Hydrologic Model Technical Memorandum

Prepared for: Eel River Valley Groundwater Basin GSP, 2021

Humboldt County Groundwater Sustainability Agency

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1. Introduction

1.1 Background

The Sustainable Groundwater Management Act (SGMA) requires local governments and water agencies in California's high and medium priority groundwater basins, as defined by the California Department of Water Resources (DWR), to form Groundwater Sustainability Agencies (GSAs) and operate under a Groundwater Sustainability Plan (GSP) by the year 2022.

The Eel River Valley Basin (ERVB), located along the Pacific Coast, was listed as a medium priority basin by DWR in 2018 (**Figure 1.1**, left panel). ERVB has a cool maritime climate and high winter rainfall that recharges the basin aquifers. ERVB is situated within the Eel River watershed and bisected by the Eel and Van Duzen Rivers, which recharge the basin through surface water-groundwater exchange. The river network of the Eel River watershed and corresponding hydrologic response units (HRUs) are shown in the right panel of **Figure 1.1**. An HRU is a land area composed of common watershed attributes, such as land-surface elevation, slope and aspect, vegetation type, soil type, and spatiotemporal climate patterns.

Groundwater in ERVB supports numerous beneficial uses:

– Agricultural water supply
– Municipal and domestic water supply
– Industrial water supply
– Freshwater replenishment of surface water, some of which are used as migration corridors for salmon and Pacific lamprey
– Freshwater supply for groundwater-dependent vegetation (phreatophytes), recreation, sport fishing, and tribal land uses and practices

Avoiding undesirable results associated with groundwater conditions using the best available science and information is the key component of a successful GSP (DWR, 2017). Humboldt County retained GHD to work with their subconsultants SHN Consulting Engineers, Stillwater Sciences, and Thomas Gast & Associates, in collaboration with the United States Geological Survey (USGS), to develop a hydrologic model to represent the groundwater system in the ERVB and evaluate changes in conditions caused by changes in groundwater pumping, climate, and other factors.

1.2 Hydrologic Modeling Purpose

The general purposes of hydrologic modeling within the GSP (DWR, 2016a) are to:

1. Support the development of the water budget
2. Support the establishment of sustainable management criteria (SMC)
3. Support identification and development of potential projects and management actions to address undesirable results (if needed)
4. Support refinement of the monitoring network

Undesirable results comprise one or more of the following effects caused by groundwater conditions occurring through the ERVB:

– Chronic lowering of groundwater levels, indicating a significant and unreasonable depletion of supply
– Significant and unreasonable reduction of groundwater storage
– Significant and unreasonable seawater intrusion

– Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies
– Significant and unreasonable land subsidence that substantially interferes with surface land uses
– Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water

A functional hydrologic model of the ERVB provides a tool to assist the Humboldt County GSA in setting sustainable management criteria at representative monitoring sites.

1.3 Hydrologic Modeling Objectives and Tasks

Hydrologic modeling for this GSP was developed based on ERVB-specific and available regional data, including surface water features, topography, water well records, geological features, and existing precipitation runoff modeling completed by USGS.

The objectives of the model analysis involve:

– Representing observed groundwater/surface water interaction along the Eel River, Van Duzen River, and major tributaries, including seasonal variations, then assessing how groundwater uses (e.g., agricultural, industrial, and municipal pumping) may change groundwater discharge to surface water.
– Evaluating the overall water balance for the ERVB through consideration of all interdependent hydrologic processes, as represented in the numerical model, to determine whether groundwater and surface water uses (e.g., agricultural, industrial, municipal pumping, surface water diversions, etc.) are sustainable currently and into the future.
– Determining if current and future groundwater and surface water uses result in an increased inland extent of the currently observed seawater/fresh groundwater interface at the west end of the ERVB.
– Supporting the establishment of minimum thresholds and associated metrics (e.g., groundwater levels, surface water levels and flows, groundwater pumping rates, inland position of seawater intrusion, etc.) that, if exceeded individually or in combination with other thresholds, may cause an undesirable result in the ERVB.
– Supporting the development of a suitable monitoring network to confirm that minimum thresholds are met and maintained.
– Evaluating any management strategies, if needed, to maintain sustainable yield with the ERVB.

Developing the hydrologic model involves the following steps:

1. Review available ERVB-specific and regional hydrologic, geologic, hydrogeologic, and geochemical data.
2. Develop a hydrogeologic conceptual model (HCM) for the ERVB and surrounding areas based on available ERVB-specific regional and information.
3. Develop a three-dimensional (3D) integrated groundwater/surface water model, representing existing ERVB conditions, based on the HCM.
4. Calibrate the groundwater flow model under transient conditions according to observed groundwater elevations, groundwater flow directions, and surface water flow rates observed in ERVB and surrounding areas.
5. Apply the 3D integrated groundwater/surface water model at key monitoring sites to compare groundwater and surface water conditions to applicable sustainability criteria under current and future conditions.
6. Document the development of the integrated groundwater/surface water model and its applications.

To summarize, the integrated groundwater/surface water model was calibrated to provide a reasonable representation of the groundwater flow system and its interactions with certain surface water features within the ERVB. The calibrated integrated groundwater/surface water and seawater intrusion model then was applied to evaluate groundwater and surface water flow conditions to assist the Humboldt County Groundwater Sustainability Agency determine if the effects of current and future water use are significant and unreasonable.

1.4 Summary of Previous Work

The USGS has been investigating regional groundwater availability in California's coastal basins, including the ERVB, and publications are currently pending final review. USGS was not able to provide a written summary of their investigations prior to the publication of this technical memorandum. USGS staff participated in several verbal discussions about USGS work in the ERVB and provided preliminary data sets for GHD's review and use.

1.5 Technical Memorandum Organization

This technical memorandum (TM) is organized as follows:

- **Section 1 – Introduction**: Presents the introduction, purpose, and scope of work of the integrated groundwater/surface water and seawater intrusion modeling conducted for ERVB
- **Section 2** – **Supporting Data and Information**: Presents a summary of the supporting data and information that this technical memorandum is based on, including the HCM prepared for the ERVB, descriptions of water year type, basin inflow and outflow summaries, and InSAR Land Surveying and Mapping
- **Section 3 – Simulation Program Selection**: Presents a description of the simulation programs selected to conduct the integrated groundwater/surface water modeling
- **Section 4 – Integrated Groundwater/Surface Water and Seawater Intrusion Model Construction**: Presents the details regarding the construction of the numerical groundwater/surface water and seawater intrusion models for the transient conditions across the ERVB
- **Section 5 – Integrated Groundwater/Surface Water Model Calibration**: Presents the calibration of the numerical integrated groundwater/surface water flow models to observed surface water and groundwater flow conditions
- **Section 6 – Applications of the Integrated Groundwater/Surface Water and Seawater Intrusion Models**: Presents the applications of the calibrated models to evaluate flow conditions relative to sustainable management criteria for ERVB under current and future conditions
- **Section 7 – Summary and Conclusions**: Summarizes the assessment of ERVB data and model predictions presented in this TM and provides the conclusions reached based on the assessments
- **Section 8 – References:** Lists the references cited in this TM

2. Supporting Data and Information

2.1 Hydrogeologic Conceptual Model

A detailed hydrogeologic conceptual model (HCM) was developed to characterize the physical components of the ERVB [GHD (2021b)]. The HCM technical memorandum [GHD (2021b)] describes the geologic setting, basin stratigraphy, and aquifer characteristics. The principal water-bearing units of the ERVB are (1) the alluvial deposits that form the lower Eel River Valley and portions of the Van Duzen Valley, and (2) the underlying Carlotta Formation. Coarse gravels near active stream channels (channel deposits) also transmit shallow groundwater but are minor units compared to the depth and extent of the alluvial deposits.

2.2 Basin Inflow and Outflow Summary

The Basin inflow and outflow summaries are based on the Basin water budget. A water budget is an inventory of surface water and groundwater inflows and outflows. Certain components of the water budget are measured, such as municipal groundwater pumping and gaged stream flow. Other components are estimated, such as ungauged stream inflow, unmetered domestic well use, and septic system infiltration. Further water budget components are calculated from the hydrologic model, such as precipitation infiltration, and surface water seepage into groundwater. The Basin inflow and outflow summary presents estimated annual totals of inflows and outflow, measured in acre-feet.

The Basin water budget incorporates historical water uses and conditions that represent the variation in climatic conditions from year to year. The DWR defines five different water year types: wet, above normal, below normal, dry, and critically dry. The historical period used in the water budget represents each of these water year types. The development of the basin water year type uses the DWR methodology with local precipitation data from within the Basin (station in Ferndale) and is described in the next section.

2.2.1 Water Year Type

A common practice in hydrology is to calculate total precipitation over a twelve-month period by designating a "water year" as the period extending from October 1 through September 30. For example, water year 2021 extended from October 1, 2020 through September 30, 2021. Water year 2022 began on October 1, 2021. For watersheds where most of the precipitation falls in the winter, the water year generally encompasses the entire wet season. Annual water budgets, which quantify inflows, outflows, and change in storage for a groundwater basin, are developed based on the annual water year period.

In January 2021, to support the development of GSPs, DWR presented a methodology for designating water year types for watersheds outside the Sacramento and San Joaquin Valleys. DWR's methodology is based on selecting a 30-year period and dividing the record into five (5) categories of water year type according to specified weighting percentages (Table 1). This methodology results in 50% of the years in the 30-year period classified as Wet or Above Normal, and 50% of the years classified as Below Normal, Dry, or Critical.

Table 1 Water Year Classifications (DWR, January 2021)

Classification	Weighted Percentage
Wet	30%
Above Normal	20%
Below Normal	20%
Dry	15%
Critical	15%

DWR (January 2021) also published a data set of water year classifications for various hydrologic units around California, including the lower Eel River (HUC 18010105), which encompasses 1,510 square miles and extends upstream to the confluence with the Middle Fork of the Eel River at Dos Rios, in Mendocino County. This hydrologic unit hosts a wide range of climatic conditions (e.g., a combination of coastal and inland areas), but the representation of water year types for the ERVB can be improved by using local rainfall data, as described below. DWR (January 2021) notes that GSAs have the option of developing their own water year types based on best available information.

Long-term rainfall records (October 1963 through September 2021) were obtained from Jerry Lema of the Ferndale Museum (515 Shaw Avenue), where a rain gauge has been operated since October 1994. The current rain gauge was manufactured by Productive Alternatives and was provided by the National Weather Service in the 1990s when the museum served as an official gauging site. From October 1970 through October 1994, daily rainfall measurements were collected by George Anderson at 1345 Main Street in Ferndale. Information regarding the location of the rain gauge from October 1963 through October 1970 was not readily available. Rainfall data collected at these Ferndale sites is presumed to be more representative of the ERVB than the regional composite data used by DWR (January 2021).

DWR's methodology for designating water year type for a given year accounts for the annual precipitation during the previous year by applying weighting factors to calculate an index value, using the following equation:

$$\text{Water Year Index} = (0.70 \times \text{current water year precipitation}) + (0.30 \times \text{previous water year precipitation})$$

The equation is applied to each year in the 30-year period to develop index values, which are then ranked from highest to lowest to assign each year to the five (5) water year type categories. The results from applying this methodology to the Ferndale rainfall data for the 30-year period of 1992 to 2021 are summarized in Table 2 and depicted on Figure 1.

Table 2 Water Year Types with Annual Precipitation, Index Values, and Ranking (1992-2021)

Water Year	Annual Precipitation (inches)	Water Year Index	Index Rank (30 is wettest and 1 is driest)	Water Year Type
2017	67.2	61.9	30	Wet
1998	66.2	61.8	29	Wet
1999	53.3	57.2	28	Wet
2003	61.6	55.3	27	Wet
2006	58.0	54.5	26	Wet
1995	56.4	49.2	25	Wet
1997	51.5	49.0	24	Wet
2004	43.1	48.6	23	Wet
2011	47.8	47.8	22	Wet
2000	45.1	47.6	21	Above Normal
1996	43.3	47.2	20	Above Normal
2016	49.6	46.0	19	Above Normal
2005	46.1	45.2	18	Above Normal
2018	34.8	44.5	17	Above Normal
2007	38.0	44.0	16	Above Normal
2019	47.9	43.9	15	Below Normal
2010	47.9	42.7	14	Below Normal
2012	39.7	42.1	13	Below Normal
1993	45.1	38.6	12	Below Normal
2013	36.2	37.3	11	Below Normal
2002	40.7	36.9	10	Below Normal
2020	31.7	36.5	9	Dry
1994	32.4	36.2	8	Dry
2008	33.7	35.0	7	Dry
2001	28.0	33.1	6	Dry
2015	37.5	32.2	5	Dry
2009	30.5	31.5	4	Critical
2021	30.3	30.7	3	Critical
2014	19.9	24.8	2	Critical
1992	23.3	23.7	1	Critical

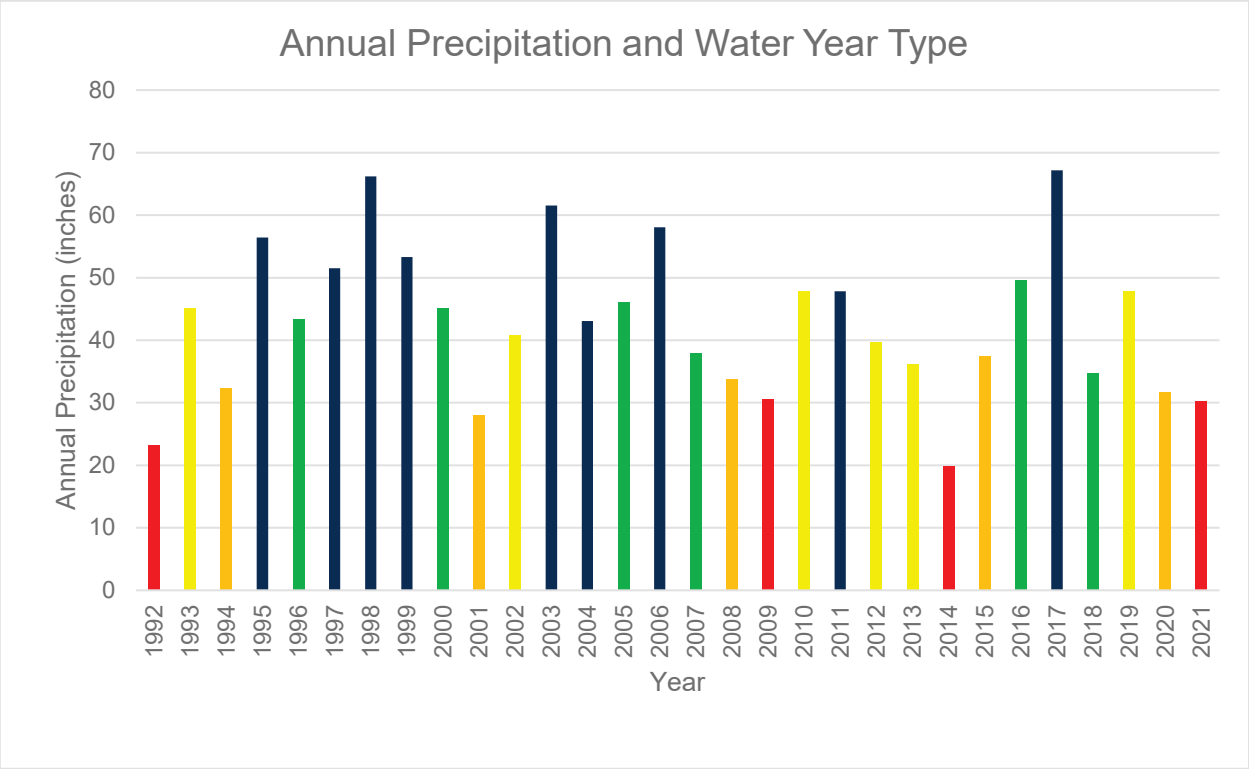

Figure 1 *Water Year Types (1992-2021), Based on Annual Rainfall Data Collected in Ferndale*

2.2.2 Basin Inflow Summary

The calculation of the Basin water inflow was estimated using several sources and tools. The following list describes the water budget component used in the Basin inflow summary and identifies the source of the data.

- **Streamflow Gage Data** – This is a surface water inflow. Stream gage data was used for the Eel River at Scotia [USGS 11477000] and the Van Duzen River at Bridgeville [USGS 11478500]. Data from 2000 through 2020 were used for this analysis. Daily average flow rate rates were used to calculate monthly total flow volumes for the period of record.
- **Precipitation Runoff to Streams** – This is a surface water inflow. Precipitation runoff to streams was estimated using the Precipitation Runoff Modeling System (PRMS). The application of PRMS is described in Section 3.3. PRMS was used to estimate the monthly flow rates and yearly total volume of runoff entering streams. This flow was added to the flow of the Eel and Van Duzen Rivers below the gage stations. It was also used to estimate the un-gaged streams in the Yager, Salt River, and Price Creek drainages. Precipitation runoff to smaller tributaries in the ERVB, including Reas and Williams Creeks, is accounted for through runoff to the larger surface water feature where these creeks discharge (e.g., Salt River). These creeks gain flows from precipitation runoff. Routing that precipitation runoff directly to the larger surface water feature through application of PRMS is a suitable method for accounting for those flows. It should be noted that the PRMS estimates runoff from areas of these contributing watersheds that are outside of the Basin boundary.
- **Wastewater Effluent Discharge** - This is a surface water inflow. Treated wastewater is directly discharged to rivers during certain times of the year, when minimum river flow rates permit discharge. The discharge data was provided by the municipalities or was estimated as a percent of the metered drinking water.
- **Groundwater Discharge to Streams** – This is a surface water inflow. Steams reaches that receive flow from groundwater are known as gaining streams. Stream reaches may vary from gaining to losing throughout the year and may vary from year to year. The MODFLOW groundwater model calculates the

monthly average volumes of the gain/loss for all stream reaches in the Basin. This process is described in more detail in Section 4.2.3.

- **Precipitation Infiltration** – This is a groundwater inflow. Precipitation infiltration is estimated using PRMS and is described in Section 3.3. The infiltration volumes are estimated on a monthly basis and are used in the water budget and as a groundwater model input.
- **Streamflow to Groundwater** – This is a groundwater inflow. This is calculated the same as groundwater to stream and represents the losing reach condition.
- **Municipal Waste Water Treatment Plant (WWTP) Land Application** - This is a groundwater inflow. When municipal wastewater is not discharged to rivers it may be discharged to infiltration ponds or land-applied. The volume of treated wastewater disposed in leach fields or infiltration ponds was either provided by the municipalities or estimated as a percentage of metered water use.
- **Industrial and Domestic Septic System** - This is a groundwater inflow. The amounts of the industrial and domestic septic system discharged in leach fields was estimated for parcels that are outside of municipal wastewater collection systems. The amount of septic discharge was based upon the water use estimate for the given parcels. Water use for the parcel was based upon land use zoning, parcel improvements, and parcel size.

The yearly volume of surface water inflow for each of the components above, along with the yearly total volumes are presented for the 2011 through 2020 water years below in Table 3.

Table 3 Surface Water Inflow for 2011 through 2020 Water Years

Water Year	Type	Water Budget Component				
		Stream Flow (af/yr)	Precipitation Runoff to Steams (af/yr)	WWTP Effluent (af/yr)	Groundwater Discharge to Stream (af/yr)	Yearly Total (af/yr)
2011	Wet	7,626,192	6,991,753	838	196,018	14,814,801
2012	Below Normal	3,897,813	5,804,851	823	181,950	9,885,436
2013	Below Normal	3,872,532	4,727,514	872	168,448	8,769,365
2014	Critical	1,827,870	2,654,822	869	147,826	4,631,386
2015	Dry	3,445,258	4,471,740	810	166,485	8,084,294
2016	Above Normal	7,195,455	6,591,416	797	188,655	13,976,323
2017	Wet	11,841,926	8,218,832	793	208,412	20,269,963
2018	Above Normal	3,436,646	3,664,620	822	161,373	7,263,461
2019	Below Normal	7,226,047	5,905,487	814	183,230	13,315,578
2020	Dry	1,651,399	2,483,401	897	153,463	4,289,160

The yearly volume of groundwater inflow for each of the components above, along with the yearly total volumes are presented for the 2000 through 2020 water years below in Table 4.

Table 4 Groundwater Inflows for 2011 through 2020 Water Years

Water Year	Type	Water Budget Component				
		Precipitation Infiltration (af/yr)	Stream Flow to Groundwater (af/yr)	Municipal WWTP Land Application (af/yr)	Industrial and Domestic Septic System (af/yr)	Yearly Total (af/yr)
2011	Wet	71,383	183,413	1,024	426	256,246
2012	Below Normal	51,015	177,473	919	426	229,833
2013	Below Normal	45,288	171,097	1,235	426	218,045
2014	Critical	8,312	147,646	1,178	426	157,562
2015	Dry	38,181	167,894	1,252	426	207,753
2016	Above Normal	79,360	181,308	858	426	261,953
2017	Wet	116,417	188,665	882	426	306,391
2018	Above Normal	41,591	143,895	999	426	186,911
2019	Below Normal	85,027	169,965	1,019	426	256,437
2020	Dry	27,953	130,016	1,223	426	159,618
Assumptions: no subsurface inflow at upstream boundaries						

2.2.3 Basin Outflow Summary

The Basin outflow summary is estimated in a manner similar to the Basin inflow. The following list describes the water budget component used in the outflow summary and identifies the source of the data.

- **Municipal Drinking Water Diversion** – The is a surface water outflow. The municipalities of Rio Dell and Scotia both pump water from the Eel River to supply their potable water demand, via their water treatment plants. Water production records were provided by the municipalities.
- **Irrigation Diversion** – This is a surface water outflow. Surface water diversion for irrigation is a relatively small portion of the total water supply for irrigation. The volume of water for this component was based upon mapped irrigation area and annual irrigation water demand estimate. The annual estimate was determined by Humboldt County Resource Conservation District (HCRCD). The demand rates are presented as a volume of water per land area. A detailed description of the process is presented in the Agriculture Water Use Technical Memorandum (Humboldt County Department of Public Works and HCRCD, 2021).
- **Streamflow to the Pacific Ocean** – This is a surface water outflow. Stream flow to the Pacific is not directly measured and is difficult to estimate due to tidal fluctuations. This component is calculated using the method outlined in the DWR Water Budget BMP (DWR, 2016b) where all other surface water flows are known or estimated.
- **Streamflow to Groundwater** - This is a surface water outflow and a groundwater inflow. This is calculated the same as groundwater to stream and represents a losing reach condition.
- **Evapotranspiration (open water, riparian, urban landscape)** – This is a surface water outflow. This parameter was estimated using the DWR's Cal-SIMETAW model. The model produces monthly ET rates for various crop types, native (or natural) vegetation, riparian and open water. The land use areas were determined by combining the irrigated areas land use and remote image analysis. This produced area of natural vegetation, riparian, impervious, and open water. These areas were used with the Cal-SIMETAW ET rates to calculate the monthly water demand. The monthly demand was summed up for each water year to calculate an annual rate.

- **Municipal Groundwater Pumping** – This is a groundwater outflow. Municipal groundwater pumping volumes were provided by the nine municipalities or service districts for calendar years 2010 to 2020. For periods where direct pumping volumes were not available, they were estimated based on average monthly rates and water year types. Monthly and annual amounts were tabulated and used for this analysis.
- **Non-Municipal Domestic and Industrial Pumping** – This is a groundwater outflow. The non-municipal domestic pumping was estimated for parcels that are outside of municipal water supply systems. The amount of water pumped was based upon the number of dwelling units or industrial process for the given parcels. Water use for the parcel was based upon land use zoning, parcel improvements, and parcel size.
- **Irrigation Pumping** – This is a groundwater outflow. The volume of water for this component was based upon mapped irrigation area and annual irrigation water demand estimate. The annual estimate was determined by HCRCD and the County using flow meter data from several irrigated facilities. These rates vary by month and water year type. Water year type was used to apply the appropriate demand in the water balance. The demand rates are presented as a volume of water per land area. A detailed description of the process is presented in the Agriculture Water Use Technical Memorandum (Humboldt County Department of Public Works and HCRCD, 2021).
- **Cannabis Pumping** – This is a groundwater outflow. The water demand for Cannabis irrigation is assumed to come from groundwater wells. The water demand for cannabis irrigation was developed by estimating the number of plants and irrigated areas. These estimates were based upon permitted cannabis cultivation sites within the Basin. Water demand per plant estimates were evaluated from several sources. Demand rates ranged from 1 to 15 gallons per plant per day. For this analysis a value of 6 gallons per plant per day was used. Indoor cannabis had a much lower demand of 0.5 gallons per plant per day. The demand for unpermitted cannabis sites was estimated as an additional 30% of the permitted demand. This was based upon CDFW estimates for other north coast basins.
- **Non-Municipal Commercial and Industrial Pumping** – This is a groundwater outflow that has been estimated for parcels that are outside of municipal water supply systems. The pumping rates per parcel were based upon the number of dwelling units assigned to each parcel, the number of people per dwelling unit, and water demand per person. There were 1498 parcels that had or had the potential to have a domestic dwelling. The number of dwelling units for each parcel was assigned based upon the zoning, zoning description and parcel improvements. Dwelling units per parcel ranged from 1 to 10. It was assumed that there were 2.4 persons per dwelling unit. This value was based upon the US Census website for Humboldt County. The water use per person was assumed to be 100 gallons per day per person. This value is conservative and is consistent with USGS Estimated Use of Water in the United States in 2015 (USGS 2017). This resulted in 240 gallons per dwelling unit per day. The yearly domestic water demand was calculated by multiplying the number of dwelling units per parcel by the water demand per dwelling unit by the number of days in the year. The yearly domestic water demand per parcel ranged from 0.27 to 2.69 acre-feet per year. The total domestic water demand is calculated by summing up the yearly domestic water demand for all selected parcels.
- **Evapotranspiration (irrigated crop, natural vegetation)** – This is a groundwater outflow. This parameter was estimated using the DWRs Cal-SIMETAW model. The model produces monthly ET rates for various irrigated crop types, native (or natural) vegetation, riparian and open water. The land use areas were determined by combining the irrigated areas land use and remote image analysis. The irrigated land areas were developed by the HCRCD and recently updated. These areas were used with the Cal-SIMETAW ET rates to calculate the monthly crop evapotranspiration. The monthly demand due to evapotranspiration was summed up for each water year to calculate an annual rate.
- **Groundwater Outflow to Ocean** – This is a groundwater outflow. Groundwater flow to the Pacific is not directly measured. This component is calculated using the method outlined in the DWR Water Budget BMP where all other component flows are known or estimated.
- **Change in Groundwater Storage** – This is a groundwater outflow. The change in groundwater storage is estimated using an integrated groundwater/surface water model described in Section 3.2. Change in groundwater storage is calculated by subtracting the average groundwater volumes for a representative average reference period (March 2003) from March groundwater volumes for each year between water year 2000 and

water year 2020. Selection of the representative average reference period is described in Section 6.1.1 and the process for calculating change in groundwater storage is described in detail in Section 6.2.2.

The yearly volume of surface water outflows for each of the components above, along with the yearly total volumes are presented for the 2011 through 2020 water years below in Table 5.

Table 5 Surface Water Outflow for 2011 through 2020 Water Years

Water Year	Type	Water Budget Component (af/yr)					
		Municipal Drinking Water Diversion	Irrigation Diversion	Streamflow to Pacific	Streamflow to Groundwater	Evapotranspiration (open water, riparian, urban landscape)	Yearly Total
2011	Wet	847	63	14,630,478	183,413	103,641	14,918,442
2012	Below Normal	857	76	9,707,030	177,473	96,967	9,982,404
2013	Below Normal	893	76	8,597,300	171,097	101,454	8,870,820
2014	Critical	837	88	4,482,815	147,646	104,332	4,735,718
2015	Dry	797	76	7,915,528	167,894	104,653	8,188,947
2016	Above Normal	816	76	13,794,123	181,308	104,669	14,080,992
2017	Wet	805	63	20,080,430	188,665	106,304	20,376,267
2018	Above Normal	809	76	7,118,681	143,895	104,669	7,368,130
2019	Below Normal	765	76	13,144,773	169,965	102,534	13,418,112
2020	Dry	812	76	4,158,257	130,016	104,909	4,394,070

The yearly volume of groundwater outflows for each of the components above, along with the yearly total volumes are presented for the 2011through 2020 water years below in Table 6.

Table 6 Groundwater Outflow for 2011 through 2020 Water Years

Water Year	Type	Water Budget Component (af/yr)								
		Municipal	Non-Municipal Domestic	Irrigation	Cannabis	Non-Municipal Commercial and Industrial	ET (irrigated crop, natural vegetation)	GW Outflow to Ocean	Change in GW Storage	Yearly Total
2011	Wet	1,772	414	10,694	98	34	96,881	131,417	14,936	256,246
2012	Below Normal	1,727	414	12,196	98	34	89,551	118,894	6,919	229,833
2013	Below Normal	1,764	414	12,196	98	34	84,998	130,236	-11,695	218,045
2014	Critical	1,814	414	14,848	98	34	86,118	72,390	-18,154	157,562
2015	Dry	1,599	414	13,522	98	34	82,571	121,312	-11,798	207,753
2016	Above Normal	1,660	414	11,754	98	34	89,666	139,590	18,737	261,953
2017	Wet	1,673	414	10,694	98	34	88,050	161,761	43,667	306,391
2018	Above Normal	1,729	414	11,754	98	34	89,666	98,527	-15,312	186,911
2019	Below Normal	1,758	414	12,196	98	34	88,965	112,024	40,948	256,437
2020	Dry	1,832	414	13,522	98	34	82,884	84,842	-24,009	159,618

2.3 Basin Inflow/Outflow Model Uncertainty

The groundwater model and methods contain assumptions and uncertainty, especially when forecasting future conditions. Model uncertainty propagates from climate change, imperfect data on subbasin geology and hydrology, and assumptions surrounding unmetered groundwater pumping. Model inputs are carefully selected, and reflect the best, most complete science and data available. Accordingly, as model inputs and assumptions are refined, the hydrologic model will be recalibrated to maintain accuracy. Table 4 provides an inventory of model assumptions and gaps in model data.

3. Simulation Program Selection

A groundwater flow model simulation is a simplified representation of groundwater flow conditions based on principles of physics and conservation of mass/water. Model simulations are aided by programs for model construction, parameter estimation, uncertainty analysis, graphical visualization, and pre- and post-processing. The selection of a simulation program for groundwater modeling applications is based on the following considerations:

– The ability of the program to represent the key components of the HCM
– The demonstrated verification that the program correctly represents the hydrologic processes being considered
– Acceptance of the program by regulatory agencies and the scientific/engineering community

These considerations complement the DWR four (4) Guiding Principles for Models Used in Support of GSPs (DWR, 2016a), described below.

3.1 Summary of DWR Guiding Principles for Models Used in Support of GSPs

As described by DWR (2016a), the intent of the Guiding Principles for Models Used in Support of GSPs is to promote transparency, coordination, and data sharing to ultimately expedite GSP-related modeling and analysis review. The four (4) DWR guiding principles are as follows:

1. Model documentation is publicly available at no cost and provides explanations for how the mathematical equations for the various model code components were derived from physical principles.
    - This documentation shall also provide guidance on limitations of the model code.
2. The mathematics of the model code have been peer reviewed for the intended uses.
3. Descriptions of the conceptual model, site-specific model assumptions, input parameters, calibration, application scenarios, and analytical results demonstrate that the forecasted water budget, SMC, proposed project, and management actions are reasonable and within the range of identified uncertainties.
4. A working copy of the complete modeling platform will be provided to the DWR upon request.

3.2 Integrated Groundwater/Surface Water Flow Model (MODFLOW)

MODFLOW, developed by the USGS, is capable of simulating steady-state or transient groundwater flow in two or three dimensions. MODFLOW uses finite-difference methods, leading to a numerical approximation that allows for a description and solution of complex groundwater flow problems. A rectangular grid is superimposed over the study area to horizontally divide the region of interest into rectangular model cells, while layers are used to vertically divide the study area into units of common hydrogeologic properties. Groundwater flow is formulated as a differential water balance for every model cell; hydraulic head is solved at the center of every model cell. MODFLOW allows for the specification of flows associated with wells, areal groundwater recharge, rivers, drains, streams, and other groundwater sources/sinks.

MODFLOW-2005 (Harbaugh, 2005, 2005) was selected to simulate groundwater flow for model construction, calibration, and applications during this modeling study due to its speed and stability of convergence. MODFLOW-2005 is an update to the original MODFLOW (McDonald and Harbaugh, 1988). MODFLOW is an open-source code, extensively verified and readily accepted by many regulatory agencies throughout North America and Europe. The MODFLOW family of codes—including MODFLOW-2005, SEAWAT (Langevin et al., 2008), and MT3DMS (Zheng and Wang, 1999) for solute transport simulations—operate using a series of human-readable American Standard Code for Information Interchange (ACII) text files, facilitating transparent review by third parties.

MODFLOW-2005 is capable of representing the hydrogeologic components within the ERVB. It is able to account for the effects of pumping on streamflow and to quantifying the depletion of interconnected surface waters when using the streamflow routing package, SFR2, to represent surface water flow conditions.

Each member of the MODFLOW family of codes for model construction, calibration, and application, described in the sections below, used one of two matrix solution solvers: the preconditioned conjugate gradient (PCG2) (Hill, 1990) for MODFLOW-2005 and the geometric multigrid (GMG) (Wilson and Naff, 2004) for SEAWAT. The GMG solver provides a better flow balance under most conditions compared to the PCG2, but can have difficulty converging, particularly for long-term transient models. For this reason, both matrix solvers were used. Regarding convergence of the solvers, the solution technique requires the satisfaction of both hydraulic head change and flow residual criteria, providing a more rigorous and reliable simulated water balance throughout the model domain.

3.2.1 Streamflow Routing (SFR2)

Within MODFLOW, groundwater/surface water interaction is represented using the Streamflow Routing (SFR2) package (Prudic et al., 2004; Niswonger and Prudic, 2005), which calculates flows between streams and groundwater based on stream and groundwater levels. Flow is routed downstream based on the calculated flow in and out of the streams. The SFR2 package includes several options for calculating stream water levels based on stream flow that account for streambed geometry, streambed elevations, channel slope, wetted perimeter, and roughness. Implementation of SFR2 in MODFLOW-2005 was aided through using the Precipitation Runoff Modeling System (PRMS), described in the following section.

3.3 Precipitation Runoff Modeling System (PRMS)

PRMS was developed to evaluate the response of various combinations of climate and land use on streamflow and general watershed hydrology. PRMS simulates hydrologic processes (e.g., evaporation, transpiration, runoff, infiltration, and interflow) as determined by the energy and water budgets of plant canopy, snowpack, and soil zone according to distributed climate information such as temperature, precipitation, and solar radiation. Areal recharge of groundwater and runoff that discharges to surface water are estimated based on land use, dominant vegetation covering the soil surface, and surficial soil types. PRMS represents hydrologic responses over HRUs. HRUs that contribute water to ERVB are illustrated as yellow polygons on the right panel of **Figure 1.1**.

On November 12, 2020, the USGS provided GHD a provisional PRMS model for areas contributing to ERVB groundwater flow (e.g., the areas depicted in yellow on the right panel of **Figure 1.1**). The model is provisional in that continued modifications were necessary for it to be able to suitably aid GSP development, and because the USGS does not bear responsibility for modifications made to the model by outside parties. This model is a subset of 183 HRUs and 94 surface water (stream) segments from the National Hydrography Dataset. Parameters for the provisional PRMS model were originally obtained from the National Hydrologic Model (NHM) (Regan et al., 2018) and subsequently modified by USGS[1] to match local conditions. This existing model spans the period of 1980 to 2016. The model has subsequently been updated to include 2017 through 2020 using gridded spatial climate datasets, including precipitation and minimum and maximum temperatures developed by Oregon University's Parameter-elevation Regressions on Independent Slopes Model (PRISM) Climate Group (PRISM Climate Group, 2004).

3.4 Seawater Intrusion Model (SEAWAT)

Density-dependent flow and saltwater intrusion models were developed using SEAWAT-V4 (Langevin et al., 2008), which is an update of SEAWAT-2000 (Langevin et al., 2003). Similar to SEAWAT-2000, SEAWAT-V4 is a coupled version of MODFLOW and MT3DMS (Zheng and Wang, 1999; Zheng, 2006) designed to simulate 3D, variable-density, saturated groundwater flow. SEAWAT-V4 is capable of accounting for the effects of irrigation pumping on seawater intrusion.

SEAWAT-V4 requires aquifer or point water heads[2] as input (i.e., for specification of constant head boundary conditions) and provides point water heads as output, though SEAWAT-V4 performs all internal calculations of groundwater flow and hydraulic head using equivalent freshwater heads with additional terms to account for variations in water density.

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1 USGS matched to observed local conditions by reducing the exchange between groundwater and the gravity reservoir above the water table to be representative of flow systems in the mountains, then adjusting rainfall intensities. The term "gravity reservoir" refers to the slow drainage to the groundwater flow system from the soil profile. Stream segments were also filtered to include only stream segments with arbolate sums (e.g., the length of upstream surface water features) greater than 12.5 miles for perennial streams and 31 miles for intermittent streams.

2 As described in Guo and Langevin (2002), aquifer or point water head at a given point in a saline aquifer is the level to which ambient saline groundwater in the aquifer will rise in a tightly-cased piezometer open to that point (assuming the water column in the piezometer casing contains a uniform density equal to that of the aquifer at that point).

The USGS's GMG solver (Wilson and Naff, 2004) matrix solution method included in SEAWAT-V4 was employed to solve the variable-density groundwater flow equation.

3.5 Parameter Estimation and Uncertainty Analysis (PEST)

The calibration of the coupled seawater intrusion model and integrated groundwater/surface water model was aided by use of the parameter estimation program Parameter Estimation++ (PESTPP) (PEST++ Development Team, 2021), an update to parameter estimation software, PEST (Watermark Numerical Computing, 2021) and written in C++ with several additional capabilities for uncertainty analysis. PEST and PESTPP are model-independent parameter estimators that have become groundwater industry standards for model calibration. PESTPP has a powerful inversion engine which can set bounds on model input parameters such as hydraulic conductivity and groundwater recharge, though combinations of highly correlated input parameters can result in more than one solution that minimizes the error between simulated and observed conditions. When there is more than one solution (as in a combination of input parameter values) that minimizes the error between simulated and observed conditions, the model is said to be non-unique. Non-uniqueness can result in uncertainty in model predictions. An iterative ensemble smoother (IES) methodology, described and demonstrated in White (2018) and based on methods described in Chen and Oliver (2013), has been implemented in PESTPP through the PESTPP-IES mode.

PESTPP collectively conveys input parameters or parameter multipliers at variable values within their bounds to the model codes for the purpose of establishing an ensemble of optimal input parameter values for a set of model realizations. (For example, one model based on one ensemble of parameter input values is a model realization.) For each run of input parameters, PESTPP-IES calculates objective function values (OFV) at model observation points or cells. OFVs represent the error of calculated versus observed groundwater elevations, discharge rates, or concentrations. Of the numerous runs, PESTPP-IES selects a suite of models that each meet model calibration criteria. This approach allows a quantification of model prediction uncertainty that is constrained by model calibration, referred to as a calibration-constrained uncertainty analysis (CCUA) (Doherty, 2015). The application of CCUA for this study is described in Section 5.2

3.6 Graphical User Interface (GUI)

The graphical user interface (GUI) Groundwater Vistas (Rumbaugh and Rumbaugh, 2020) will be employed as the interface between the assembled hydrogeologic data, the required MODFLOW family of codes, and PEST input files. Although the GUI is not an open-source application, input and output files are human-readable and executed using open-source codes described in Sections 3.3 and 3.5. In other words, the GUI is used to create the model files, but the GUI is not the model.

3.7 Pre- and Post-processing

Some pre- and post-processing will be achieved using the R (R Core Team, 2020) and python (Van Rossum and Drake, 2009) programming languages, which both make use of open source libraries of human-readable functions and are script-based languages that permit reproducible analyses of model files.

In particular, python will be used extensively with the FloPy library (Bakker et al., 2016) to manage MODFLOW files outside of the GUI and with the pyPRMS library (Norton, 2019) for fine-tuning the existing PRMS input files, which are not supported by a GUI. These libraries are publicly available.

4. Integrated Groundwater/Surface Water and Seawater Intrusion Model Construction

Constructing numerical groundwater flow models involves developing the horizontal and vertical discretization of the selected model domain, specifying hydraulic properties, and implementing boundary conditions consistent with the HCM. The process for model construction, in relation to these aspects of the groundwater flow model, is presented in the following sections.

4.1 Model Spatial Domain and Discretization

The model domain should extend to where reasonably defensible boundary conditions can be established. Where possible, model domain limits, and associated boundary conditions, should be based on natural hydrogeologic features at a regional scale. Boundary conditions must be selected to minimize potentially incorrect biases to model predictions within the area of interest[3].

The selected model domain for this modeling study is shown on **Figure 4.1**., extending approximately 121.5 miles northwest-southeast and approximately 75 miles southwest-northeast. The model domain is oriented with its vertical and horizontal axes arranged northwest-southeast and southwest-northeast respectively to align the average observed groundwater flow directions within the ERVB, which flow predominantly northwest towards the Pacific Coast. Aligning the model domain with the primary flow directions minimizes potential numerical dispersion[4] in subsequent seawater intrusion simulations.

A rectangular finite-difference grid was extended over the groundwater flow model domain, details of which are illustrated in **Figure 4.1**. Horizontally, the model domain is discretized into rows and columns. A minimum finite-difference grid spacing of 1,000 feet by 1,000 feet was assigned to the ERVB to provide sufficient resolution for integrated groundwater/surface water simulations and analysis, as well as for the seawater intrusion simulations. The grid spacing was progressively increased outside the ERVB towards the model domain limits to a maximum of 10,000 feet by 10,000 feet. Horizontally the model is discretized into 103 rows and 291 columns.

The number of model layers varied depending on the application. A total of six (6) and 15 model layers was assigned to the integrated groundwater/surface water and saltwater intrusion models, respectively, with the larger number for the seawater intrusion model layers intended to limit numerical dispersion[5] in the vertical direction. Hydrostratigraphy represented by each model layer is presented below; the structure of the model layers for the integrated groundwater/surface water model is presented on **Figure 4.2** along cross-section A-A'.

Stratigraphy	Integrated Groundwater/Surface Water Model Layers	Seawater Intrusion Model Layers
Coarse Gravels Near Active Stream Channels (Channel Deposits)	1	1
Quaternary Alluvium (Qal)	1 - 2	1 - 11

[3] For example, identifying a river boundary condition with specified stage elevations near a pumping well when the purpose of the analysis is to evaluate the effect of pumping on river flow. Stage elevations could supply an unlimited amount of water to the well, thus introducing a reduced effect (e.g., a potentially incorrect bias) of the pumping on the simulated groundwater flow field.

[4] When groundwater flow models are developed using finite-difference methods, advective flow and mass transport are perpendicular to the finite-difference model cell face. When these faces are not oriented perpendicular to primary flow directions, flow and transport to neighboring cells is only approximated through face-contacting model cells, resulting in gradually dispersive broadening of the transport mass. This dispersive broadening is referred to as numerical dispersion, specifically it is angular-numerical dispersion (Spitz and Moreno, 1996).

[5] The advection dispersion equation is solved at the center of each active finite-difference model cell using finite-difference methods and represents mass throughout the entirety of the model cell. This means that a model cell downgradient of the chloride front will show concentrations even when the actual front has not actually reached the midpoint of the model cell. This is another form of numerical dispersion, specifically it is distance-related numerical dispersion (Spitz and Moreno, 1996) and can be reduced by increasing the vertical discretization.

Stratigraphy	Integrated Groundwater/Surface Water Model Layers	Seawater Intrusion Model Layers
Hookton Formation (Qh)	1 - 2	1 - 11
Upper Carlotta (Qtc upper)	1 - 5	1 - 14
Lower Carlotta (Qtc lower)	1 - 6	1 - 15

Vertical discretization involved assigning the bottom of Model Layer 1 to be a minimum of 10 feet below the static dry water table conditions (i.e., based on historical water levels measured between the months of May and October)[6]. This approach limits the amount of repeated drying and re-wetting of model cells during solution iterations. The thickness of each stratigraphic unit within the ERVB was modified from the thickness rasters[7] provided by the USGS for this project to better reflect the interpretation of field investigation results from 2021[8]. Where the thickness of a stratigraphic deposit was less than 10 feet it was assumed to pinch out and assigned the hydrogeological properties from the model layer below. This resulted in stratigraphic deposits that are represented in a range of model layers. Outside of the ERVB, minimal model layer thicknesses (i.e., 1 ft) were assigned because interaction between surface water and groundwater is limited in these areas due to the competent rock of mountainous regions, but surface water still needed representation in active model cells.

The integrated groundwater/surface water and seawater intrusion models contain a total of 114,948 and 287,370 finite-difference model cells (of which 18,826 and 44,741 are active for flow), respectively.

4.1.1 Time Discretization

The integrated groundwater/surface water and seawater intrusion models were represented from calendar year 1980 through September 2020 (end of water year 2020) and from 1995 through September 2020, respectively using the transient mode (i.e., SFR and well boundary conditions and recharge varied over time) in MODFLOW-2005. For each model, the period of interest is water year 2000 through water year 2020. (As such, models were provided a substantial warm-up period[9] to improve the accuracy of model results.) These simulation periods are divided into stress periods within which boundary conditions are constant, which are then subdivided into timesteps to permit the flow system to adjust to the change in stress period. Each of the integrated groundwater/surface water and seawater intrusion models had stress periods that spanned one (1) month and timesteps that spanned one (1) day.

4.2 Flow Model Boundary Conditions

Inactive areas of the model domain define the limits of the active areas of the model domain and are depicted by grey fill no-flow cells on **Figure 4.1**. Boundary conditions for the integrated groundwater/surface water and seawater intrusion models consist of the following:

– No-flow boundary conditions representing anticipated flow divides located along topographic highs at the model domain limits, with vertical no-flow boundary conditions at depths corresponding to the inferred base of the lower Carlotta formation and the bottom of the groundwater flow system
– Constant head boundary conditions representing the Pacific Ocean

6 See, for example, Figure 3 from SHN (2021a).
7 A raster is a digital method of storing spatial information whereby values that vary across a geographical space, such as stratigraphic thicknesses, are assigned to a matrix of rows and columns.
8 Based on 2021 field investigations (GHD, 2021b) the stratigraphic unit underlying the Quaternary alluvium was interpreted as an upper unit of the Carlotta formation composed of fine-grained silts and clays. The USGS raster for this zone was defined as Hookton formation deposits. Model stratigraphy reflects the 2021 field investigation interpretation (i.e., that this zone is an Upper Carlotta). The thickness of the Upper Carlotta was assumed to be consistent with the USGS-interpreted Hookton formation where the Hookton formation underlies Quaternary alluvium. Hookton Formation is expected to be located along the terraces at the north and northeastern margins of the Basin as illustrated on **Figure 4.6** in Section 4.3.
9 A warm-up period allows any errors associated with the initial representation of the groundwater flow system to work their way through the system so they don't affect simulation targets or model outputs of interest, such as stage elevations or river flows.

– Streamflow routing and river boundary conditions representing surface water features throughout the Eel River and Van Duzen River watersheds
– Groundwater pumping wells
– Recharge over the top of the model domain due to precipitation infiltration

4.2.1 No-Flow Boundary Conditions

No-flow boundary conditions were applied where negligible groundwater flow across a model boundary could be reasonably expected, specifically along the south by the Wildcat Range, a mountainous area formed by north-dipping sediments of the Wildcat Group in the southern limb of the Eel River syncline. The northern side of the ERVB is bounded by the axis of the Table Bluff anticline to the west and the Little Salmon fault to the east (illustrated on Hydrologic Conceptual Model TM, Figure 3 of GHD (2021b)). The eastern limit of the ERVB is defined by the extent of the mapped Carlotta formation, with some extensions to include the terraces and shallow alluvial materials of the Eel and Van Duzen rivers.

In the mountainous regions outside of the ERVB, no-flow boundaries are assigned adjacent to surface water features to represent the limited interaction between groundwater and surface water expected.

At the bottom of the model, a no-flow boundary condition was applied, which is representative of the base of the Carlotta formation and the base of the ERVB as described by GHD (2021b) and Ogle (1953).

4.2.2 Constant Head Boundary Condition

A constant head boundary condition at the northwest (downgradient/discharge) model domain limit represents both the Pacific Ocean and the exchange of groundwater and surface water with the ocean. The elevation was specified as a uniform long-term average (i.e., greater than 1 one [1] month) of 0 feet (NAVD 88). It is recognized that the Pacific Coast is tidally influenced and that tidal changes vary across a period that is less than one (1) day.

4.2.3 Streamflow Routing and River Boundary Conditions

The manners in which the integrated groundwater/surface water and seawater intrusion models represent surface water features vary. The interaction between groundwater and surface water is a primary topic of interest in the ERVB and an accurate representation is required. Of those in the MODFLOW family of codes, the SFR2 package (Prudic et al., 2004; Niswonger and Prudic, 2005) is the most accurate representation of this interaction. However, SEAWAT, the model that was applied to evaluate seawater intrusion in the ERVB, predates development of SFR2 and does not include this more accurate representation of the interaction of groundwater and surface water. Therefore, it was necessary to represent surface water features as SFR boundary condition cells in the integrated groundwater/surface water models and as river boundary condition cells in the seawater intrusion models.

The SFR2 package calculates flows between streams and groundwater based on stream and groundwater levels. Flow is routed downstream based on the calculated flow in and out of the streams. The SFR2 package includes several options for calculating stream water levels based on stream flow that account for streambed geometry, streambed elevations, and channel slope, wetted perimeter, and roughness.

Figure 4.2 shows a representative SFR boundary condition model cell perpendicular to Eel River near Fortuna. As illustrated on **Figure 4.1** SFR boundary condition model cells were assigned to represent natural surface water features throughout the Eel River and Van Duzen watersheds. SFR2 calculates volumetric flow between a section of stream within a boundary condition model cell, using the following formula:

$$Q_L = \frac{KwL}{m}(h_s - h_a) \qquad \text{Equation 4.1}$$

where:

Q_L = volumetric flow between section of stream and volume of aquifer (cubic ft/day)

K = hydraulic conductivity of the streambed sediments (ft/day)

w = width of the stream within the model cell (ft)[10]

L = length of the stream within the finite-difference model cell (ft)

m = thickness of streambed deposits extending from the top to the bottom of the streambed (ft)

h_s = stream stage elevation, calculated by adding the streambed elevation to stream depth (stream depth calculated using Equation 4.3 below) (ft NAVD88)

h_a = head in the aquifer beneath the streambed (ft NAVD88)

The first term on the right-hand side of Equation 4.1 is a conductance term that relates the capacity of the riverbed material to convey water between the groundwater and surface water flow systems. This conductance term is defined as:

$$C = \frac{KwL}{m} \qquad \text{Equation 4.2}$$

where:

C = conductance term (square ft/day)

Values for K and m were adjusted during model calibration.

Streamflow routing is calculated within each SFR boundary condition finite-difference model cell based on the continuity equation so that all volumetric inflow is equal to outflow minus all sources and sinks to the stream. The SFR2 package calculates volumetric flow at the midpoint of each SFR boundary condition cell (Q_{mpt}) as follows:

$$Q_{mdpt} = Q_{trb} + 0.5\left(Q_{ro} + Q_{ppt} - Q_{et} - Q_L\right) \qquad \text{Equation 4.3}$$

where:

Q_{trb} = inflow into the SFR boundary cell from upstream SFR boundary cells (cubic ft/day)

Q_{ro} = direct overland runoff (cubic ft/day)

Q_{ppt} = precipitation that falls directly on the stream reach within the finite-difference model cell (cubic ft/day)

Q_{et} = evapotranspiration from a stream reach within the finite-difference model cell (cubic ft/day)

Q_L = leakage through the streambed; positive when flow is from the stream reach to the aquifer, and negative when flow is from the aquifer to the stream reach (cubic ft/day)

Values for Q_{ppt} were obtained from the PRISM (PRISM Climate Group, 2004) data set by assigning monthly average precipitation to the centroid of each HRU that then were assigned to intersecting stream reaches. Values for Q_{et} and Q_{ro} were determined based on output from the calibrated PRMS model that were translated to each stream reach in the SFR model input file. Q_{ro} was adjusted during model calibration.

Stream depth is calculated based on the following:

$$D_{stage} = \left[\frac{Q_{mdpt} n_{Manning's}}{C w S_0^{1/2}}\right]^{3/5} \qquad \text{Equation 4.4}$$

[10] Stream widths were estimated based on the North American River Width Dataset (NARWidth) (Allen and Pavelsky, 2015). Where stream widths were not available within NARWidth they then were estimated based on an empirical power relationship presented in Leaf et al. (2015) and Feinstein (2010).

where:

D_{stage} = stream depth (ft)

$n_{Manning's}$ = Manning's roughness coefficient (standard units) that was modified during the calibration process

C = a constant that is equal to 128,390.4 $ft^{1/3}$/day when volumetric flow is in units of cubic ft/day

S_0 = slope in the stream channel (ft/foot)

For the seawater intrusion models, SFR boundary condition model cells were replaced with river boundary condition cells, which provide a simpler representation of the interactions between groundwater and surface water. If a specified river stage elevation is lower than the simulated groundwater elevation, the river boundary receives discharge from groundwater. If the specified river stage elevation is higher than the simulated groundwater elevation, the river boundary serves as a recharge to groundwater. Regardless, the river package does not itself determine the river stage but must be specified by the user. For seawater intrusion analyses, stage elevations were translated from output from the SFR2 in the integrated groundwater/surface water models to ensure continuity between the two representations of the ERVB.

The quantity of surface and groundwater exchange when using river boundary condition model cells is equal to the difference between the simulated groundwater elevation within the river cell and the specified head within the river cell, multiplied by a conductance term (as expressed in Equation 4.1).

4.2.4 Groundwater Pumping Wells

As described in Section 2.1.3, municipal water supply wells, industrial supply wells, and irrigation wells are located within the model domain, and are represented in the model as analytical elements. As described in Section 2.1.3, pumping rates were estimated based on Water Year Type, Month of Year, and land use classification (irrigation, industrial, or domestic supply). Where well screen information was available, wells were assigned to the model layer that corresponds to the mid-screen elevation. Where well screen information was not available, wells were assigned to Model Layer 1. Locations of the wells are presented on **Figure 4.3** and ranges of pumping rates assigned to wells are listed in **Table 4.1**.

Two municipal supply wells, Scotia and Rio Dell, obtain their water supply from infiltration galleries and don't pump from the groundwater flow system. These two wells are represented in the groundwater flow model as diversions from the SFR boundary condition model cells at those locations.

4.2.5 Recharge

Recharge from precipitation infiltration was applied as the top boundary condition for the model domain. The amount of precipitation reaching the groundwater table as recharge depends on topography, shallow soil types, ground cover and land use (vegetation or building/pavement coverage), season, weather conditions, etc. Monthly recharge values for 1980 through September 2020 were obtained from a calibrated PRMS simulation output. **Figure 4.4** shows the ranges of recharge rates applied to HRUs within the ERVB between water year 2000 (i.e., after model warm-up) and 2020. Applied recharge varied on a monthly basis so that a representative recharge rate was applied to each HRU for each model stress period. The inset on the right side of **Figure 4.4** shows monthly recharge rates applied to each HRU. These monthly rates also are listed in **Table 4.2**.

4.2.6 Seawater Intrusion Model Groundwater Density

Variations in the densities of groundwater near the coast influence groundwater flow conditions and seawater intrusion, representing the presence of groundwater with such characteristics as:

– Fresh groundwater from precipitation recharge

– Regional fresh groundwater inflow through the ERVB from upgradient locations
– Fresh groundwater from regional rivers and streams
– Fresh groundwater and seawater distributions created by the saltwater present in the Pacific Ocean

In a variable-density groundwater flow model, a groundwater density distribution must be specified. For seawater intrusion model applications, an initial distribution of density was allowed to evolve to simulate, under natural conditions in the absence of pumping, the development of the naturally occurring fresh groundwater and seawater distributions within the groundwater flow system. This initial seawater intrusion simulation was started with the density distribution of fresh groundwater throughout the model domain. The movement of seawater inland from the Pacific Ocean was simulated until an approximately stable distribution of fresh groundwater and seawater was established. For the transient seawater intrusion application models, density distribution was allowed to change through time as the simulation progressed.

Density values are specified in the constant head boundary condition cells representing the Pacific Ocean. In the absence of measured specific gravity near the ERVB, estimated specific gravity values of 1,025,000 mg/L and 1,000,000 mg/L were specified for seawater at the Pacific Coast and fresh groundwater, respectively, based on values presented in Langevin et al. (2008). A constant chloride concentration of 19,400 mg/L was specified for seawater at the constant head boundary condition model cells representing the Pacific Ocean. An equation relating chloride concentration to groundwater density was developed as follows:

$$\rho = 1{,}000{,}000\text{mg/L} + 1.289 \times C_{Cl} \qquad \text{Equation 4.5}$$

where:

ρ = groundwater density (mg/L)

C_{Cl} = groundwater chloride concentration (mg/L)

For the seawater intrusion models, uniform dispersivity values were specified throughout the model domain. Dispersivity is dependent on the scale of the groundwater migration path under consideration. Longitudinal dispersivity values were estimated based on the approximate distance from the coast to the observed 100 mg/L chloride isoconcentration profile delineated by Johnson (1975) and illustrated on **Figure 4.5** and an empirical relationship that relates migration path length with longitudinal dispersivity (Xu and Eckstein, 1995). That empirical relationship is described as follows:

$$\alpha_L = 1.2 \times \log_{10}\left(\frac{L}{3.2808 \text{ feet/meter}}\right)^{2.958} \times 3.2808 \text{ feet/meter} \qquad \text{Equation 4.6}$$

where:

α_L = longitudinal dispersivity (feet)

$\log_{10}$ = base-10 logarithm

L = migration path length (feet)

Based on Equation 4.5 and a seawater migration path length of 21,000 feet (see **Figure 4.5**) an horizontal dispersivity value of 200 feet was applied to the seawater intrusion model. The horizontal and vertical dispersivity values were specified to be 1/10 of the longitudinal dispersivity. This aligns with observations by Gelhar et al. (1992).

As chloride moves through hydrostratigraphic deposits, it moves through the mobile pore fraction, which corresponds to the segments of an aquifer that have the highest permeability and can be substantially smaller than the drainable fraction (i.e., that of specific yield or effective porosity) (Payne et al., 2008). A mobile fraction of 1 percent was applied uniformly throughout the ERVB. This is consistent with mobile pore fractions reported in other alluvium basins (Payne et al., 2008).

4.3 Model Hydraulic Conductivity Distribution

Hydraulic conductivity zones were assigned in the model to represent each of the major hydrogeologic units in the ERVB (i.e., channel deposits, Quaternary alluvium, Hookton formation, Upper Carlotta, and Lower Carlotta). Hydraulic conductivity zones specified in model layers 1 through 6 in the integrated groundwater/surface water model and in model layers 1 through 15 in the seawater intrusion models are presented on **Figure 4.6**. Specifying hydraulic conductivity zones per hydrogeologic unit permits parameter estimation for each unit and a corresponding uncertainty analysis using PEST. The hydraulic conductivity value for each unit was adjusted during model calibration within reasonable bounds based on the results of the hydraulic conductivity testing performed within each hydrogeologic unit (see Table 1 of GHD (2021a)]) as well as values available in published literature consistent with the geologic materials that make up each unit.

4.4 Model Parameter Specification

As described in the following Section 5, groundwater flow was simulated under transient conditions during model calibration spanning water years 2000 through 2020, with a steady-state initial stress period and subsequent warm-up period that spanned from 1980 through the end of 1999. The model requires specification of uniform specific storage and uniform specific yield. The term “specific storage” refers to the volume of water that is released from storage per unit decrease in groundwater elevation in a fully-saturated model cell. The term “specific yield” refers to the volume of water that drains from interconnected pores per unit decrease in groundwater elevation in a partially-saturated model cell. For this study, a uniform value for specific storage of 1×10^{-4} ft^{-1} was selected based on literature values presented in Spitz and Moreno (1996), which provides ranges of 4×10^{-5} ft^{-1} to 3×10^{-4} ft^{-1} for sandy aquifers. A uniform value for specific yield of 0.21 was applied throughout the ERVB based on average values for fine sand (Johnson, 1967).

Solution of the groundwater flow equation requires iterative methods using numerical solvers. The transient groundwater flow equation was solved using the PCG2 solver implemented in MODFLOW-2005. Each iteration of the numerical solver results in updates to hydraulic head and flow values throughout the model domain. A model converges when updates to these values fall to below specified convergence criteria.. The convergence criteria for the PCG2 solver were specified as 0.001 ft for the maximum hydraulic head change and 8.64 cubic ft per day for the maximum flow residual throughout the model domain. The SFR2 package has its own convergence criteria and values of 1×10^{-6} ft and 1×10^{-6} cubic ft/day (0.0864 cubic feet per second [cfs]) were used for the maximum stream depth change and maximum streamflow residual, respectively. Model convergence was obtained using these criteria to determine a cumulative transient water balance discrepancy of less than 0.2 percent throughout the model domain and model calibration period.

5. Integrated Groundwater/Surface Water Model Calibration

Groundwater flow model calibration is the process of adjusting model input parameter and boundary conditions so that simulated results provide a reasonable representation of observed groundwater and surface water flow conditions. The objective of model calibration is to determine a unique combination of input parameters to produce a numerical solution that best matches the observed groundwater elevations, observed groundwater flow directions, and observed stream discharge rates.

5.1 Calibration Targets

Selection of the targets for calibration of the transient models typically considers if groundwater elevation monitoring events:

1. Represent the range of groundwater flow conditions observed throughout the area of interest
2. Feature groundwater stresses and boundary conditions (i.e., extraction rates/stage elevations) represent the range of conditions affecting groundwater elevations and flow directions
3. Provide spatial coverage of the model domain with measurements at the majority of the monitoring well locations
4. Incorporate key areas of interest within the model domain

It is important for the integrated groundwater/surface water model to reasonably represent surface flow conditions (i.e., discharge rates and stage elevations), as they are key features of interest within the ERVB.

Groundwater elevations in California Statewide Groundwater Elevation Monitoring (CASGEM) program monitoring wells in the ERVB have been recorded since 1950. **Figure 5.1** shows CASGEM wells monitored over a substantial length of time (i.e., greater than 20 monitoring events) within the calibration period (i.e., 2000 through 2020). The right panel of **Figure 5.1** also shows measured groundwater elevations in these CASGEM wells since 1992, to align with local water year types presented in Table 2, to illustrate measured groundwater elevation variability, though only water levels from 2000 to 2020 were used for model calibration. Shading behind the right panel of **Figure 5.1** shows the water year types when these water levels were measured, demonstrating that these calibration targets (2000 through 2020) represent a range of flow conditions occurring in the ERVB. Based on **Figure 5.1**, spring groundwater elevations (higher groundwater elevations) show greater variability than fall groundwater elevations (lower groundwater elevations), which are stable historically. **Figure 5.2** shows the groundwater target locations and observation periods used for the calibration. **Table 5.1** lists the observation target values. As illustrated on **Figure 5.1**, observation targets comprise the key areas of interest and provide reasonable coverage across the ERVB. Using transient targets ensures inclusion of a range of groundwater flow conditions representative of wet seasons (March monitoring events) and end of dry season (October monitoring events).

There are two (2) USGS National Water Information System (NWIS) stations near the ERVB: one in the upper Eel River (Station 11477000 Eel River at Scotia, California) and the other in the upper Van Duzen River (Station 11478500 Van Duzen River near Bridgeville, California). River flows and stage elevations for these stations were accessed using tools developed by De Cicco et al. (2021) and are presented on **Figures 5.3** and **5.4**. Stage elevations at Stations 11477000 and 11478500 are available for periods after 2007 and represent each of the five (5) water year types (i.e., wet, above average, below average, dry, and critical). Both flow rates and stage elevations were averaged monthly so that they can be qualitatively compared to simulated flows and stages, which vary according to changes in monthly stress periods. **Table 5.2** lists the monthly average flow and stage targets at each of the Eel River and Van Duzen River station locations.

5.2 Calibration Methodology

Model calibration was performed in a two-stage approach—first matching simulated to observed surface water flows and stage elevations, then matching simulated to observed groundwater elevations.

The integrated groundwater/surface water model was calibrated according to surface water flows and stage elevations in an iterative manner. The process involves:

1. Manually adjusting the parameters on the USGS provisional PRMS model (see Section 3.4)
2. Assigning PRMS runoff and evapotranspiration outputs to each SFR boundary condition model cell
3. Using the integrated groundwater/surface water model to transiently simulate 1980 through to the end of water year 2020, with stress periods from 1980 to the end of 1999 used as model warm-up periods
4. Qualitatively comparing simulated flow and stage elevations to target observations (see Section 5.1)

Two (2) PRMS parameters from the provisional USGS model were modified during model calibration: ***carea_max***, which is the maximum proportion of each HRU area that contributes to surface runoff, and ***ssr2gw_rate***, which is a coefficient that expresses the rate at which groundwater in the gravity reservoir above the water table recharges. The parameter ***ssr2gw_rate*** originally was adjusted by USGS from the original NHM

to reflect the low exchange rate in mountainous areas. Parameter ***ssr2gw_rate*** was increased in the ERVB to reflect the greater exchange in the more permeable deposits (i.e., channel deposits and Quaternary alluvium).

The integrated groundwater/surface water model was then manually calibrated to transiently observed groundwater elevations by adjusting SFR streambed thicknesses and hydraulic conductivity of the streambed sediments. Hydraulic conductivity of major hydrogeologic units in the ERVB was also adjusted during model calibration, aided through applying PESTPP-IES to iteratively adjust hydraulic conductivity values until the error between observed and simulated groundwater elevations was minimized over the model domain. When calibrating a groundwater flow model using the IES as implemented in PESTPP-IES, several realizations of equally valid calibrated groundwater flow models are produced based on ensembles of parameter values so that each provide reasonable matches to observed conditions. These calibrations constrain the uncertainty analysis.

The uncertainty analysis was implemented using 10 model realizations: a base realization that is derived from the initial estimate of parameter values and nine (9) additional calibrated realizations. Calibrating 10 groundwater flow models yields 90 percent confidence intervals for model application predictions.

Model calibration was evaluated both qualitatively and quantitatively. A qualitative evaluation was conducted by visually comparing simulated and observed flow rates and stage elevations at the Eel River and Van Duzen River NWIS station locations. A qualitative evaluation was conducted by visually comparing the simulated to observed transient groundwater elevations at CASGEM wells with long-term monitoring histories. This comparison provided a qualitative measure of the spatial distribution of the calibration error, as well as a way to determine if the calibrated model could reasonably represent observed groundwater flow directions.

The quantitative evaluation was conducted by examining calibration target errors, or residuals, which were calculated by subtracting the simulated from the observed groundwater elevations. The mean residual, absolute mean residual, and residual sum of square statistics, standard deviation, normalized error, etc. were calculated to quantify the discrepancy between observed and simulated groundwater elevations provided by the calibrated model. The objective of the model calibration was to minimize this discrepancy.

A second quantitative evaluation can be found in the simulated cumulative volumetric water budget reported by MODFLOW-2005, indicating the quantities of flow into and out of the model domain via the groundwater flow components specified in the model. The cumulative volumetric budget was reviewed to ensure that the total inflows and outflows were consistent with the HCM. The cumulative volumetric water budget also provided a percent discrepancy between the total simulated inflows and outflows at each timestep. A discrepancy of less than 0.2 percent for each timestep between 2000 and 2020 indicates a satisfactory numerical convergence.

5.3 Integrated Groundwater/Surface Water Model Calibration Results

As presented in **Table 5.3**, 339 groundwater targets from 44 observation wells were used for evaluating groundwater elevation conditions in the ERVB. Calibration target locations and minimum and maximum residual values from the calibrated base realization are plotted spatially on **Figure 5.5**.

Hydraulic conductivity distributions for each model layer are explicitly represented in **Figure 4.6**. Each model layer includes hydraulic conductivity value zones and values applied in the calibrated model representing the stratigraphic units in the ERVB. The ranges of hydraulic conductivity values that produce calibrated model results in the 10 model realizations are summarized as follows:

- **Channel Deposits**: from 385 ft/day to 412 ft/day
- **Quaternary Alluvium**: from 173 ft/day to 191 ft/day
- **Hookton Formation**: from 0.07 ft/day to 0.07 ft/day
- **Carlotta Formation (upper)**: from 0.1 ft/day to 0.1 ft/day
- **Carlotta Formation (lower)**: from 2.1 ft/day to 2.2 ft/day

The limited range of ensemble parameter values indicates that the transient groundwater flow model is reasonably constrained where there are numerous observations, such as near the channel deposits and Quaternary alluvium. Where observations are sparse, such as in the upper and lower Carlotta formation, the limited range of ensemble parameter values indicates that observation targets are not sensitive to parameter adjustments.

Vertical to horizontal hydraulic conductivity anisotropy ratios were applied to the stratigraphic units as follows:

– An anisotropy ratio of 1:10 was applied to the channel deposits and Hookton formation to represent the horizontal stratification (i.e., layering) in these deposits.
– The anisotropy ratio in the Quaternary alluvium was adjusted during the calibration process to reflect the fine-grained bedding in this unit (described in GHD (2021b)]). The vertical to horizontal hydraulic conductivity anisotropy ratios in the 10 calibrated ensembles range from 1:85 to 1:92.
– An anisotropy ratio of 1:1 was applied to the finer-grained deposits where horizontal hydraulic conductivity is limited.

The calibrated hydraulic conductivity values for the model are generally consistent with the hydraulic conductivity values estimated from the single-well response test (GHD, 2021a).

Figure 5.5 shows minimum (in the left panel) and maximum (in the right panel) target residuals for calibration from one (1) of the 10 ensemble calibrated models, referred to as the Base Model. Target residuals are colored based on whether they are positive (blue: indicating that the observed groundwater elevation is underpredicted) or negative (red: indicating that the observed groundwater elevation is over-predicted), and their sizes vary based on the magnitude of the residual. Due to the transient nature of the simulation and the limited number of synoptic monitoring events, a quantitative assessment of simulated and observed hydrographs at regularly monitored CASGEM well locations was prepared based on the Base Model, presented along the bottom of **Figure 5.5**.

Another qualitative evaluation involves the comparison of simulated to observed monthly average stream flows and stage elevations. **Figure 5.6** presents simulated flows in the top panel and stages in the bottom panel for the Eel River (at Station 11477000) and Van Duzen River (at Station 11478500) in the left and right panels, respectively. Simulated values are presented as light blue lines and observed values as orange lines. Vertical axes for the flow plots are logarithmically scaled so that the simulated to observed match can be evaluated for both high and low flow conditions. Flows and stages in the Eel River provide a good match to observed conditions. Flow in the Van Duzen also provides a reasonable match to observed conditions, particularly during high flow conditions. During low flow conditions the model underpredicts flow in the Van Duzen River, though that is typically when flows are less than 10 cfs. Regardless, it is not expected to adversely influence predictions made with the integrated groundwater/surface water model during model application because the magnitude of the mismatch is small (i.e., less than 10 cfs). If specific questions pertaining to low flow conditions are required than additional model investigations involving grid rediscretization can be completed.

Table 5.3 lists targets for Base Model calibration. Calibration target residuals are colored based on whether the residual is positive or negative. **Figure 5.7** presents a scatter plot of Base Model observed versus simulated groundwater elevations for the transient model calibration. The transient calibrated Base Model provides a residual mean of -3.2 ft, an absolute residual mean of 5.9 feet, a residual sum of squared error of 21,070 square ft, and a residual standard deviation of 7.2 ft. The residual standard deviation is 3 percent of the head range. Spitz and Moreno (1996) suggest that the residual standard deviation should normally be less than about 10 percent of the head range, which is satisfied by Base Model calibration.

The scatter plot of the simulated versus observed groundwater elevations presented on **Figure 5.7** includes a line of exact match between the simulated and observed groundwater elevations. Below the observed versus simulated scatter plot is a plot of observed groundwater elevations versus the model residuals. The plotted points appearing above the match line overpredict the observed groundwater elevation (and have a negative residual). The plotted points appearing below the exact match line underpredict the observed groundwater elevation (and have a positive residual). A reasonable distribution of residual points on the bottom panel of **Figure 5.7** occurs above and below the match line across the full range of the measured groundwater elevations

throughout the model domain, which further ensures the calibrated model provides a reasonable match to the observed groundwater flow conditions.

Simulated groundwater elevations for spring (March 2003) and fall (October 2003) are presented on left and right panels, respectively, of **Figure 5.8**. The bottom right panel of **Figure 5.8** shows the flows in the Eel and Van Duzen rivers during these periods (highlighted in yellow) as a reference. There is a high hydraulic gradient down the Van Duzen River valley discharging groundwater into the lower Eel River valley. When flows are high in the spring, there is limited exchange with the surface water flow system until below Palmer Creek. This is evidenced by groundwater elevation contours that are approximately perpendicular to Eel River. In the fall, when river flows and groundwater elevations are lower, after entering the lower Eel River valley, groundwater flows towards and discharges to Eel River near Fortuna.

The cumulative transient volumetric water budget was observed for the calibrated Base Model. A discrepancy between simulated inflows and outflows of less than 0.2 percent for each stress occurs in the budget, demonstrating that a good numerical convergence was achieved throughout the model domain and across the simulation period used for calibration (i.e., 2000 through 2020).

6. Applications of the Integrated Groundwater/Surface Water and Seawater Intrusion Models

6.1 Groundwater Model Scenarios Overview

The calibrated integrated groundwater/surface water and seawater intrusion models were used to support development of the SMC, with the ultimate intention to determine if water uses within the ERVB can be sustained currently and into the future without creating an undesirable result, i.e.:

– Chronic lowering of groundwater levels, indicating a significant and unreasonable depletion of supply
– Significant and unreasonable reduction of groundwater storage
– Significant and unreasonable seawater intrusion
– Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water

The effect of water use on degradation of water quality—through the migration of contaminant plumes that impair water supply, for example, and land subsidence that substantially interferes with land uses—is evaluated as part of the GSP through monitoring and analytical methods (see Sections 6.2.4 and 6.2.5).

The historical effects of water use in the ERVB were evaluated by comparing the integrated groundwater/surface water and seawater intrusion models that include groundwater pumping to a simulated groundwater flow system that does not include groundwater pumping. Comparing pumped to unpumped (i.e., undisturbed) conditions enables a better understanding of depletions to the groundwater and surface water flow systems that can be attributed to either water use in the ERVB or seasonality and climate. This comparison permits the evaluation of the effect of current water use on the SMC.

Section 5.3 includes a description of the CCUA results, demonstrating that the model is reasonably well constrained and capable of providing predictions with greater reliability where the model can be calibrated to observed groundwater and surface water data. Where observations are sparse across large areas, the model was not sensitive to calibration adjustments. Therefore, application of the integrated groundwater/surface water and seawater intrusion models will focus on the Lower Eel River and Van Duzen River valleys, where there a

greater number of observations can constrain the model—which also happens to be where much of the water use is occurring within the ERVB and where predictions can be made with greater reliability.

For much of the analysis presented in Section 6 a reference condition of water levels is necessary. Commonly, this reference is a historical point of comparison (e.g., the date of the implementation of the SGMA). When trends are not evident, as is the case in the ERVB (see for example **Figure 5.1**), selection of an appropriate average condition is necessary. Groundwater levels recorded at the CASGEM program wells provide the best opportunities to evaluate a reference condition. Average spring groundwater levels were calculated for CASGEM program wells 36943, 36942, 23181, and 23183, all located within the Lower Eel River Valley and currently active. The period of record used to develop the average included all measurements available (these generally start in the 1980s) up to 2015. To establish a modeled reference condition, modeled outputs were compared with average groundwater elevations. 2003 was determined to be the best fit. The modeled groundwater levels for Spring 2003 are therefore used as a reference representing average spring conditions. As illustrated on **Figure 5.1** there is not a lot of variability in fall conditions. Fall 2003 was therefore selected as average fall conditions to be consistent with the spring analyses.

6.1.1 Increased Groundwater Extraction Scenarios

The Base Models (of the 10 model realizations) for the calibrated integrated groundwater/surface water and seawater intrusion models were used to investigate future conditions by considering a range of potential future water needs. This was accomplished by simulating increased pumping rates as proportions of historical pumping. To better understand the sustainable yield, additional pumping scenarios were included, up to an 800% increase of current conditions. In total, an additional 13 simulations were completed, encompassing pumping increases of 10 percent, 20 percent, 30 percent, 40 percent, 50 percent, 100 percent, 200 percent, 250 percent, 300 percent, 300 percent, 400 percent, 500 percent, and 800 percent, in addition to the non-pumping conditions and historical conditions described in Section 6.1.

6.1.2 Climate Change Scenarios

The Base Model for the calibrated integrated groundwater/surface water model (Base Model) and the seawater intrusion model were used to evaluate a range of potential future climatological conditions. DWR provides necessary and relevant climate change datasets, generated from climate and hydrologic modeling studies, to assess projected groundwater conditions and water budgets for specific groundwater management projects (DWR, 2018). These datasets are available as 3.75 mile × 3.75 mile grids. GSP criteria described in DWR (2018) require that each of the presented climate change scenarios represent projected conditions over a 50-year SGMA planning and implementation horizon.

Projected precipitation, minimum temperature, and maximum temperature under near future (i.e., 2030) and late future (i.e., 2070) scenarios were used as inputs to the calibrated PRMS model. DWR climate change datasets were assigned as PRMS inputs by developing area-weighted average values that were then assigned to each of the PRMS HRUs. Select outputs from the PRMS models were then assigned as MODFLOW-2005 input parameters (see Sections 4.2.3 and 4.2.5) to simulate the projected 50-year near future and late future groundwater conditions. Sea level rise is included in each of these scenarios as constant head boundary conditions specified as 15 cm (i.e., 0.49 ft) and 45 cm (i.e., 1.48 ft) for the near and late future climate scenarios, respectively. An additional simulation representing conditions where sea level rises by 3 ft also was simulated using the seawater intrusion model to evaluate the effect of this condition on the availability of freshwater in the ERVB. This supplemental model was applied using the late future 2070 climatic conditions. The 50-year projections were centered around 2030 (i.e., 2005 to 2054) and 2070 (i.e., 2045 to 2094) for the near and late future climate scenarios, respectively.

6.2 Sustainable Management Criteria (SMC) Modeling Evaluation

6.2.1 Chronic Lowering of Groundwater Levels

As described in SHN (2021a) and presented on the hydrographs therein, there has been no evidence of chronic lowering of groundwater levels observed in the CASGEM monitoring wells. The potential for chronic lowering of groundwater levels was evaluated at select wells screened in alluvium throughout the ERVB, since the alluvium is where most groundwater extraction occurs (see **Figure 4.3)**. **Table 6.1** provides a legend to match Well Identification Keys from **Figure 6.1** with observation well identifications. The model was applied to evaluate if water use (i.e., pumping) in ERVB has the potential to induce chronic groundwater lowering. The amount of groundwater lowering that is attributable to pumping under current conditions was estimated by subtracting groundwater elevations under pumping conditions from groundwater elevations under non-pumping conditions. **Figure 6.2** shows ranges of groundwater lowering attributable to pumping at each of these wells. Wells on **Figure 6.2** are arranged from left to right in order of decreasing median groundwater lowering amounts for the periods between water year 2000 through to the end of water year 2020. The greatest amount of lowering occurs east of Ferndale near the foothills of the Wildcat Range.

Figure 6.3 presents ranges of groundwater lowering based on the 10 CCUA model realizations (described in Sections 5.2 and 5.3) during average spring (March 2003) and fall (September 2003) conditions in the upper left and right panels, respectively. Contours of the minimum and maximum amounts of groundwater lowering, based on the CCUA models, are presented in orange and green, respectively. Simulated groundwater elevations at select groundwater model cells are presented on the bottom panels of **Figure 6.3** to illustrate the water level dynamics in the basin and assess the potential for chronic lowering associated with water use. The bottom panels show that groundwater recovers each year to an equilibrium level, even following critically dry years. Based on historical water use and the seasonal nature of water level recovery, chronic lowering of water levels in the ERVB is not likely.

As described in Section 6.1.1, simulated pumping was modified in the model to better understand potential future conditions and identify the water use rates that would be required to cause a substantial change to water levels and flow directions in the ERVB. **Figures 6.4** and **6.5** show groundwater elevations and groundwater lowering[11], respectively, under a range of increased pumping conditions based on average dry conditions (i.e., September 2003). Flowlines are presented on **Figure 6.4** that show changes to flow under increased pumping. Under most increased pumping scenarios groundwater discharges to Eel River. Only during extreme pumping scenarios (i.e., four [4] and five [5] times current pumping rates [300 percent and 400 percent increases in pumping rates]) does water get drawn from Eel River in towards the center of the valley.

6.2.1.1 Modeling Uncertainties of Chronic Lowering

Figure 6.2 shows the ranges of median groundwater lowering values for each of the 10 model realizations completed during the CCUA. The median values are limited and vary a little under 0.3 feet at the worst-case location (i.e., east of Ferndale near the Wildcats as simulated at E2). **Figure 6.3** shows the ranges of uncertainty related to groundwater lowering in the quaternary alluvium in the ERVB. Although there is some variability in simulated output it is limited and is not significant to the interpretation of the effects of water use on chronic lowering of groundwater levels in the ERVB.

6.2.2 Reduction in Groundwater Storage

The DWR Water Budget BMP (DWR, 2016b) defines the change in storage as “the total change in storage between seasonal high conditions, which typically occurs in the spring” and recommends that the change in storage estimates be based on observed changes in groundwater levels within the Basin. CASGEM monitoring

[11] Note that the upper left panel of **Figure 6.5** shows groundwater elevations under non-pumping conditions as a reference against which the other panels of groundwater lowering are compared.

wells in the Basin typically are measured in March and October. Calculation of change in springtime storage, therefore, is based on March values for spring groundwater storage so that future analyses can be completed using observed changes in groundwater levels within the Basin. Changes in fall storage have been calculated to support Water Balance analysis presented in the GSP based on the storage that is remaining at the end of one water year and the beginning of another. Calculation of fall/end of water year storage is based on September values.

Changes in spring and fall groundwater storage is calculated by subtracting previous year from the same month in the current year groundwater elevations in each Quaternary alluvium model cell for each year between water year 2000 and water year 2020. The initial head differences (i.e., 2000) are compared to March and September 2003, for spring and fall conditions, respectively. The head differences were then converted to volumes by multiplying by the 1,000 ft × 1,000 ft finite-difference model cell area. The volumes of groundwater were then determined by scaling by the specific yield value of 0.21. This approach is summarized in Equation 6.1.

$$\Delta V_{GW} = 1{,}000\ \text{ft} \times 1{,}000\ \text{ft} \times 0.21 \times \frac{1\ \text{acre-ft}}{43{,}560\ \text{ft}^3} \sum_{i=1}^{n_{\text{Alluvium Model Cells}}} h_i^{\text{current}} - h_i^{\text{previous}} \qquad \text{Equation 6.1}$$

where:

ΔV_{GW} = the change in annual groundwater storage volume (acre-ft)

$n_{\text{Alluvium Model Cells}}$ = the number of finite-difference model cells representing Quaternary alluvium

h_i^{current} = the groundwater elevation in model cell (i) during spring (March) or fall (September) in a particular year (ft NAVD88)

h_i^{previous} = the groundwater elevation in model cell (i) during spring (March) or fall (September) in the previous year (feet NAVD88)

The spring and fall changes and cumulative changes in groundwater storage are presented on the upper two panels of **Figure 6.6** for each of the 10 equally calibrated groundwater flow models. Positive changes in storage are represented as green bars and negative changes in storage are represented as red bars on **Figure 6.6**. Interpreting the change in storage in the context of a water year type is complicated because comparing one month to the same month of the previous year does not necessarily reflect the total precipitation that occurred over the duration of the water year, which is how the water year type is determined. The bottom panel of **Figure 6.6** includes simulated estimates of accessible freshwater (i.e., freshwater that is situated in Channel Deposits, Quaternary Alluvium, or Lower Carlotta Formation aquifers) volumes in the basin on a monthly basis. The freshwater volumes provide a reference for interpreting changes in storage and for interpreting how freshwater volumes are affected by water year types. Freshwater was defined as groundwater with chloride concentrations below the Secondary Drinking Water Standard of 250 mg/L and was determined using the seawater intrusion model.

As described in Section 5.1 and illustrated on **Figure 5.1** spring (March) groundwater elevations are more variable than fall (October) levels. This variability in the spring and stability in the fall also can be observed in the change in storage values illustrated on the upper two panels of **Figure 6.6**.

Figure 6.6 shows that Basin water use is not a major contributor to changes in storage. For example, in situations where there are sequential dry years such as water years 2012 and 2013 (end of water years 2012 and 2013, respectively) there would be potential for an increase in the magnitude in the reduction in fall storage (i.e., more reduction from one water year to the next) if Basin water use were a large contributor to storage reductions. Since these sequential reductions are not observed in fall 2012 and 2013, the data helps show that Basin water use is not a major contributor to storage reductions but rather year over year climatic changes are the primary contributor.

6.2.2.1 Modeling Uncertainties of Reduction in Groundwater Storage Analysis

The ranges of change in storage for each of the 10 model realizations presented on **Figure 6.6** appear to overlay one another. Although there is some variability (this is evident as the lines representing cumulative storage begin to spread towards the end of water year 2020) the variability is not significant to the interpretation of reduction in groundwater storage. That is to say that when the model uncertainty is accounted for reductions in storage in ERVB is neither significant nor unreasonable.

6.2.3 Seawater Intrusion

The seawater intrusion model was used to support the development of protective groundwater level analysis using observed chloride concentration and water level data together with well construction details from the DWR database. Minimum thresholds based on chloride values and the associated 100 mg/L isocontour were developed for specific well locations within the seawater-freshwater transition zone.

There is a natural advance and retreat that occurs with seawater intrusion: chlorides advance when water levels are low in the summer and retreat towards the Pacific Ocean when wet season weather causes substantial amounts of freshwater move through the surface water and groundwater flow systems. The upper panel of **Figure 6.7** shows the range[12] of advance and retreat of the 100 mg/L chloride concentration isoconcentration contour[13] that would happen under climatic conditions, alone. These frequency contours are compared to the 100 mg/L chloride concentration isocontour estimated by Johnson (1975). The comparison shows that there is a good match between this measured isoconcentration contour and the median simulated 100 mg/L isoconcentration contour. During the seawater intrusion model construction and analysis the advancing chloride distribution near the rivers was investigated. The model indicated that there was an upwelling occurring from the deeper zones. GHD prepared a sensitivity analysis model by removing deep Carlotta Formation constant chloride concentrations from the boundary conditions. The resulting chloride distribution was very close to the Pacific Ocean. This implied that much of the seawater intrusion into the basin is coming from deep formations. Hydraulic heads in the quaternary alluvium are hydraulically connected to the rivers and these heads vary seasonally. During dry seasons, when surface water stage elevations and shallow groundwater elevations are lower, there is an upward head differential between the alluvium and lower Carlotta causing the upward migration of chloride. The seasonal rising and lowering of the Salt and Eel Rivers results in increased summertime hydraulic gradients towards these rivers. This seasonal increase in the hydraulic gradient causes seawater advance along the rivers that is greater than in the surrounding aquifers. Near the middle of the basin the distance that the 100 mg/L isoconcentration profile advances and retreats due to climatic variability alone is 4,750 feet (see the upper left panel of **Figure 6.7**). Under current conditions that include seasonal water usage the advance of the seawater is an additional 700 feet. This is shown in the upper middle plot of **Figure 6.7**[14]. As pumping scenarios increase the stress on the groundwater flow system, freshwater from the Eel and Salt Rivers diffuse the chloride concentrations, lowering them. It is only when pumping is increased to 4× current conditions (a rate that far exceeds the amount that would be required by irrigation to replace evapotranspiration) that 100 mg/L chloride frequencies increase from 5 percent to 95 percent.

The seawater intrusion model also was applied to evaluate various water use scenarios with the purpose of understanding the relationship between the rate of extraction, increases in chloride concentrations, and groundwater level lowering. The model runs included the following scenarios:

– **No-Pumping**: Conditions that represent water levels and chloride concentrations if no pumping were occurring. This scenario establishes the natural variations to water levels and chloride concentrations.
– **Current Pumping**: Conditions that represent water levels and chloride concentrations observed under the current pumping rates.

[12] The range represents the range between the 95% and 5% frequency within which chloride concentrations are equal to or greater than 100 mg/L
[13] Chloride concentrations are measured in the upper 60 feet of the aquifer or Model Layer 1, whichever is deeper, to be consistent with most irrigation well screen intervals.
[14] The reference line that appears in the plots that show pumping conditions represents the 5% isocontour for non-pumping conditions

– **Increased Pumping**: Conditions predicted to occur under increases to pumping rates at increments that included 10%, 20%, 30%, 40%, 50%, 100%, 150%, 200%, 250%, 300%, 400%, 500%, and 800% above current pumping rates.

Results of the increased pumping scenarios were analyzed to develop an understanding of the chloride/water level relationships. The representative monitoring sites for chloride concentrations were evaluated by plotting graphs of the predicted water levels and chloride concentrations through the timeframe of the model (2000 to 2020). Preliminary chloride concentrations were established to identify early-notification of significant seawater intrusion. Individual well early-notification concentrations varied across the basin based on the well's proximity to the 100 mg/L chloride isocontour. For each well, the years that the predicted chloride concentration exceeded these key indicators were evaluated. The magnitude of water level lowering required to cause the exceedance was noted and an average value over the years in which it occurred was calculated.

In over half the wells analyzed, the established preliminary early-notification concentration were not exceeded with the scenarios run (up to 800% increase in pumping). For wells that did predict exceedances, a greater than 500% increase in pumping was required, and exceedances were often only predicted during years where a climatic stress was put on the Basin (i.e., critical or dry water year). In all cases, the model predicts that groundwater level needs to be lowered below sea level, and in many cases, well below sea level, to induce seawater intrusion.

6.2.3.1 Modeling Uncertainties of Seawater Intrusion Analysis

There are two key areas of uncertainty associated with the seawater intrusion model.

– Development of the initial seawater intrusion condition involved simulating the groundwater flow system at steady state for 1,000 years. This was described in Section 4.2.6. By simulating steady-state conditions the regular rising and falling of the rivers was averaged. This potentially underestimated the periodic effect of high flows moving through the flow system that may exaggerate the advance of chloride concentrations along the river channels.
– The MODFLOW package that allows improved representation of groundwater/surface water interactions (i.e., SFR2) is newer than the seawater intrusion model (i.e., SEAWAT4). It was therefore necessary to use another MODFLOW package to represent rivers in the seawater intrusion model (i.e., the river package). Unlike the SFR2 package that calculates stage elevations, the river package needs stage values to be assigned. Assigned stage elevations potentially can provide an infinite source of water into the groundwater flow system. This was mitigated by the Project Team by assigning transient stage elevations based on the SFR-calculated river stages for each of the increased water use scenarios.

Stated another way, there is some uncertainty with the application of the seawater intrusion model; however, the project team applied an approach aimed to reduce this uncertainty. The uncertainty associated with the initial conditions for seawater intrusion that resulted in chloride advances along the Eel and Salt Rivers result in conservative estimates of seawater intrusion and does not adversely affect the associated conclusions.

6.2.4 Degraded Water Quality

Based on evaluation of the historical and current water quality conditions of the ERVB (SHN, 2021b), it has been concluded that water quality generally is good. For example, while there are some constituents with elevated concentrations and some constituents of concern are derived from land use, there are no known conditions of degradation of groundwater related to groundwater management or use. In addition, there have not been any significant changes in the groundwater management or use since 2015. Therefore, it can be concluded that degradation of groundwater associated with use is not likely to have initiated since 2015. Without the identification of degradation conditions related to management or use, the focused application of modeling was not considered useful for the development of the water quality SMC. However, modeling scenarios that evaluate impacts associated with increased pumping scenarios (as described in Sections 6.1.1 and 6.2.1) are informative in that results show that a significant increase in pumping (4x and 5x current rates) is required to induce changes to the regional groundwater gradients and the direction of groundwater flow. The models that have been

developed could be used in the future to evaluate potential projects or management actions to ensure that water quality is not inadvertently degraded.

6.2.4.1 Modeling Uncertainties of Degraded Water Quality Analysis

Uncertainty associated with the effects of water use on changing water quality in the ERVB is largely based on the uncertainty of the hydraulic gradient/water level described in Section 6.2.1.1. Although there is some variability in simulated output, it is limited and not significant to the interpretation of the effects of water use on flow patterns, directions, and gradients in the ERVB.

6.2.5 Ground Subsidence

Analyzing conditions in the ERVB related to the potential for ground subsidence were aided by the model's information regarding the maximum groundwater lowering occurring within the basin under historical and current pumping conditions. Since the modeled outputs occurring under the current pumping conditions indicate localized, seasonal groundwater level lowering in the order of 5 ft or less, recovering between October and March each year, it was determined that any measurable subsidence occurring in the ERVB can only be attributed to tectonics related to the Cascadia Subduction Zone. These modeled results and conclusions were then compared to, and confirmed by, the available Interferometric Synthetic Aperture Radar (InSAR) data of the basin, which were plus or minus 0.25 ft for the period of record (2015-2020) (Towill, Inc., 2021).

6.2.5.1 Modeling Uncertainties of Ground Subsidence Analysis

Uncertainty associated with the effects of water use on ground subsidence in the ERVB is largely based on uncertainty with the water level, described in Section 6.2.1.1. Although there is some variability in simulated output, it is limited and not significant to the interpretations of the seasonal recovery of water levels in the ERVB that might affect ground subsidence.

Uncertainties in the vertical ground surface displacement estimations using UnSAR that indicate negligible land subsidence for the basin: quantitative analysis was performed (Towill, Inc., 2021) by comparing Continuous Global Positioning Systems (CGPS) and InSAR time-series data for the reference period. Those results provide strong evidence that the InSAR data accurately models change in ground elevation to an accuracy tested to be a minimum of 18 millimeters (0.71 inches) at 95% confidence.

6.2.6 Depletion of Interconnected Surface Water

This section describes the methods used to evaluate the depletion of interconnected surface waters due to groundwater extraction in the ERVB. The evaluation and quantification of surface water depletion due to groundwater extraction is challenging due to the complexity and variability of groundwater/surface water exchange and the fact that surface water depletion cannot be directly measured. Multiple factors, in addition to groundwater extraction, influence surface water depletion, such as runoff, diversions, evapotranspiration, channel substrate composition and natural seasonal variation in groundwater/surface water exchange. Due to these complexities, the analysis uses a combination of modeling tools, historic flow data, field observations, and stream gages to assess the effects of groundwater extraction on the depletion of interconnected surface water.

The Eel River, Van Duzen River, Salt River, Yager Creek, and other surface waters and GDEs (rivers, streams, and wetlands) are hydraulically connected to the alluvial aquifer. The features of the interconnected surface waters are described in the GHD (2021b) and Stillwater Sciences (2022) technical memoranda. The river conditions generally recharge the aquifer during wet conditions and groundwater discharges into surface waters during dry conditions. However, the specific direction of flow and rate of exchange varies by reach based on the local hydrogeological conditions. The term hyporheic zone refers to the boundary area where there is mixing of groundwater and surface water. The extent of the hyporheic zone is difficult to estimate due the variable thickness and composition of channel deposits. In general, water can flow quickly in surface waters but flows

much slower in the porous media of the aquifer. Groundwater extraction may influence the exchange of water between the aquifer and interconnected surface waters.

This study primarily focuses on aquatic beneficial uses related to the depletion of interconnected surface water. The evaluation of terrestrial beneficial uses is discussed in Section 6.3, Terrestrial GDE Assessment. While there are multiple beneficial uses that may be affected by surface water depletion, anadromous fish passage is one of the most important and sufficient information was available to support a framework for impact analysis. Therefore, the primary focus of analysis for beneficial uses is the potential effect on adult anadromous fish migration during the fall (September through November) when low stream flows may adversely affect fish migration.

The analysis examined potential surface water depletion in several discrete reaches of the Eel River, Van Duzen River and Yager Creek, and Salt River. These reaches included: upper Eel River from Scotia to the confluence of the Van Duzen River, Eel River from the confluence of the Van Duzen River to the tidally influenced section of the Eel River, tidally influenced section and estuary of the Eel River, Van Duzen River and Yager Creek from Bridgeville to the Eel River confluence, and Salt River. In review of the modeling results, a change in stream flow rates due to groundwater extraction results in variable potential for depletion of surface water for each reach. The model results indicate minimal changes in stream flow through upper Eel River, Van Duzen River and Yager Creek due to groundwater extraction. Most of these reaches are up-stream of the majority of the groundwater extraction in the basin. River conditions in the tidally influenced and estuary reaches are governed by the sea level and are not likely to exhibit shallow depth limitations that would impede anadromous fish passage. Based on evaluation of the modeling results and field monitoring data, the Eel River from the confluence of the Van Duzen River to the tidally influenced reach exhibits the highest potential for surface water depletion due to groundwater extraction.

The analysis of interconnected surface water depletion in the Eel River has four components:

1. Identification of focused study locations where the river geomorphology creates critical passage conditions (Section 6.2.6.1)
2. Evaluation of the changes in river flow due to groundwater extraction at the focused study locations (Section 6.2.6.2)
3. Evaluation of the change in river stage at the focused study locations resulting from the change in river flow due to groundwater extraction (Section 6.2.6.3)
4. Evaluation of the change in groundwater levels at monitoring wells near the focused study areas (Section 6.2.6.4)

6.2.6.1 Surface Water Depletion Locations of Interest Identification

This study investigated the potential effects from depletion of surface waters through groundwater use on the upstream migration of adult salmon and steelhead (salmonids). Between 2006 and 2020, shallow riffles have been observed blocking adult salmonid passage until the first high flows during the fall (September–November) (Stillwater Sciences 2022). A review of riffle depths and adult Chinook salmon holding location collected from 2010 to 2020 (Stillwater Sciences 2011-2021) showed that upstream migration by adult Chinook salmon in the Lower Eel River during the early fall is inhibited by riffles that are 0.5–0.6 ft deep and is blocked by riffle depths 0.4 ft or less. Adult Chinook salmon have generally been observed in the pool at the confluence of the Eel/Van Duzen rivers when riffle depths downstream of the confluence met or exceeded 0.7 ft deep. Based upon these observations and for this analysis, a riffle crest depth of 0.7 feet is defined as Minimum Fish Passage Depth, which is the minimum depth required over riffles for unimpeded fish passage (i.e., fish passage is not blocked or impeded).

Figure 6.8 presents riffle depths within the lower Eel River measured by Stillwater Sciences from 2010 through 2020 compared to daily average flows (cfs) at the Eel River Scotia gage [USGS 11477000]. According to Stillwater Sciences (Dennis Halligan, personal communication), the Minimum Fish Passage Depth of 0.7 ft occurs when river flows, as monitored at Scotia, are between 130 and 310 cfs. The exact location of the shallowest riffles within the Eel River will vary from year to year due to geomorphic changes in the river channel. While the exact locations of these individual riffles may vary, historically they have occurred in the same general areas. These shallow riffle areas are included within the locations of interest in this study and are shown on **Figure 6.9**. An individual location of interest

may incorporate multiple model grid cells. Table 3 summarizes the locations of interest and the number of model grid cells.

A more detailed description of minimum riffles depth and locations is presented in Stillwater Sciences (2022).

Table 7 Surface Water Depletion Locations of Interest and Model Grid Cells

Surface Water Depletion Location of Interest	Number of Model Grid Cells
ME-1	5
ME-2	4
ME-3	4
ME-4	5
ME-5	5
ME-6	3
ME-7	2

6.2.6.2 Groundwater/Surface Water Model River Flow Estimates

The effect of groundwater extraction on surface water depletion is evaluated by comparing stream flow estimates from a no groundwater extraction scenario and various groundwater extraction scenarios. The rate of streamflow depletion due to groundwater extraction is the difference between the streamflow rates of the extraction and no-extraction scenarios.

The groundwater/surface water model incorporates the historical and seasonal variations in hydrologic conditions as well as the hydrogeologic conditions of the groundwater/surface water exchange. The model simulates monthly average river flow rates over a time period ranging from 2000 through 2020. This time period incorporates historical climate data, and all water year types are represented in the dataset.

The resulting monthly average change in streamflow rates vary from month to month due to seasonal weather and water use variations. The monthly average change in flow rates and percent changes in flow rates at each of the surface water depletion locations of interest along the Eel River are shown on **Figure 6.10**. The change in flow rate due to groundwater extraction ranged from 0 to 16.2 cfs (i.e., as simulated for June 2014 at ME 7). The greatest changes in flow rates occur in the summer irrigation season when the river flows are decreasing. As the irrigation season ends and stream flows increase, the change in stream flow due to groundwater extraction decreases. The change in stream flow due to groundwater extraction remains low when the flow in the river is high.

The monthly average change in flow rate for a given month will vary from year to year due to climate conditions reflective of the water year type. Grouping the model results from the 2000 through 2020 time period of the monthly average change in flow rate by month shows the distribution of change in flow rate for each month and illustrates the year-to-year variation, as shown on **Figure 6.11**.

The change in flow rates due to groundwater extraction varies for each surface depletion location with the lowest change in flow rate at the upper reach of the Eel River and gradually increasing by location moving down river.

The next step in the evaluation focuses on the time period when there is upstream fish migration, September through November. As a worst-case scenario, the maximum observed flow difference for the time period (2000-2020) is selected as the maximum potential flow difference due to groundwater extraction at each surface water depletion location. Under current groundwater extraction conditions, the value of the maximum September through November flow change ranged from 6.6 cfs at the upper reach near the confluence of the Van Duzen River to 14.6 cfs just below Fernbridge.

The model results of the maximum, average, and minimum September through November change in stream flow at each of the surface water depletion locations of interest due to groundwater extraction for the current conditions and for the increased groundwater extraction scenarios are presented in Tables 8 through 14.

Table A.1 in Attachment A includes the change in stream flows at each of these locations for each of the increased groundwater scenarios between Water Years 2000 and 2020, inclusively. As described in Section 6.2.6.1, an individual location of interest may incorporate multiple model grid cells. Table A.1 includes flows, flow differences, and percent reductions of flows at each of the model grid cells representing the locations of interest. Table A.1 first presents flows for existing conditions through to 50% increase in pumping for each location, then 75%[15] through to 300% increase in pumping for each location, then 400% through 800% increase in pumping for each location.

Table 8 Change in ME-1 Monthly Average Stream Flow Due to Groundwater Extraction, September through November, 2000-2020

	ME-1					
	Maximum Change in Flow		Average Change in Flow		Minimum Change in Flow (cfs)	
Scenario	cfs	% Of Total Flow	cfs	% Of Total Flow	cfs	% Of Total Flow
Current Conditions	7	9%	2	1%	1	0.01%
10% Increase	7	10%	3	2%	1	0.01%
20% Increase	8	11%	3	2%	1	0.01%
30% Increase	9	11%	3	2%	1	0.01%
40% Increase	9	12%	3	2%	1	0.01%
50% Increase	10	13%	3	2%	1	0.02%
100% Increase	13	17%	5	3%	2	0.03%
150% Increase	16	22%	6	4%	2	0.03%
200% Increase	20	26%	7	5%	3	0.04%
250% Increase	23	31%	8	5%	3	0.04%
300% Increase	27	35%	9	6%	4	0.05%
400% Increase	33	44%	12	8%	5	0.06%
500% Increase	40	53%	14	9%	6	0.08%
800% Increase	59	77%	21	14%	9	0.12%

[15] The 75% increase in pumping evaluation is an evaluation that occurred in the development and evaluation of the sustainable yield, which was completed following the development of the SMCs reported in this technical memorandum. Flows and flow differences under a 75% pumping increase scenario are included in Table A.1 as a reference for the sustainable yield analysis provided under separate cover.

Table 9 Change in ME-2 Monthly Average Stream Flow Due to Groundwater Extraction, September through November, 2000-2020

	ME-2					
	Maximum Change in Flow		Average Change in Flow		Minimum Change in Flow (cfs)	
Scenario	cfs	% Of Total Flow	cfs	% Of Total Flow	cfs	% Of Total Flow
Current Conditions	9	10%	5	1%	3	0.02%
10% Increase	10	11%	6	2%	3	0.02%
20% Increase	11	12%	7	2%	3	0.02%
30% Increase	12	13%	7	2%	3	0.02%
40% Increase	13	14%	8	2%	4	0.02%
50% Increase	14	15%	8	2%	5	0.02%
100% Increase	19	20%	11	3%	6	0.04%
150% Increase	23	24%	14	4%	8	0.05%
200% Increase	28	29%	16	5%	9	0.06%
250% Increase	33	34%	19	5%	11	0.07%
300% Increase	38	39%	22	6%	13	0.07%
400% Increase	47	49%	28	8%	16	0.10%
500% Increase	56	59%	33	9%	19	0.12%
800% Increase	84	87%	50	14%	29	0.17%

Table 10 Change in ME-3 Monthly Average Stream Flow Due to Groundwater Extraction, September through November, 2000-2020

	ME-3					
	Maximum Change in Flow		Average Change in Flow		Minimum Change in Flow (cfs)	
Scenario	cfs	% Of Total Flow	cfs	% Of Total Flow	cfs	% Of Total Flow
Current Conditions	11	11%	7	2%	4	0.02%
10% Increase	13	12%	8	2%	5	0.03%
20% Increase	14	14%	9	2%	5	0.03%
30% Increase	15	15%	10	3%	6	0.04%
40% Increase	16	16%	10	3%	6	0.04%
50% Increase	17	17%	11	3%	7	0.04%
100% Increase	23	23%	15	4%	9	0.06%
150% Increase	29	28%	19	5%	11	0.07%
200% Increase	34	34%	22	6%	13	0.08%
250% Increase	40	40%	26	7%	16	0.09%
300% Increase	46	45%	30	8%	18	0.11%
400% Increase	58	57%	37	10%	23	0.13%
500% Increase	69	68%	45	12%	27	0.16%
800% Increase	104	97%	68	18%	41	0.24%

Table 11 Change in ME-4 Monthly Average Stream Flow Due to Groundwater Extraction, September through November, 2000-2020

	ME-4					
	Maximum Change in Flow		Average Change in Flow		Minimum Change in Flow (cfs)	
Scenario	cfs	% Of Total Flow	cfs	% Of Total Flow	cfs	% Of Total Flow
Current Conditions	13	12%	8	2%	6	0.03%
10% Increase	14	13%	9	2%	6	0.03%
20% Increase	15	15%	10	3%	7	0.04%
30% Increase	16	16%	11	3%	7	0.04%
40% Increase	18	17%	12	3%	8	0.04%
50% Increase	19	18%	13	3%	8	0.04%
100% Increase	25	24%	17	4%	11	0.06%
150% Increase	31	30%	21	5%	14	0.07%
200% Increase	38	37%	25	7%	17	0.09%
250% Increase	44	43%	30	8%	20	0.11%
300% Increase	50	49%	34	9%	23	0.12%
400% Increase	63	61%	42	11%	28	0.16%
500% Increase	76	73%	51	13%	34	0.19%
800% Increase	114	98%	77	20%	52	0.29%

Table 12 Change in ME-5 Monthly Average Stream Flow Due to Groundwater Extraction, September through November, 2000-2020

	ME-5					
	Maximum Change in Flow		Average Change in Flow		Minimum Change in Flow (cfs)	
Scenario	cfs	% Of Total Flow	cfs	% Of Total Flow	cfs	% Of Total Flow
Current Conditions	13	12%	9	2%	6	0.03%
10% Increase	15	13%	10	3%	7	0.04%
20% Increase	16	15%	11	3%	7	0.04%
30% Increase	17	16%	12	3%	8	0.04%
40% Increase	19	17%	13	3%	9	0.05%
50% Increase	20	18%	14	3%	9	0.05%
100% Increase	27	24%	18	5%	13	0.07%
150% Increase	33	31%	23	6%	16	0.09%
200% Increase	40	37%	28	7%	19	0.10%
250% Increase	47	43%	32	8%	23	0.12%
300% Increase	53	49%	37	9%	26	0.14%
400% Increase	67	61%	46	12%	32	0.18%
500% Increase	81	73%	56	14%	39	0.21%
800% Increase	120	100%	83	21%	59	0.32%

Table 13 Change in ME-6 Monthly Average Stream Flow Due to Groundwater Extraction, September through November, 2000-2020

	ME-6					
	Maximum Change in Flow		Average Change in Flow		Minimum Change in Flow (cfs)	
Scenario	cfs	% Of Total Flow	cfs	% Of Total Flow	cfs	% Of Total Flow
Current Conditions	14	12%	9	2%	7	0.04%
10% Increase	15	13%	10	3%	7	0.04%
20% Increase	16	15%	11	3%	8	0.04%
30% Increase	18	16%	12	3%	8	0.04%
40% Increase	19	17%	13	3%	9	0.05%
50% Increase	20	18%	14	3%	10	0.05%
100% Increase	27	24%	19	5%	13	0.07%
150% Increase	34	30%	24	6%	17	0.09%
200% Increase	41	36%	28	7%	20	0.11%
250% Increase	48	42%	33	8%	23	0.13%
300% Increase	55	48%	38	9%	27	0.15%
400% Increase	68	60%	48	12%	34	0.18%
500% Increase	82	73%	57	14%	41	0.23%
800% Increase	123	100%	86	21%	62	0.34%

Table 14 Change in ME-7 Monthly Average Stream Flow Due to Groundwater Extraction, September through November, 2000-2020

	ME-7					
	Maximum Change in Flow		Average Change in Flow		Minimum Change in Flow (cfs)	
Scenario	cfs	% Of Total Flow	cfs	% Of Total Flow	cfs	% Of Total Flow
Current Conditions	15	12%	10	2%	7	0.04%
10% Increase	16	13%	11	3%	8	0.04%
20% Increase	17	15%	12	3%	8	0.04%
30% Increase	19	16%	13	3%	9	0.05%
40% Increase	20	17%	14	3%	10	0.05%
50% Increase	22	18%	15	4%	10	0.05%
100% Increase	29	25%	21	5%	14	0.08%
150% Increase	37	31%	26	6%	18	0.10%
200% Increase	44	37%	31	7%	22	0.12%
250% Increase	52	43%	36	9%	25	0.14%
300% Increase	59	49%	41	10%	29	0.16%
400% Increase	74	61%	52	12%	37	0.20%
500% Increase	89	74%	62	15%	44	0.24%
800% Increase	133	100%	94	22%	67	0.37%

6.2.6.3 Modeled Changes in River Stage at Surface Water Depletion Locations of Interest

The next step in the analysis of surface water depletion examines the effect of the change in flow on river stage. The shape and size of the river channel varies by location and is dynamic due to active migration of sediments. To evaluate the variation of the channel geometry and flow rates throughout the basin, several low flow stream gages were installed along the Eel and Van Duzen rivers. The gage station locations are shown in **Figure 6.12**. Each station recorded flow data over the low flow period and stage/discharge relationships were developed for each gage location. The measured flow data is shown on **Figures 6.13** through **Figure 6.15**, with **Figure 6.13** showing the Upper Eel River gages above the Van Duzen confluence, **Figure 6.14** showing Main Eel River gages below the confluence, and **Figure 6.15** showing gages on the Van Duzen River. The stage/discharge curve for each gage station is shown on **Figure 6.16.**

The analysis of the change in stage at each surface water depletion locations utilizes the stage/discharge relationship from the closest gage station. The stream gage station associated with each surface water depletion location is shown in Table 5.

Table 15 Stream Gages Associated with Surface Water Depletion Location

Surface Water Depletion Location of Interest	Closest Stream Gage
ME-1	SW-7
ME-2	SW-7 and SW-5
ME-3	SW-5
ME-4	R-2
ME-5	R-2 and R-5
ME-6	R-2 and R-5
ME-7	R-5

The stage/discharge relationship provides the depth of the river for a given flow rate. The relationship varies with the flow rate: changes in the stage are greater at the lower flow rates, and changes in the stage decrease as flows increase. Therefore, it is important to consider the flow rate when fish are migrating when evaluating the effects of flow depletion on river stage. The monthly average stream flows in the fall are typically below the minimum fish passage flows of 130 cfs. The monthly average flow rates typically increase in October and November. Increased river flows that allow for fish passage are typically caused by rainfall events. These events increase stream flows to greater than 130 cfs for periods of time in the order of a few days and then flows decrease below 130 cfs. The increase of flow in the river to greater than 130 cfs may only persist for a few days. The period when flow conditions permit fish migration may be obscured in the monthly average flow rates calculated by the model. To evaluate the effect of the change in flow due to groundwater extraction the stage/discharge relationship is used to calculate the change in stage that would occur due to groundwater extraction when the river stage was at the minimum fish passage flow of 130 cfs (see Section 6.2.6.1). The stage at 130 cfs is compared to what the stage would be without the change in flow due to the groundwater extraction scenario. That is to say that 130 cfs is the entry point for reviewing the stage/discharge relationship.

The evaluation of the change in river stage uses the stage/discharge relationship to determine the river depth at the minimum fish passage flow of 130 cfs and then what the stage would have been without the flow decrease due to the groundwater extraction for a given scenario. This stage is calculated using minimum fish passage flow (130 cfs) plus maximum scenario flow depletion. The difference between the river stage at 130 cfs and what the stage would have been without the flow depletion indicates the effect on the river stage due to groundwater extraction. As an example, the stage/discharge relationship from SW-7 is used for ME-1. Based on the SW-7 stage/discharge relationship, a flow of 130 cfs would result in a stage of 1.64 ft. Under the 800% groundwater extraction scenario the reduction in flow would be 53 cfs. Using the stage/discharge relationship, a flow of 183 (130 cfs plus the change in flow of 53 cfs) would result in a stage of 1.76, indicating a change in river stage of

0.12 ft. **Figure 6.17** shows the stage/discharge curve for SW-7. The vertical red line shows the flow rates of 130 and 183 cfs. The horizontal yellow line intersecting the discharge curve at the red lines indicate the stage of 1.64 ft and 1.76 ft, at the respective flow rates.

The model results indicate a negligible change in stage resulting from groundwater extraction under current conditions, and incrementally larger changes with scenarios of increased pumping rates. A summary of the change in stage at each surface water depletion location for each scenario is presented in **Table 16**.

Table 16 Change in Stream Stage at Minimum Fish Passage Flow (130 cfs) Due to Groundwater Extraction

Scenario	Change in River Stage Due to Groundwater Extraction (ft)						
	ME-1	ME-2	ME-3	ME-4	ME-5	ME-6	ME-7
Current Conditions	0.02	0.02	0.03	0.04	0.04	0.04	0.05
10% Increase	0.02	0.03	0.03	0.04	0.05	0.05	0.05
20% Increase	0.02	0.03	0.04	0.05	0.05	0.05	0.06
30% Increase	0.02	0.03	0.04	0.05	0.05	0.06	0.06
40% Increase	0.02	0.03	0.04	0.06	0.06	0.06	0.06
50% Increase	0.03	0.04	0.04	0.06	0.06	0.06	0.07
100% Increase	0.03	0.05	0.06	0.08	0.08	0.08	0.09
150% Increase	0.04	0.06	0.07	0.10	0.10	0.10	0.11
200% Increase	0.05	0.07	0.09	0.11	0.12	0.12	0.13
250% Increase	0.06	0.08	0.10	0.13	0.14	0.14	0.16
300% Increase	0.07	0.09	0.11	0.15	0.16	0.16	0.18
400% Increase	0.08	0.11	0.14	0.19	0.20	0.20	0.22
500% Increase	0.09	0.13	0.16	0.22	0.23	0.24	0.26
800% Increase	0.13	0.19	0.23	0.31	0.33	0.34	0.36

6.2.6.4 Groundwater Levels as a Proxy for Surface Water Depletion

The groundwater model can produce estimates of the monthly average groundwater elevations at monitoring well locations. To aid in selection of monitoring wells useful for the Impacts to Interconnected Surface Waters SMCs, modeled water level lowering associated with the extraction scenarios in candidate wells near the river were reviewed. Predicted lowering of groundwater levels associated with extraction is greatest in the immediate vicinity of the source of extraction itself, with a diminishing magnitude of impact as you move away from that source. In general, groundwater levels in wells adjacent to the river under any of the given increased groundwater pumping scenarios indicate the smallest range of groundwater level lowering, including current pumping conditions (i.e., 0.5 feet or less of change). Conversely, monitoring wells further away from the river exhibit a greater fluctuation of groundwater levels under increased pumping scenarios, likely due to closer proximity to the location of the groundwater extraction and reduced groundwater recharging influence of the river (i.e., losing stream conditions encountered in the summer and fall). Monitoring wells adjacent to the river are not sufficiently responsive to modelled increased pumping scenarios for setting water level minimum thresholds, while the groundwater levels in a selected set of 2021 County Monitoring Wells and a CASGEM Well have been identified as being a sufficient distance from the Eel River for use as Representative Monitoring Sites for evaluating impacts to surface waters and in the establishment of groundwater level proxies.

The evaluation of change in river stage due to groundwater extraction resulted in relatively small changes. The field measurement of river stage is typically +/- 0.1 ft. Therefore, modeled extraction scenarios that result in this 0.1 foot river stage depletion can be used by the model to correlate an associated groundwater level lowering in a given well in the vicinity of the river relative to that given well's specific fall baseline water level (Note the newly installed

2021 County Monitoring Wells do not yet have an adequate period of record). As an example, **Figure 6.18** depicts the modeled monthly average groundwater levels of CASGEM Well 36942 from 2000 through 2020 for the existing condition and increased groundwater extraction scenarios including the resulting 0.1 foot, or greater, of associated river stage depletion. The monthly average groundwater levels may also be grouped by month to provide a distribution of groundwater levels for each pumping scenario month. Using this methodology, river stage depletion can now be attributed to each individual Representative Monitoring Site now utilizing an appropriately established groundwater level proxy as the Minimum Threshold for surface water depletion. Table 17 presents the potential RMS proxy wells and their associated monthly average groundwater level plot.

Table 17 Potential Surface Water Deletion RMS Proxy Wells

Potential RMS Proxy Well	Time Series Plot Figure
CASGEM 36942	**Figure 6.19**
MW-2s	**Figure 6.20**
MW-13	**Figure 6.21**
MW-20	**Figure 6.22**
MW-21	**Figure 6.23**
MW-22	**Figure 6.24**
MW-25	**Figure 6.25**
MW-30	**Figure 6.26**

6.2.6.5 Modeling Uncertainties of Depletion of Groundwater Analysis

The evaluation and quantification surface water depletion due to groundwater extraction is challenging due to the complexity and variability of the groundwater/surface water interchange. There is not a method to directly measure surface water depletion and using multiple models and monitoring data has some limitations and uncertainties.

The groundwater model uses a finite-difference grid cell of 1,000 ft by 1,000 ft and values used to define the physical characteristics, model inputs, and outputs represent the average values for a model grid cell. The complex nature of the river channel where critical riffles occur are not represented in the model. The model does accurately simulate the average flow and groundwater level for the model grid cell but the assessment of effect of the change in flow on the change in stage relies upon monitored data and a local stage/discharge relationship. Each individual surface water depletion location is comprised of several model gird cells. The river channel geometry is constantly changing. The analysis assumes that a critical riffle will form within a surface water depletion location. The modeled values for cells within a surface water depletion location are similar but there is variation. To be conservative, the analysis selected the highest value from the cells within a surface water depletion location.

Another factor that effects the uncertainty of the analysis is time step of the physical process. The rate of flow of surface waters is relatively quick, reported in feet per second, compared to groundwater, reported in feet per day. Dynamic changes in the river flow occur rapidly and changes in groundwater take much longer. The river flow measurements are reported as daily average values and the groundwater model reports monthly average values. The disparity of the time rates of the physical processes and reporting periods may introduce uncertainty to the analysis.

Unlike flow in the Eel and Van Duzen Rivers, long term flow in Salt River has not been monitored and therefore there is not a direct set of calibration targets that can be used to evaluate the goodness of fit of Salt River flow model predictions. Currently there has not been an investigation to determine the flow/stage relationships in Salt River. These factors introduce uncertainty to the Salt River depletion of interconnected surface water analysis. There are currently many ongoing or planned landscape-scale multi-benefit projects in the lower ERVB that may affect the analysis of surface water groundwater interactions in the lower basin. These including the Salt River Ecosystem Restoration Project, the Centerville Slough Restoration Project, Ocean Ranch Restoration, and Cannibal Island Restoration. Each of the landscape-scale projects are required to evaluate the associated environmental impacts following the California Environmental Quality Act (CEQA). Should future analysis require application of the model with landscape-scale

accuracy, collection of data including surface water flows, bathymetry, shallow groundwater elevations, chloride concentrations, and/or total dissolved solids, among others, would be required to refine and calibrate the model locally.

SGMA requires that GSPs and the corresponding groundwater sustainability programs are reviewed at least every 5 years after initial submission. If, during one of those review periods, further predictive analysis that includes application of modeling is required or found to be warranted, the integrated groundwater/surface water flow and seawater intrusion models can be updated to include data collected as part of the landscape-scale multi-benefit projects in the lower ERVB.

6.3 Terrestrial GDE Assessment

To assess the impact of the SMCs on terrestrial GDEs we compared the modeled groundwater elevations for the 2003 water year with the 2003 pumping rates (historical pumping) with the groundwater elevations with pumping increased by 150 percent (increased pumping) while all other variables are held constant. A 150% increase in pumping corresponds to the SMC for basin. The modeled groundwater elevations for the historical and increased pumping periods were differenced to assess the effects of increased pumping on groundwater elevations in March (spring) and September (fall). Changes to the spring 2003 groundwater elevation were generally 0-2 ft for the basin with the exception of the upper portions of the Salt River near Waddington where spring groundwater elevations declined by up to 6 ft and near Loleta, where spring groundwater elevation declined by up to 4 ft. The decline in groundwater elevation was greater for September. The magnitude and extent of groundwater decline was greater in the fall for the coastal plain near the Salt River in the Middle Eel GDE unit, with groundwater declines from 2-6 ft. The GDEs along this portion of the basin are typically limited to the areas along channels and oxbows of the Salt River, where vegetation grows along the channel margins. GDE units along these channels were typically river/stream/canal, which includes emergent herbaceous species with rooting depths of up to 1-2 ft. Groundwater declines of 2-4 ft extend toward the Eel River in the Middle Eel GDE unit, potentially affecting willow and cottonwood forests along the channel comprised of red alder, various willow species, and black cottonwood. This vegetation can have relatively deep roots (up to 7-15 ft, depending on the species). Declines in groundwater of 2-4 ft have been documented seasonally and during droughts in the Middle Eel River. Near Loleta the fall groundwater elevation decreased by 2-4 ft potentially affecting small channels and willows in the Intertidal Zone and Tributaries GDE. For the remainder of the basin groundwater declines by 0-2 ft.

The effects of a long-term decline in groundwater of 2-4 ft in the ERVB are uncertain. There is limited data to correlate groundwater elevation changes with vegetation health because long-term groundwater data is somewhat limited (Stillwater Sciences, 2022). Historically, GDEs were resilient through droughts with little sustained decline in NDVI through time (Stillwater Sciences, 2022). However, a sustained decline of 2-4 ft could impact GDEs, particularly for plants at higher elevation within a particular GDE (and hence further from groundwater). In addition, vegetation that was able to survive droughts at historical pumping levels may become more stressed during droughts if pumping was increased by 150%. Where groundwater declines are small (the remainder of the basin outside of the Loleta and Salt River areas), the decline is likely to have limited effects on more deeply rooted GDEs, provided surface waters continue to be connected with groundwater, although vegetation at higher elevation relative to existing groundwater may become stressed during even modest declines in groundwater.

6.4 Effects of Climate Change Scenarios

Section 6.1.2 describes the implementation of the climate change scenarios in the integrated groundwater/surface water and seawater intrusion models. Evaluation of the effects of climate change on the basin have been prepared by comparing average groundwater levels in the quaternary alluvium, changes in storage, stream flow at critical riffle locations, and volumes of accessible freshwater.

Figure 6.27 shows average quaternary alluvium groundwater elevations in both the near future (i.e., 2030) and late future (i.e., 2070) climate conditions on the left and right panels, respectively. A yellow horizontal line is presented to show the average groundwater elevations for the reference period of March 2003. Horizontal green lines are presented to show the average March groundwater elevations in each of the two climate change scenarios. The average March climate change scenarios show increases to average alluvium water levels. The

climate change scenarios show average March groundwater elevations as rising by 0.9 ft and 1.2 feet in the near and late future scenarios, respectively. As discussed in Section 6.2.1 chronic lowering of water levels is not expected to be a factor for ERVB. The climate change scenarios indicate that chronic lowering also is not expected into the near and late future. This is attributable to the climate forecast models for this area of California that show wetter average conditions (i.e., more precipitation) that the DWR (2018) datasets are based upon. Those same forecasts show warmer average minimum and maximum temperatures; however, these warmer conditions are not warm enough to counteract the effect of the increased precipitation, resulting in greater recharge and increased groundwater elevations.

These increased water levels do not result in long-term decreasing storage levels as illustrated on **Figure 6.28**. Cumulative changes in storage show increasing trends towards the ends of the simulation timeframes (i.e., beginning in water year 2044 in the near future model and 2084 in the late future model) resulting from the wetter conditions compared throughout the simulation period. **Figure 6.28** shows climate model changes in storage that align with current/recent times. These changes in storage have been greyed-out on **Figure 6.28** to reflect they do not reflect actual conditions but rather conditions simulated through the climate forecast models. These scenarios imply that ERVB will experience fewer reductions in groundwater storage due to changing climate conditions when compared to current conditions, as presented on **Figure 6.6**.

The effect of these future climate scenarios on stream flows and stage elevations at the seven focused study locations on the Main Eel River are illustrated on **Figures 6.29** and **6.30**, respectively. Each of the boxplots[16] shows the Near Future, Late Future, and current conditions presented as a reference. **Figures 6.29** and **6.30** show that flows and stage elevations in the Eel River are not expected to lower and climate change is not expected to negatively affect streamflow depletion.

The effects sea level rising to 0.49 ft in the near future (2030) and to 1.49 ft and 3 ft in late future (2070) have on the volume of accessible freshwater in the basin were evaluated using the saltwater intrusion model. **Figure 6.33** shows each of these three scenarios and provides summary statistics that include minimum, average, and maximum freshwater volumes. The difference between current conditions and the climate change scenarios is the expected increase in wetness under future conditions. This results in greater volumes of freshwater in the basin. Despite the 1.48 feet of sea level rise represented by the Late Future (2070) model, the additional wetness under the 2070 model compared to the 2030 model results in more freshwater volume in the basin. Under the 3-foot sea level rise scenario, there is a reduction in freshwater volume compared to the 1.48-foot sea level rise condition that ranges from 1,000-acre-feet to 31,000-acre-feet.

6.4.1 Modeling Uncertainties of Climate Change Analysis

The integrated groundwater/surface water and seawater intrusion models were developed using climate data obtained from the PRISM dataset that formed key inputs to the PRMS model that then generated the boundary conditions of the MODFLOW and SEAWAT models. However, the climate change dataset was developed by DWR using different methodologies than the historical datasets. These differences are documented in DWR (2018). As a result, changes between current conditions and future conditions are not directly comparable. However, the forecast models tend to show an increasing water level in the ERVB (compare, for example, the 2030 and 2070 model scenarios). These forecasted wet conditions and the corresponding rising levels will make the basin more resilient to chronic lowering of water levels, storage loss, and seawater intrusion.

[16] A boxplot is a simplified way of evaluating the spread of data in which a box represents the range between the 25th and 75th percentiles, an horizontal line represents the median value, whiskers (vertical lines) represent 1.5× the range from 25th percentile to the median and 1.5× the range from the median to the 75th percentile. Values outside of the range of upper and lower box plot whiskers are presented as symbols.

7. Summary and Conclusions

SGMA requires local governments and water agencies in California's high and medium priority groundwater basins to form GSAs and operate under a GSP by 2022. Groundwater in the ERVB supports several beneficial uses.

A key component of a GSP is avoidance of a range of undesirable results as defined in SGMA.

The Humboldt County Groundwater Sustainability Agency retained a project team consisting of GHD, SHN Consulting Engineers, Stillwater Sciences, and Thomas Gast & Associates, in collaboration with USGS to develop integrated groundwater/surface water and seawater intrusion models to represent the hydrologic, geologic, and hydrogeologic conditions in the ERVB. The integrated groundwater/surface water model was calibrated under transient conditions to provide a reasonable match to average monthly surface water flow and stage elevations and observed groundwater elevations for the period between 2000 and September 2020 (i.e., end of Water Year 2020). Model calibration was completed concurrent with an uncertainty analysis that generated 10 equally calibrated model realizations. The model uncertainty analysis indicated the transient groundwater flow model is reasonably constrained where there are numerous observations, such as near the Channel Deposits and Quaternary Alluvium. These areas provide greater reliability in model predictions. This area also is where much of the water use is occurring within the ERVB and therefore is the area of focus for application of the model.

The integrated groundwater/surface water and seawater intrusion models were applied to evaluate the key sustainability management criteria to understand whether water uses in ERVB can be sustained currently and into the future without creating undesirable results. Models were developed to represent current and historical conditions. The integrated groundwater/surface water model also was applied to represent near (2030) and late (2070) future conditions. To evaluate undesirable results a reference condition of the groundwater flow system is necessary. Commonly this reference is a historical comparison, such as the date of the implementation of SGMA, to evaluate trends. When trends are not evident, as is the case in ERVB, selection of an appropriate average conditions is required. Historical trends in the CASGEM program monitoring wells were evaluated because these wells currently are active, are located in the ERVB, and have a long period of record. Based on this review March 2003 provides a reasonable average groundwater system condition representing wet conditions for model output comparisons. As there is not a lot of variability in fall water level conditions Fall 2003 was selected as average fall conditions to be consistent with spring analyses.

Based on those analyses the following conclusions are made:

– **Chronic Lowering of Groundwater Levels**
  - Current and historical conditions: Based on the historical water use in the basin and the seasonal nature of the water level recovery, chronic lowering of water levels in the basin are not likely. It is only during extreme increases in water use, corresponding to four and five times current pumping rates, that water is drawn from the Eel River towards the valley.
  - Near and late future conditions: Average March water level conditions in near and late future are expected to be higher than March 2003 reference conditions indicating that chronic lowering of water levels is not expected in ERVB. This is a result of the generally wetter conditions predicted through the climate forecast models that these analyses are based on.

– **Reduction in Groundwater Storage**
  - Current and historical conditions: The change in storage in the ERVB was developed by subtracting previous from current March and September water volumes in the alluvium, for spring and fall analyses, respectively. From 2000 through to 2020 the net change in volume and cumulative net change in volume are stable and decreasing trends are not evident.
  - Near and late future conditions: In near and late future conditions groundwater storage is anticipated to be stable and with increasing cumulative groundwater storage arising in the latter part of the near and late future simulations. Reduction in groundwater storage is not expected in ERVB.

– **Seawater Intrusion**
  - Current and historical conditions: There is a natural seasonal advance and retreat that occurs with seawater intrusion such that chlorides advance when water levels are low in the summer and retreat towards the Pacific Ocean when wet season weather causes substantial amounts of freshwater to move through the groundwater/surface water flow systems. Near the middle of the basin that advance and retreat spans approximately 4,750 feet due to climatic conditions, alone (i.e., without pumping). The advance due to pumping is on the order of approximately 700 feet. Under extreme pumping conditions, on the order of four times current conditions, areas in the basin that once experienced 100 mg/L chloride concentrations 5% of the time begin experiencing those concentrations on the order of 95% of the time. This is an extreme scenario that requires pumping at rates that are much greater than the amount that would be required by irrigation to replace evapotranspiration.
  - Near and late future conditions: The near and late future forecasted wet conditions are predicted to provide enough freshwater into the basin to prevent a reduction of accessible freshwater under 0.49 ft, 1.48 ft, and 3 ft of sea level rise.
– **Depletion of Interconnected Surface Water**
  - Current and historical conditions: Streamflow depletions is a sustainability indicator that is of key interest in the Basin. One of the key questions with the depletion of surface waters is the potential effects on the upstream migration of adult salmon and steelhead. The time period when this occurs is generally in the fall (September through November). Reviews of migration timing and riffle depth data collected from 2010 to 2020 showed upstream migration by adult Chinook salmon in the Lower Eel River during the early fall is inhibited by riffles that are 0.5 – 0.6 feet deep and is blocked by rifle depths 0.4 feet or less. The model was applied to evaluate the effects of water use, current and increased pumping rates, on flow and depth of water (stage elevations) at critical riffle locations. Salt River flows also were evaluated; however, these analyses should be considered preliminary because the integrated groundwater/surface water model was not calibrated to surface water flows in Salt River.
  - Near and late future conditions: near and late future flows and stage elevations are expected to be greater than current and historical conditions owing to the generally wetter conditions predicted by the climate forecast models for this area.

Each of the sustainability indicators were evaluated under current and future climatic conditions using current and enhanced water use conditions. The enhanced water use conditions ranged from moderate to extreme [nine (9) times current conditions]. Only during extreme water use conditions, when water use is much greater than the evaporative demand, are there undesirable results.

8. References

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Tables

Well Locations and Pumping Rates Assigned to Transient Models
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Well Identification	State Plane Coordinate X	State Plane Coordinate Y	Screen Elevation (NAVD88) Top	Screen Elevation (NAVD88) Bottom	Well Type	Pumping Rate (GPM) Minimum	Pumping Rate (GPM) Maximum
Municipality							
Bear River	5,949,073	2,120,296	-346	-366	Municipal Supply	18	46
Ferndale	5,936,329	2,105,461	-114	-134	Municipal Supply	79	161
Fortuna	5,965,286	2,098,507	-27	-55	Municipal Supply	602	1,191
Hydesville	5,986,520	2,087,832	111	84	Municipal Supply	18	133
Loleta	5,945,641	2,126,820	-190	-195	Municipal Supply	24	70
Palmer Creek	5,956,866	2,110,863	-11	-21	Municipal Supply	0	28
Rio Dell[(1)]	5,974,639	2,073,583	--	--	Municipal Supply	127	279
Riverside	5,928,114	2,103,168	-18	-28	Municipal Supply	12	28
Scotia[(1)]	5,975,178	2,063,310	--	--	Municipal Supply	263	475
Land Classification Code							
100-101-001-000	5,926,215	2,116,777	--	--	Agriculture	0	105
100-101-002-000	5,927,952	2,116,267	--	--	Agriculture	0	155
100-101-003-000	5,929,738	2,116,430	--	--	Agriculture	0	56
100-101-004-000	5,929,242	2,113,535	--	--	Agriculture	0	278
100-101-005-000	5,928,347	2,114,468	--	--	Agriculture	0	89
100-101-006-000	5,926,376	2,114,526	--	--	Agriculture	0	196
100-101-007-000	5,926,224	2,113,201	--	--	Agriculture	0	201
100-102-002-000	5,931,780	2,116,813	--	--	Agriculture	0	35
100-102-003-000	5,931,975	2,115,097	--	--	Agriculture	0	262
100-102-004-000	5,933,804	2,117,178	--	--	Agriculture	0	75
100-102-005-000	5,933,431	2,116,313	--	--	Agriculture	0	16
100-102-006-000	5,934,080	2,116,298	--	--	Agriculture	0	25
100-102-007-000	5,933,730	2,115,310	--	--	Agriculture	0	47
100-102-008-000	5,933,712	2,114,647	--	--	Agriculture	0	44
100-102-009-000	5,933,690	2,113,987	--	--	Agriculture	0	45
100-102-010-000	5,935,047	2,115,704	--	--	Agriculture	0	220
100-102-011-000	5,935,337	2,113,204	--	--	Agriculture	0	71
100-102-012-000	5,934,664	2,113,228	--	--	Agriculture	0	321
100-102-013-000	5,933,993	2,112,968	--	--	Agriculture	0	47
100-102-014-000	5,933,338	2,112,996	--	--	Agriculture	0	45
100-102-015-000	5,932,510	2,113,067	--	--	Agriculture	0	76
100-102-016-000	5,931,090	2,113,491	--	--	Agriculture	0	185
100-111-002-000	5,925,450	2,110,775	--	--	Agriculture	0	262
100-111-009-000	5,928,239	2,111,610	--	--	Agriculture	0	333
100-111-013-000	5,926,952	2,109,982	--	--	Agriculture	0	360
100-111-014-000	5,929,008	2,109,872	--	--	Agriculture	0	214
100-112-003-000	5,930,579	2,108,684	--	--	Agriculture	0	21
100-112-004-000	5,930,554	2,109,379	--	--	Agriculture	0	21
100-112-005-000	5,931,871	2,109,027	--	--	Agriculture	0	132
100-112-006-000	5,930,933	2,111,054	--	--	Agriculture	0	182
100-112-007-000	5,932,260	2,111,016	--	--	Agriculture	0	179
100-112-008-000	5,933,619	2,111,641	--	--	Agriculture	0	94
100-112-009-000	5,934,531	2,111,609	--	--	Agriculture	0	38
100-112-010-000	5,934,911	2,111,591	--	--	Agriculture	0	19
100-112-011-000	5,935,324	2,111,570	--	--	Agriculture	0	41
100-112-012-000	5,935,146	2,110,254	--	--	Agriculture	0	58
100-112-014-000	5,934,025	2,109,047	--	--	Agriculture	0	67
100-112-015-000	5,933,811	2,110,304	--	--	Agriculture	0	109
100-142-008-000	5,915,513	2,105,403	--	--	Agriculture	0	59
100-142-009-000	5,915,490	2,104,049	--	--	Agriculture	0	62
100-142-011-000	5,915,582	2,106,735	--	--	Agriculture	0	171
100-142-019-000	5,916,441	2,104,733	--	--	Agriculture	0	219
100-142-021-000	5,914,281	2,102,889	--	--	Agriculture	0	98
100-142-021-000	5,914,739	2,104,737	--	--	Agriculture	0	98
100-143-004-000	5,912,782	2,103,183	--	--	Agriculture	0	191
100-152-021-000	5,928,794	2,105,023	--	--	Agriculture	0	238
100-161-007-000	5,934,444	2,108,301	--	--	Agriculture	0	82
100-191-009-000	5,937,976	2,107,514	--	--	Agriculture	0	102
100-191-014-000	5,938,843	2,109,002	--	--	Agriculture	0	85
100-201-004-000	5,940,161	2,104,999	--	--	Agriculture	0	284
100-201-005-000	5,940,159	2,104,304	--	--	Agriculture	0	27
100-201-006-000	5,938,800	2,104,712	--	--	Agriculture	0	352
100-201-034-000	5,936,554	2,106,442	--	--	Agriculture	0	30
100-201-038-000	5,935,952	2,106,094	--	--	Agriculture	0	19
100-201-050-000	5,937,319	2,106,198	--	--	Agriculture	0	87

Well Locations and Pumping Rates Assigned to Transient Models
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Well Identification	State Plane Coordinate X	State Plane Coordinate Y	Screen Elevation (NAVD88) Top	Screen Elevation (NAVD88) Bottom	Well Type	Pumping Rate (GPM) Minimum	Pumping Rate (GPM) Maximum
100-211-001-000	5,939,458	2,103,789	--	--	Agriculture	0	54
100-211-002-000	5,940,153	2,102,925	--	--	Agriculture	0	227
100-211-003-000	5,940,138	2,101,930	--	--	Agriculture	0	348
100-211-004-000	5,938,767	2,101,716	--	--	Agriculture	0	18
100-211-007-000	5,938,786	2,103,207	--	--	Agriculture	0	31
100-212-005-000	5,936,456	2,102,550	--	--	Agriculture	0	21
100-212-008-000	5,935,807	2,102,559	--	--	Agriculture	0	7
100-212-009-000	5,936,115	2,103,046	--	--	Agriculture	0	23
100-212-012-000	5,937,508	2,103,821	--	--	Agriculture	0	41
100-212-021-000	5,936,297	2,102,058	--	--	Agriculture	0	8
100-212-028-000	5,936,095	2,103,697	--	--	Agriculture	0	36
100-221-001-000	5,940,098	2,100,703	--	--	Agriculture	0	103
100-221-002-000	5,938,985	2,100,615	--	--	Agriculture	0	80
100-221-003-000	5,938,177	2,101,162	--	--	Agriculture	0	16
100-221-004-000	5,938,189	2,100,275	--	--	Agriculture	0	52
100-222-001-000	5,940,053	2,099,344	--	--	Agriculture	0	331
100-241-001-000	5,931,377	2,107,667	--	--	Agriculture	0	13
101-011-005-000	5,915,526	2,102,264	--	--	Agriculture	0	18
101-011-014-000	5,914,690	2,103,165	--	--	Agriculture	0	14
101-011-016-000	5,916,006	2,103,211	--	--	Agriculture	0	11
106-011-001-000	5,936,364	2,115,050	--	--	Agriculture	0	250
106-011-002-000	5,936,357	2,112,549	--	--	Agriculture	0	46
106-011-003-000	5,938,338	2,112,711	--	--	Agriculture	0	156
106-011-004-000	5,939,273	2,113,753	--	--	Agriculture	0	394
106-011-006-000	5,943,044	2,114,017	--	--	Agriculture	0	94
106-011-007-000	5,944,369	2,114,015	--	--	Agriculture	0	63
106-011-008-000	5,945,606	2,113,805	--	--	Agriculture	0	83
106-011-009-000	5,947,528	2,112,374	--	--	Agriculture	0	329
106-011-011-000	5,941,582	2,115,323	--	--	Agriculture	0	38
106-011-013-000	5,939,755	2,117,126	--	--	Agriculture	0	84
106-011-016-000	5,937,747	2,115,471	--	--	Agriculture	0	36
106-011-020-000	5,947,775	2,112,982	--	--	Agriculture	0	31
106-011-022-000	5,941,659	2,112,751	--	--	Agriculture	0	423
106-011-023-000	5,941,688	2,114,060	--	--	Agriculture	0	91
106-011-024-000	5,945,562	2,113,288	--	--	Agriculture	0	359
106-021-001-000	5,936,295	2,111,876	--	--	Agriculture	0	48
106-021-002-000	5,936,272	2,111,205	--	--	Agriculture	0	49
106-021-003-000	5,936,242	2,110,220	--	--	Agriculture	0	93
106-021-007-000	5,937,568	2,109,827	--	--	Agriculture	0	38
106-021-011-000	5,940,287	2,111,108	--	--	Agriculture	0	143
106-021-012-000	5,940,231	2,109,146	--	--	Agriculture	0	127
106-021-013-000	5,941,628	2,111,270	--	--	Agriculture	0	107
106-021-020-000	5,941,197	2,107,426	--	--	Agriculture	0	45
106-021-024-000	5,942,829	2,106,018	--	--	Agriculture	0	100
106-021-025-000	5,942,852	2,107,386	--	--	Agriculture	0	94
106-021-028-000	5,942,930	2,110,057	--	--	Multi Family Residential	0	89
106-021-030-000	5,943,232	2,111,297	--	--	Agriculture	0	54
106-021-032-000	5,944,274	2,111,374	--	--	Agriculture	0	91
106-021-033-000	5,945,749	2,111,505	--	--	Agriculture	0	110
106-021-036-000	5,946,844	2,108,629	--	--	Agriculture	0	84
106-021-037-000	5,945,367	2,108,075	--	--	Agriculture	0	186
106-021-038-000	5,944,173	2,107,384	--	--	Agriculture	0	78
106-021-039-000	5,944,114	2,105,400	--	--	Agriculture	0	155
106-021-040-000	5,945,408	2,105,810	--	--	Agriculture	0	95
106-021-046-000	5,943,972	2,108,712	--	--	Agriculture	0	45
106-021-048-000	5,944,581	2,110,006	--	--	Agriculture	0	154
106-021-050-000	5,941,638	2,109,748	--	--	Agriculture	0	64
106-021-056-000	5,945,984	2,110,134	--	--	Agriculture	0	63
106-021-061-000	5,938,971	2,111,470	--	--	Agriculture	0	95
106-021-062-000	5,937,682	2,111,069	--	--	Agriculture	0	122
106-021-063-000	5,947,016	2,110,844	--	--	Agriculture	0	110
106-021-066-000	5,942,619	2,111,551	--	--	Agriculture	0	35
106-021-068-000	5,942,949	2,108,624	--	--	Agriculture	0	55
106-021-071-000	5,941,883	2,107,421	--	--	Agriculture	0	38
106-021-073-000	5,938,926	2,110,389	--	--	Agriculture	0	57
106-021-076-000	5,936,195	2,108,875	--	--	Agriculture	0	21
106-021-077-000	5,937,442	2,108,881	--	--	Agriculture	0	54

Table 4.1

Well Locations and Pumping Rates Assigned to Transient Models
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Well Identification	State Plane Coordinate X	State Plane Coordinate Y	Screen Elevation (NAVD88) Top	Screen Elevation (NAVD88) Bottom	Well Type	Pumping Rate (GPM) Minimum	Pumping Rate (GPM) Maximum
106-021-078-000	5,941,213	2,108,919	--	--	Agriculture	0	36
106-021-081-000	5,940,526	2,107,448	--	--	Agriculture	0	42
106-021-083-000	5,939,028	2,109,766	--	--	Agriculture	0	33
106-021-086-000	5,942,781	2,104,778	--	--	Agriculture	0	68
106-021-087-000	5,943,273	2,104,310	--	--	Agriculture	0	4
106-031-001-000	5,948,720	2,113,443	--	--	Agriculture	0	56
106-031-010-000	5,948,828	2,108,374	--	--	Agriculture	0	110
106-031-011-000	5,947,480	2,107,284	--	--	Agriculture	0	188
106-031-012-000	5,947,831	2,105,146	--	--	Agriculture	0	264
106-031-013-000	5,949,339	2,104,312	--	--	Agriculture	0	299
106-031-014-000	5,949,877	2,105,230	--	--	Agriculture	0	113
106-031-015-000	5,949,470	2,107,199	--	--	Agriculture	0	90
106-031-016-000	5,950,579	2,103,948	--	--	Agriculture	0	57
106-031-018-000	5,950,794	2,105,981	--	--	Agriculture	0	65
106-031-019-000	5,952,771	2,104,045	--	--	Agriculture	0	376
106-031-020-000	5,952,799	2,105,620	--	--	Agriculture	0	60
106-031-021-000	5,952,793	2,106,145	--	--	Agriculture	0	77
106-031-023-000	5,952,177	2,107,768	--	--	Agriculture	0	175
106-031-024-000	5,951,016	2,109,066	--	--	Agriculture	0	102
106-031-026-000	5,950,812	2,107,159	--	--	Agriculture	0	86
106-031-027-000	5,947,824	2,111,306	--	--	Agriculture	0	36
106-031-034-000	5,949,140	2,109,497	--	--	Agriculture	0	215
106-031-036-000	5,948,654	2,112,400	--	--	Agriculture	0	57
106-031-040-000	5,949,983	2,111,501	--	--	Agriculture	0	401
106-031-041-000	5,952,529	2,111,102	--	--	Agriculture	0	559
106-031-043-000	5,953,509	2,107,709	--	--	Agriculture	0	164
106-031-045-000	5,952,858	2,109,564	--	--	Agriculture	0	135
106-041-003-000	5,954,986	2,108,069	--	--	Agriculture	0	535
106-041-005-000	5,955,511	2,105,811	--	--	Agriculture	0	121
106-041-007-000	5,954,757	2,104,618	--	--	Agriculture	0	89
106-051-001-000	5,941,417	2,104,249	--	--	Agriculture	0	74
106-051-002-000	5,941,467	2,103,035	--	--	Agriculture	0	71
106-051-003-000	5,941,447	2,101,938	--	--	Agriculture	0	324
106-051-004-000	5,942,721	2,103,299	--	--	Agriculture	0	76
106-051-005-000	5,943,692	2,102,650	--	--	Agriculture	0	239
106-051-006-000	5,945,432	2,102,211	--	--	Agriculture	0	104
106-051-007-000	5,945,564	2,103,994	--	--	Agriculture	0	148
106-051-008-000	5,947,069	2,104,177	--	--	Agriculture	0	161
106-051-009-000	5,947,309	2,102,244	--	--	Agriculture	0	177
106-051-010-000	5,949,480	2,102,205	--	--	Agriculture	0	87
106-051-013-000	5,950,444	2,102,109	--	--	Agriculture	0	41
106-051-015-000	5,951,115	2,103,128	--	--	Agriculture	0	148
106-061-001-000	5,941,444	2,100,733	--	--	Agriculture	0	433
106-061-002-000	5,940,836	2,099,419	--	--	Agriculture	0	134
106-061-006-000	5,945,410	2,100,907	--	--	Agriculture	0	85
106-061-007-000	5,945,392	2,099,873	--	--	Agriculture	0	50
106-061-012-000	5,946,987	2,097,096	--	--	Agriculture	0	41
106-061-013-000	5,946,787	2,098,974	--	--	Agriculture	0	139
106-061-014-000	5,946,735	2,100,298	--	--	Agriculture	0	56
106-061-015-000	5,946,731	2,101,119	--	--	Agriculture	0	57
106-061-016-000	5,948,091	2,100,233	--	--	Agriculture	0	171
106-061-017-000	5,949,375	2,100,919	--	--	Agriculture	0	75
106-061-024-000	5,949,360	2,099,238	--	--	Agriculture	0	33
106-061-028-000	5,950,720	2,100,252	--	--	Agriculture	0	23
106-061-036-000	5,951,026	2,097,084	--	--	Agriculture	0	17
106-061-037-000	5,950,463	2,096,625	--	--	Agriculture	0	75
106-061-038-000	5,950,669	2,095,296	--	--	Agriculture	0	106
106-061-039-000	5,950,654	2,094,020	--	--	Agriculture	0	50
106-061-041-000	5,949,288	2,095,513	--	--	Agriculture	0	87
106-061-046-000	5,950,699	2,099,415	--	--	Agriculture	0	92
106-061-047-000	5,950,868	2,098,093	--	--	Agriculture	0	65
106-061-052-000	5,945,631	2,097,303	--	--	Agriculture	0	188
106-061-053-000	5,945,473	2,099,025	--	--	Agriculture	0	67
106-061-054-000	5,949,550	2,094,730	--	--	Agriculture	0	88
106-061-066-000	5,950,588	2,100,857	--	--	Agriculture	0	46
106-061-067-000	5,943,487	2,100,519	--	--	Agriculture	0	256
106-061-069-000	5,944,049	2,097,963	--	--	Agriculture	0	149

Well Locations and Pumping Rates Assigned to Transient Models
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Well Identification	State Plane Coordinate X	State Plane Coordinate Y	Screen Elevation (NAVD88) Top	Screen Elevation (NAVD88) Bottom	Well Type	Pumping Rate (GPM) Minimum	Pumping Rate (GPM) Maximum
106-071-002-000	5,947,617	2,097,849	--	--	Rural Residential	0	15
106-071-013-000	5,949,495	2,098,328	--	--	Agriculture	0	20
106-071-016-000	5,949,125	2,096,842	--	--	Agriculture	0	23
106-071-017-000	5,948,790	2,096,854	--	--	Agriculture	0	23
106-071-018-000	5,948,422	2,096,867	--	--	Agriculture	0	22
106-071-019-000	5,947,930	2,096,881	--	--	Agriculture	0	33
106-071-020-000	5,947,470	2,096,910	--	--	Agriculture	0	24
106-071-022-000	5,947,736	2,098,443	--	--	Rural Residential - Vacant	0	26
106-071-023-000	5,949,604	2,096,766	--	--	Agriculture	0	200
106-081-003-000	5,947,201	2,095,620	--	--	Agriculture	0	71
106-081-005-000	5,948,339	2,095,389	--	--	Agriculture	0	47
106-091-001-000	--	--	--	--	--	0	85
106-091-002-000	5,953,492	2,102,016	--	--	Agriculture	0	79
106-091-003-000	--	--	--	--	--	0	304
106-091-004-000	5,952,013	2,098,706	--	--	Agriculture	0	177
106-091-005-000	5,953,303	2,097,837	--	--	Agriculture	0	111
106-091-006-000	5,954,410	2,101,987	--	--	Agriculture	0	46
106-091-007-000	5,955,070	2,101,966	--	--	Agriculture	0	46
106-091-008-000	5,956,288	2,101,671	--	--	Agriculture	0	228
106-091-009-000	5,956,453	2,100,057	--	--	Agriculture	0	752
106-091-012-000	5,955,392	2,097,475	--	--	Agriculture	0	143
106-091-013-000	5,956,274	2,097,317	--	--	Agriculture	0	87
106-091-014-000	5,957,122	2,097,976	--	--	Agriculture	0	138
106-091-015-000	5,957,320	2,096,194	--	--	Agriculture	0	46
106-091-018-000	5,957,666	2,097,907	--	--	Agriculture	0	215
106-091-020-000	5,958,163	2,096,449	--	--	Agriculture	0	32
106-091-023-000	5,958,837	2,096,393	--	--	Agriculture	0	70
106-091-024-000	5,959,888	2,096,522	--	--	Agriculture	0	85
106-091-025-000	5,960,722	2,097,805	--	--	Agriculture	0	271
106-091-046-000	5,954,425	2,097,632	--	--	Agriculture	0	81
106-101-001-000	5,951,975	2,096,754	--	--	Agriculture	0	67
106-101-002-000	5,951,954	2,095,800	--	--	Agriculture	0	43
106-101-003-000	5,951,909	2,095,134	--	--	Agriculture	0	45
106-101-007-000	5,953,584	2,094,747	--	--	Agriculture	0	135
106-101-009-000	5,953,118	2,095,917	--	--	Agriculture	0	231
106-101-012-000	5,954,647	2,095,654	--	--	Agriculture	0	73
106-101-014-000	5,954,719	2,093,719	--	--	Agriculture	0	66
106-101-018-000	5,956,925	2,094,915	--	--	Agriculture	0	21
106-101-021-000	5,956,740	2,095,585	--	--	Agriculture	0	9
106-101-022-000	5,957,063	2,095,533	--	--	Agriculture	0	9
106-101-028-000	5,957,367	2,092,039	--	--	Agriculture	0	120
106-101-029-000	5,957,172	2,090,939	--	--	Agriculture	0	45
106-101-030-000	5,957,848	2,089,955	--	--	Agriculture	0	187
106-101-031-000	5,958,638	2,091,801	--	--	Agriculture	0	79
106-101-033-000	5,959,746	2,094,353	--	--	Agriculture	0	258
106-101-034-000	5,958,779	2,094,992	--	--	Agriculture	0	41
106-101-036-000	5,961,223	2,095,204	--	--	Agriculture	0	86
106-101-054-000	5,954,094	2,096,029	--	--	Agriculture	0	19
106-101-056-000	5,956,166	2,095,839	--	--	Agriculture	0	20
106-101-059-000	5,951,418	2,094,087	--	--	Agriculture	0	27
106-101-060-000	5,955,479	2,095,054	--	--	Agriculture	0	118
106-101-064-000	5,956,071	2,094,080	--	--	Agriculture	0	81
106-101-071-000	5,957,124	2,093,929	--	--	Agriculture	0	77
106-101-073-000	5,957,863	2,094,609	--	--	Agriculture	0	102
106-111-002-000	5,954,012	2,093,412	--	--	Agriculture	0	8
106-111-004-000	5,955,962	2,092,432	--	--	Agriculture	0	254
106-221-003-000	5,961,178	2,090,195	--	--	Agriculture	0	9
106-221-005-000	5,960,463	2,088,606	--	--	Agriculture	0	329
106-221-007-000	5,959,813	2,089,630	--	--	Agriculture	0	11
106-221-008-000	5,959,772	2,090,029	--	--	Agriculture	0	39
106-221-009-000	5,959,780	2,090,436	--	--	Agriculture	0	14
106-221-012-000	5,959,813	2,091,546	--	--	Agriculture	0	45
106-221-013-000	5,960,424	2,092,500	--	--	Agriculture	0	72
201-172-001-000	5,964,678	2,097,144	--	--	Agriculture	0	28
201-172-003-000	5,964,830	2,096,166	--	--	Agriculture	0	7
201-201-003-000	5,964,805	2,094,225	--	--	Agriculture	0	243
201-201-005-000	5,963,924	2,093,176	--	--	Agriculture	0	18

Well Locations and Pumping Rates Assigned to Transient Models
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Well Identification	State Plane Coordinate X	State Plane Coordinate Y	Screen Elevation (NAVD88) Top	Screen Elevation (NAVD88) Bottom	Well Type	Pumping Rate (GPM) Minimum	Pumping Rate (GPM) Maximum
201-201-008-000	5,964,050	2,094,440	--	--	Agriculture	0	132
201-201-009-000	5,962,685	2,094,540	--	--	Open Space/Parks	0	37
201-211-003-000	5,963,941	2,092,420	--	--	Agriculture	0	453
201-221-009-000	5,963,963	2,091,140	--	--	Agriculture	0	12
201-221-010-000	5,964,702	2,090,916	--	--	Agriculture	0	11
201-221-010-000	5,965,113	2,090,813	--	--	Agriculture	0	11
201-261-001-000	5,963,845	2,088,998	--	--	Agriculture	0	44
201-261-003-000	5,964,902	2,089,663	--	--	Agriculture	0	13
201-261-008-000	5,964,961	2,088,416	--	--	Agriculture	0	82
201-262-004-000	5,966,521	2,088,358	--	--	Agriculture	0	47
201-311-004-000	5,968,993	2,087,012	--	--	Grazing/Timber	0	151
201-311-013-000	5,968,680	2,088,715	--	--	Rural Residential	0	239
201-311-017-000	5,967,634	2,088,615	--	--	Agriculture	0	419
201-322-008-000	5,970,233	2,088,573	--	--	Grazing/Timber	0	78
201-322-020-000	5,969,793	2,086,325	--	--	Agriculture	0	20
201-322-021-000	5,970,197	2,086,297	--	--	Grazing/Timber	0	23
201-322-022-000	5,970,596	2,086,297	--	--	Grazing/Timber	0	41
204-051-008-000	5,986,970	2,078,812	--	--	--	0	22
204-071-011-000	5,987,328	2,080,584	--	--	--	0	53
204-072-003-000	5,991,896	2,082,418	--	--	Timber Production	0	38
204-072-006-000	5,988,964	2,081,300	--	--	--	0	50
204-081-002-000	5,973,431	2,088,105	--	--	Agriculture	0	418
204-081-005-000	5,973,512	2,086,209	--	--	Agriculture	0	257
204-091-008-000	5,978,566	2,085,669	--	--	Grazing/Timber	0	76
204-091-015-000	5,976,547	2,086,244	--	--	Rural Residential	0	675
204-091-022-000	5,975,249	2,087,192	--	--	Rural Residential - Vacant	0	137
204-091-023-000	5,975,471	2,085,642	--	--	Rural Residential - Vacant	0	477
204-101-001-000	5,975,497	2,084,191	--	--	Agriculture	0	225
204-111-008-000	5,980,994	2,084,244	--	--	--	0	30
204-171-012-000	5,975,237	2,087,719	--	--	Rural Residential	0	34
204-181-023-000	5,979,525	2,088,206	--	--	Grazing/Timber	0	200
204-211-044-000	5,986,702	2,089,385	--	--	Grazing/Timber	0	69
204-211-044-000	5,987,791	2,089,341	--	--	Grazing/Timber	0	69
204-211-045-000	5,986,363	2,088,201	--	--	Grazing/Timber	0	185
204-231-001-000	5,987,039	2,087,421	--	--	Agriculture	0	414
204-231-001-000	5,987,681	2,088,419	--	--	Agriculture	0	414
204-231-013-000	5,986,954	2,086,547	--	--	Agriculture	0	349
204-231-013-000	5,988,215	2,086,264	--	--	Agriculture	0	349
204-251-005-000	5,986,435	2,083,926	--	--	Agriculture	0	56
204-262-001-000	5,977,648	2,089,923	--	--	Rural Residential	0	6
204-381-023-000	5,986,792	2,090,169	--	--	Grazing/Timber	0	92
204-381-027-000	5,987,023	2,090,688	--	--	Agriculture	0	82
205-091-001-000	5,963,662	2,079,216	--	--	Rural Residential	0	209
205-091-004-000	5,965,961	2,078,908	--	--	Rural Residential	0	68
205-091-009-000	5,965,968	2,077,294	--	--	Rural Residential	0	93
205-091-011-000	5,964,181	2,077,909	--	--	Rural Residential	0	124
205-101-004-000	5,962,964	2,082,462	--	--	Agriculture	0	370
205-101-012-000	5,964,729	2,080,279	--	--	Grazing/Timber	0	279
205-101-014-000	5,963,160	2,080,541	--	--	Rural Residential	0	573
205-101-016-000	5,963,125	2,084,519	--	--	Rural Residential - Vacant	0	220
205-111-035-000	5,967,754	2,076,889	--	--	Rural Residential - Vacant	0	89
205-111-036-000	5,968,740	2,077,690	--	--	Rural Residential	0	485
205-121-001-000	5,963,568	2,086,397	--	--	Agriculture	0	37
206-101-052-000	5,988,990	2,088,696	--	--	Timber Production	0	21
206-321-007-000	--	--	--	--	--	0	17
206-331-028-000	5,991,968	2,085,196	--	--	Rural Residential	0	170
206-331-038-000	5,991,360	2,085,120	--	--	Rural Residential - Vacant	0	136
206-351-003-000	5,987,641	2,082,993	--	--	Agriculture	0	108
206-361-005-000	5,990,356	2,085,062	--	--	Rural Residential	0	245
206-371-001-000	5,988,576	2,083,862	--	--	Rural Residential	0	46
206-371-010-000	5,988,851	2,082,501	--	--	Agriculture	0	20
206-371-019-000	5,990,952	2,083,787	--	--	Rural Residential	0	232
308-141-020-000	5,936,162	2,133,959	--	--	Agriculture	0	116
308-141-020-000	5,937,427	2,134,251	--	--	Agriculture	0	116
309-171-003-000	5,939,922	2,128,259	--	--	Agriculture	0	162
309-171-004-000	5,939,537	2,127,206	--	--	Agriculture	0	167
309-181-003-000	5,937,004	2,126,250	--	--	Agriculture	0	90

Table 4.1

Well Locations and Pumping Rates Assigned to Transient Models
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Well Identification	State Plane Coordinate X	State Plane Coordinate Y	Screen Elevation (NAVD88) Top	Screen Elevation (NAVD88) Bottom	Well Type	Pumping Rate (GPM) Minimum	Pumping Rate (GPM) Maximum
309-191-001-000	5,939,628	2,126,444	--	--	Agriculture	0	67
309-191-002-000	5,939,598	2,125,824	--	--	Agriculture	0	55
309-191-003-000	5,941,286	2,126,167	--	--	Agriculture	0	92
309-191-008-000	5,941,085	2,125,296	--	--	Agriculture	0	10
309-191-009-000	5,939,871	2,124,754	--	--	Agriculture	0	168
309-191-010-000	5,941,176	2,124,327	--	--	Agriculture	0	14
309-191-012-000	5,942,709	2,124,860	--	--	Agriculture	0	126
309-201-002-000	5,937,331	2,124,162	--	--	Agriculture	0	368
309-201-003-000	5,940,073	2,123,563	--	--	Agriculture	0	264
309-201-004-000	5,939,650	2,123,003	--	--	Agriculture	0	19
309-211-007-000	5,942,809	2,123,834	--	--	Agriculture	0	113
309-221-003-000	5,944,661	2,120,447	--	--	Agriculture	0	36
309-221-005-000	5,944,340	2,121,834	--	--	Agriculture	0	57
309-231-001-000	5,933,900	2,121,526	--	--	Agriculture	0	144
309-231-002-000	5,935,227	2,121,498	--	--	Agriculture	0	163
309-231-003-000	5,937,172	2,121,581	--	--	Agriculture	0	166
309-251-001-000	5,939,877	2,121,400	--	--	Agriculture	0	22
309-251-002-000	5,942,549	2,121,328	--	--	Agriculture	0	255
309-261-003-000	5,944,074	2,117,692	--	--	Agriculture	0	55
309-271-001-000	5,944,391	2,116,597	--	--	Agriculture	0	13
309-271-002-000	5,944,281	2,115,897	--	--	Gravel Mining	0	29
310-061-009-000	5,935,296	2,124,202	--	--	Agriculture	0	189
310-091-001-000	5,932,921	2,121,802	--	--	Agriculture	0	59

Note:

(1) Water is supplied through an infiltration gallery. This is represented in the model by removing surface water flows from SFR boundary condition cells at these locations.

Model-Assigned Recharge Rates
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

	Model-Applied Recharge Rates in Each HRU (inches/month)														
Date	**109325**	**109326**	**109337**	**109341**	**109348**	**109349**	**109350**	**109351**	**109355**	**109377**	**109378**	**109380**	**109390**	**109911**	**109912**
October 1999	0.0029	0.0016	0.0015	0.0085	0.00079	0.000000011	0.001	0.003	0.000000011	0.000000011	0.000000011	0.0066	0.00000001	0.000000011	0.000000023
November 1999	0.012	0.0011	0.001	0.0057	0.00054	0.089	0.00072	0.002	0.17	2.3	4.1E-09	0.0045	1.6	0.000000004	2.4
December 1999	1.1	0.15	0.00077	0.21	0.0004	2.3	0.2	0.51	1.7	1.6	1.4	0.8	1.1	0.41	1.8
January 2000	2	0.75	2.7	1.6	1.9	6.2	0.9	3.8	4.7	4	7	1.9	3.2	6.8	4.5
February 2000	1.8	0.54	2.6	1.7	1.5	6	0.63	3.2	5.2	3.7	3.9	1.7	2.3	3	3.7
March 2000	1	0.32	1.5	1.1	0.63	1.7	0.38	1.9	1.7	1.3	1.1	1.2	0.85	0.84	1.1
April 2000	0.22	0.022	0.17	0.19	0.009	0.00013	0.014	0.041	0.17	0.54	0.00015	0.097	0.17	0.00021	0.38
May 2000	0.39	0.0098	0.26	0.063	0.0044	0.0000045	0.0064	0.019	0.13	0.06	0.0000048	0.044	0.022	0.0000057	0.015
June 2000	0.022	0.0053	0.0079	0.033	0.0025	0.00000051	0.0034	0.01	0.000052	0.0000099	0.00000053	0.023	0.00000027	0.00000059	0.0000083
July 2000	0.0099	0.0034	0.0047	0.021	0.0016	0.00000011	0.0022	0.0065	0.0000026	0.00000094	0.00000011	0.015	0.000000066	0.00000012	0.00000084
August 2000	0.0055	0.0022	0.0029	0.013	0.0011	0.000000029	0.0015	0.0042	0.00000035	0.00000016	0.00000003	0.0096	0.000000019	0.000000032	0.00000015
September 2000	0.0034	0.0015	0.0019	0.0086	0.0007	9.6E-09	0.00098	0.0028	0.000000075	0.000000041	9.9E-09	0.0063	6.7E-09	0.00000001	0.000000038
October 2000	0.0045	0.0011	0.0014	0.0061	0.00052	3.9E-09	0.00073	0.002	0.000000023	0.29	0.000000004	0.0045	2.8E-09	4.2E-09	0.38
November 2000	0.0092	0.00077	0.00094	0.0042	0.00036	1.6E-09	0.00051	0.0014	7.7E-09	0.88	1.7E-09	0.0031	0.75	1.7E-09	0.85
December 2000	0.0094	0.00058	0.0007	0.0031	0.00027	8E-10	0.00039	0.0011	3.2E-09	1.1	8.3E-10	0.25	0.86	8.3E-10	1.1
January 2001	1.1	0.3	1	0.32	0.36	2.9	0.37	1.9	2.1	2.1	2.2	0.98	1.5	1.3	2.2
February 2001	1.2	0.38	1.8	1.1	0.99	3	0.42	2.3	2.6	1.9	1.9	1.3	1.1	1.2	1.6
March 2001	0.46	0.14	0.61	0.61	0.24	1.2	0.12	0.84	1.2	0.65	0.73	0.6	0.36	0.45	0.61
April 2001	0.72	0.018	0.97	0.49	0.0094	0.000077	0.012	0.82	0.79	0.41	0.000075	0.47	0.41	0.000072	0.15
May 2001	0.032	0.0088	0.017	0.11	0.0045	0.0000033	0.0056	0.028	0.0015	0.00093	0.0000033	0.079	0.0000027	0.0000032	0.0000032
June 2001	0.013	0.0049	0.0079	0.048	0.0025	0.00000041	0.0031	0.014	0.000012	0.00001	0.00000041	0.036	0.00000035	0.00000039	0.00000039
July 2001	0.0078	0.0032	0.0047	0.028	0.0016	0.00000009	0.002	0.0083	0.0000011	0.00000097	0.00000009	0.021	0.000000079	0.000000088	0.000000088
August 2001	0.004	0.0021	0.0029	0.017	0.0011	0.000000025	0.0014	0.0053	0.00000018	0.00000017	0.000000025	0.013	0.000000023	0.000000025	0.000000025
September 2001	0.0025	0.0014	0.0019	0.011	0.00071	8.5E-09	0.00092	0.0034	0.000000044	0.000000041	8.5E-09	0.0084	7.7E-09	8.2E-09	8.4E-09
October 2001	0.0021	0.001	0.0014	0.0077	0.00052	3.5E-09	0.00068	0.0025	0.000000015	0.000000014	3.5E-09	0.0059	3.2E-09	3.4E-09	3.5E-09
November 2001	0.01	0.00073	0.00094	0.0052	0.00036	1.5E-09	0.00048	0.0017	5.3E-09	0.93	1.5E-09	0.004	0.4	1.4E-09	0.84
December 2001	2.2	0.61	2	1.4	1.4	5.9	0.55	3.3	4.3	4.2	4.2	2	2.9	1.5	4.6
January 2002	1.2	0.46	1.7	1.1	1.2	3.6	0.55	2.2	2.8	2.1	3.9	1.4	1.7	3.5	2.2
February 2002	0.9	0.3	1.3	0.86	0.71	2.8	0.38	1.7	2.4	1.5	1.6	0.92	0.92	1.4	1.6
March 2002	1.2	0.34	1.8	1.1	0.79	2.1	0.37	2.1	2.3	1.7	1.3	1.2	1.2	0.95	1.4
April 2002	0.048	0.03	0.031	0.17	0.0079	0.0025	0.017	0.052	0.003	0.0023	0.0025	0.13	0.00029	0.0024	0.00059
May 2002	0.018	0.012	0.012	0.069	0.004	0.000017	0.0072	0.022	0.000018	0.000016	0.000017	0.053	0.0000067	0.000017	0.0000094
June 2002	0.0073	0.0061	0.006	0.035	0.0023	0.0000012	0.0038	0.011	0.0000013	0.0000012	0.0000012	0.027	0.00000066	0.0000012	0.00000084
July 2002	0.0045	0.0038	0.0037	0.022	0.0015	0.00000021	0.0024	0.0071	0.00000022	0.00000021	0.00000021	0.017	0.00000013	0.00000021	0.00000016
August 2002	0.0028	0.0025	0.0024	0.014	0.001	0.000000051	0.0016	0.0046	0.000000052	0.000000051	0.000000051	0.011	0.000000034	0.00000005	0.00000004
September 2002	0.0019	0.0016	0.0016	0.0089	0.00067	0.000000015	0.0011	0.003	0.000000016	0.000000015	0.000000015	0.0069	0.000000011	0.000000015	0.000000013
October 2002	0.0014	0.0012	0.0012	0.0064	0.00049	5.9E-09	0.00077	0.0022	0.000000006	5.9E-09	5.9E-09	0.0049	4.4E-09	5.8E-09	0.000000005
November 2002	0.0052	0.00084	0.00081	0.0044	0.00034	2.4E-09	0.00054	0.0015	2.4E-09	2.4E-09	2.4E-09	0.0034	1.8E-09	2.3E-09	2.1E-09
December 2002	1.4	0.43	1.4	1.2	0.98	8.1	0.51	2.3	7.1	5.2	6.8	1.5	4.5	5.4	5.1
January 2003	1.4	0.51	2	1.4	1.3	3	0.57	2.6	2.3	1.9	3.3	1.5	1.4	2.7	1.9
February 2003	0.7	0.21	1.2	0.65	0.56	1.7	0.25	1.3	1.5	1.2	1.1	0.71	0.72	0.8	1
March 2003	1.3	0.32	1.8	1.1	0.62	2.9	0.24	2.1	3.2	1.9	1.6	1.2	1.1	1.2	1.5
April 2003	2.1	0.58	3.2	1.9	1.6	7.1	0.64	3.9	7.7	4.8	4.6	2.2	3	3	4.4
May 2003	0.48	0.19	0.65	0.61	0.35	0.74	0.16	0.43	0.66	0.44	0.44	0.46	0.23	0.32	0.37
June 2003	0.023	0.02	0.017	0.1	0.0092	0.000098	0.012	0.032	0.000089	0.000084	0.000081	0.077	0.000029	0.000095	0.000053
July 2003	0.01	0.0093	0.0083	0.05	0.0045	0.0000038	0.0059	0.016	0.0000036	0.0000035	0.0000034	0.038	0.0000018	0.0000037	0.0000027
August 2003	0.0056	0.0052	0.0047	0.028	0.0025	0.00000046	0.0033	0.0092	0.00000044	0.00000043	0.00000042	0.021	0.00000027	0.00000045	0.00000036
September 2003	0.0034	0.0032	0.0029	0.017	0.0015	0.000000092	0.002	0.0056	0.000000089	0.000000089	0.000000087	0.013	0.00000006	0.00000009	0.000000076
October 2003	0.0023	0.0022	0.002	0.011	0.0011	0.000000027	0.0014	0.0039	0.000000026	0.000000026	0.000000026	0.0087	0.000000019	0.000000026	0.000000023
November 2003	0.0078	0.0014	0.0013	0.0075	0.00071	0.000000009	0.00095	0.0026	8.8E-09	0.49	8.7E-09	0.0058	0.29	8.8E-09	0.51
December 2003	1.3	0.38	0.88	0.88	0.53	5.7	0.41	2	4.2	4.5	4.1	1.3	3.3	2.5	4.9
January 2004	1.9	0.72	2.7	1.7	2	4.9	0.87	3.3	3.6	3.2	5.3	1.9	2.4	5.4	3.4
February 2004	1.5	0.48	2.3	1.5	1.3	5.9	0.53	3	5.3	3.2	3.9	1.6	2	2.9	3.2
March 2004	0.26	0.084	0.45	0.39	0.094	0.19	0.074	0.4	0.18	0.17	0.094	0.41	0.05	0.078	0.083

Model-Assigned Recharge Rates
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

	Model-Applied Recharge Rates in Each HRU (inches/month)														
Date	**109325**	**109326**	**109337**	**109341**	**109348**	**109349**	**109350**	**109351**	**109355**	**109377**	**109378**	**109380**	**109390**	**109911**	**109912**
April 2004	0.22	0.016	0.16	0.092	0.0081	0.000029	0.01	0.031	0.12	0.26	0.000028	0.071	0.22	0.000032	0.028
May 2004	0.033	0.008	0.016	0.046	0.0041	0.0000019	0.0051	0.016	0.000002	0.0016	0.0000019	0.036	0.00049	0.000002	0.0000018
June 2004	0.012	0.0045	0.0075	0.026	0.0023	0.00000027	0.0029	0.0087	0.00000028	0.000013	0.00000027	0.02	0.0000078	0.00000028	0.00000026
July 2004	0.0065	0.0029	0.0045	0.017	0.0015	0.000000065	0.0019	0.0057	0.000000068	0.0000011	0.000000065	0.013	0.00000079	0.000000067	0.000000064
August 2004	0.0039	0.002	0.0028	0.011	0.001	0.000000019	0.0013	0.0038	0.00000002	0.00000019	0.000000019	0.0084	0.00000014	0.00000002	0.000000019
September 2004	0.0025	0.0013	0.0018	0.0072	0.00068	6.7E-09	0.00088	0.0025	6.9E-09	0.000000045	6.7E-09	0.0056	0.000000036	6.8E-09	6.7E-09
October 2004	0.0098	0.00098	0.0013	0.0052	0.0005	2.8E-09	0.00065	0.0019	2.9E-09	1.1	2.9E-09	0.0041	0.39	2.9E-09	1.2
November 2004	0.0086	0.00069	0.00091	0.0036	0.00035	1.2E-09	0.00046	0.0013	1.3E-09	0.0059	1.2E-09	0.0028	0.0018	1.2E-09	0.0053
December 2004	0.9	0.3	1.4	0.31	0.66	3.6	0.25	1.5	2.9	2.7	2.2	0.61	2.3	1.3	2.9
January 2005	1.2	0.48	1.7	1.1	1.3	4.6	0.56	2.2	3.4	2.7	4.8	1.3	2	5.4	3.3
February 2005	0.71	0.21	1.1	0.7	0.3	1	0.12	1.3	0.84	0.48	0.29	0.53	0.33	0.35	0.27
March 2005	1.2	0.35	1.7	1.2	0.9	4.4	0.39	2.4	4.4	2.7	2.4	1.2	1.5	2.3	2.7
April 2005	0.86	0.25	1.3	1	0.56	2.9	0.27	1.6	3.1	1.8	1.8	1	1.1	1.3	1.8
May 2005	0.67	0.22	0.75	0.35	0.24	1.3	0.11	0.42	1.8	0.93	0.64	0.52	0.23	0.00027	1.3
June 2005	0.28	0.13	0.34	0.13	0.059	1.1	0.11	0.034	1	1.2	0.00084	0.21	0.39	0.39	1.5
July 2005	0.043	0.037	0.027	0.058	0.0061	0.0013	0.02	0.017	0.0013	0.0012	0.000011	0.075	0.00078	0.0012	0.0013
August 2005	0.014	0.013	0.011	0.032	0.0032	0.000012	0.0076	0.0094	0.000012	0.000012	0.00000094	0.036	0.0000095	0.000011	0.000012
September 2005	0.0069	0.0065	0.0055	0.019	0.0019	0.00000096	0.004	0.0057	0.00000096	0.00000096	0.00000016	0.02	0.00000084	0.00000095	0.00000097
October 2005	0.0053	0.004	0.0035	0.013	0.0013	0.00000018	0.0025	0.0039	0.00000018	0.00000018	0.000000043	0.013	0.00000016	0.00000017	0.00000018
November 2005	0.012	0.0025	0.0022	0.0082	0.00084	0.000000043	0.0016	0.0026	0.000000043	1.5	0.000000013	0.0082	0.98	0.000000042	1.4
December 2005	1.7	0.43	1.8	0.94	1.2	7.8	0.5	2.2	6	4.3	6.1	1.2	3.2	5.3	4.6
January 2006	2.2	0.79	3.5	2	2.5	8.6	1	4.4	6.4	5.6	9	2.3	3.8	9	6.3
February 2006	0.58	0.22	0.81	0.72	0.57	3	0.25	1.1	2.7	1.4	1.9	0.71	1	1.7	1.8
March 2006	2.5	0.77	3.7	2.3	2.1	8.7	1	4.7	8.3	5.6	5.8	2.5	3.6	4.6	5.5
April 2006	1.2	0.35	1.8	1.3	0.81	3.5	0.33	2.2	3.6	2.2	2.1	1.4	1.3	1.4	1.8
May 2006	0.044	0.03	0.03	0.17	0.013	0.0007	0.019	0.058	0.00072	0.17	0.00067	0.13	0.00032	0.00065	0.36
June 2006	0.016	0.011	0.011	0.066	0.0052	0.0000091	0.0071	0.022	0.0000092	0.0027	0.0000089	0.051	0.0000063	0.0000087	0.0024
July 2006	0.0069	0.0062	0.006	0.036	0.003	0.00000088	0.004	0.012	0.00000089	0.000017	0.00000088	0.028	0.00000069	0.00000086	0.000017
August 2006	0.0041	0.0037	0.0036	0.021	0.0018	0.00000016	0.0024	0.0073	0.00000016	0.0000013	0.00000016	0.016	0.00000013	0.00000015	0.0000012
September 2006	0.0026	0.0024	0.0023	0.013	0.0012	0.000000039	0.0015	0.0046	0.000000039	0.0000002	0.000000039	0.01	0.000000033	0.000000038	0.0000002
October 2006	0.0019	0.0017	0.0016	0.0092	0.00081	0.000000013	0.0011	0.0032	0.000000013	0.000000052	0.000000013	0.0071	0.000000011	0.000000013	0.000000051
November 2006	0.011	0.0011	0.0011	0.0061	0.00055	4.8E-09	0.00075	0.0022	4.8E-09	1.2	4.8E-09	0.0048	0.75	4.7E-09	1.2
December 2006	1.1	0.27	0.3	0.55	0.22	4.1	0.21	0.97	3	2.9	2.5	1	2.1	0.84	3.2
January 2007	0.43	0.2	0.51	0.52	0.45	0.94	0.22	0.76	0.73	0.74	1.2	0.63	0.55	1.2	0.8
February 2007	1.5	0.45	2.3	1.3	1.5	6.6	0.65	3.3	6.1	4.1	4.7	1.6	2.6	3.7	4.3
March 2007	0.55	0.18	0.77	0.72	0.22	0.66	0.13	0.83	0.7	0.52	0.51	0.58	0.46	0.45	0.5
April 2007	0.7	0.018	0.88	0.65	0.009	0.2	0.012	0.9	1	0.38	0.000046	0.51	0.34	0.000047	0.21
May 2007	0.23	0.0087	0.098	0.16	0.0044	0.0014	0.0056	0.063	0.061	0.0024	0.0000025	0.13	0.0013	0.0000025	0.0015
June 2007	0.016	0.0048	0.011	0.064	0.0025	0.000012	0.0031	0.023	0.000016	0.000015	0.00000033	0.05	0.000012	0.00000033	0.000012
July 2007	0.0087	0.0031	0.0061	0.035	0.0016	0.0000011	0.0021	0.013	0.0000013	0.0000012	0.000000077	0.028	0.000001	0.000000076	0.0000011
August 2007	0.0048	0.0021	0.0037	0.021	0.0011	0.00000018	0.0014	0.0075	0.0000002	0.0000002	0.000000022	0.016	0.00000018	0.000000022	0.00000018
September 2007	0.003	0.0014	0.0023	0.013	0.0007	0.000000044	0.00092	0.0047	0.000000049	0.000000048	7.6E-09	0.01	0.000000043	7.4E-09	0.000000045
October 2007	0.0073	0.001	0.0016	0.0091	0.00052	0.000000014	0.00068	0.0033	0.000000016	0.31	3.2E-09	0.0071	0.000000014	3.1E-09	0.23
November 2007	0.0051	0.00072	0.0011	0.0061	0.00036	5.2E-09	0.00048	0.0022	5.6E-09	0.045	1.4E-09	0.0048	0.14	1.3E-09	0.00015
December 2007	1	0.31	1.5	0.75	0.9	3.8	0.43	2.2	3	3.5	3.2	1.1	2.8	1.8	3.8
January 2008	1.8	0.67	2.7	1.6	2	6.9	0.83	3.4	5.1	3.4	6.6	1.8	2.3	5.5	3.6
February 2008	0.85	0.29	1.3	0.95	0.55	2.3	0.29	1.5	1.9	1.2	1.3	0.8	0.7	1	1.2
March 2008	0.29	0.042	0.45	0.42	0.018	0.01	0.027	0.38	0.22	0.048	0.0082	0.43	0.24	0.0089	0.0059
April 2008	0.25	0.013	0.3	0.22	0.0064	0.000023	0.0086	0.21	0.45	0.24	0.000022	0.22	0.23	0.000022	0.13
May 2008	0.035	0.0071	0.022	0.1	0.0035	0.0000016	0.0046	0.019	0.0034	0.0027	0.0000016	0.064	0.0000013	0.0000016	0.0000015
June 2008	0.012	0.0041	0.0093	0.046	0.002	0.00000024	0.0027	0.01	0.000017	0.000015	0.00000024	0.031	0.00000021	0.00000024	0.00000023
July 2008	0.0067	0.0027	0.0053	0.027	0.0013	0.00000006	0.0018	0.0065	0.0000013	0.0000013	0.000000059	0.019	0.000000053	0.000000058	0.000000057
August 2008	0.004	0.0018	0.0033	0.017	0.0009	0.000000018	0.0012	0.0043	0.00000021	0.0000002	0.000000018	0.012	0.000000016	0.000000018	0.000000017
September 2008	0.0025	0.0012	0.0021	0.011	0.00061	6.3E-09	0.00082	0.0028	0.00000005	0.000000049	6.3E-09	0.0076	5.7E-09	6.1E-09	6.1E-09

Model-Assigned Recharge Rates
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	Model-Applied Recharge Rates in Each HRU (inches/month)														
Date	**109325**	**109326**	**109337**	**109341**	**109348**	**109349**	**109350**	**109351**	**109355**	**109377**	**109378**	**109380**	**109390**	**109911**	**109912**
October 2008	0.0059	0.00092	0.0015	0.0076	0.00045	2.7E-09	0.00061	0.0021	0.000000016	0.000000016	2.7E-09	0.0054	2.5E-09	2.6E-09	2.6E-09
November 2008	0.0094	0.00065	0.001	0.0051	0.00031	1.2E-09	0.00043	0.0014	5.8E-09	0.61	1.2E-09	0.0037	0.25	1.1E-09	0.53
December 2008	0.5	0.033	0.00076	0.0038	0.00024	1	0.00033	0.0011	0.82	2.2	5.9E-10	0.065	1.8	5.7E-10	2.3
January 2009	0.92	0.33	0.92	0.59	0.00018	1.2	0.39	1.6	0.65	0.42	0.94	0.83	0.36	2.9E-10	0.38
February 2009	1.8	0.57	2.6	1.6	1.5	5.6	0.75	3.5	4.2	2.8	3	1.8	1.5	2.6	2.6
March 2009	0.94	0.32	1.3	1.1	0.73	3	0.39	2.2	2.9	1.7	1.8	1.4	1	1.6	1.5
April 2009	0.45	0.03	0.69	0.59	0.0097	0.0017	0.02	0.88	0.2	0.0013	0.001	0.68	0.00033	0.0012	0.00046
May 2009	0.48	0.17	0.68	0.56	0.12	1.2	0.0078	0.77	1.6	0.000013	0.000012	0.65	0.0000071	0.000013	0.0000084
June 2009	0.024	0.021	0.021	0.11	0.0059	0.000088	0.004	0.041	0.000088	0.000001	0.00000097	0.092	0.00000069	0.000001	0.00000077
July 2009	0.01	0.0097	0.0093	0.053	0.0033	0.0000036	0.0025	0.019	0.0000036	0.00000019	0.00000018	0.042	0.00000014	0.00000018	0.00000015
August 2009	0.0057	0.0054	0.0051	0.029	0.002	0.00000044	0.0016	0.01	0.00000044	0.000000047	0.000000044	0.023	0.000000035	0.000000045	0.000000039
September 2009	0.0035	0.0032	0.0031	0.017	0.0012	0.000000089	0.0011	0.0062	0.000000089	0.000000014	0.000000014	0.014	0.000000011	0.000000014	0.000000012
October 2009	0.011	0.0022	0.0021	0.012	0.00087	0.000000026	0.0008	0.0042	0.000000026	5.6E-09	5.4E-09	0.0094	4.5E-09	5.3E-09	4.8E-09
November 2009	0.0097	0.0015	0.0014	0.0077	0.00059	8.7E-09	0.00056	0.0028	8.8E-09	2.3E-09	2.2E-09	0.0062	1.8E-09	2.2E-09	0.000000002
December 2009	0.86	0.16	1.1	0.43	0.00043	1.1	0.14	2	0.2	1.3	0.000000001	0.82	0.89	0.000000001	1.5
January 2010	2	0.74	2.7	1.8	1.5	7.7	0.86	3.6	5.9	3.4	5.7	2.2	2.3	5	3.9
February 2010	1.6	0.48	2.3	1.5	1	3.5	0.63	3.2	2.8	1.5	1.7	1.8	0.79	1.5	1.4
March 2010	1.2	0.29	1.9	1.4	0.66	2.9	0.21	2.6	3.2	1.1	1.3	1.5	0.59	0.77	0.88
April 2010	1.5	0.43	2.2	1.7	0.89	5.1	0.31	3	5.3	2	2.5	2	1.1	1.5	1.8
May 2010	0.75	0.26	1	0.76	0.36	1.3	0.19	0.59	1.5	1.1	1.1	0.84	0.62	0.72	0.99
June 2010	0.36	0.17	0.39	0.35	0.31	1.2	0.17	0.36	1.1	0.88	1.2	0.47	0.42	1.4	1.2
July 2010	0.022	0.021	0.017	0.075	0.01	0.000079	0.014	0.026	0.000079	0.000077	0.00008	0.078	0.000061	0.000088	0.000078
August 2010	0.0097	0.0093	0.008	0.039	0.0046	0.0000031	0.0061	0.013	0.0000031	0.0000031	0.0000031	0.037	0.0000027	0.0000033	0.0000031
September 2010	0.0064	0.005	0.0044	0.022	0.0025	0.00000039	0.0033	0.0076	0.00000039	0.00000039	0.00000039	0.02	0.00000035	0.0000004	0.00000039
October 2010	0.0088	0.0033	0.0029	0.015	0.0016	0.000000087	0.0022	0.0051	0.000000087	0.61	0.000000088	0.013	0.00000008	0.000000089	0.63
November 2010	0.49	0.025	0.72	0.0094	0.0011	0.23	0.0014	0.7	0.29	1.1	0.000000024	0.57	0.89	0.000000025	1
December 2010	2.2	0.82	3.2	1.6	2	8.2	0.91	4.2	6	4.6	6	2.4	3.3	7	5.1
January 2011	0.79	0.32	0.95	0.83	0.7	1.2	0.33	1.4	0.71	0.69	1.3	0.92	0.57	1.3	0.67
February 2011	0.95	0.32	1.5	0.94	0.73	2.9	0.37	2	2.3	1.1	1.4	1.1	0.62	0.97	0.81
March 2011	2.5	0.8	3.7	2.4	2.3	9.5	1.1	5	8.2	4.1	4.9	2.8	2.4	3.7	3.6
April 2011	1.2	0.15	1.4	1.2	0.27	1.6	0.12	2.2	2.1	0.55	0.77	1.4	0.44	0.16	0.23
May 2011	0.47	0.099	0.57	0.25	0.011	0.00094	0.018	0.064	0.00098	0.00057	0.00086	0.24	0.00038	0.00048	0.00043
June 2011	0.45	0.14	0.39	0.24	0.0048	0.00001	0.007	0.023	0.00001	0.0000083	0.0000099	0.31	0.0000068	0.0000077	0.0000073
July 2011	0.019	0.017	0.012	0.053	0.0028	0.00000096	0.004	0.013	0.00000097	0.00000084	0.00000094	0.052	0.00000073	0.00000079	0.00000077
August 2011	0.0085	0.008	0.0061	0.029	0.0017	0.00000017	0.0024	0.0075	0.00000017	0.00000015	0.00000016	0.027	0.00000013	0.00000014	0.00000014
September 2011	0.0048	0.0045	0.0036	0.018	0.0011	0.000000041	0.0015	0.0047	0.000000041	0.000000038	0.000000041	0.016	0.000000034	0.000000036	0.000000036
October 2011	0.0097	0.0029	0.0024	0.012	0.00077	0.000000014	0.0011	0.0033	0.000000014	0.13	0.000000014	0.011	0.000000012	0.000000012	0.13
November 2011	0.0073	0.0019	0.0016	0.0078	0.00053	0.000000005	0.00075	0.0022	0.000000005	0.55	0.000000005	0.0069	0.31	4.5E-09	0.62
December 2011	0.0057	0.0014	0.0012	0.0056	0.00039	2.2E-09	0.00056	0.0016	2.2E-09	0.22	2.2E-09	0.0049	0.34	0.000000002	0.2
January 2012	0.69	0.28	0.87	0.51	0.5	3.4	0.4	1.4	2	2.2	2.4	0.82	2	4.6	2.5
February 2012	0.79	0.27	1.1	0.86	0.46	1.8	0.31	1.7	1.5	0.87	0.94	1.1	0.49	1	0.84
March 2012	1.9	0.61	2.7	1.9	1.4	8.1	0.8	4.1	7.3	3.7	4.6	2.2	2.5	4.6	3.6
April 2012	0.9	0.29	1.2	1.2	0.59	2.7	0.3	1.8	2.6	1.5	1.6	1.4	0.88	1.3	1.4
May 2012	0.039	0.027	0.027	0.16	0.013	0.00035	0.017	0.054	0.00036	0.00033	0.00034	0.31	0.00026	0.00033	0.00032
June 2012	0.014	0.011	0.01	0.063	0.0053	0.0000067	0.0068	0.021	0.0000067	0.0000065	0.0000066	0.058	0.0000057	0.0000065	0.0000064
July 2012	0.0075	0.0059	0.0058	0.035	0.003	0.00000072	0.0038	0.012	0.00000072	0.00000071	0.00000071	0.031	0.00000064	0.0000007	0.0000007
August 2012	0.004	0.0036	0.0035	0.021	0.0018	0.00000013	0.0024	0.0071	0.00000013	0.00000013	0.00000013	0.018	0.00000012	0.00000013	0.00000013
September 2012	0.0025	0.0023	0.0022	0.013	0.0012	0.000000034	0.0015	0.0045	0.000000034	0.000000034	0.000000034	0.011	0.000000032	0.000000033	0.000000034
October 2012	0.0041	0.0016	0.0016	0.009	0.00082	0.000000012	0.0011	0.0031	0.000000012	0.000000012	0.000000012	0.0076	0.000000011	0.000000011	0.000000012
November 2012	0.095	0.024	0.0011	0.006	0.00056	0.6	0.039	0.0021	0.2	1.3	4.4E-09	0.077	0.73	4.2E-09	1.2
December 2012	2	0.74	2.6	1.8	1.9	8.1	0.95	3.8	5.8	4	6.3	2.1	2.9	7	4.3
January 2013	0.96	0.37	1.2	0.95	1	1.8	0.46	1.5	1.1	1.2	1.9	1	0.89	2	1.3
February 2013	0.49	0.12	0.75	0.52	0.17	0.48	0.18	1.2	0.51	0.66	0.49	0.72	0.45	0.5	0.6
March 2013	0.27	0.11	0.36	0.42	0.24	1.3	0.12	0.52	1.2	0.48	0.81	0.46	0.39	0.95	0.66

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Humboldt County Groundwater Sustainability Agency

	Model-Applied Recharge Rates in Each HRU (inches/month)														
Date	**109325**	**109326**	**109337**	**109341**	**109348**	**109349**	**109350**	**109351**	**109355**	**109377**	**109378**	**109380**	**109390**	**109911**	**109912**
April 2013	0.42	0.019	0.62	0.43	0.0096	0.084	0.013	0.71	0.4	0.12	0.000095	0.47	0.18	0.3	0.000087
May 2013	0.023	0.009	0.017	0.09	0.0046	0.0000038	0.006	0.032	0.00013	0.000049	0.0000037	0.075	0.000086	0.00013	0.0000036
June 2013	0.01	0.005	0.0079	0.043	0.0025	0.00000045	0.0033	0.015	0.0000041	0.0000024	0.00000045	0.035	0.0000032	0.000004	0.00000043
July 2013	0.0056	0.0032	0.0047	0.026	0.0016	0.000000098	0.0021	0.009	0.00000051	0.00000035	0.000000097	0.021	0.00000043	0.0000005	0.000000095
August 2013	0.0035	0.0021	0.0029	0.016	0.0011	0.000000027	0.0014	0.0057	0.0000001	0.000000076	0.000000027	0.013	0.000000089	0.0000001	0.000000027
September 2013	0.0045	0.0014	0.0019	0.01	0.00072	0.000000009	0.00096	0.0037	0.000000028	0.000000022	0.000000009	0.0082	0.000000024	0.000000027	8.9E-09
October 2013	0.0057	0.001	0.0014	0.0072	0.00053	3.7E-09	0.00071	0.0026	9.7E-09	7.9E-09	3.7E-09	0.0058	8.8E-09	9.6E-09	3.6E-09
November 2013	0.0023	0.00074	0.00094	0.0049	0.00037	1.5E-09	0.0005	0.0018	3.7E-09	3.1E-09	1.6E-09	0.0039	3.4E-09	3.6E-09	1.5E-09
December 2013	0.0029	0.00056	0.0007	0.0036	0.00028	7.6E-10	0.00038	0.0013	1.7E-09	1.4E-09	7.7E-10	0.0029	1.5E-09	1.6E-09	7.6E-10
January 2014	0.0019	0.00042	0.00052	0.0026	0.0002	3.8E-10	0.00028	0.00098	7.8E-10	6.8E-10	3.8E-10	0.0021	7.2E-10	7.6E-10	3.8E-10
February 2014	0.18	0.00029	0.00035	0.14	0.00014	0.37	0.0002	0.71	0.36	1.3	1.9E-10	0.52	0.74	3.5E-10	0.97
March 2014	1.4	0.075	1.8	1.2	0.00012	3.6	0.17	2.5	3.1	1.1	1.2E-10	1.4	0.45	2.1E-10	0.56
April 2014	0.19	0.11	0.21	0.4	0.000085	0.63	0.085	0.34	0.58	0.45	6.6E-11	0.37	0.24	1.1E-10	0.46
May 2014	0.022	0.017	0.017	0.099	0.000067	0.000052	0.012	0.034	0.000052	0.000049	4.1E-11	0.076	0.00004	6.7E-11	0.000048
June 2014	0.009	0.0078	0.0077	0.046	0.00005	0.0000024	0.0053	0.016	0.0000024	0.0000024	2.4E-11	0.035	0.0000021	3.8E-11	0.0000023
July 2014	0.0053	0.0047	0.0046	0.027	0.000039	0.00000035	0.0032	0.0093	0.00000035	0.00000035	1.6E-11	0.021	0.00000031	2.4E-11	0.00000034
August 2014	0.0033	0.003	0.0029	0.017	0.00003	0.000000076	0.002	0.0058	0.000000076	0.000000076	9.9E-12	0.013	0.000000069	1.5E-11	0.000000075
September 2014	0.004	0.0019	0.0019	0.011	0.000023	0.000000022	0.0013	0.0038	0.000000022	0.000000022	6.2E-12	0.0083	0.00000002	9.1E-12	0.000000021
October 2014	0.01	0.0014	0.0013	0.0075	0.000018	7.9E-09	0.00094	0.0027	7.9E-09	0.43	4.3E-12	0.0058	7.3E-09	6.1E-12	0.33
November 2014	0.11	0.00096	0.43	0.0051	0.000014	3.1E-09	0.061	0.19	3.1E-09	0.74	2.8E-12	0.077	0.51	3.9E-12	0.74
December 2014	1.9	0.7	2.7	1.1	1.4	6.2	0.92	3.3	4.1	3.3	4.1	1.6	2.5	7.3	3.8
January 2015	0.35	0.16	0.44	0.42	0.35	0.75	0.17	0.58	0.37	0.33	0.68	0.45	0.21	1.2	0.32
February 2015	0.84	0.3	1.3	1	0.74	4.1	0.29	1.7	3.6	1.2	1.9	1	0.6	1.3	1.1
March 2015	0.038	0.027	0.19	0.16	0.014	0.00024	0.017	0.32	0.00024	0.00022	0.00023	0.12	0.13	0.00021	0.00019
April 2015	0.21	0.011	0.26	0.32	0.0055	0.61	0.0068	0.36	1.2	0.35	0.0000054	0.31	0.34	0.33	0.58
May 2015	0.024	0.0059	0.02	0.095	0.0031	0.00012	0.0039	0.037	0.00013	0.00011	0.00000062	0.072	0.00011	0.00011	0.00012
June 2015	0.0099	0.0035	0.0088	0.044	0.0018	0.0000039	0.0023	0.017	0.000004	0.0000037	0.00000012	0.034	0.0000036	0.0000038	0.0000039
July 2015	0.0058	0.0024	0.0051	0.026	0.0012	0.00000049	0.0016	0.0098	0.0000005	0.00000048	0.000000033	0.02	0.00000047	0.00000048	0.0000005
August 2015	0.0036	0.0016	0.0031	0.016	0.00084	0.000000099	0.0011	0.0061	0.0000001	0.000000097	0.000000011	0.013	0.000000095	0.000000097	0.0000001
September 2015	0.0028	0.0011	0.002	0.01	0.00057	0.000000027	0.00074	0.0039	0.000000027	0.000000027	4.1E-09	0.0081	0.000000026	0.000000026	0.000000027
October 2015	0.0017	0.00083	0.0014	0.0074	0.00042	9.5E-09	0.00055	0.0028	9.7E-09	9.5E-09	1.8E-09	0.0057	9.2E-09	9.3E-09	9.7E-09
November 2015	0.0052	0.00059	0.00099	0.005	0.0003	3.6E-09	0.0004	0.0019	3.7E-09	0.48	8.3E-10	0.0039	0.27	3.5E-09	0.52
December 2015	1.5	0.57	1.2	1.1	1	7.2	0.86	2.5	4.6	4.6	4.7	1.6	3.2	6.9	5
January 2016	2.3	0.89	3.2	2.1	2.5	9.5	1.1	4.3	6.4	4.1	7.9	2.4	2.8	12	4.8
February 2016	0.69	0.23	0.96	0.78	0.36	1.2	0.25	1.3	0.9	0.71	0.48	0.78	0.55	1	0.53
March 2016	1.5	0.46	2.2	1.6	1.1	6.7	0.54	2.8	5.8	2.2	2.5	1.7	1.1	3.9	1.9
April 2016	0.057	0.036	0.037	0.21	0.017	0.0021	0.021	0.073	0.0022	0.13	0.0011	0.16	0.00018	0.0004	0.0033
May 2016	0.02	0.013	0.013	0.078	0.0065	0.000016	0.0081	0.026	0.000016	0.000011	0.000012	0.059	0.0000052	0.0000078	0.0000068
June 2016	0.0074	0.0066	0.0065	0.039	0.0033	0.0000012	0.0041	0.013	0.0000012	0.00000092	0.00000099	0.029	0.00000056	0.00000073	0.00000068
July 2016	0.0045	0.0041	0.004	0.024	0.0021	0.0000002	0.0026	0.008	0.00000021	0.00000017	0.00000018	0.018	0.00000012	0.00000014	0.00000013
August 2016	0.0029	0.0026	0.0026	0.015	0.0013	0.000000049	0.0017	0.0051	0.00000005	0.000000043	0.000000045	0.011	0.000000031	0.000000037	0.000000035
September 2016	0.0019	0.0017	0.0017	0.0096	0.00087	0.000000015	0.0011	0.0033	0.000000015	0.000000013	0.000000014	0.0073	0.00000001	0.000000012	0.000000011
October 2016	0.38	0.025	0.7	0.0068	0.1	0.98	0.037	0.37	0.82	1.1	5.4E-09	0.39	0.33	4.6E-09	1
November 2016	0.98	0.46	1.6	0.4	1.2	3.1	0.58	2	1.9	2	0.51	0.89	1.5	3.5	2.2
December 2016	1.1	0.47	1.5	1	1.2	4.6	0.53	2	3.3	2.2	4.2	1.3	1.6	7.4	2.6
January 2017	1.4	0.65	2.4	1.7	0.95	11	0.76	1.4	9.2	5.3	10	1.9	5.2	13	6.2
February 2017	2.1	0.66	2.5	1.9	2.2	8.1	0.72	2.6	7.4	5	5.7	1.8	3.3	5	4.7
March 2017	1.3	0.35	1.2	0.88	2.6	1.9	0.22	2.5	2.2	1.8	1.1	0.81	1.1	0.98	1.9
April 2017	0.97	0.66	1.4	1.1	1.8	2.6	0.26	4.1	2.9	2.1	1.4	0.98	1.2	1.2	1.4
May 2017	0.039	0.81	0.03	0.17	0.02	0.0013	0.016	4	0.0015	0.0013	0.0011	0.12	0.00051	0.0012	0.00059
June 2017	0.013	0.051	0.011	0.065	0.0067	0.000012	0.0066	0.056	0.000012	0.000012	0.000011	0.049	0.0000079	0.000011	0.0000085
July 2017	0.007	0.016	0.0061	0.036	0.0036	0.0000011	0.0038	0.023	0.0000011	0.0000011	0.000001	0.027	0.0000008	0.000001	0.00000085
August 2017	0.0042	0.0076	0.0036	0.021	0.0021	0.00000018	0.0023	0.012	0.00000018	0.00000018	0.00000017	0.016	0.00000014	0.00000017	0.00000015
September 2017	0.0026	0.0043	0.0023	0.013	0.0013	0.000000043	0.0015	0.007	0.000000044	0.000000044	0.000000042	0.01	0.000000036	0.000000042	0.000000038

Model-Assigned Recharge Rates
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

	Model-Applied Recharge Rates in Each HRU (inches/month)														
Date	**109325**	**109326**	**109337**	**109341**	**109348**	**109349**	**109350**	**109351**	**109355**	**109377**	**109378**	**109380**	**109390**	**109911**	**109912**
October 2017	0.0022	0.0029	0.0016	0.0091	0.00093	0.000000014	0.0011	0.0047	0.000000015	0.000000015	0.000000014	0.007	0.000000012	0.000000014	0.000000013
November 2017	0.0079	0.0019	0.0011	0.0061	0.11	5.2E-09	0.00073	0.0031	5.3E-09	1.9	5.1E-09	0.0047	1.1	0.000000005	1.1
December 2017	0.0049	0.0013	0.00082	0.0045	0.23	2.3E-09	0.00055	0.18	2.3E-09	0.056	2.2E-09	0.0034	0.09	2.2E-09	0.0084
January 2018	0.51	0.48	0.38	0.35	1.6	4.4	0.29	1.6	3.6	2.7	3.1	0.48	2.4	2.1	3.2
February 2018	0.37	0.41	0.1	0.16	1.6	0.0082	0.034	0.96	0.0079	0.0073	0.0085	0.17	0.0058	0.011	0.0079
March 2018	1.9	0.42	2.2	1.3	2.6	4.5	0.58	2.4	4.5	3.3	2.7	1.4	2	2.3	3.8
April 2018	0.73	0.72	0.91	0.94	0.87	2.7	0.2	3.6	3.2	2.4	1.7	0.85	1.5	2	0.37
May 2018	0.032	0.14	0.026	0.16	0.014	0.00052	0.015	1.1	0.00055	0.00056	0.00048	0.11	0.0003	0.00052	0.00011
June 2018	0.011	0.017	0.01	0.062	0.0056	0.000008	0.0064	0.029	0.0000082	0.0000082	0.0000077	0.046	0.0000062	0.0000079	0.0000037
July 2018	0.0064	0.0083	0.0057	0.035	0.0031	0.00000081	0.0037	0.015	0.00000082	0.00000083	0.00000079	0.026	0.00000068	0.0000008	0.00000048
August 2018	0.0039	0.0047	0.0035	0.021	0.0019	0.00000015	0.0023	0.0085	0.00000015	0.00000015	0.00000014	0.015	0.00000013	0.00000014	0.000000098
September 2018	0.0025	0.0029	0.0022	0.013	0.0012	0.000000037	0.0015	0.0053	0.000000037	0.000000038	0.000000037	0.0097	0.000000033	0.000000036	0.000000027
October 2018	0.0029	0.002	0.0016	0.0089	0.00085	0.000000013	0.001	0.0036	0.000000013	0.000000013	0.000000012	0.0068	0.000000011	0.000000012	9.5E-09
November 2018	0.004	0.0014	0.0011	0.006	0.00057	4.6E-09	0.00072	0.0024	4.6E-09	1.1	4.6E-09	0.0045	0.63	4.5E-09	0.94
December 2018	0.012	0.15	0.00079	0.061	0.69	2.4	0.05	1.1	2	2.4	0.78	0.35	1.9	0.000000002	1.9
January 2019	1.3	0.7	1.5	1.1	1.9	6.5	0.58	2.4	5.4	3.8	6.4	1.4	2.9	6.5	4.8
February 2019	1.1	0.32	2.5	1.6	1.2	8.6	0.83	1.3	7.6	5	5.7	1.7	3.5	5	6.8
March 2019	2.5	0.52	2.1	1.5	2.7	4.3	0.51	3	4.3	3.3	2.8	1.5	2.1	2.2	3.9
April 2019	0.87	0.8	0.77	0.65	1	1.1	0.11	3.8	1.2	0.85	0.42	0.56	0.53	0.44	0.039
May 2019	0.42	0.81	0.62	0.13	0.12	1.9	0.098	5	2	2.2	1.4	0.17	0.88	0.038	2
June 2019	0.03	0.046	0.031	0.051	0.0091	0.0021	0.019	2	0.0021	0.0021	0.0022	0.058	0.0012	0.00013	0.0016
July 2019	0.012	0.015	0.012	0.03	0.0044	0.000016	0.0078	0.044	0.000016	0.000016	0.000016	0.031	0.000013	0.0000044	0.000014
August 2019	0.0062	0.0073	0.0062	0.018	0.0025	0.0000012	0.0041	0.019	0.0000012	0.0000012	0.0000012	0.018	0.000001	0.0000005	0.0000011
September 2019	0.0037	0.0042	0.0036	0.011	0.0015	0.00000019	0.0024	0.01	0.00000019	0.00000019	0.00000019	0.011	0.00000017	0.000000098	0.00000018
October 2019	0.0025	0.0028	0.0024	0.008	0.0011	0.000000049	0.0016	0.0065	0.000000049	0.00000005	0.00000005	0.0076	0.000000045	0.000000028	0.000000048
November 2019	0.0017	0.0018	0.0016	0.0054	0.00071	0.000000015	0.0011	0.0042	0.000000015	0.000000015	0.000000015	0.0051	0.000000014	9.3E-09	0.000000015
December 2019	0.11	0.13	0.0012	0.004	1.2	2.2	0.0008	1.9	1.6	3	0.38	0.46	2.2	3.8E-09	4
January 2020	1.4	0.75	1.1	0.99	2.1	4.9	0.72	2.8	3.7	3	4.5	1.5	2.3	3.2	3.5
February 2020	0.083	0.56	0.041	0.2	1.6	0.013	0.037	0.39	0.012	0.0096	0.014	0.19	0.0068	0.017	0.0077
March 2020	0.19	0.3	0.41	0.079	1	0.000032	0.011	1.5	0.000031	0.27	0.000032	0.068	0.066	0.000034	0.13
April 2020	0.32	0.36	0.38	0.26	0.33	0.21	0.0051	2.9	0.79	0.49	0.0000018	0.033	0.37	0.13	0.27
May 2020	0.023	0.027	0.017	0.072	0.011	0.00000028	0.0031	0.69	0.000095	0.37	0.00000029	0.02	0.000078	0.00007	0.099
June 2020	0.0094	0.011	0.0078	0.036	0.0048	0.000000063	0.0019	0.039	0.0000034	0.00068	0.000000064	0.012	0.000003	0.0000029	0.0000025
July 2020	0.0053	0.0059	0.0047	0.022	0.0028	0.00000002	0.0013	0.018	0.00000045	0.00001	0.00000002	0.0082	0.00000041	0.00000039	0.00000036
August 2020	0.0033	0.0036	0.0029	0.014	0.0017	0.000000007	0.00092	0.01	0.000000092	0.00000088	7.1E-09	0.0056	0.000000086	0.000000083	0.000000078
September 2020	0.0021	0.0023	0.0019	0.0092	0.0011	2.7E-09	0.00064	0.0061	0.000000025	0.00000015	2.8E-09	0.0038	0.000000024	0.000000023	0.000000022

Groundwater Observation Targets and Weights
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Well Identification	Observation Date	State Plane Coordinate X	State Plane Coordinate Y	Observed Groundwater Elevation (NAVD88)	Target Observation Weight
02N01W08B001H	March 2000	5,949,810	2,100,915	25.04	0.029
02N01W08B001H	October 2000	5,949,810	2,100,915	10.44	0.029
02N01W08B001H	March 2001	5,949,810	2,100,915	18.94	0.029
02N01W08B001H	October 2001	5,949,810	2,100,915	11.84	0.029
02N01W08B001H	March 2002	5,949,810	2,100,915	21.74	0.029
02N01W08B001H	March 2003	5,949,810	2,100,915	22.04	0.029
02N01W08B001H	October 2003	5,949,810	2,100,915	13.14	0.029
02N01W08B001H	April 2004	5,949,810	2,100,915	19.34	0.029
02N01W08B001H	October 2004	5,949,810	2,100,915	8.04	0.029
02N01W08B001H	April 2005	5,949,810	2,100,915	22.44	0.029
02N01W08B001H	October 2005	5,949,810	2,100,915	13.14	0.029
02N01W08B001H	May 2006	5,949,810	2,100,915	20.44	0.029
02N01W08B001H	October 2006	5,949,810	2,100,915	13.04	0.029
02N01W08B001H	March 2007	5,949,810	2,100,915	22.64	0.029
02N01W08B001H	October 2007	5,949,810	2,100,915	13.04	0.029
02N01W08B001H	April 2008	5,949,810	2,100,915	20.84	0.029
02N01W08B001H	October 2008	5,949,810	2,100,915	12.64	0.029
02N01W08B001H	April 2009	5,949,810	2,100,915	20.34	0.029
02N01W08B001H	October 2009	5,949,810	2,100,915	10.74	0.029
02N01W08B001H	March 2010	5,949,810	2,100,915	19.64	0.029
02N01W08B001H	October 2010	5,949,810	2,100,915	13.04	0.029
02N01W08B001H	April 2011	5,949,810	2,100,915	25.54	0.029
02N01W08B001H	October 2011	5,949,810	2,100,915	13.14	0.029
02N01W08B001H	April 2012	5,949,810	2,100,915	25.04	0.029
02N01W08B001H	October 2012	5,949,810	2,100,915	12.44	0.029
02N01W08B001H	March 2013	5,949,810	2,100,915	18.94	0.029
02N01W08B001H	October 2013	5,949,810	2,100,915	12.14	0.029
02N01W08B001H	March 2014	5,949,810	2,100,915	16.04	0.029
02N01W08B001H	October 2014	5,949,810	2,100,915	10.54	0.029
02N01W08B001H	April 2015	5,949,810	2,100,915	20.84	0.029
02N01W08B001H	October 2015	5,949,810	2,100,915	11.24	0.029
02N01W08B001H	March 2016	5,949,810	2,100,915	29.54	0.029
02N01W08B001H	October 2016	5,949,810	2,100,915	10.94	0.029
02N01W08B001H	March 2017	5,949,810	2,100,915	26.54	0.029
02N01W08B001H	October 2017	5,949,810	2,100,915	9.04	0.029
02N01W09G001H	March 2000	5,954,198	2,098,582	25.01	0.027
02N01W09G001H	October 2000	5,954,198	2,098,582	13.41	0.027
02N01W09G001H	March 2001	5,954,198	2,098,582	17.51	0.027
02N01W09G001H	October 2001	5,954,198	2,098,582	13.11	0.027
02N01W09G001H	March 2002	5,954,198	2,098,582	21.51	0.027
02N01W09G001H	October 2002	5,954,198	2,098,582	12.91	0.027
02N01W09G001H	March 2003	5,954,198	2,098,582	21.91	0.027
02N01W09G001H	October 2003	5,954,198	2,098,582	14.11	0.027
02N01W09G001H	April 2004	5,954,198	2,098,582	21.91	0.027
02N01W09G001H	October 2004	5,954,198	2,098,582	13.61	0.027
02N01W09G001H	April 2005	5,954,198	2,098,582	22.21	0.027
02N01W09G001H	October 2005	5,954,198	2,098,582	14.01	0.027
02N01W09G001H	May 2006	5,954,198	2,098,582	24.81	0.027
02N01W09G001H	October 2006	5,954,198	2,098,582	14.21	0.027
02N01W09G001H	March 2007	5,954,198	2,098,582	21.81	0.027
02N01W09G001H	October 2007	5,954,198	2,098,582	14.51	0.027
02N01W09G001H	April 2008	5,954,198	2,098,582	21.01	0.027
02N01W09G001H	October 2008	5,954,198	2,098,582	13.91	0.027
02N01W09G001H	April 2009	5,954,198	2,098,582	20.81	0.027
02N01W09G001H	October 2009	5,954,198	2,098,582	14.21	0.027

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Well Identification	Observation Date	State Plane Coordinate X	State Plane Coordinate Y	Observed Groundwater Elevation (NAVD88)	Target Observation Weight
02N01W09G001H	March 2010	5,954,198	2,098,582	21.71	0.027
02N01W09G001H	October 2010	5,954,198	2,098,582	14.11	0.027
02N01W09G001H	April 2011	5,954,198	2,098,582	25.51	0.027
02N01W09G001H	October 2011	5,954,198	2,098,582	15.56	0.027
02N01W09G001H	April 2012	5,954,198	2,098,582	24.55	0.027
02N01W09G001H	October 2012	5,954,198	2,098,582	13.21	0.027
02N01W09G001H	March 2013	5,954,198	2,098,582	18.71	0.027
02N01W09G001H	October 2013	5,954,198	2,098,582	13.01	0.027
02N01W09G001H	March 2014	5,954,198	2,098,582	16.71	0.027
02N01W09G001H	October 2014	5,954,198	2,098,582	12.51	0.027
02N01W09G001H	April 2015	5,954,198	2,098,582	18.20	0.027
02N01W09G001H	October 2015	5,954,198	2,098,582	12.10	0.027
02N01W09G001H	March 2016	5,954,198	2,098,582	26.36	0.027
02N01W09G001H	October 2016	5,954,198	2,098,582	12.77	0.027
02N01W09G001H	March 2017	5,954,198	2,098,582	25.91	0.027
02N01W09G001H	October 2017	5,954,198	2,098,582	13.41	0.027
02N01W09G001H	March 2018	5,954,198	2,098,582	19.91	0.027
02N02W02G001H	March 2000	5,932,962	2,104,842	14.89	0.031
02N02W02G001H	October 2000	5,932,962	2,104,842	7.09	0.031
02N02W02G001H	March 2001	5,932,962	2,104,842	11.79	0.031
02N02W02G001H	October 2001	5,932,962	2,104,842	7.49	0.031
02N02W02G001H	March 2002	5,932,962	2,104,842	13.49	0.031
02N02W02G001H	October 2002	5,932,962	2,104,842	5.89	0.031
02N02W02G001H	March 2003	5,932,962	2,104,842	13.89	0.031
02N02W02G001H	October 2003	5,932,962	2,104,842	8.29	0.031
02N02W02G001H	April 2004	5,932,962	2,104,842	12.99	0.031
02N02W02G001H	October 2004	5,932,962	2,104,842	7.69	0.031
02N02W02G001H	April 2005	5,932,962	2,104,842	14.69	0.031
02N02W02G001H	October 2005	5,932,962	2,104,842	8.19	0.031
02N02W02G001H	May 2006	5,932,962	2,104,842	14.49	0.031
02N02W02G001H	October 2006	5,932,962	2,104,842	7.69	0.031
02N02W02G001H	March 2007	5,932,962	2,104,842	14.39	0.031
02N02W02G001H	October 2007	5,932,962	2,104,842	7.99	0.031
02N02W02G001H	April 2008	5,932,962	2,104,842	12.49	0.031
02N02W02G001H	October 2008	5,932,962	2,104,842	7.69	0.031
02N02W02G001H	April 2009	5,932,962	2,104,842	12.59	0.031
02N02W02G001H	October 2009	5,932,962	2,104,842	8.09	0.031
02N02W02G001H	March 2010	5,932,962	2,104,842	13.59	0.031
02N02W02G001H	October 2010	5,932,962	2,104,842	8.59	0.031
02N02W02G001H	April 2011	5,932,962	2,104,842	14.79	0.031
02N02W02G001H	October 2011	5,932,962	2,104,842	8.49	0.031
02N02W02G001H	October 2012	5,932,962	2,104,842	8.19	0.031
02N02W02G001H	March 2013	5,932,962	2,104,842	11.89	0.031
02N02W02G001H	March 2014	5,932,962	2,104,842	10.89	0.031
02N02W02G001H	October 2014	5,932,962	2,104,842	8.99	0.031
02N02W02G001H	April 2015	5,932,962	2,104,842	11.79	0.031
02N02W02G001H	March 2017	5,932,962	2,104,842	14.79	0.031
02N02W02G001H	October 2017	5,932,962	2,104,842	7.19	0.031
02N02W02G001H	March 2018	5,932,962	2,104,842	12.79	0.031
03N01W30N001H	March 2000	5,941,781	2,112,961	13.64	0.028
03N01W30N001H	October 2000	5,941,781	2,112,961	6.14	0.028
03N01W30N001H	March 2001	5,941,781	2,112,961	11.14	0.028
03N01W30N001H	October 2001	5,941,781	2,112,961	5.84	0.028
03N01W30N001H	March 2002	5,941,781	2,112,961	12.14	0.028
03N01W30N001H	October 2002	5,941,781	2,112,961	5.74	0.028

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03N01W30N001H	March 2003	5,941,781	2,112,961	12.04	0.028
03N01W30N001H	October 2003	5,941,781	2,112,961	6.24	0.028
03N01W30N001H	April 2004	5,941,781	2,112,961	11.24	0.028
03N01W30N001H	October 2004	5,941,781	2,112,961	5.94	0.028
03N01W30N001H	April 2005	5,941,781	2,112,961	13.74	0.028
03N01W30N001H	October 2005	5,941,781	2,112,961	6.34	0.028
03N01W30N001H	May 2006	5,941,781	2,112,961	13.04	0.028
03N01W30N001H	October 2006	5,941,781	2,112,961	6.94	0.028
03N01W30N001H	October 2007	5,941,781	2,112,961	7.34	0.028
03N01W30N001H	April 2008	5,941,781	2,112,961	11.54	0.028
03N01W30N001H	October 2008	5,941,781	2,112,961	8.34	0.028
03N01W30N001H	April 2009	5,941,781	2,112,961	11.64	0.028
03N01W30N001H	October 2009	5,941,781	2,112,961	7.04	0.028
03N01W30N001H	March 2010	5,941,781	2,112,961	12.34	0.028
03N01W30N001H	October 2010	5,941,781	2,112,961	7.44	0.028
03N01W30N001H	April 2011	5,941,781	2,112,961	13.94	0.028
03N01W30N001H	October 2011	5,941,781	2,112,961	6.54	0.028
03N01W30N001H	April 2012	5,941,781	2,112,961	14.24	0.028
03N01W30N001H	October 2012	5,941,781	2,112,961	6.64	0.028
03N01W30N001H	March 2013	5,941,781	2,112,961	10.54	0.028
03N01W30N001H	October 2013	5,941,781	2,112,961	6.44	0.028
03N01W30N001H	March 2014	5,941,781	2,112,961	11.14	0.028
03N01W30N001H	October 2014	5,941,781	2,112,961	6.94	0.028
03N01W30N001H	April 2015	5,941,781	2,112,961	10.24	0.028
03N01W30N001H	October 2015	5,941,781	2,112,961	6.44	0.028
03N01W30N001H	March 2016	5,941,781	2,112,961	15.04	0.028
03N01W30N001H	October 2016	5,941,781	2,112,961	6.74	0.028
03N01W30N001H	March 2017	5,941,781	2,112,961	15.34	0.028
03N01W30N001H	October 2017	5,941,781	2,112,961	5.74	0.028
03N01W30N001H	March 2018	5,941,781	2,112,961	13.64	0.028
03N01W34J001H	March 2000	5,961,994	2,107,979	25.49	0.030
03N01W34J001H	October 2000	5,961,994	2,107,979	21.99	0.030
03N01W34J001H	March 2001	5,961,994	2,107,979	23.39	0.030
03N01W34J001H	October 2001	5,961,994	2,107,979	20.69	0.030
03N01W34J001H	March 2002	5,961,994	2,107,979	24.49	0.030
03N01W34J001H	October 2002	5,961,994	2,107,979	20.79	0.030
03N01W34J001H	March 2003	5,961,994	2,107,979	25.39	0.030
03N01W34J001H	October 2003	5,961,994	2,107,979	21.69	0.030
03N01W34J001H	April 2004	5,961,994	2,107,979	24.69	0.030
03N01W34J001H	October 2004	5,961,994	2,107,979	21.19	0.030
03N01W34J001H	April 2005	5,961,994	2,107,979	25.29	0.030
03N01W34J001H	October 2005	5,961,994	2,107,979	21.79	0.030
03N01W34J001H	May 2006	5,961,994	2,107,979	26.69	0.030
03N01W34J001H	October 2006	5,961,994	2,107,979	22.29	0.030
03N01W34J001H	March 2007	5,961,994	2,107,979	24.89	0.030
03N01W34J001H	October 2007	5,961,994	2,107,979	22.39	0.030
03N01W34J001H	April 2008	5,961,994	2,107,979	24.79	0.030
03N01W34J001H	October 2008	5,961,994	2,107,979	21.89	0.030
03N01W34J001H	April 2009	5,961,994	2,107,979	24.19	0.030
03N01W34J001H	October 2009	5,961,994	2,107,979	21.79	0.030
03N01W34J001H	March 2010	5,961,994	2,107,979	23.09	0.030
03N01W34J001H	October 2010	5,961,994	2,107,979	21.29	0.030
03N01W34J001H	April 2011	5,961,994	2,107,979	25.47	0.030
03N01W34J001H	April 2012	5,961,994	2,107,979	25.30	0.030
03N01W34J001H	October 2012	5,961,994	2,107,979	24.39	0.030

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03N01W34J001H	March 2013	5,961,994	2,107,979	24.09	0.030
03N01W34J001H	April 2015	5,961,994	2,107,979	22.88	0.030
03N01W34J001H	October 2015	5,961,994	2,107,979	20.40	0.030
03N01W34J001H	March 2016	5,961,994	2,107,979	25.89	0.030
03N01W34J001H	October 2016	5,961,994	2,107,979	21.56	0.030
03N01W34J001H	March 2017	5,961,994	2,107,979	26.89	0.030
03N01W34J001H	October 2017	5,961,994	2,107,979	21.79	0.030
03N01W34J001H	March 2018	5,961,994	2,107,979	25.79	0.030
03N01W34J001H	March 2000	5,961,994	2,107,979	25.49	0.030
03N01W34J001H	October 2000	5,961,994	2,107,979	21.99	0.030
03N01W34J001H	March 2001	5,961,994	2,107,979	23.39	0.030
03N01W34J001H	October 2001	5,961,994	2,107,979	20.69	0.030
03N01W34J001H	March 2002	5,961,994	2,107,979	24.49	0.030
03N01W34J001H	October 2002	5,961,994	2,107,979	20.79	0.030
03N01W34J001H	March 2003	5,961,994	2,107,979	25.39	0.030
03N01W34J001H	October 2003	5,961,994	2,107,979	21.69	0.030
03N01W34J001H	April 2004	5,961,994	2,107,979	24.69	0.030
03N01W34J001H	October 2004	5,961,994	2,107,979	21.19	0.030
03N01W34J001H	April 2005	5,961,994	2,107,979	25.29	0.030
03N01W34J001H	October 2005	5,961,994	2,107,979	21.79	0.030
03N01W34J001H	May 2006	5,961,994	2,107,979	26.69	0.030
03N01W34J001H	October 2006	5,961,994	2,107,979	22.29	0.030
03N01W34J001H	March 2007	5,961,994	2,107,979	24.89	0.030
03N01W34J001H	October 2007	5,961,994	2,107,979	22.39	0.030
03N01W34J001H	April 2008	5,961,994	2,107,979	24.79	0.030
03N01W34J001H	October 2008	5,961,994	2,107,979	21.89	0.030
03N01W34J001H	April 2009	5,961,994	2,107,979	24.19	0.030
03N01W34J001H	October 2009	5,961,994	2,107,979	21.79	0.030
03N01W34J001H	March 2010	5,961,994	2,107,979	23.09	0.030
03N01W34J001H	October 2010	5,961,994	2,107,979	21.29	0.030
03N01W34J001H	April 2011	5,961,994	2,107,979	25.47	0.030
03N01W34J001H	April 2012	5,961,994	2,107,979	25.30	0.030
03N01W34J001H	October 2012	5,961,994	2,107,979	24.39	0.030
03N01W34J001H	March 2013	5,961,994	2,107,979	24.09	0.030
03N01W34J001H	April 2015	5,961,994	2,107,979	22.88	0.030
03N01W34J001H	October 2015	5,961,994	2,107,979	20.40	0.030
03N01W34J001H	March 2016	5,961,994	2,107,979	25.89	0.030
03N01W34J001H	October 2016	5,961,994	2,107,979	21.56	0.030
03N01W34J001H	March 2017	5,961,994	2,107,979	26.89	0.030
03N01W34J001H	October 2017	5,961,994	2,107,979	21.79	0.030
03N01W34J001H	March 2018	5,961,994	2,107,979	25.79	0.030
03N02W13J001H	March 2000	5,939,865	2,124,890	8.97	0.037
03N02W13J001H	March 2001	5,939,865	2,124,890	5.27	0.037
03N02W13J001H	October 2001	5,939,865	2,124,890	2.97	0.037
03N02W13J001H	March 2002	5,939,865	2,124,890	7.57	0.037
03N02W13J001H	October 2002	5,939,865	2,124,890	6.07	0.037
03N02W13J001H	March 2003	5,939,865	2,124,890	8.67	0.037
03N02W13J001H	October 2003	5,939,865	2,124,890	4.87	0.037
03N02W13J001H	April 2004	5,939,865	2,124,890	6.77	0.037
03N02W13J001H	April 2005	5,939,865	2,124,890	10.87	0.037
03N02W13J001H	October 2005	5,939,865	2,124,890	4.77	0.037
03N02W13J001H	May 2006	5,939,865	2,124,890	7.67	0.037
03N02W13J001H	October 2006	5,939,865	2,124,890	4.57	0.037
03N02W13J001H	March 2007	5,939,865	2,124,890	6.87	0.037
03N02W13J001H	October 2007	5,939,865	2,124,890	4.87	0.037

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03N02W13J001H	April 2008	5,939,865	2,124,890	6.17	0.037
03N02W13J001H	October 2008	5,939,865	2,124,890	4.47	0.037
03N02W13J001H	April 2009	5,939,865	2,124,890	6.47	0.037
03N02W13J001H	October 2009	5,939,865	2,124,890	4.77	0.037
03N02W13J001H	March 2010	5,939,865	2,124,890	7.07	0.037
03N02W13J001H	October 2010	5,939,865	2,124,890	5.47	0.037
03N02W13J001H	October 2011	5,939,865	2,124,890	5.37	0.037
03N02W13J001H	April 2012	5,939,865	2,124,890	8.97	0.037
03N02W13J001H	October 2012	5,939,865	2,124,890	4.77	0.037
03N02W13J001H	March 2013	5,939,865	2,124,890	6.27	0.037
03N02W13J001H	October 2013	5,939,865	2,124,890	4.67	0.037
03N02W13J001H	October 2014	5,939,865	2,124,890	6.47	0.037
03N02W13J001H	April 2015	5,939,865	2,124,890	6.07	0.037
03N02W13J002H	March 2016	5,939,865	2,124,890	8.64	1.000
03N02W35M002H	March 2000	5,931,405	2,109,073	16.00	0.028
03N02W35M002H	October 2000	5,931,405	2,109,073	8.60	0.028
03N02W35M002H	March 2001	5,931,405	2,109,073	13.30	0.028
03N02W35M002H	October 2001	5,931,405	2,109,073	8.60	0.028
03N02W35M002H	March 2002	5,931,405	2,109,073	14.90	0.028
03N02W35M002H	October 2002	5,931,405	2,109,073	8.60	0.028
03N02W35M002H	March 2003	5,931,405	2,109,073	15.70	0.028
03N02W35M002H	October 2003	5,931,405	2,109,073	9.50	0.028
03N02W35M002H	April 2004	5,931,405	2,109,073	14.40	0.028
03N02W35M002H	October 2004	5,931,405	2,109,073	8.50	0.028
03N02W35M002H	April 2005	5,931,405	2,109,073	17.00	0.028
03N02W35M002H	October 2005	5,931,405	2,109,073	9.10	0.028
03N02W35M002H	May 2006	5,931,405	2,109,073	14.50	0.028
03N02W35M002H	October 2006	5,931,405	2,109,073	8.90	0.028
03N02W35M002H	March 2007	5,931,405	2,109,073	14.80	0.028
03N02W35M002H	October 2007	5,931,405	2,109,073	9.00	0.028
03N02W35M002H	April 2008	5,931,405	2,109,073	13.80	0.028
03N02W35M002H	October 2008	5,931,405	2,109,073	8.60	0.028
03N02W35M002H	April 2009	5,931,405	2,109,073	14.10	0.028
03N02W35M002H	October 2009	5,931,405	2,109,073	9.00	0.028
03N02W35M002H	March 2010	5,931,405	2,109,073	15.10	0.028
03N02W35M002H	October 2010	5,931,405	2,109,073	10.00	0.028
03N02W35M002H	April 2011	5,931,405	2,109,073	16.10	0.028
03N02W35M002H	October 2011	5,931,405	2,109,073	9.70	0.028
03N02W35M002H	April 2012	5,931,405	2,109,073	16.30	0.028
03N02W35M002H	October 2012	5,931,405	2,109,073	9.60	0.028
03N02W35M002H	March 2013	5,931,405	2,109,073	13.90	0.028
03N02W35M002H	October 2013	5,931,405	2,109,073	8.90	0.028
03N02W35M002H	March 2014	5,931,405	2,109,073	12.20	0.028
03N02W35M002H	October 2014	5,931,405	2,109,073	8.90	0.028
03N02W35M002H	April 2015	5,931,405	2,109,073	13.50	0.028
03N02W35M002H	October 2015	5,931,405	2,109,073	9.00	0.028
03N02W35M002H	March 2016	5,931,405	2,109,073	15.83	0.028
03N02W35M002H	October 2016	5,931,405	2,109,073	9.00	0.028
03N02W35M002H	October 2017	5,931,405	2,109,073	9.10	0.028
03N02W35M002H	March 2018	5,931,405	2,109,073	15.80	0.028
1	March 2017	5,925,192	2,105,190	15.01	1.000
10	October 2016	5,939,340	2,115,246	5.85	0.500
10	March 2017	5,939,340	2,115,246	10.12	0.500
11	March 2017	5,937,561	2,110,846	15.16	0.500
11	October 2016	5,937,561	2,110,846	6.70	0.500

Groundwater Observation Targets and Weights
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Well Identification	Observation Date	State Plane Coordinate X	State Plane Coordinate Y	Observed Groundwater Elevation (NAVD88)	Target Observation Weight
12	March 2017	5,938,042	2,107,919	18.19	0.500
12	October 2016	5,938,042	2,107,919	7.96	0.500
13	October 2016	5,945,462	2,104,778	-1.53	0.500
13	March 2017	5,945,462	2,104,778	12.37	0.500
14	October 2016	5,949,643	2,105,328	13.90	0.500
14	March 2017	5,949,643	2,105,328	25.87	0.500
15	October 2016	5,953,588	2,107,525	11.98	0.500
15	March 2017	5,953,588	2,107,525	20.98	0.500
16	October 2016	5,949,707	2,096,799	14.18	0.500
16	March 2017	5,949,707	2,096,799	31.30	0.500
17	October 2016	5,953,393	2,099,732	15.07	0.500
17	March 2017	5,953,393	2,099,732	27.68	0.500
18	March 2017	5,946,760	2,101,174	25.81	0.500
18	October 2016	5,946,760	2,101,174	10.93	0.500
19	March 2017	5,956,006	2,093,107	30.63	0.500
19	October 2016	5,956,006	2,093,107	18.73	0.500
2	October 2016	5,928,336	2,108,570	8.01	1.000
20	March 2017	5,960,894	2,088,431	34.58	0.500
20	October 2016	5,960,894	2,088,431	28.00	0.500
21	March 2017	5,963,173	2,079,374	44.77	0.500
21	October 2016	5,963,173	2,079,374	34.90	0.500
22	March 2017	5,967,573	2,088,741	49.48	0.500
22	October 2016	5,967,573	2,088,741	43.45	0.500
24	October 2016	5,942,291	2,122,058	6.21	1.000
25	March 2017	5,944,004	2,123,910	18.13	0.500
25	October 2016	5,944,004	2,123,910	13.65	0.500
26	October 2016	5,935,929	2,133,737	5.37	1.000
28	October 2016	5,953,850	2,095,785	15.10	1.000
3	October 2016	5,928,640	2,109,546	5.83	0.500
3	March 2017	5,928,640	2,109,546	10.55	0.500
4	March 2017	5,930,312	2,109,758	10.98	0.500
4	October 2016	5,930,312	2,109,758	5.28	0.500
403358124063701	July 2010	5,975,454	2,096,611	223.45	0.500
403358124063701	July 2011	5,975,454	2,096,611	225.87	0.500
403421124155801	July 2011	5,932,213	2,100,050	72.84	1.000
403544124131501	July 2010	5,944,976	2,108,124	12.41	0.200
403544124131501	July 2011	5,944,976	2,108,124	12.27	0.200
403544124131501	May 2012	5,944,976	2,108,124	16.86	0.200
403544124131501	May 2014	5,944,976	2,108,124	12.23	0.200
403544124131501	June 2016	5,944,976	2,108,124	11.19	0.200
403825124123301	August 2009	5,948,360	2,124,211	66.15	0.167
403825124123301	July 2010	5,948,360	2,124,211	69.05	0.167
403825124123301	July 2011	5,948,360	2,124,211	69.30	0.167
403825124123301	May 2012	5,948,360	2,124,211	69.17	0.167
403825124123301	May 2014	5,948,360	2,124,211	68.21	0.167
403825124123301	June 2016	5,948,360	2,124,211	68.62	0.167
5	March 2017	5,929,435	2,108,104	10.96	0.500
5	October 2016	5,929,435	2,108,104	5.34	0.500
6	October 2016	5,933,416	2,111,645	7.29	0.500
6	March 2017	5,933,416	2,111,645	14.34	0.500
7	March 2017	5,933,173	2,113,000	14.18	0.500
7	October 2016	5,933,173	2,113,000	7.83	0.500
8	October 2016	5,932,949	2,115,083	6.26	0.500
8	March 2017	5,932,949	2,115,083	11.21	0.500
A	November 2016	5,989,976	2,083,905	111.38	1.000

Groundwater Observation Targets and Weights
Eel River Valley Groundwater Sustainability Plan
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Well Identification	Observation Date	State Plane Coordinate X	State Plane Coordinate Y	Observed Groundwater Elevation (NAVD88)	Target Observation Weight
Add-29	November 2016	5,929,452	2,119,437	7.03	0.500
Add-29	March 2017	5,929,452	2,119,437	15.83	0.500
B	November 2016	5,975,815	2,084,679	70.00	0.500
B	March 2017	5,975,815	2,084,679	72.59	0.500
C-23	October 2016	5,974,763	2,087,182	63.05	0.500
C-23	March 2017	5,974,763	2,087,182	69.52	0.500
D	March 2017	5,958,167	2,090,576	30.44	0.500
D	November 2016	5,958,167	2,090,576	21.40	0.500
1	March 2017	5,965,284	2,098,690	15.01	1.000

Surface Water Observation Qualitative Targets
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

	Eel River Station 11477000		Van Duzen River Station 11478500	
Date	Monthly Average Flow Rate (cfs)	Monthly Average Stage Elevation (NAVD88)	Monthly Average Flow Rate (cfs)	Monthly Average Stage Elevation (NAVD88)
January 2000	12,386.9	--	2,488.5	--
February 2000	26,453.3	--	2,831.3	--
March 2000	26,406.7	--	2,153.7	--
April 2000	5,171.0	--	457.8	--
May 2000	3,634.8	--	448.8	--
June 2000	1,500.5	--	174.8	--
July 2000	403.5	--	42.7	--
August 2000	156.9	--	14.7	--
September 2000	88.6	--	9.0	--
October 2000	76.6	--	8.6	--
November 2000	482.0	--	66.5	--
December 2000	1,070.6	--	232.1	--
January 2001	2,234.3	--	380.4	--
February 2001	4,061.7	--	485.3	--
March 2001	15,686.7	--	1,365.5	--
April 2001	4,362.7	--	634.1	--
May 2001	2,398.4	--	380.8	--
June 2001	623.9	--	77.2	--
July 2001	254.0	--	40.9	--
August 2001	78.2	--	10.9	--
September 2001	48.6	--	5.9	--
October 2001	54.7	--	4.7	--
November 2001	257.4	--	54.2	--
December 2001	20,115.8	--	2,779.7	--
January 2002	32,348.1	--	3,374.1	--
February 2002	7,088.6	--	1,049.1	--
March 2002	11,553.0	--	1,348.7	--
April 2002	5,312.0	--	580.1	--
May 2002	2,019.4	--	207.5	--
June 2002	940.8	--	84.1	--
July 2002	283.2	--	24.4	--
August 2002	99.4	--	7.7	--
September 2002	52.4	--	4.6	--
October 2002	41.6	--	3.9	--
November 2002	1,142.9	--	188.0	--
December 2002	13,557.4	--	1,744.0	--
January 2003	51,935.5	--	4,455.2	--
February 2003	11,706.2	--	1,053.0	--
March 2003	11,441.3	--	1,364.9	--
April 2003	14,875.7	--	1,803.1	--
May 2003	25,056.1	--	2,143.8	--
June 2003	3,684.0	--	326.9	--
July 2003	809.3	--	65.1	--
August 2003	248.1	--	18.8	--
September 2003	148.4	--	10.0	--
October 2003	104.9	--	6.7	--
November 2003	325.4	--	30.6	--
December 2003	11,937.1	--	1,685.9	--
January 2004	25,477.1	--	2,700.6	--
February 2004	12,011.7	--	1,352.7	--
March 2004	32,823.7	--	2,913.8	--
April 2004	4,864.7	--	464.5	--
May 2004	2,995.8	--	412.0	--
June 2004	1,006.1	--	84.2	--
July 2004	323.6	--	27.4	--
August 2004	130.4	--	10.6	--
September 2004	96.7	--	6.4	--
October 2004	76.2	--	6.4	--

Surface Water Observation Qualitative Targets
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

	Eel River Station 11477000		Van Duzen River Station 11478500	
Date	Monthly Average Flow Rate (cfs)	Monthly Average Stage Elevation (NAVD88)	Monthly Average Flow Rate (cfs)	Monthly Average Stage Elevation (NAVD88)
November 2004	843.7	--	151.9	--
December 2004	5,270.8	--	885.6	--
January 2005	11,783.2	--	966.7	--
February 2005	10,823.8	--	1,325.4	--
March 2005	10,154.7	--	788.0	--
April 2005	23,169.0	--	2,332.4	--
May 2005	8,367.1	--	1,090.6	--
June 2005	10,788.3	--	937.9	--
July 2005	3,722.3	--	479.7	--
August 2005	555.8	--	49.4	--
September 2005	223.0	--	14.6	--
October 2005	174.9	--	14.4	--
November 2005	1,382.8	--	211.2	--
December 2005	7,073.6	--	1,158.9	--
January 2006	64,757.7	--	5,743.0	--
February 2006	29,541.4	--	2,937.9	--
March 2006	24,693.0	--	1,977.5	--
April 2006	28,206.7	--	2,349.7	--
May 2006	14,191.9	--	1,200.6	--
June 2006	2,718.3	--	266.3	--
July 2006	640.1	--	64.2	--
August 2006	223.9	--	18.7	--
September 2006	142.9	--	9.4	--
October 2006	130.9	--	9.7	--
November 2006	373.1	--	107.7	--
December 2006	5,385.4	--	1,212.8	--
January 2007	10,863.2	--	1,485.0	--
February 2007	7,341.4	--	742.1	--
March 2007	17,814.3	--	2,105.9	--
April 2007	3,902.7	--	604.6	--
May 2007	3,390.6	--	519.0	--
June 2007	894.4	--	111.2	--
July 2007	291.8	--	33.3	--
August 2007	159.9	--	17.1	--
September 2007	86.3	--	6.6	--
October 2007	124.5	45.4	16.0	358.8
November 2007	791.7	46.0	151.3	359.2
December 2007	2,431.0	46.8	387.3	359.7
January 2008	19,609.4	52.0	2,509.5	361.9
February 2008	18,761.3	52.1	1,730.8	361.4
March 2008	9,737.0	49.9	1,209.0	361.1
April 2008	4,276.7	48.0	614.9	360.4
May 2008	3,049.7	47.5	401.7	360.1
June 2008	1,317.2	46.5	137.3	359.5
July 2008	272.1	45.5	33.7	359.0
August 2008	98.2	45.1	9.9	358.7
September 2008	55.4	44.9	5.3	358.6
October 2008	116.0	45.1	14.2	358.7
November 2008	962.9	45.9	223.3	359.4
December 2008	423.7	45.6	63.8	359.2
January 2009	6,880.7	48.7	1,566.9	361.2
February 2009	2,875.2	47.0	302.6	359.9
March 2009	19,911.7	52.4	2,749.4	362.0
April 2009	6,476.0	48.9	882.9	360.8
May 2009	5,818.4	48.3	841.9	360.5
June 2009	1,543.8	46.6	161.6	359.7
July 2009	421.3	45.6	42.1	359.2
August 2009	135.1	45.2	11.3	359.0

Surface Water Observation Qualitative Targets
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

	Eel River Station 11477000		Van Duzen River Station 11478500	
Date	Monthly Average Flow Rate (cfs)	Monthly Average Stage Elevation (NAVD88)	Monthly Average Flow Rate (cfs)	Monthly Average Stage Elevation (NAVD88)
September 2009	60.1	45.0	5.1	358.9
October 2009	214.7	45.1	42.3	359.0
November 2009	390.9	45.6	59.9	359.3
December 2009	1,492.8	46.3	415.6	359.9
January 2010	7,561.9	49.1	1,296.5	361.0
February 2010	26,779.3	54.0	2,635.5	362.1
March 2010	13,902.0	51.1	1,616.0	361.4
April 2010	15,489.0	51.5	1,497.4	361.3
May 2010	12,850.3	50.8	1,323.5	361.1
June 2010	5,785.0	48.6	662.9	360.5
July 2010	1,475.6	46.4	152.7	359.5
August 2010	354.2	45.3	36.4	359.0
September 2010	170.4	45.0	14.4	358.8
October 2010	150.8	44.9	13.6	358.8
November 2010	4,246.6	47.4	543.5	359.9
December 2010	10,909.0	50.0	1,511.3	361.1
January 2011	24,144.5	53.6	2,472.8	361.8
February 2011	4,993.4	48.6	458.7	360.1
March 2011	21,160.3	52.9	2,428.5	361.9
April 2011	35,857.3	56.1	2,662.5	362.2
May 2011	7,418.7	49.6	1,203.5	361.1
June 2011	3,715.0	48.0	558.2	360.4
July 2011	1,419.2	46.4	205.0	359.6
August 2011	409.3	45.2	56.7	359.0
September 2011	160.8	44.7	13.3	358.7
October 2011	444.5	45.1	52.8	358.9
November 2011	340.5	45.1	36.8	359.0
December 2011	1,118.2	46.0	224.9	359.5
January 2012	548.8	45.5	109.0	359.2
February 2012	10,134.4	49.7	1,644.3	361.1
March 2012	6,304.3	48.6	1,136.6	360.7
April 2012	29,449.7	55.1	3,472.7	362.7
May 2012	6,844.8	49.3	845.5	360.7
June 2012	1,459.4	46.4	165.6	359.5
July 2012	492.0	45.4	58.3	359.1
August 2012	176.3	44.7	22.4	358.9
September 2012	78.6	44.4	8.0	358.7
October 2012	62.2	44.3	6.4	358.6
November 2012	233.7	44.9	37.4	359.0
December 2012	19,875.1	51.6	2,564.4	361.3
January 2013	21,124.5	52.8	1,910.3	361.0
February 2013	4,131.4	48.1	735.1	359.8
March 2013	3,710.0	47.7	575.1	359.6
April 2013	4,766.3	48.4	721.2	359.8
May 2013	1,764.9	46.7	183.8	358.9
June 2013	601.1	45.5	59.1	358.5
July 2013	323.9	45.0	33.6	358.3
August 2013	98.3	44.4	7.9	358.1
September 2013	57.8	44.2	4.7	358.0
October 2013	210.4	44.7	69.3	358.4
November 2013	137.1	44.5	16.0	358.2
December 2013	330.5	45.0	43.8	358.4
January 2014	196.0	44.7	26.8	358.3
February 2014	2,589.4	46.0	378.1	358.9
March 2014	11,238.3	50.3	1,662.6	360.7
April 2014	10,008.7	49.8	1,262.7	360.3
May 2014	1,677.4	46.5	172.3	359.1
June 2014	451.8	45.1	50.1	358.6

Surface Water Observation Qualitative Targets
Eel River Valley Groundwater Sustainability Plan
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	Eel River Station 11477000		Van Duzen River Station 11478500	
Date	Monthly Average Flow Rate (cfs)	Monthly Average Stage Elevation (NAVD88)	Monthly Average Flow Rate (cfs)	Monthly Average Stage Elevation (NAVD88)
July 2014	134.4	44.4	15.1	358.3
August 2014	47.1	44.1	4.3	358.1
September 2014	32.1	44.0	2.3	358.0
October 2014	98.9	44.3	7.9	358.1
November 2014	732.8	45.4	237.6	359.0
December 2014	14,440.2	50.6	1,690.8	360.8
January 2015	12,018.1	50.4	1,458.6	360.6
February 2015	16,644.1	50.9	2,247.1	361.0
March 2015	3,523.3	47.8	306.0	359.4
April 2015	1,918.3	46.9	323.5	359.4
May 2015	994.6	46.1	96.8	358.8
June 2015	485.5	45.5	40.8	358.5
July 2015	125.0	44.8	13.6	358.3
August 2015	66.5	44.6	4.5	358.2
September 2015	33.7	44.5	3.5	358.1
October 2015	57.4	44.6	4.7	358.2
November 2015	87.8	44.7	9.4	358.3
December 2015	5,154.4	47.4	1,061.5	359.8
January 2016	23,496.1	53.4	3,439.6	362.3
February 2016	31,193.3	55.2	3,257.8	362.0
March 2016	30,071.0	54.4	3,026.9	361.8
April 2016	12,724.7	50.9	1,153.6	360.5
May 2016	2,924.5	47.4	313.7	359.4
June 2016	1,050.2	46.0	90.8	358.8
July 2016	356.3	45.0	33.0	358.5
August 2016	123.0	44.5	11.6	358.3
September 2016	56.3	44.2	4.6	358.3
October 2016	200.6	44.4	83.7	358.4
November 2016	7,051.2	48.8	1,199.2	360.5
December 2016	22,517.7	52.6	2,563.1	361.7
January 2017	36,660.6	55.6	3,093.8	362.0
February 2017	53,689.7	59.1	5,076.8	363.2
March 2017	27,340.0	54.1	2,830.0	362.0
April 2017	18,826.0	52.1	2,112.5	361.5
May 2017	10,510.3	49.7	1,165.7	360.6
June 2017	2,177.3	46.4	186.2	359.2
July 2017	614.5	45.3	59.4	358.7
August 2017	215.8	44.3	18.7	358.4
September 2017	128.7	44.1	9.0	358.3
October 2017	123.4	44.1	13.3	358.4
November 2017	462.3	44.6	211.6	359.0
December 2017	4,781.4	47.4	933.0	360.4
January 2018	1,913.5	45.9	352.7	359.5
February 2018	10,899.3	49.6	1,349.7	360.8
March 2018	7,285.7	48.4	1,078.9	360.4
April 2018	19,204.7	52.4	2,081.9	361.5
May 2018	4,570.6	47.8	558.2	360.0
June 2018	1,161.1	45.7	128.0	359.2
July 2018	364.2	44.7	39.9	358.7
August 2018	141.8	44.2	9.5	358.4
September 2018	77.7	44.1	5.4	358.3
October 2018	64.2	44.1	6.8	358.3
November 2018	72.6	44.2	9.3	358.4
December 2018	1,914.1	45.9	336.9	359.4
January 2019	9,271.6	49.3	1,241.2	360.7
February 2019	23,656.9	52.8	2,729.7	361.7
March 2019	41,450.0	57.0	3,569.3	362.4
April 2019	18,488.3	52.4	1,709.0	361.1

Surface Water Observation Qualitative Targets
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

	Eel River Station 11477000		Van Duzen River Station 11478500	
Date	**Monthly Average Flow Rate (cfs)**	**Monthly Average Stage Elevation (NAVD88)**	**Monthly Average Flow Rate (cfs)**	**Monthly Average Stage Elevation (NAVD88)**
May 2019	6,286.1	48.5	400.6	359.6
June 2019	7,879.0	48.9	648.3	359.8
July 2019	1,223.6	45.6	69.6	358.6
August 2019	344.6	44.5	22.2	358.3
September 2019	140.2	43.9	9.8	358.2
October 2019	161.6	44.0	17.7	358.3
November 2019	150.7	44.0	18.5	358.3
December 2019	1,893.8	45.5	415.9	359.2
January 2020	3,316.8	47.0	817.0	360.1
February 2020	9,264.7	49.3	1,408.9	360.8
March 2020	1,311.1	45.7	130.6	359.1
April 2020	3,149.7	46.9	589.0	359.9
May 2020	1,457.5	45.8	216.7	359.3
June 2020	2,141.3	46.2	441.7	359.7
July 2020	369.6	44.4	64.3	358.6
August 2020	100.0	43.7	16.2	358.3
September 2020	60.5	43.5	6.7	358.1
October 2020	60.8	43.5	6.5	358.1

Note:

-- Stage elevations were not recorded this month

Groundwater Elevation Target Residuals
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

		State Plane Coordinates		Groundwater Elevations (NAVD88)		
Well Identification	Observation Date	X	Y	Observed	Simulated	Residuals
02N01W08B001H	March 2000	5949810.16	2100914.61	25.0	26.6	-1.55
02N01W08B001H	October 2000	5949810.16	2100914.61	10.4	21.9	-11.46
02N01W08B001H	March 2001	5949810.16	2100914.61	18.9	24.4	-5.48
02N01W08B001H	October 2001	5949810.16	2100914.61	11.8	19.8	-8.00
02N01W08B001H	March 2002	5949810.16	2100914.61	21.7	24.8	-3.10
02N01W08B001H	March 2003	5949810.16	2100914.61	22.0	25.0	-2.95
02N01W08B001H	October 2003	5949810.16	2100914.61	13.1	20.9	-7.74
02N01W08B001H	April 2004	5949810.16	2100914.61	19.3	25.8	-6.48
02N01W08B001H	October 2004	5949810.16	2100914.61	8.0	21.2	-13.11
02N01W08B001H	April 2005	5949810.16	2100914.61	22.4	25.4	-3.01
02N01W08B001H	October 2005	5949810.16	2100914.61	13.1	22.0	-8.86
02N01W08B001H	May 2006	5949810.16	2100914.61	20.4	27.8	-7.33
02N01W08B001H	October 2006	5949810.16	2100914.61	13.0	21.5	-8.47
02N01W08B001H	March 2007	5949810.16	2100914.61	22.6	25.5	-2.85
02N01W08B001H	October 2007	5949810.16	2100914.61	13.0	21.4	-8.32
02N01W08B001H	April 2008	5949810.16	2100914.61	20.8	24.9	-4.10
02N01W08B001H	October 2008	5949810.16	2100914.61	12.6	20.4	-7.74
02N01W08B001H	April 2009	5949810.16	2100914.61	20.3	24.0	-3.69
02N01W08B001H	October 2009	5949810.16	2100914.61	10.7	20.3	-9.56
02N01W08B001H	March 2010	5949810.16	2100914.61	19.6	24.8	-5.17
02N01W08B001H	October 2010	5949810.16	2100914.61	13.0	23.3	-10.25
02N01W08B001H	April 2011	5949810.16	2100914.61	25.5	26.1	-0.60
02N01W08B001H	October 2011	5949810.16	2100914.61	13.1	22.7	-9.60
02N01W08B001H	April 2012	5949810.16	2100914.61	25.0	26.0	-0.94
02N01W08B001H	October 2012	5949810.16	2100914.61	12.4	22.8	-10.32
02N01W08B001H	March 2013	5949810.16	2100914.61	18.9	25.4	-6.48
02N01W08B001H	October 2013	5949810.16	2100914.61	12.1	21.6	-9.48
02N01W08B001H	March 2014	5949810.16	2100914.61	16.0	23.5	-7.41
02N01W08B001H	October 2014	5949810.16	2100914.61	10.5	21.7	-11.11
02N01W08B001H	April 2015	5949810.16	2100914.61	20.8	24.5	-3.66
02N01W08B001H	October 2015	5949810.16	2100914.61	11.2	21.7	-10.47
02N01W08B001H	March 2016	5949810.16	2100914.61	29.5	27.1	2.42
02N01W08B001H	October 2016	5949810.16	2100914.61	10.9	22.4	-11.41
02N01W08B001H	March 2017	5949810.16	2100914.61	26.5	29.3	-2.76
02N01W08B001H	October 2017	5949810.16	2100914.61	9.0	22.1	-13.02
02N01W09G001H	March 2000	5954197.59	2098581.83	25.0	26.8	-1.75
02N01W09G001H	October 2000	5954197.59	2098581.83	13.4	21.8	-8.41
02N01W09G001H	March 2001	5954197.59	2098581.83	17.5	24.2	-6.71
02N01W09G001H	October 2001	5954197.59	2098581.83	13.1	19.6	-6.50
02N01W09G001H	March 2002	5954197.59	2098581.83	21.5	24.9	-3.37
02N01W09G001H	October 2002	5954197.59	2098581.83	12.9	19.7	-6.78
02N01W09G001H	March 2003	5954197.59	2098581.83	21.9	24.9	-3.02
02N01W09G001H	October 2003	5954197.59	2098581.83	14.1	21.6	-7.48
02N01W09G001H	April 2004	5954197.59	2098581.83	21.9	26.9	-4.96
02N01W09G001H	October 2004	5954197.59	2098581.83	13.6	20.8	-7.16
02N01W09G001H	April 2005	5954197.59	2098581.83	22.2	25.3	-3.06
02N01W09G001H	October 2005	5954197.59	2098581.83	14.0	22.4	-8.37
02N01W09G001H	May 2006	5954197.59	2098581.83	24.8	29.8	-4.99

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02N01W09G001H	October 2006	5954197.59	2098581.83	14.2	23.3	**-9.07**
02N01W09G001H	March 2007	5954197.59	2098581.83	21.8	25.8	**-3.98**
02N01W09G001H	October 2007	5954197.59	2098581.83	14.5	20.7	**-6.15**
02N01W09G001H	April 2008	5954197.59	2098581.83	21.0	25.4	**-4.41**
02N01W09G001H	October 2008	5954197.59	2098581.83	13.9	19.3	**-5.38**
02N01W09G001H	April 2009	5954197.59	2098581.83	20.8	23.5	**-2.72**
02N01W09G001H	October 2009	5954197.59	2098581.83	14.2	19.6	**-5.35**
02N01W09G001H	March 2010	5954197.59	2098581.83	21.7	24.4	**-2.73**
02N01W09G001H	October 2010	5954197.59	2098581.83	14.1	22.5	**-8.43**
02N01W09G001H	April 2011	5954197.59	2098581.83	25.5	26.9	**-1.40**
02N01W09G001H	October 2011	5954197.59	2098581.83	15.6	22.3	**-6.78**
02N01W09G001H	April 2012	5954197.59	2098581.83	24.6	25.8	**-1.30**
02N01W09G001H	October 2012	5954197.59	2098581.83	13.2	22.1	**-8.86**
02N01W09G001H	March 2013	5954197.59	2098581.83	18.7	26.1	**-7.37**
02N01W09G001H	October 2013	5954197.59	2098581.83	13.0	21.0	**-7.95**
02N01W09G001H	March 2014	5954197.59	2098581.83	16.7	22.1	**-5.39**
02N01W09G001H	October 2014	5954197.59	2098581.83	12.5	19.4	**-6.90**
02N01W09G001H	April 2015	5954197.59	2098581.83	18.2	24.5	**-6.29**
02N01W09G001H	October 2015	5954197.59	2098581.83	12.1	20.1	**-7.98**
02N01W09G001H	March 2016	5954197.59	2098581.83	26.4	27.2	-0.88
02N01W09G001H	October 2016	5954197.59	2098581.83	12.8	21.8	**-9.02**
02N01W09G001H	March 2017	5954197.59	2098581.83	25.9	31.1	**-5.17**
02N01W09G001H	October 2017	5954197.59	2098581.83	13.4	23.4	**-9.94**
02N01W09G001H	March 2018	5954197.59	2098581.83	19.9	24.8	**-4.84**
02N02W02G001H	March 2000	5932962.22	2104842.47	14.9	22.1	**-7.24**
02N02W02G001H	October 2000	5932962.22	2104842.47	7.1	15.5	**-8.39**
02N02W02G001H	March 2001	5932962.22	2104842.47	11.8	18.1	**-6.34**
02N02W02G001H	October 2001	5932962.22	2104842.47	7.5	14.2	**-6.70**
02N02W02G001H	March 2002	5932962.22	2104842.47	13.5	19.5	**-5.96**
02N02W02G001H	October 2002	5932962.22	2104842.47	5.9	13.8	**-7.89**
02N02W02G001H	March 2003	5932962.22	2104842.47	13.9	19.8	**-5.87**
02N02W02G001H	October 2003	5932962.22	2104842.47	8.3	14.9	**-6.56**
02N02W02G001H	April 2004	5932962.22	2104842.47	13.0	20.7	**-7.69**
02N02W02G001H	October 2004	5932962.22	2104842.47	7.7	14.6	**-6.89**
02N02W02G001H	April 2005	5932962.22	2104842.47	14.7	20.1	**-5.37**
02N02W02G001H	October 2005	5932962.22	2104842.47	8.2	15.7	**-7.55**
02N02W02G001H	May 2006	5932962.22	2104842.47	14.5	23.8	**-9.26**
02N02W02G001H	October 2006	5932962.22	2104842.47	7.7	15.7	**-8.03**
02N02W02G001H	March 2007	5932962.22	2104842.47	14.4	19.7	**-5.30**
02N02W02G001H	October 2007	5932962.22	2104842.47	8.0	14.7	**-6.69**
02N02W02G001H	April 2008	5932962.22	2104842.47	12.5	19.5	**-7.04**
02N02W02G001H	October 2008	5932962.22	2104842.47	7.7	14.1	**-6.39**
02N02W02G001H	April 2009	5932962.22	2104842.47	12.6	18.2	**-5.64**
02N02W02G001H	October 2009	5932962.22	2104842.47	8.1	14.0	**-5.86**
02N02W02G001H	March 2010	5932962.22	2104842.47	13.6	19.4	**-5.85**
02N02W02G001H	October 2010	5932962.22	2104842.47	8.6	16.4	**-7.79**
02N02W02G001H	April 2011	5932962.22	2104842.47	14.8	20.9	**-6.07**
02N02W02G001H	October 2011	5932962.22	2104842.47	8.5	15.5	**-7.03**
02N02W02G001H	October 2012	5932962.22	2104842.47	8.2	15.8	**-7.61**
02N02W02G001H	March 2013	5932962.22	2104842.47	11.9	19.8	**-7.90**

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02N02W02G001H	March 2014	5932962.22	2104842.47	10.9	16.2	-5.34
02N02W02G001H	October 2014	5932962.22	2104842.47	9.0	14.6	-5.65
02N02W02G001H	April 2015	5932962.22	2104842.47	11.8	19.0	-7.20
02N02W02G001H	March 2017	5932962.22	2104842.47	14.8	27.3	-12.53
02N02W02G001H	October 2017	5932962.22	2104842.47	7.2	15.8	-8.59
02N02W02G001H	March 2018	5932962.22	2104842.47	12.8	18.6	-5.79
03N01W30N001H	March 2000	5941781.5	2112961.05	13.6	20.2	-6.55
03N01W30N001H	October 2000	5941781.5	2112961.05	6.1	11.2	-5.09
03N01W30N001H	March 2001	5941781.5	2112961.05	11.1	16.4	-5.22
03N01W30N001H	October 2001	5941781.5	2112961.05	5.8	10.5	-4.61
03N01W30N001H	March 2002	5941781.5	2112961.05	12.1	18.2	-6.09
03N01W30N001H	October 2002	5941781.5	2112961.05	5.7	10.1	-4.33
03N01W30N001H	March 2003	5941781.5	2112961.05	12.0	18.3	-6.27
03N01W30N001H	October 2003	5941781.5	2112961.05	6.2	11.2	-4.98
03N01W30N001H	April 2004	5941781.5	2112961.05	11.2	18.8	-7.58
03N01W30N001H	October 2004	5941781.5	2112961.05	5.9	10.7	-4.71
03N01W30N001H	April 2005	5941781.5	2112961.05	13.7	18.1	-4.35
03N01W30N001H	October 2005	5941781.5	2112961.05	6.3	12.0	-5.61
03N01W30N001H	May 2006	5941781.5	2112961.05	13.0	21.5	-8.47
03N01W30N001H	October 2006	5941781.5	2112961.05	6.9	11.4	-4.45
03N01W30N001H	October 2007	5941781.5	2112961.05	7.3	10.9	-3.54
03N01W30N001H	April 2008	5941781.5	2112961.05	11.5	17.6	-6.09
03N01W30N001H	October 2008	5941781.5	2112961.05	8.3	10.2	-1.89
03N01W30N001H	April 2009	5941781.5	2112961.05	11.6	17.0	-5.40
03N01W30N001H	October 2009	5941781.5	2112961.05	7.0	11.2	-4.12
03N01W30N001H	March 2010	5941781.5	2112961.05	12.3	18.7	-6.38
03N01W30N001H	October 2010	5941781.5	2112961.05	7.4	12.8	-5.35
03N01W30N001H	April 2011	5941781.5	2112961.05	13.9	20.3	-6.35
03N01W30N001H	October 2011	5941781.5	2112961.05	6.5	11.9	-5.33
03N01W30N001H	April 2012	5941781.5	2112961.05	14.2	19.6	-5.40
03N01W30N001H	October 2012	5941781.5	2112961.05	6.6	11.9	-5.24
03N01W30N001H	March 2013	5941781.5	2112961.05	10.5	16.7	-6.18
03N01W30N001H	October 2013	5941781.5	2112961.05	6.4	11.5	-5.11
03N01W30N001H	March 2014	5941781.5	2112961.05	11.1	15.1	-3.99
03N01W30N001H	October 2014	5941781.5	2112961.05	6.9	11.7	-4.78
03N01W30N001H	April 2015	5941781.5	2112961.05	10.2	16.8	-6.56
03N01W30N001H	October 2015	5941781.5	2112961.05	6.4	10.6	-4.14
03N01W30N001H	March 2016	5941781.5	2112961.05	15.0	20.3	-5.26
03N01W30N001H	October 2016	5941781.5	2112961.05	6.7	11.6	-4.88
03N01W30N001H	March 2017	5941781.5	2112961.05	15.3	23.0	-7.68
03N01W30N001H	October 2017	5941781.5	2112961.05	5.7	11.2	-5.44
03N01W30N001H	March 2018	5941781.5	2112961.05	13.6	16.3	-2.68
03N01W34J001H	March 2000	5961994.29	2107979.43	25.5	24.1	1.39
03N01W34J001H	October 2000	5961994.29	2107979.43	22.0	17.4	4.56
03N01W34J001H	March 2001	5961994.29	2107979.43	23.4	21.0	2.41
03N01W34J001H	October 2001	5961994.29	2107979.43	20.7	16.9	3.83
03N01W34J001H	March 2002	5961994.29	2107979.43	24.5	22.4	2.11
03N01W34J001H	October 2002	5961994.29	2107979.43	20.8	16.5	4.32
03N01W34J001H	March 2003	5961994.29	2107979.43	25.4	23.1	2.29
03N01W34J001H	October 2003	5961994.29	2107979.43	21.7	17.2	4.44

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03N01W34J001H	April 2004	5961994.29	2107979.43	24.7	22.3	**2.43**
03N01W34J001H	October 2004	5961994.29	2107979.43	21.2	17.7	**3.52**
03N01W34J001H	April 2005	5961994.29	2107979.43	25.3	22.9	**2.42**
03N01W34J001H	October 2005	5961994.29	2107979.43	21.8	17.2	**4.61**
03N01W34J001H	May 2006	5961994.29	2107979.43	26.7	24.7	**1.98**
03N01W34J001H	October 2006	5961994.29	2107979.43	22.3	17.1	**5.14**
03N01W34J001H	March 2007	5961994.29	2107979.43	24.9	22.0	**2.88**
03N01W34J001H	October 2007	5961994.29	2107979.43	22.4	17.3	**5.12**
03N01W34J001H	April 2008	5961994.29	2107979.43	24.8	21.5	**3.29**
03N01W34J001H	October 2008	5961994.29	2107979.43	21.9	16.8	**5.09**
03N01W34J001H	April 2009	5961994.29	2107979.43	24.2	21.5	**2.70**
03N01W34J001H	October 2009	5961994.29	2107979.43	21.8	17.9	**3.85**
03N01W34J001H	March 2010	5961994.29	2107979.43	23.1	23.9	-0.83
03N01W34J001H	October 2010	5961994.29	2107979.43	21.3	18.9	**2.39**
03N01W34J001H	April 2011	5961994.29	2107979.43	25.5	25.0	0.49
03N01W34J001H	April 2012	5961994.29	2107979.43	25.3	24.1	**1.19**
03N01W34J001H	October 2012	5961994.29	2107979.43	24.4	17.9	**6.48**
03N01W34J001H	March 2013	5961994.29	2107979.43	24.1	20.6	**3.52**
03N01W34J001H	April 2015	5961994.29	2107979.43	22.9	20.9	**1.98**
03N01W34J001H	October 2015	5961994.29	2107979.43	20.4	16.2	**4.23**
03N01W34J001H	March 2016	5961994.29	2107979.43	25.9	24.3	**1.59**
03N01W34J001H	October 2016	5961994.29	2107979.43	21.6	18.9	**2.62**
03N01W34J001H	March 2017	5961994.29	2107979.43	26.9	26.5	0.35
03N01W34J001H	October 2017	5961994.29	2107979.43	21.8	17.1	**4.68**
03N01W34J001H	March 2018	5961994.29	2107979.43	25.8	21.5	**4.28**
03N01W34J001H	March 2000	5961994.29	2107979.43	25.5	24.1	**1.39**
03N01W34J001H	October 2000	5961994.29	2107979.43	22.0	17.4	**4.56**
03N01W34J001H	March 2001	5961994.29	2107979.43	23.4	21.0	**2.41**
03N01W34J001H	October 2001	5961994.29	2107979.43	20.7	16.9	**3.83**
03N01W34J001H	March 2002	5961994.29	2107979.43	24.5	22.4	**2.11**
03N01W34J001H	October 2002	5961994.29	2107979.43	20.8	16.5	**4.32**
03N01W34J001H	March 2003	5961994.29	2107979.43	25.4	23.1	**2.29**
03N01W34J001H	October 2003	5961994.29	2107979.43	21.7	17.2	**4.44**
03N01W34J001H	April 2004	5961994.29	2107979.43	24.7	22.3	**2.43**
03N01W34J001H	October 2004	5961994.29	2107979.43	21.2	17.7	**3.52**
03N01W34J001H	April 2005	5961994.29	2107979.43	25.3	22.9	**2.42**
03N01W34J001H	October 2005	5961994.29	2107979.43	21.8	17.2	**4.61**
03N01W34J001H	May 2006	5961994.29	2107979.43	26.7	24.7	**1.98**
03N01W34J001H	October 2006	5961994.29	2107979.43	22.3	17.1	**5.14**
03N01W34J001H	March 2007	5961994.29	2107979.43	24.9	22.0	**2.88**
03N01W34J001H	October 2007	5961994.29	2107979.43	22.4	17.3	**5.12**
03N01W34J001H	April 2008	5961994.29	2107979.43	24.8	21.5	**3.29**
03N01W34J001H	October 2008	5961994.29	2107979.43	21.9	16.8	**5.09**
03N01W34J001H	April 2009	5961994.29	2107979.43	24.2	21.5	**2.70**
03N01W34J001H	October 2009	5961994.29	2107979.43	21.8	17.9	**3.85**
03N01W34J001H	March 2010	5961994.29	2107979.43	23.1	23.9	-0.83
03N01W34J001H	October 2010	5961994.29	2107979.43	21.3	18.9	**2.39**
03N01W34J001H	April 2011	5961994.29	2107979.43	25.5	25.0	0.49
03N01W34J001H	April 2012	5961994.29	2107979.43	25.3	24.1	**1.19**
03N01W34J001H	October 2012	5961994.29	2107979.43	24.4	17.9	**6.48**

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03N01W34J001H	March 2013	5961994.29	2107979.43	24.1	20.6	**3.52**
03N01W34J001H	April 2015	5961994.29	2107979.43	22.9	20.9	**1.98**
03N01W34J001H	October 2015	5961994.29	2107979.43	20.4	16.2	**4.23**
03N01W34J001H	March 2016	5961994.29	2107979.43	25.9	24.3	**1.59**
03N01W34J001H	October 2016	5961994.29	2107979.43	21.6	18.9	**2.62**
03N01W34J001H	March 2017	5961994.29	2107979.43	26.9	26.5	0.35
03N01W34J001H	October 2017	5961994.29	2107979.43	21.8	17.1	**4.68**
03N01W34J001H	March 2018	5961994.29	2107979.43	25.8	21.5	**4.28**
03N02W13J001H	March 2000	5939864.86	2124889.71	9.0	17.4	**-8.40**
03N02W13J001H	March 2001	5939864.86	2124889.71	5.3	12.6	**-7.30**
03N02W13J001H	October 2001	5939864.86	2124889.71	3.0	8.2	**-5.21**
03N02W13J001H	March 2002	5939864.86	2124889.71	7.6	14.0	**-6.43**
03N02W13J001H	October 2002	5939864.86	2124889.71	6.1	8.4	**-2.31**
03N02W13J001H	March 2003	5939864.86	2124889.71	8.7	14.3	**-5.61**
03N02W13J001H	October 2003	5939864.86	2124889.71	4.9	9.5	**-4.62**
03N02W13J001H	April 2004	5939864.86	2124889.71	6.8	15.0	**-8.28**
03N02W13J001H	April 2005	5939864.86	2124889.71	10.9	13.9	**-3.01**
03N02W13J001H	October 2005	5939864.86	2124889.71	4.8	9.7	**-4.90**
03N02W13J001H	May 2006	5939864.86	2124889.71	7.7	18.0	**-10.33**
03N02W13J001H	October 2006	5939864.86	2124889.71	4.6	9.9	**-5.34**
03N02W13J001H	March 2007	5939864.86	2124889.71	6.9	14.4	**-7.57**
03N02W13J001H	October 2007	5939864.86	2124889.71	4.9	8.8	**-3.93**
03N02W13J001H	April 2008	5939864.86	2124889.71	6.2	13.5	**-7.29**
03N02W13J001H	October 2008	5939864.86	2124889.71	4.5	8.0	**-3.54**
03N02W13J001H	April 2009	5939864.86	2124889.71	6.5	11.9	**-5.48**
03N02W13J001H	October 2009	5939864.86	2124889.71	4.8	8.2	**-3.43**
03N02W13J001H	March 2010	5939864.86	2124889.71	7.1	13.4	**-6.38**
03N02W13J001H	October 2010	5939864.86	2124889.71	5.5	9.4	**-3.96**
03N02W13J001H	October 2011	5939864.86	2124889.71	5.4	9.3	**-3.98**
03N02W13J001H	April 2012	5939864.86	2124889.71	9.0	15.1	**-6.15**
03N02W13J001H	October 2012	5939864.86	2124889.71	4.8	9.1	**-4.34**
03N02W13J001H	March 2013	5939864.86	2124889.71	6.3	12.7	**-6.44**
03N02W13J001H	October 2013	5939864.86	2124889.71	4.7	8.5	**-3.83**
03N02W13J001H	October 2014	5939864.86	2124889.71	6.5	7.6	**-1.10**
03N02W13J001H	April 2015	5939864.86	2124889.71	6.1	11.4	**-5.38**
03N02W13J002H	March 2016	5939864.86	2124889.71	8.6	14.3	**-5.67**
03N02W35M002H	March 2000	5931404.93	2109073.48	16.0	17.3	**-1.29**
03N02W35M002H	October 2000	5931404.93	2109073.48	8.6	12.7	**-4.08**
03N02W35M002H	March 2001	5931404.93	2109073.48	13.3	14.9	**-1.58**
03N02W35M002H	October 2001	5931404.93	2109073.48	8.6	11.2	**-2.60**
03N02W35M002H	March 2002	5931404.93	2109073.48	14.9	16.0	**-1.14**
03N02W35M002H	October 2002	5931404.93	2109073.48	8.6	10.5	**-1.86**
03N02W35M002H	March 2003	5931404.93	2109073.48	15.7	17.1	**-1.45**
03N02W35M002H	October 2003	5931404.93	2109073.48	9.5	12.0	**-2.46**
03N02W35M002H	April 2004	5931404.93	2109073.48	14.4	15.5	**-1.09**
03N02W35M002H	October 2004	5931404.93	2109073.48	8.5	13.4	**-4.90**
03N02W35M002H	April 2005	5931404.93	2109073.48	17.0	17.7	-0.69
03N02W35M002H	October 2005	5931404.93	2109073.48	9.1	12.2	**-3.10**
03N02W35M002H	May 2006	5931404.93	2109073.48	14.5	18.1	**-3.56**
03N02W35M002H	October 2006	5931404.93	2109073.48	8.9	10.9	**-2.00**

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03N02W35M002H	March 2007	5931404.93	2109073.48	14.8	16.0	**-1.19**
03N02W35M002H	October 2007	5931404.93	2109073.48	9.0	12.6	**-3.61**
03N02W35M002H	April 2008	5931404.93	2109073.48	13.8	14.7	-0.86
03N02W35M002H	October 2008	5931404.93	2109073.48	8.6	12.2	**-3.61**
03N02W35M002H	April 2009	5931404.93	2109073.48	14.1	14.7	-0.63
03N02W35M002H	October 2009	5931404.93	2109073.48	9.0	11.3	**-2.34**
03N02W35M002H	March 2010	5931404.93	2109073.48	15.1	17.0	**-1.89**
03N02W35M002H	October 2010	5931404.93	2109073.48	10.0	14.8	**-4.82**
03N02W35M002H	April 2011	5931404.93	2109073.48	16.1	17.0	-0.94
03N02W35M002H	October 2011	5931404.93	2109073.48	9.7	13.8	**-4.08**
03N02W35M002H	April 2012	5931404.93	2109073.48	16.3	17.7	**-1.35**
03N02W35M002H	October 2012	5931404.93	2109073.48	9.6	14.7	**-5.12**
03N02W35M002H	March 2013	5931404.93	2109073.48	13.9	15.5	**-1.63**
03N02W35M002H	October 2013	5931404.93	2109073.48	8.9	11.8	**-2.95**
03N02W35M002H	March 2014	5931404.93	2109073.48	12.2	15.6	**-3.36**
03N02W35M002H	October 2014	5931404.93	2109073.48	8.9	14.9	**-6.02**
03N02W35M002H	April 2015	5931404.93	2109073.48	13.5	15.2	**-1.68**
03N02W35M002H	October 2015	5931404.93	2109073.48	9.0	11.9	**-2.92**
03N02W35M002H	March 2016	5931404.93	2109073.48	15.8	19.1	**-3.30**
03N02W35M002H	October 2016	5931404.93	2109073.48	9.0	16.0	**-6.98**
03N02W35M002H	October 2017	5931404.93	2109073.48	9.1	11.9	**-2.78**
03N02W35M002H	March 2018	5931404.93	2109073.48	15.8	17.7	**-1.89**
1	March 2017	5925192.3	2105190.27	15.0	21.6	**-6.63**
10	October 2016	5939340.48	2115246.29	5.9	11.5	**-5.68**
10	March 2017	5939340.48	2115246.29	10.1	18.6	**-8.50**
11	March 2017	5937561.37	2110846.1	15.2	22.8	**-7.63**
11	October 2016	5937561.37	2110846.1	6.7	15.4	**-8.75**
12	March 2017	5938041.82	2107918.5	18.2	23.1	**-4.92**
12	October 2016	5938041.82	2107918.5	8.0	22.0	**-14.02**
13	October 2016	5945462.31	2104777.71	-1.5	25.4	**-26.92**
13	March 2017	5945462.31	2104777.71	12.4	24.6	**-12.28**
14	October 2016	5949643.34	2105328.09	13.9	18.9	**-4.98**
14	March 2017	5949643.34	2105328.09	25.9	26.5	-0.63
15	October 2016	5953587.51	2107524.92	12.0	15.8	**-3.81**
15	March 2017	5953587.51	2107524.92	21.0	27.1	**-6.15**
16	October 2016	5949706.67	2096799.47	14.2	22.7	**-8.48**
16	March 2017	5949706.67	2096799.47	31.3	32.1	-0.80
17	October 2016	5953392.69	2099731.59	15.1	21.8	**-6.77**
17	March 2017	5953392.69	2099731.59	27.7	30.3	**-2.60**
18	March 2017	5946760.3	2101173.7	25.8	29.8	**-3.97**
18	October 2016	5946760.3	2101173.7	10.9	21.3	**-10.35**
19	March 2017	5956006.5	2093107.18	30.6	36.1	**-5.49**
19	October 2016	5956006.5	2093107.18	18.7	23.3	**-4.60**
2	October 2016	5928336.31	2108570.13	8.0	15.0	**-7.00**
20	March 2017	5960894.01	2088431.08	34.6	37.0	**-2.41**
20	October 2016	5960894.01	2088431.08	28.0	31.5	**-3.47**
21	March 2017	5963173.34	2079374.34	44.8	61.8	**-17.07**
21	October 2016	5963173.34	2079374.34	34.9	44.4	**-9.47**
22	March 2017	5967573.31	2088740.88	49.5	58.2	**-8.73**
22	October 2016	5967573.31	2088740.88	43.5	44.3	-0.81

Groundwater Elevation Target Residuals
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24	October 2016	5942291	2122058.27	6.2	9.8	**-3.57**
25	March 2017	5944003.75	2123909.61	18.1	19.5	**-1.42**
25	October 2016	5944003.75	2123909.61	13.6	11.1	**2.55**
26	October 2016	5935928.86	2133736.59	5.4	6.0	-0.60
28	October 2016	5953849.84	2095784.63	15.1	22.6	**-7.47**
3	October 2016	5928639.5	2109546.14	5.8	18.1	**-12.31**
3	March 2017	5928639.5	2109546.14	10.5	16.1	**-5.59**
4	March 2017	5930311.6	2109757.77	11.0	19.3	**-8.35**
4	October 2016	5930311.6	2109757.77	5.3	14.4	**-9.17**
403358124063701	July 2010	5975453.72	2096611	223.4	223.5	-0.03
403358124063701	July 2011	5975453.72	2096611	225.9	223.0	**2.85**
403421124155801	July 2011	5932213.13	2100049.6	72.8	33.9	**38.97**
403544124131501	July 2010	5944976.09	2108124.34	12.4	19.1	**-6.70**
403544124131501	July 2011	5944976.09	2108124.34	12.3	18.1	**-5.86**
403544124131501	May 2012	5944976.09	2108124.34	16.9	21.4	**-4.59**
403544124131501	May 2014	5944976.09	2108124.34	12.2	18.1	**-5.82**
403544124131501	June 2016	5944976.09	2108124.34	11.2	20.3	**-9.10**
403825124123301	August 2009	5948360.06	2124210.69	66.2	37.9	**28.25**
403825124123301	July 2010	5948360.06	2124210.69	69.1	36.9	**32.10**
403825124123301	July 2011	5948360.06	2124210.69	69.3	36.8	**32.48**
403825124123301	May 2012	5948360.06	2124210.69	69.2	36.5	**32.66**
403825124123301	May 2014	5948360.06	2124210.69	68.2	33.0	**35.17**
403825124123301	June 2016	5948360.06	2124210.69	68.6	31.7	**36.90**
5	March 2017	5929435.33	2108104.25	11.0	19.5	**-8.54**
5	October 2016	5929435.33	2108104.25	5.3	15.7	**-10.31**
6	October 2016	5933415.77	2111645.21	7.3	11.7	**-4.39**
6	March 2017	5933415.77	2111645.21	14.3	21.6	**-7.26**
7	March 2017	5933173.03	2112999.8	14.2	21.0	**-6.87**
7	October 2016	5933173.03	2112999.8	7.8	10.6	**-2.73**
8	October 2016	5932949.16	2115082.73	6.3	11.0	**-4.73**
8	March 2017	5932949.16	2115082.73	11.2	18.9	**-7.64**
A	November 2016	5989975.93	2083904.69	111.4	117.3	**-5.87**
Add-29	November 2016	5929452.23	2119437.02	7.0	10.5	**-3.47**
Add-29	March 2017	5929452.23	2119437.02	15.8	14.8	0.98
B	November 2016	5975815	2084678.58	70.0	74.3	**-4.31**
B	March 2017	5975815	2084678.58	72.6	97.6	**-25.01**
C-23	October 2016	5974763.25	2087181.78	63.1	67.8	**-4.71**
C-23	March 2017	5974763.25	2087181.78	69.5	82.6	**-13.12**
D	March 2017	5958167.25	2090575.59	30.4	39.5	**-9.03**
D	November 2016	5958167.25	2090575.59	21.4	27.2	**-5.81**
1	March 2017	5965284.44	2098690.21	15.0	36.6	**-21.58**

Chronic Lowering Of Groundwater Levels Observation Locations
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

	State Plane Coordinate		*Figure 6.1*
Well Identification	***X***	***Y***	***Well Identification Key***
1	5,925,179	2,105,211	1
2	5,928,233	2,108,573	2
3	5,928,671	2,109,526	3
4	5,930,188	2,109,772	4
5	5,929,388	2,108,100	5
6	5,933,532	2,111,625	6
7	5,933,042	2,112,987	7
8	5,933,084	2,115,062	8
9	5,936,944	2,114,201	9
10	5,939,245	2,115,102	10
11	5,937,615	2,110,826	11
12	5,938,024	2,107,938	12
13	5,945,465	2,103,695	13
14	5,949,737	2,105,319	14
15	5,953,502	2,107,539	15
16	5,949,617	2,096,793	16
17	5,953,357	2,099,748	17
18	5,946,766	2,101,173	18
19	5,956,028	2,093,117	19
20	5,960,982	2,088,419	20
21	5,963,120	2,079,385	21
22	5,967,621	2,088,700	22
24	5,942,199	2,122,053	23
25	5,943,912	2,123,923	24
26	5,935,824	2,133,750	25
28	5,953,953	2,095,865	26
29	5,929,391	2,119,453	27
30	5,954,146	2,105,309	28
31	5,952,765	2,103,974	29
33	5,955,405	2,101,065	30
34	5,930,671	2,125,754	31
36	5,962,625	2,083,216	32
38	5,960,865	2,095,371	33
39	5,959,889	2,096,744	34
41	5,948,530	2,108,381	35
42	5,946,815	2,108,578	36
43	5,948,437	2,109,406	37
44	5,950,157	2,111,234	38
45	5,965,847	2,088,717	39
46	5,963,971	2,094,227	40
47	5,938,833	2,102,698	41
48	5,937,228	2,103,521	42
51	5,927,602	2,113,776	43
52	5,918,119	2,104,150	44
53	5,916,152	2,110,076	45
54	5,941,575	2,109,413	46

Chronic Lowering Of Groundwater Levels Observation Locations
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

	State Plane Coordinate		*Figure 6.1*
Well Identification	***X***	***Y***	***Well Identification Key***
57	5,941,620	2,111,242	47
58	5,938,968	2,111,463	48
59	5,937,635	2,114,203	49
17A	5,952,066	2,100,930	50
41A	5,948,543	2,108,373	51
A	5,990,094	2,083,900	52
Bear River #1 (090605125)	5,948,992	2,119,691	53
Bear River #2 (090605119)	5,949,076	2,120,284	54
C-23	5,974,643	2,087,094	55
City of Fortuna Well 1	5,965,276	2,098,658	56
City of Fortuna Well 2	5,965,382	2,098,532	57
City of Fortuna Well 4	5,965,219	2,098,497	58
City of Fortuna Well 5	5,965,320	2,098,430	59
D	5,958,128	2,090,556	60
Del Oro Water Company	5,936,336	2,105,436	61
E	5,951,966	2,096,882	62
E2	5,951,909	2,095,750	63
FDMW 1	5,958,170	2,102,173	64
FDMW 2	5,958,425	2,102,498	65
FDMW 3	5,958,821	2,102,772	66
FDMW 4	5,959,242	2,103,000	67
FDMW 5	5,957,664	2,103,316	68
FDMW 6	5,959,549	2,101,652	69
FDMW 7	5,959,229	2,102,487	70
G	5,927,313	2,104,581	71
H	5,925,780	2,108,790	72
Hydesville CSD Well# 1	5,986,540	2,087,841	73
Hydesville CSD Well# 2	5,986,740	2,087,834	74
I	5,914,495	2,104,720	75
J	5,945,746	2,111,413	76
L	5,931,705	2,114,523	77
M	5,940,076	2,123,568	78
M2	5,940,076	2,123,555	79
MW-10	5,988,306	2,091,199	80
MW-11	5,994,302	2,084,729	81
MW-1s	5,994,302	2,084,729	82
MW-1d	5,949,527	2,113,094	83
MW-2s	5,961,651	2,096,148	84
MW-2d	5,961,651	2,096,148	85
MW-3s	5,960,531	2,089,098	86
MW-3d	5,960,531	2,089,098	87
MW-5s	5,930,282	2,112,001	88
MW-5d	5,930,282	2,112,001	89
MW-7s	5,927,441	2,105,966	90
MW-7d	5,927,441	2,105,966	91
MW-9s	5,976,155	2,084,927	92

Chronic Lowering Of Groundwater Levels Observation Locations
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

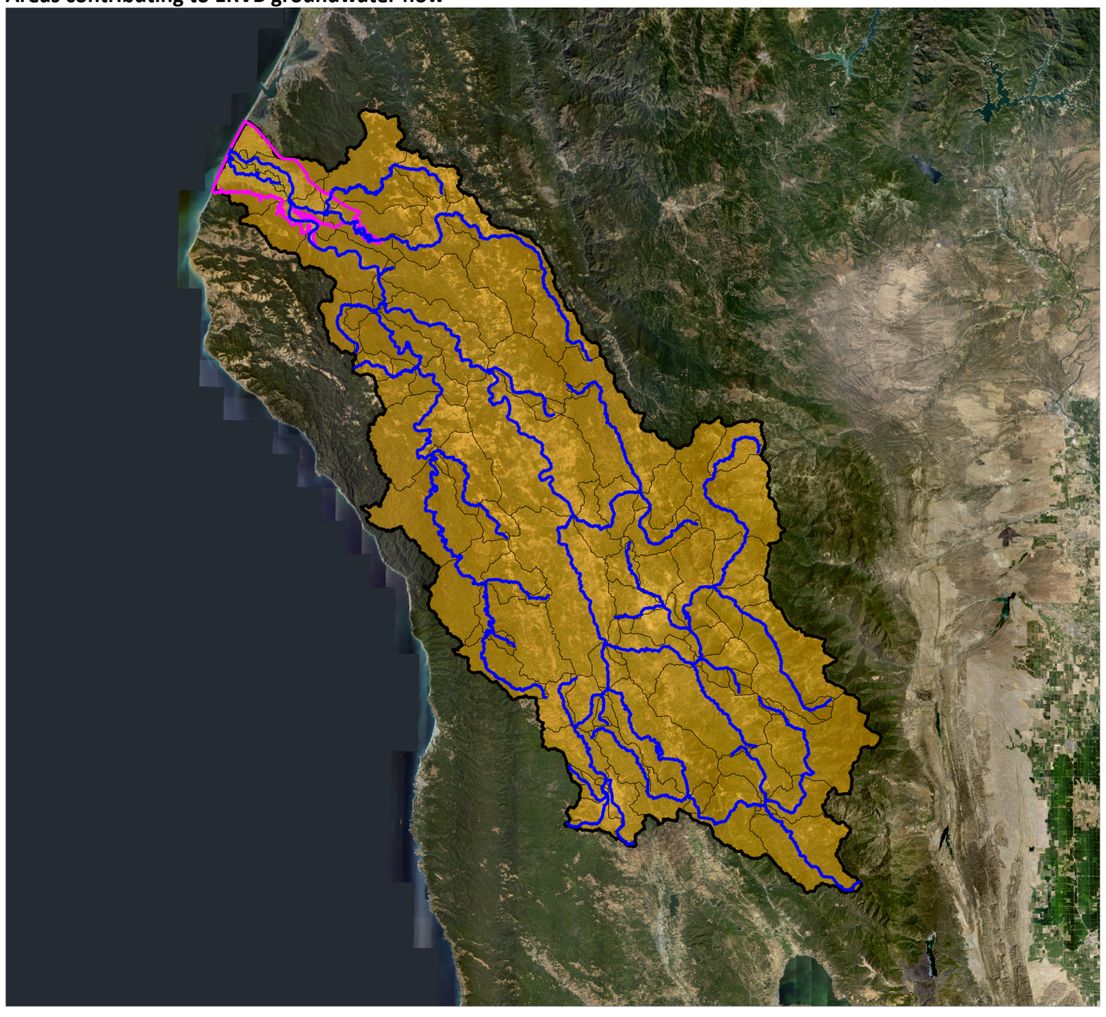
	State Plane Coordinate		*Figure 6.1*
Well Identification	***X***	***Y***	***Well Identification Key***
MW-9d	5,976,155	2,084,927	93
N	5,941,130	2,128,132	94
Palmer Creek #2	5,956,872	2,110,870	95
Q	5,928,407	2,115,070	96
R	5,937,514	2,124,093	97
R_Shop	5,937,505	2,124,090	98
Rio Dell Infiltration MW 1	5,969,841	2,077,383	99
Rio Dell Infiltration MW 2	5,970,353	2,077,210	100
Rio Dell Infiltration MW 3	5,970,500	2,076,578	101
Rio Dell Well 1	5,971,279	2,077,481	102
Rio Dell Well 3	5,971,281	2,077,390	103
CASGEM 23182	5,939,844	2,125,324	104
CASGEM 36943	5,932,994	2,104,855	105
CASGEM 23178	5,949,889	2,100,880	106
CASGEM 36942	5,954,097	2,098,577	107
CASGEM 23181	5,941,647	2,112,944	108
CASGEM 23183	5,931,514	2,109,076	109
CASGEM 36944	5,961,956	2,107,949	110
CASGEM 23179	5,960,020	2,094,011	111
CASGEM 23180	5,943,401	2,127,535	112
City of Fortuna Well 3	5,965,286	2,098,418	113
Palmer Creek CSD 1	5,956,818	2,110,894	114
MW-16	5,989,635	2,084,565	115
MW-17	5,979,383	2,084,217	116
MW-12s	5,974,842	2,087,034	117
MW-12d	5,974,842	2,087,034	118
MW-13s	5,964,857	2,090,812	119
MW-13d	5,964,857	2,090,812	120
MW-19	5,960,436	2,090,990	121
MW-21	5,963,287	2,094,917	122
MW-22	5,965,194	2,097,679	123
MW-20	5,956,832	2,095,889	124
MW-30	5,952,137	2,097,299	125
MW-22	5,965,194	2,097,679	126
MW-24	5,963,845	2,100,901	127
MW-23	5,960,172	2,108,790	128
MW-25	5,953,830	2,106,090	129
MW-28	5,932,206	2,107,960	130
MW-14s	5,939,094	2,112,139	131
MW-14d	5,939,094	2,112,139	132
MW-26	5,941,585	2,125,434	133
MW-27	5,934,787	2,125,601	134
MW-15s	5,947,471	2,109,285	135
MW-15d	5,947,471	2,109,285	136

Figures

Eel River Valley Basin (ERVB) (Groundwater Basin 1-010 Eel River Valley)

0 2 4miles

Areas contributing to ERVB groundwater flow



0 10 20 miles

Legend

Hydrologic Response Unit (HRU) contributing flow to Eel River Valley Basin (ERVB) (Groundwater Basin 1-010 Eel River Valley)

River network contributing flow to ERVB

ERVB

N

GHD

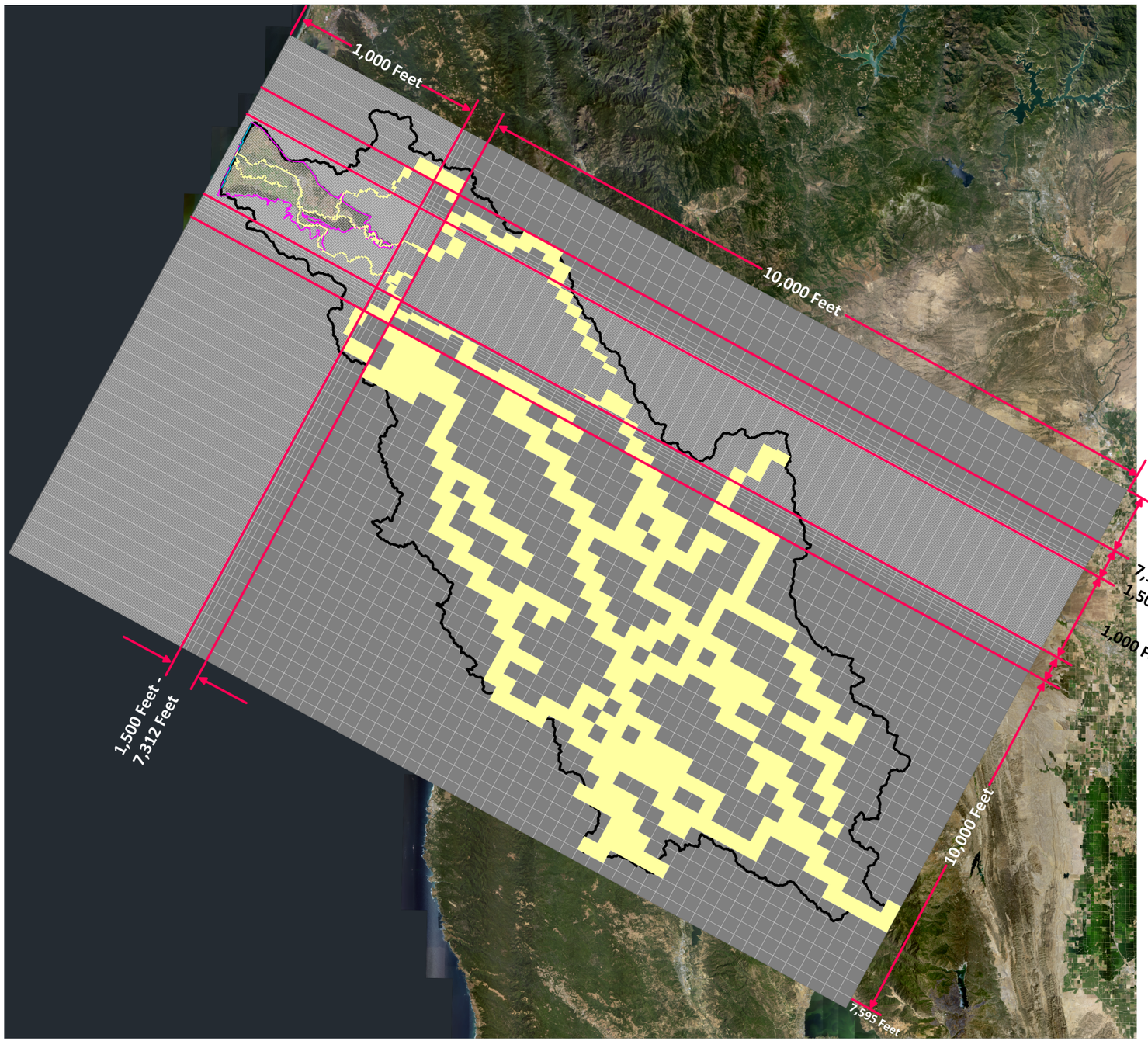
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

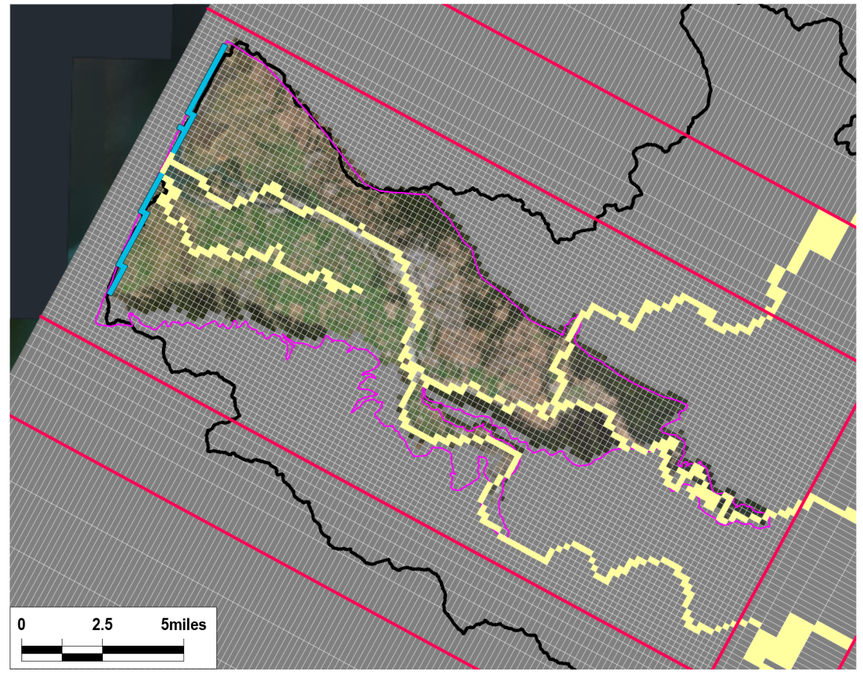
ERVB LOCATION AND HRU AREAS CONTRIBUTING TO GROUNDWATER FLOW

Project No. **11217388**
Date **November 2021**

FIGURE 1.1

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 1.1 ERVB.srf
Plot Date: November 19 2021 8:11 AM





LEGEND

- Finite Difference Model Grid
- 1,000 Feet — Model Grid Horizontal Grid Spacing
- Beginning of Model Cell Size Transition
- Streamflow Routing Boundary Condition
- Constant Head Boundary Condition
- No-Flow Boundary Condition

0 7.5 15miles

N

GHD

HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

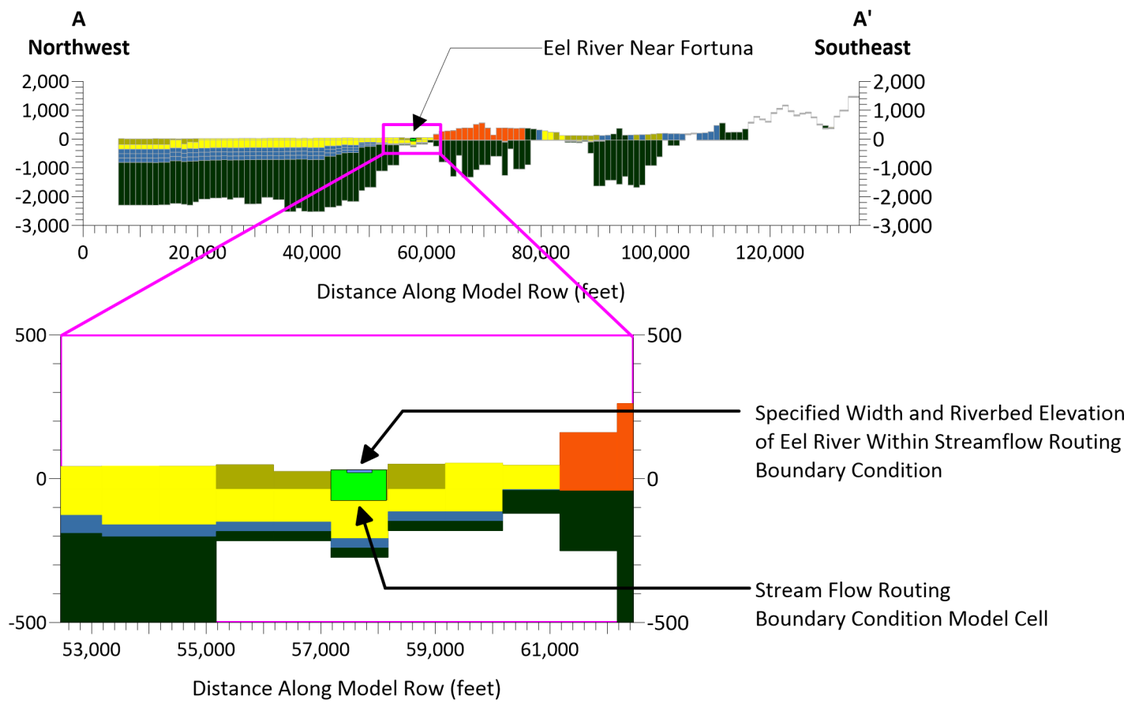
FINITE DIFFERENCE GRID AND BOUNDARY CONDITIONS

Project No. **11217388**
Date **October 2021**

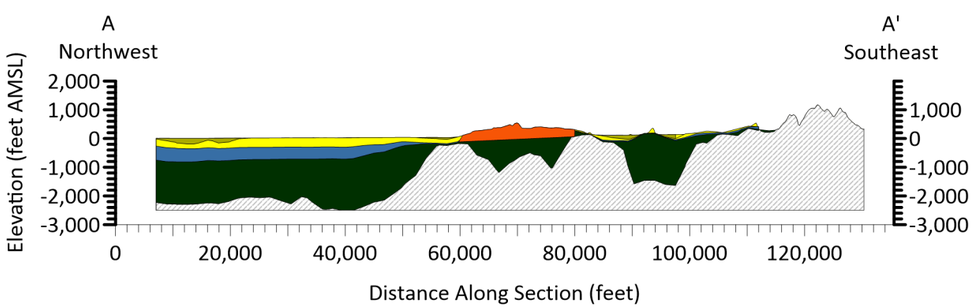
FIGURE 4.1

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 4.1 Finite DIfference Grid and Boundary Conditions.srf
Plot Date: October 29 2021 12:10 PM

Model Cross-Section

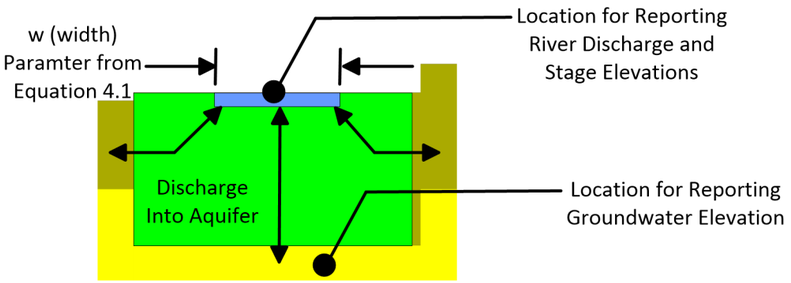


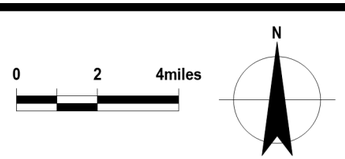
Geological Cross-Section



Stratigraphy

- Channel Deposits
- Qal - Alluvium
- Qh - Hookton Formation
- Qtc - Carlotta Formation (upper)
- Qtc - Carlotta Formation (lower)
- Boundary representing base of Carlotta Formation and base of ERVB





GHD

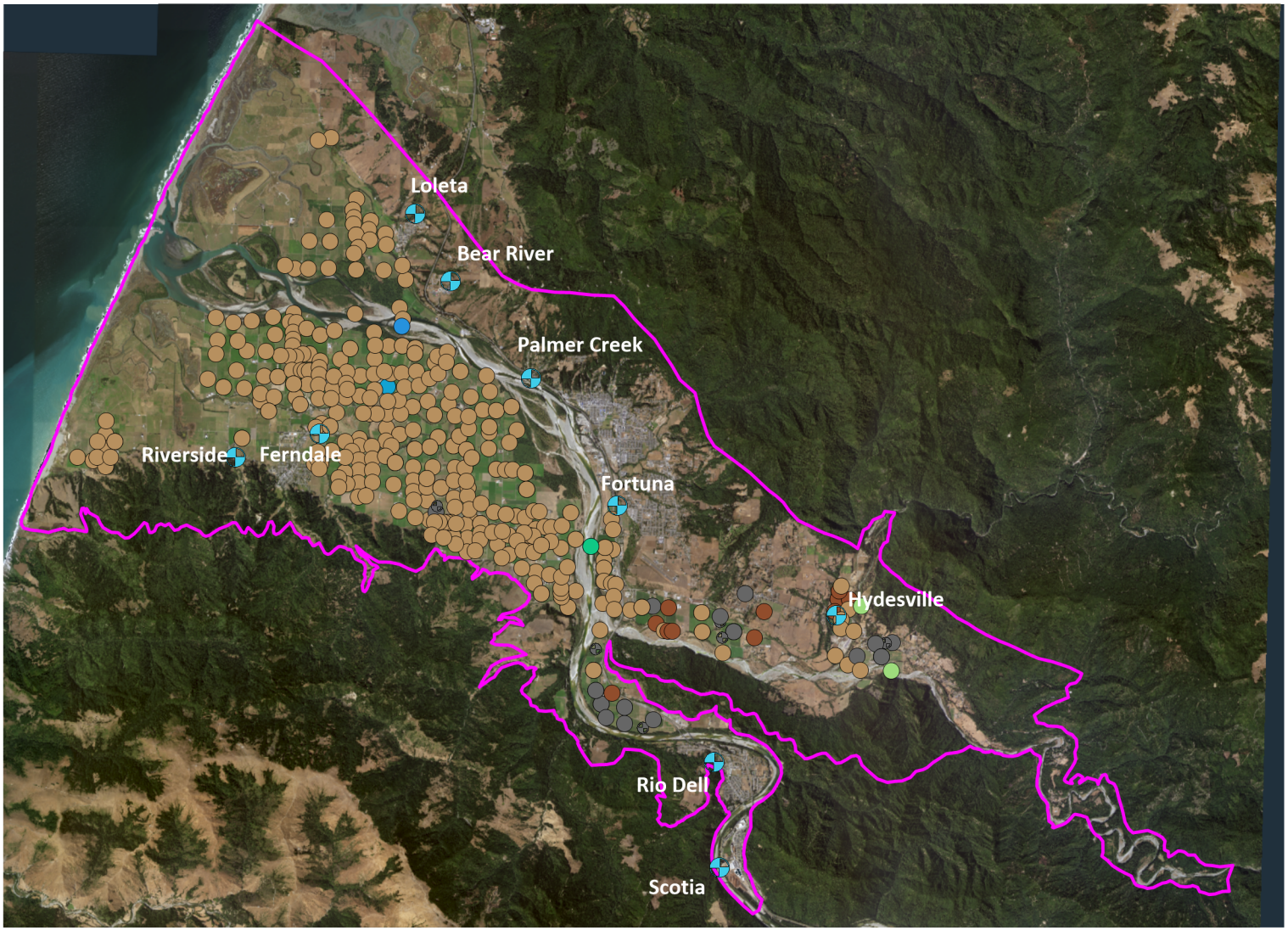
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

MODEL VERTICAL DISCRETIZATION AND STREAMFLOW BOUNDARY

Project No. **11182028**
Date **November 2021**

FIGURE 4.2

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 4.2 Cross-Section AAprime and BCs.srf
Plot Date: November 16 2021 6:11 PM



Legend

- Agriculture
- Gravel Mining
- Grazing/Timber
- Multi Family Residential
- Municipal Supply
- Open Space/Parks
- Rural Residential
- Rural Residential - Vacant
- Timber Production

0 1.5 3miles

N

GHD

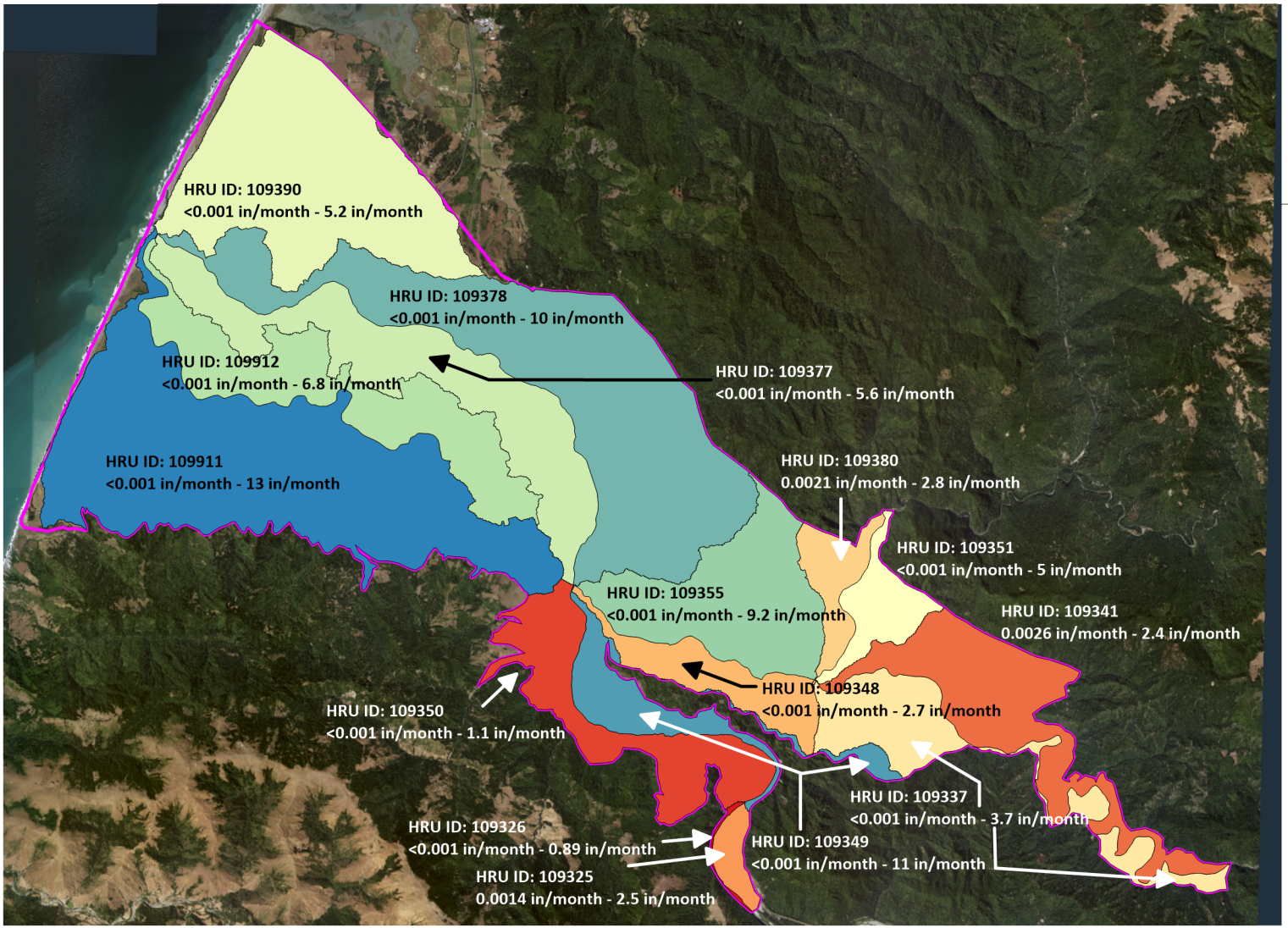
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

ERVB GROUNDWATER EXTRACTION WELL LOCATIONS

Project No. **11217388**
Date **November 2021**

FIGURE 4.3

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 4.3 WellLocations.srf
Plot Date: November 06 2021 4:11 PM

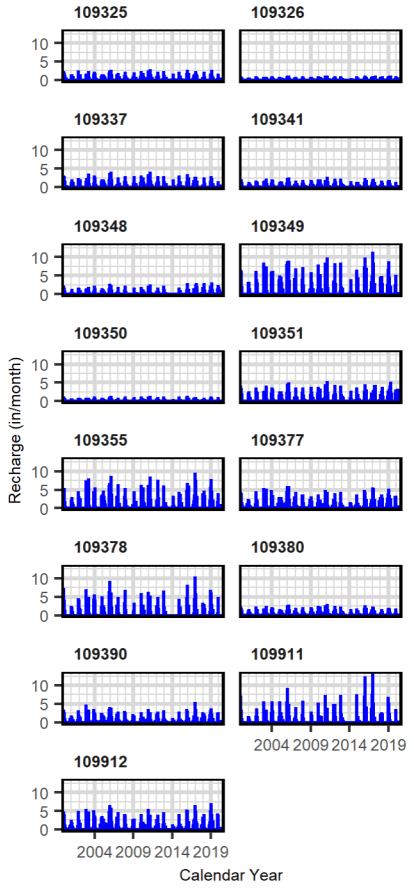


Legend

Range of Model-Applied Recharge Rates
(Water Year 2000 - 2020)
0.012 in/year - 61 in/year

Minimum Lower Maximum Rate

Higher Maximum Rate



0 1.5 3miles

N

GHD

HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

ERVB GROUNDWATER RECHARGE ZONES AND RATES

Project No. **11217388**
Date **November 2021**

FIGURE 4.4

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 4.4 Recharge Zones.srf
Plot Date: November 02 2021 1:11 PM

Legend

100 mg/L Chloride Isoconcentration Contour Based on Johnson (1975)

0 0.5 1mile

N

GHD

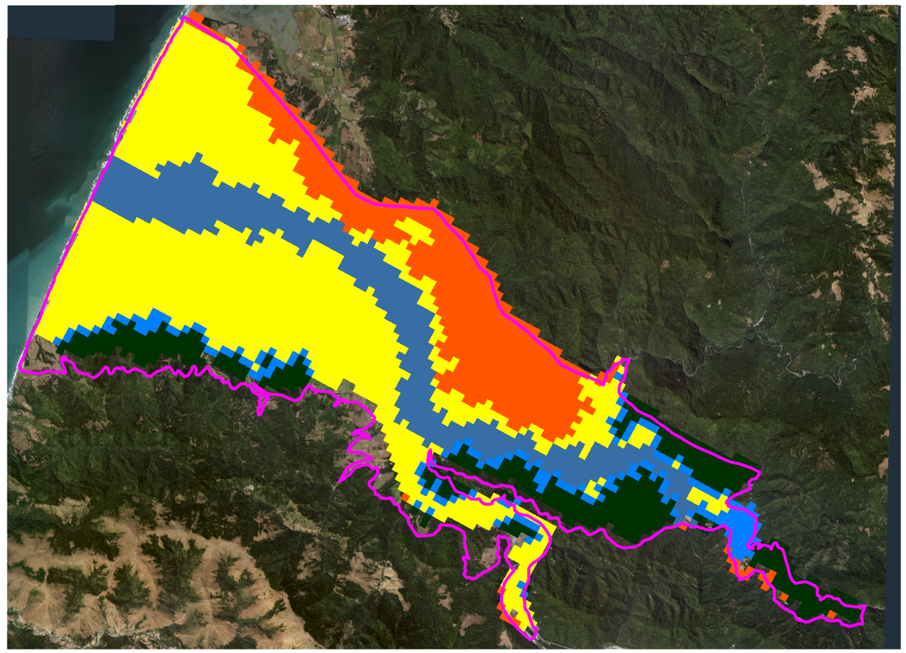
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

SEAWATER INTRUSION 100 mg/L ISOCONCENTRATION CONTOUR

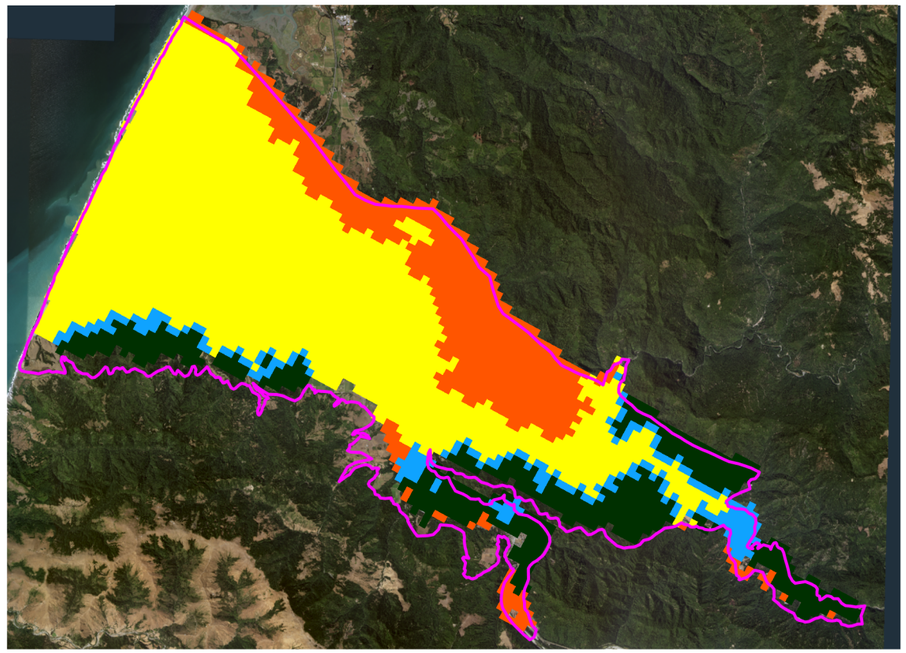
Project No. **11217388**
Date **November 2021**

FIGURE 4.5

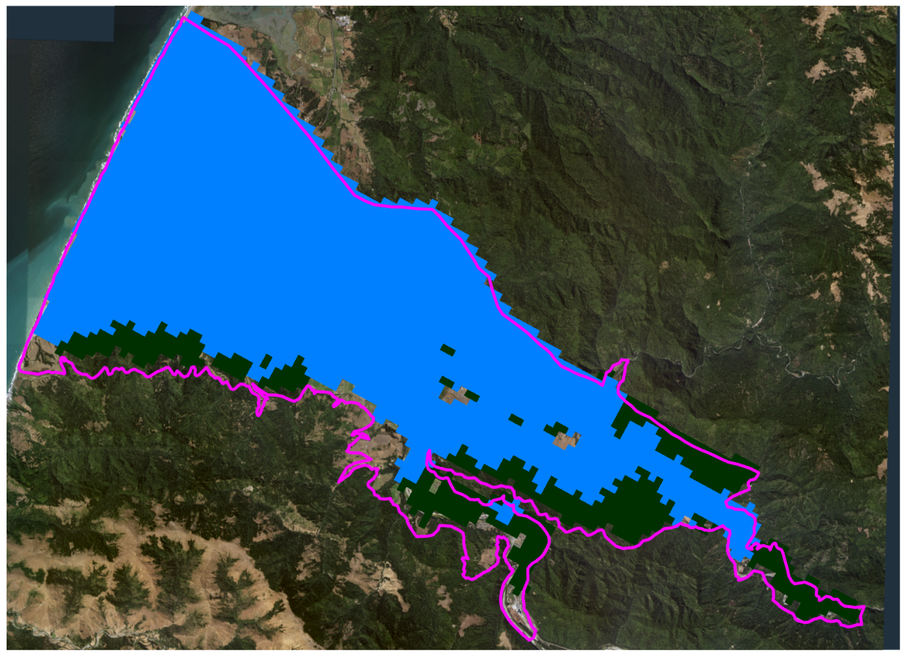
Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 4.5 SeawaterIntrusion.srf
Plot Date: November 06 2021 3:11 PM



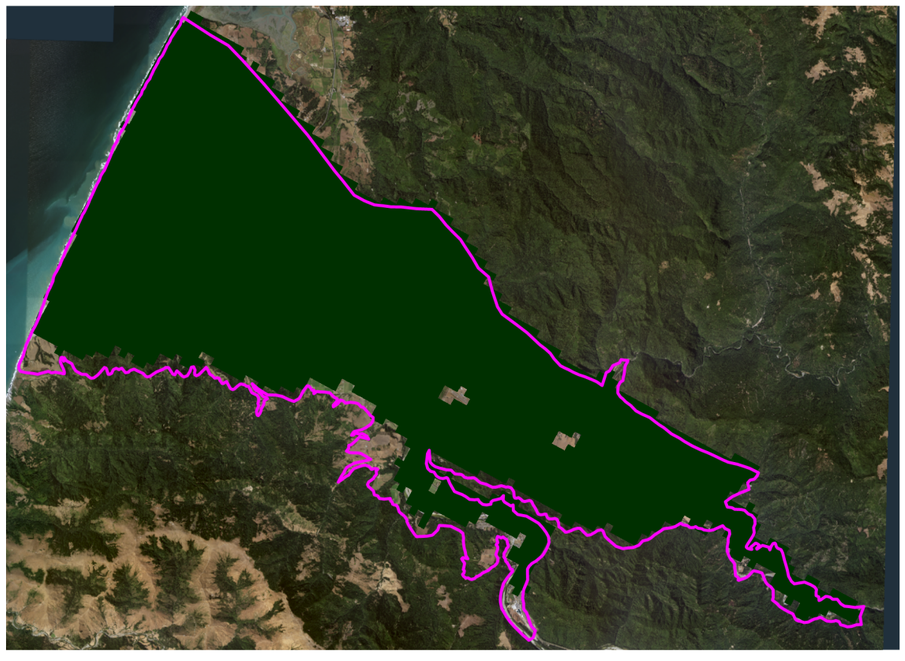
Integrated Groundwater/ Surface Water Model
Model Layer 1
Seawater Intrusion Model
Model Layer 1
- Channel Deposits
- Quaternary Alluvium
- Hookton Formation
- Upper Carlotta
- Lower Carlotta



Integrated Groundwater/ Surface Water Model
Model Layer 2
Seawater Intrusion Model
Model Layers 2 to 11
- Quaternary Alluvium
- Hookton Formation
- Upper Carlotta
- Lower Carlotta



Integrated Groundwater/ Surface Water Model
Model Layers 3 to 5
Seawater Intrusion Model
Model Layers 12 to 14
- Upper Carlotta
- Lower Carlotta



Integrated Groundwater/ Surface Water Model
Model Layer 6
Seawater Intrusion Model
Model Layer 15
- Lower Carlotta

0 2 4miles

N

GHD

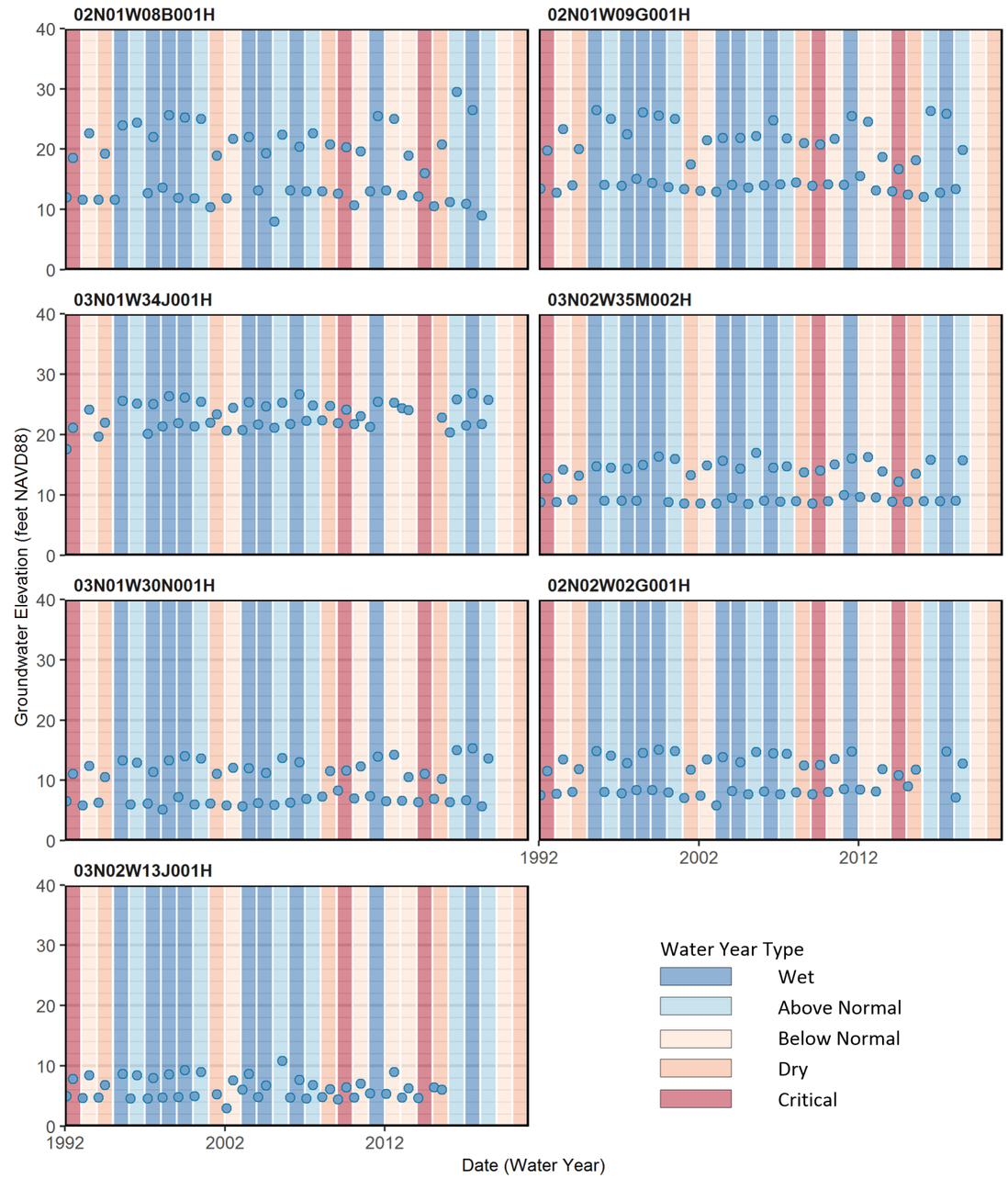
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

DISTRIBUTION OF MODEL-ASSIGNED HYDRAULIC CONDUCTIVITY ZONES

Project No. **11217388**
Date **November 2021**

FIGURE 4.6

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 4.6 K Zones.srf
Plot Date: November 06 2021 4:11 PM



0 1 2miles

N

GHD

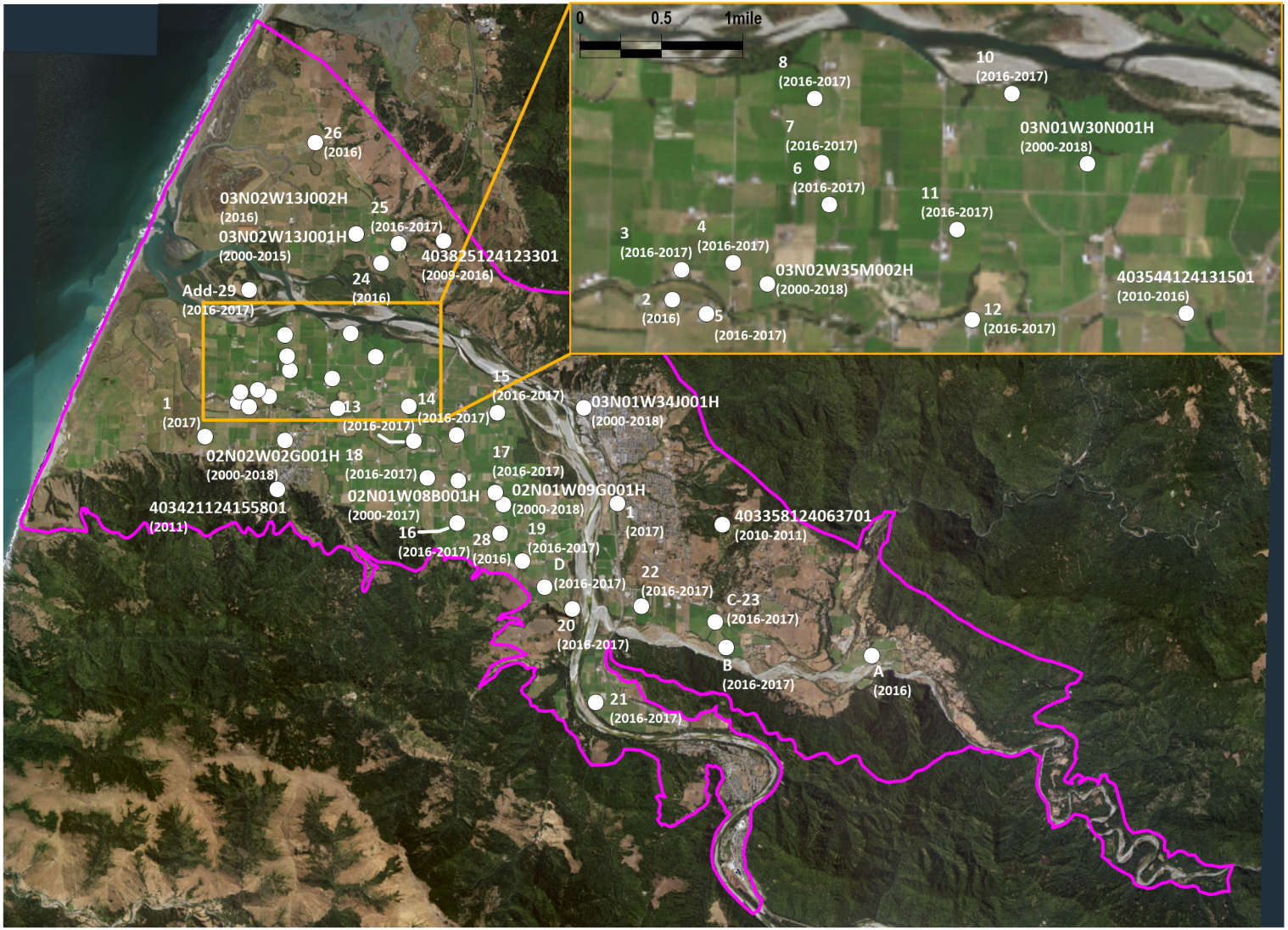
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

LONGTERM CASGEM MONITORING WELL LOCATIONS AND WATER LEVELS

Project No. **11182028**
Date **January 2022**

FIGURE 5.1

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 5.1 CASGEM MonitoringWellLocations.srf
Plot Date: January 10 2022 10:01 AM



Legend

25	Well Identification[(1)]
(2016-2017)	Observation Period

Note:

(1) Some well identification numbers have been anonymized

0 1.5 3miles

N

GHD

HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

ERVB GROUNDWATER TARGET LOCATIONS AND OBSERVATION PERIOD

Project No. **11217388**
Date **November 2021**

FIGURE 5.2

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 5.2 Target Locations.srf
Plot Date: November 03 2021 2:11 PM

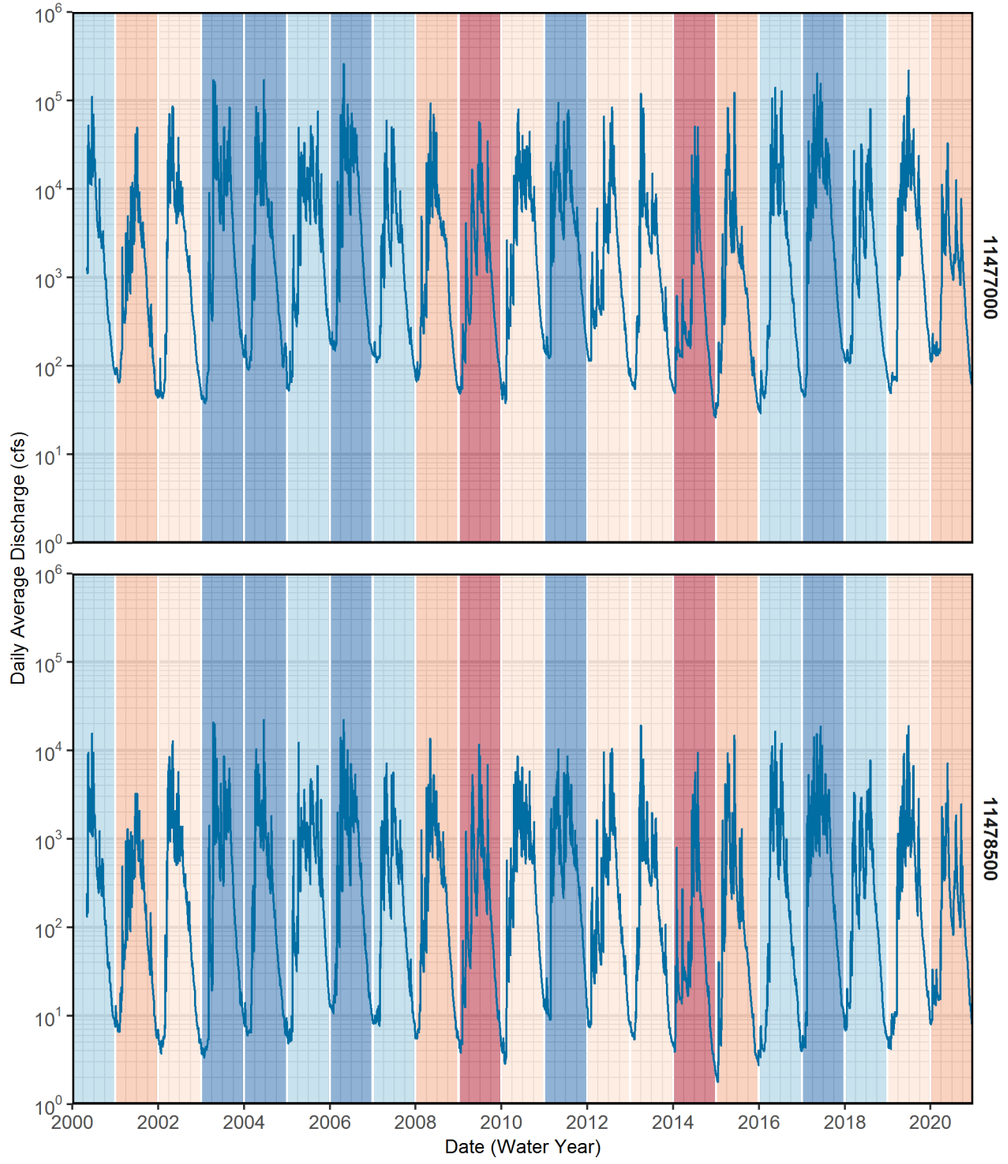
Legend

Eel River Valley Basin

11478500 USGS Surface Water Monitoring Station Target Identification

USGS Surface Water Monitoring Station Target Locations

Sources: Orthoimagery: USDA, 2021. National Agriculture Image Program (NAIP)



Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

0 1.5 3miles

N

GHD

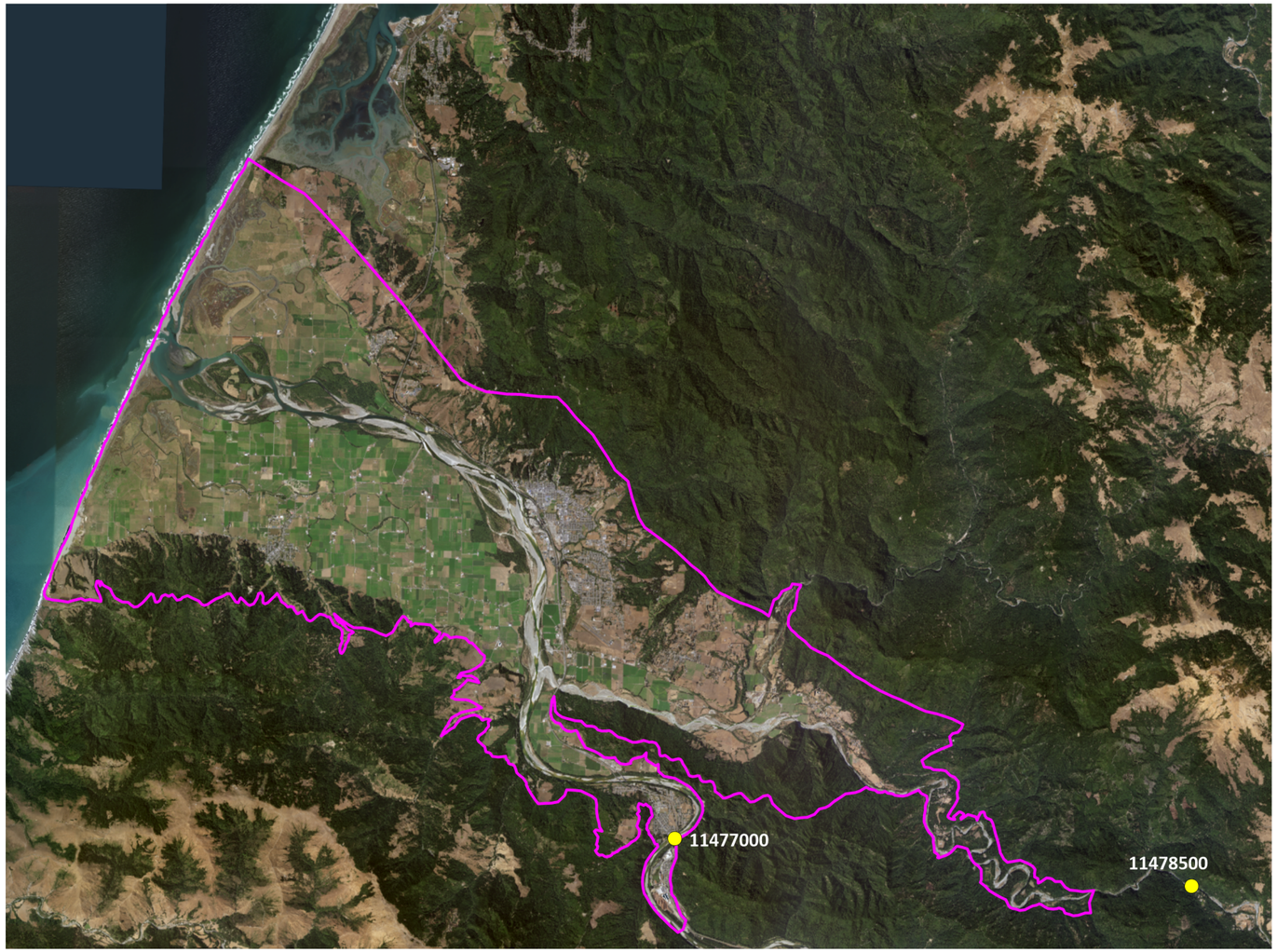
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

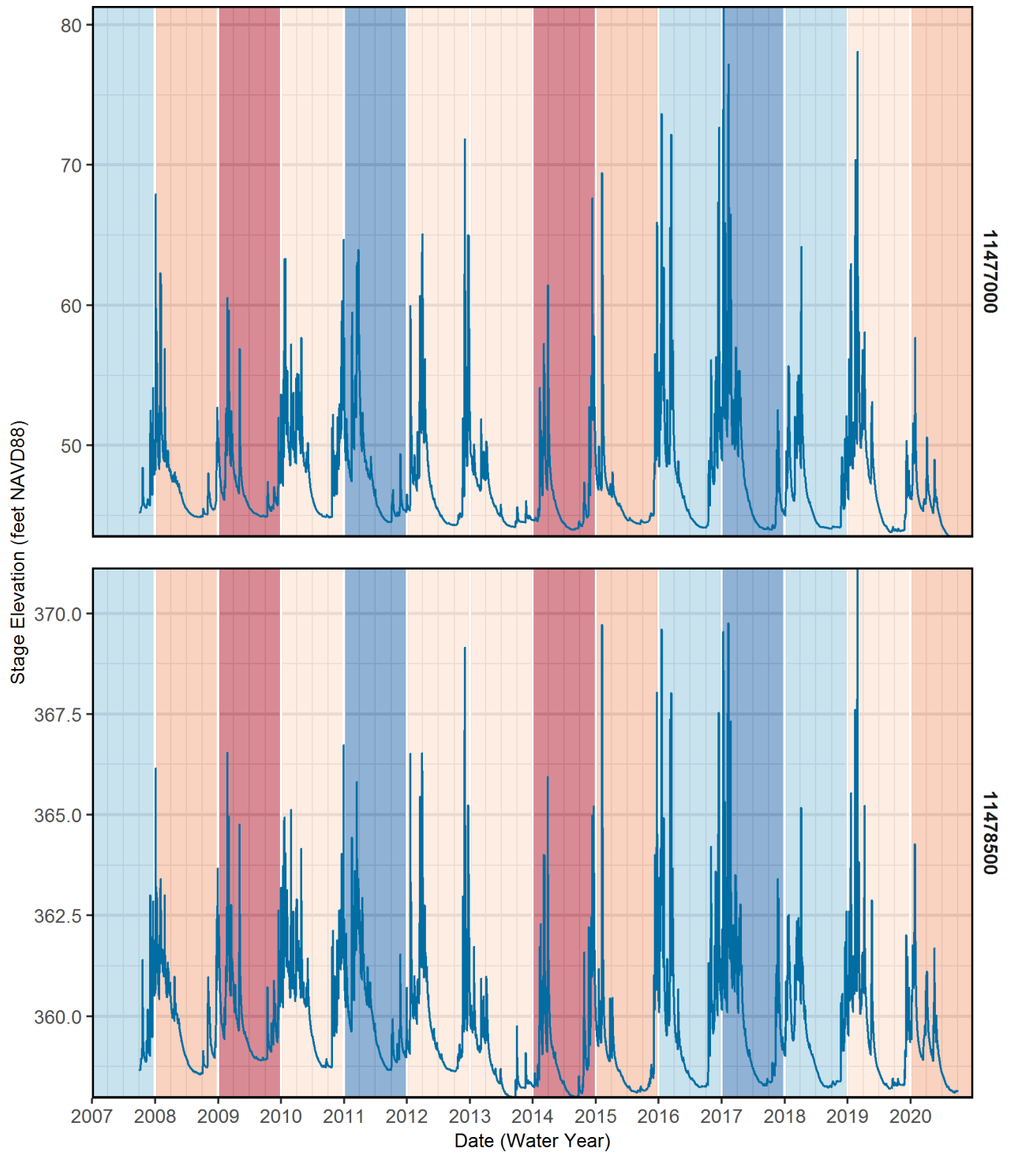
HISTORICAL RIVER TARGET FLOW RATES

Project No. **11217388**
Date **January 2022**

FIGURE 5.3

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 5.3 LocalSurfaceWater.srf
Plot Date: January 10 2022 10:01 AM





Legend

Eel River Valley Basin

11478500 USGS Surface Water Monitoring Station Target Identification

USGS Surface Water Monitoring Station Target Locations

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

Sources: Orthoimagery: USDA, 2021. National Agriculture Image Program (NAIP)

0 1.5 3miles

N

GHD

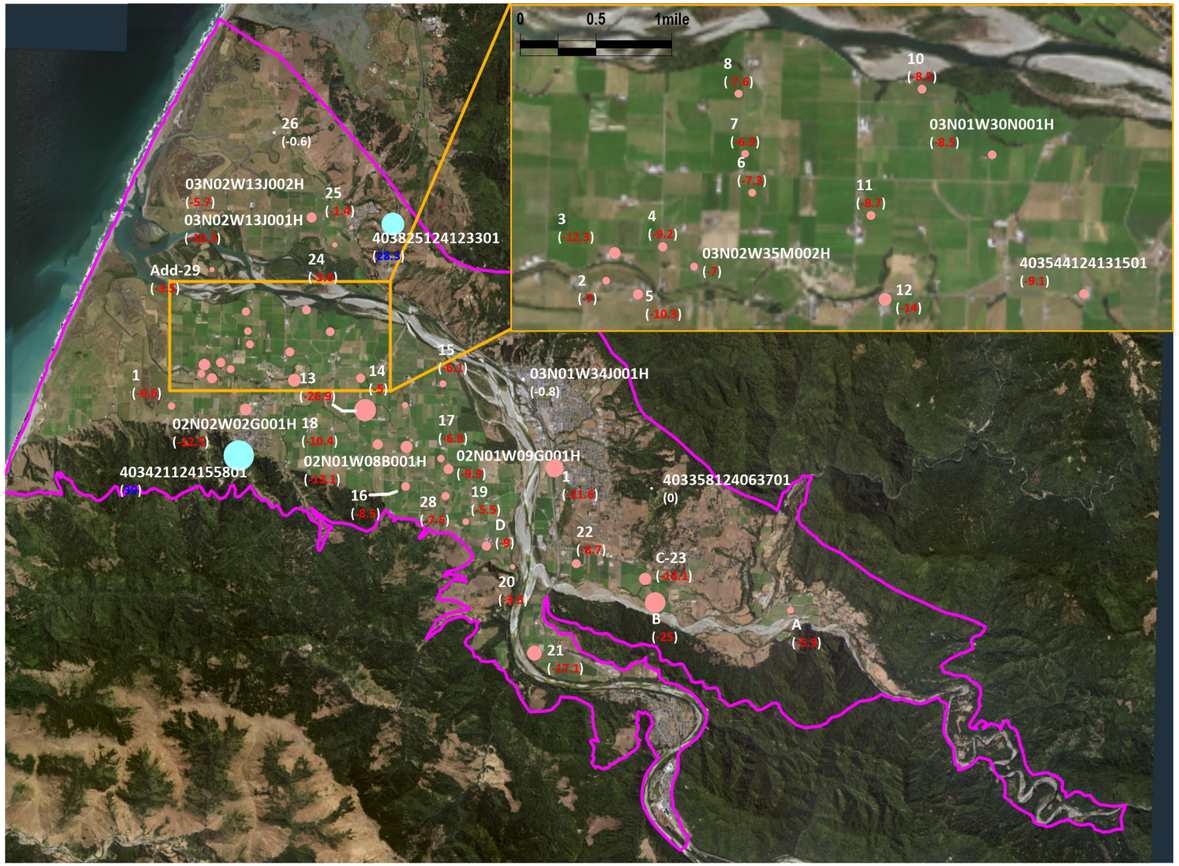
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

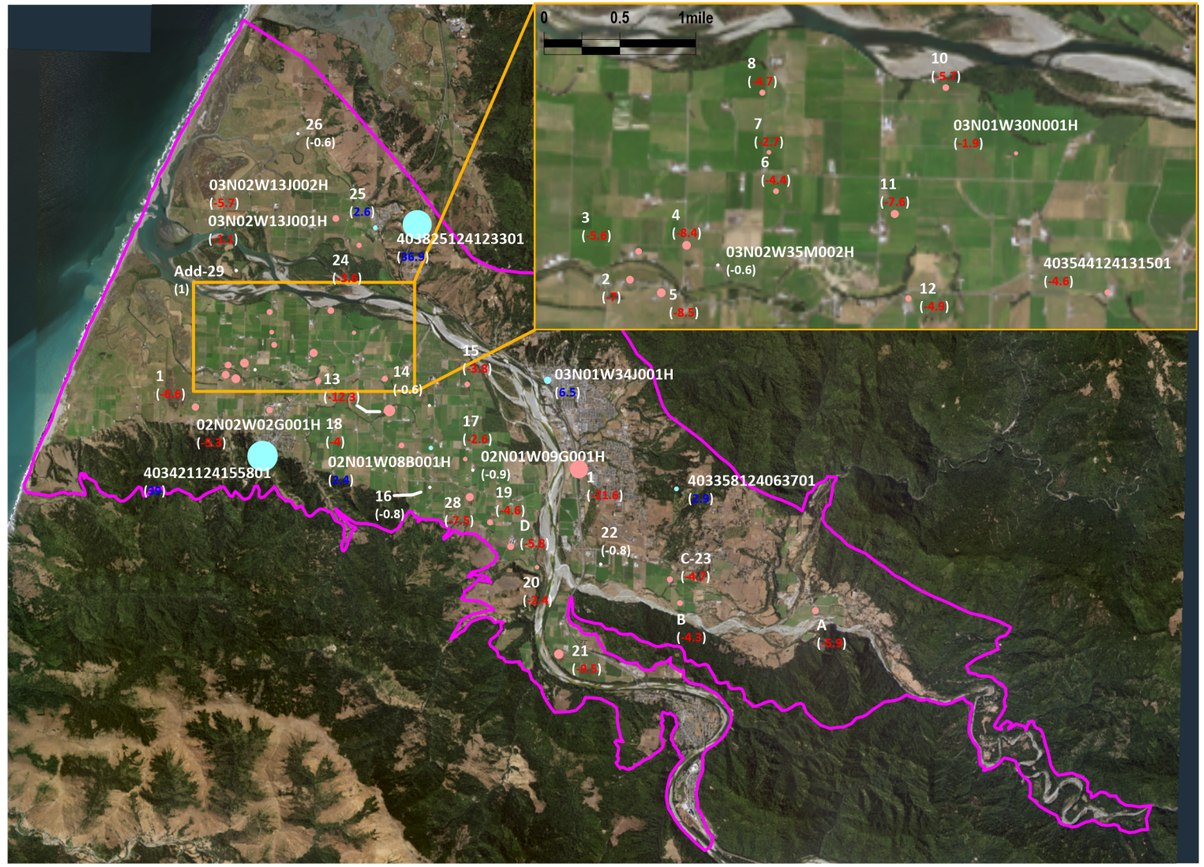
HISTORICAL RIVER STAGE TARGET ELEVATIONS

Project No. **11217388**
Date **January 2022**

FIGURE 5.4

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 5.4 LocalSurfaceWater_StageElevations.srf
Plot Date: January 10 2022 10:01 AM





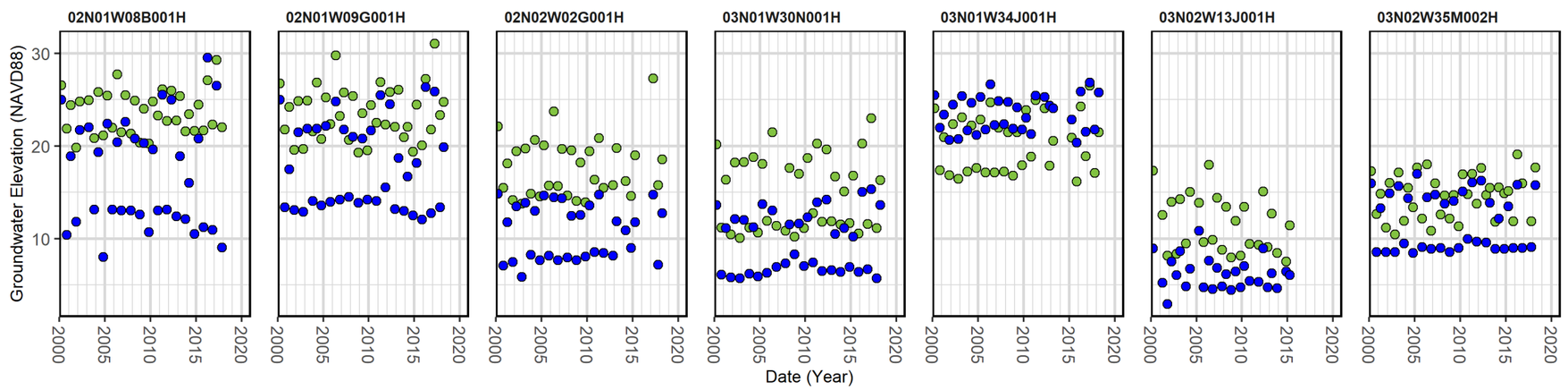
Legend

7	Monitoring Well Identification
(-6.9)	Groundwater Elevation Residual[1]
2.4	Postitive Calibration Residual (Under-predicted)
-6.9	Negative Calibration Residual (Over-predicted)
-0.4	Residual within +/- 1 foot
	Postive Residual Circles
	Negative Residual Circles
	Residual Circle within +/- 1 foot

Transient Targets

(More than 20 Observations)

	Observed Groundwater Elevation (NAVD88)
	Simulated Groundwater Elevation (NAVD88)



0 1.5 3miles

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GHD

HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

TRANSIENT TARGET RESIDUALS

Project No. 11217388
Date November 2021

FIGURE 5.5

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 5.5 Target Residuals.srf
Plot Date: November 06 2021 3:11 PM

Eel River: Station 11477000

Van Duzen River: Station 11478500

River Flow (cfs)

10^5
10^4
10^3
10^2
10^1
10^0

2001 2003 2005 2007 2009 2011 2013 2015 2017 2019

Date (Water Year)

Eel River: Station 11477000

Van Duzen River: Station 11478500

Stage Elevation (feet NAVD88)

60 55 50 45

375 370 365 360

2001 2003 2005 2007 2009 2011 2013 2015 2017 2019

Date (Water Year)

Legend

Observed Flow (cfs)/Groundwater Elevation (feet NAVD88)

Simulated Flow (cfs)/Groundwater Elevation (feet NAVD88)

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

GHD

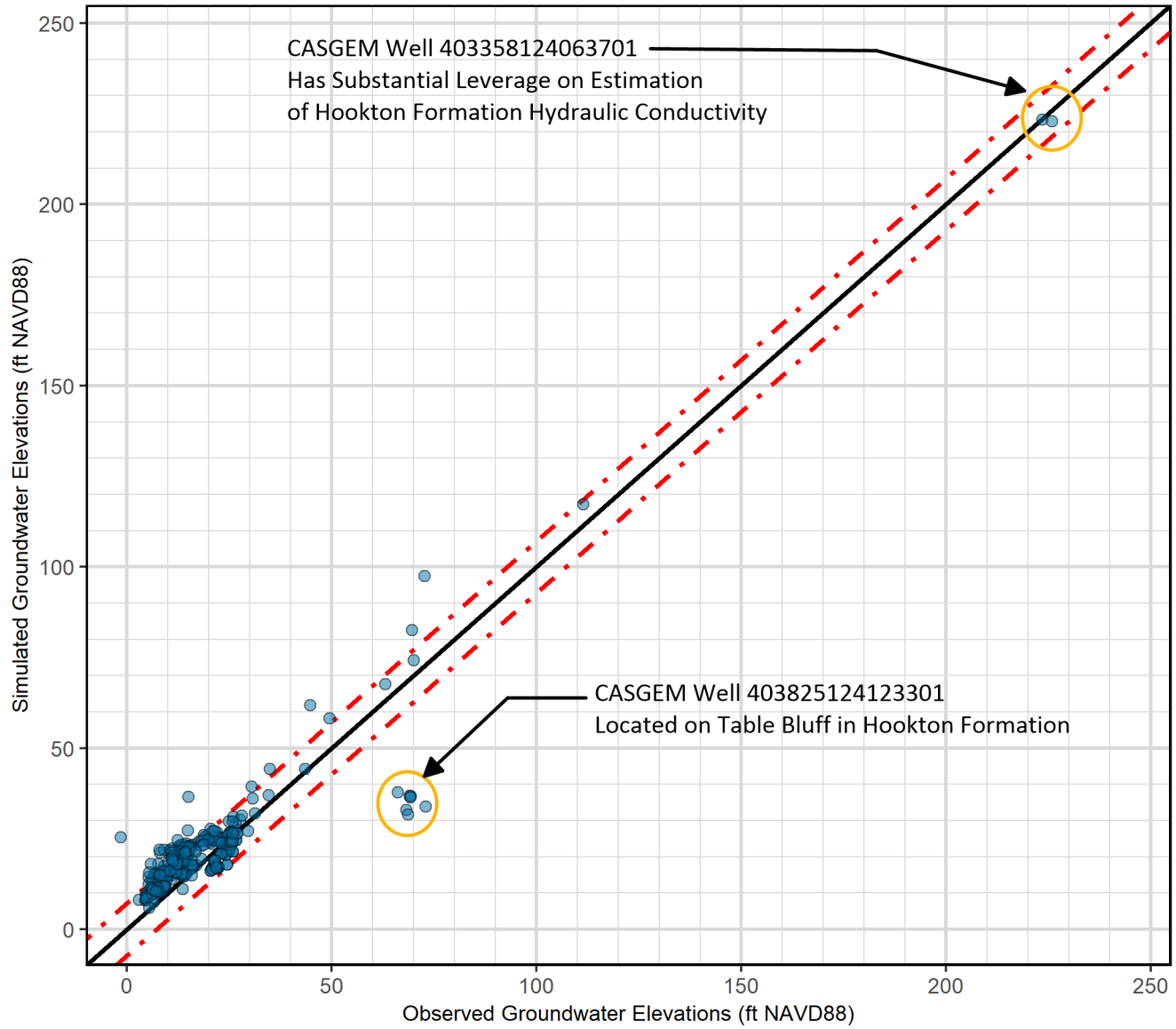
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

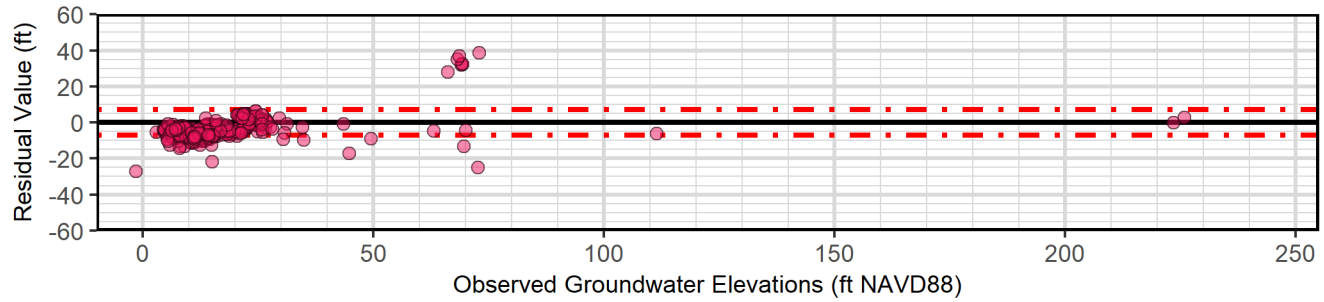
EEL AND VAN DUZEN RIVERS SIMULATED AND OBSERVED FLOW AND STAGE

Project No. **11217388**
Date **January 2022**

FIGURE 5.6

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 5.6 Flow and Stage Sim and Obs.srf
Plot Date: January 10 2022 10:01 AM





Calibration Statistics	Statistic Value
Number of Observations =	339
Residual Mean (feet) =	-3.2
Absolute Residual Mean (feet) =	5.9
Residual Standard Deviation (feet) =	7.2
Residual Sum of Square (feet^2) =	21,070
Minimum Residual (feet) =	-27
Maximum Residual (feet) =	39
Observation Head Range (feet) =	227
Standard Deviation / Head Range (Standard Units) =	0.03

LEGEND

- Groundwater Elevation Target
- Observed - Simulated Groundwater Elevation Residual
- Line of Exact Match
- +/- Standard Deviation

HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

SCATTER PLOT OF OBSERVED VERSUS SIMULATED GROUNDWATER ELEVATIONS

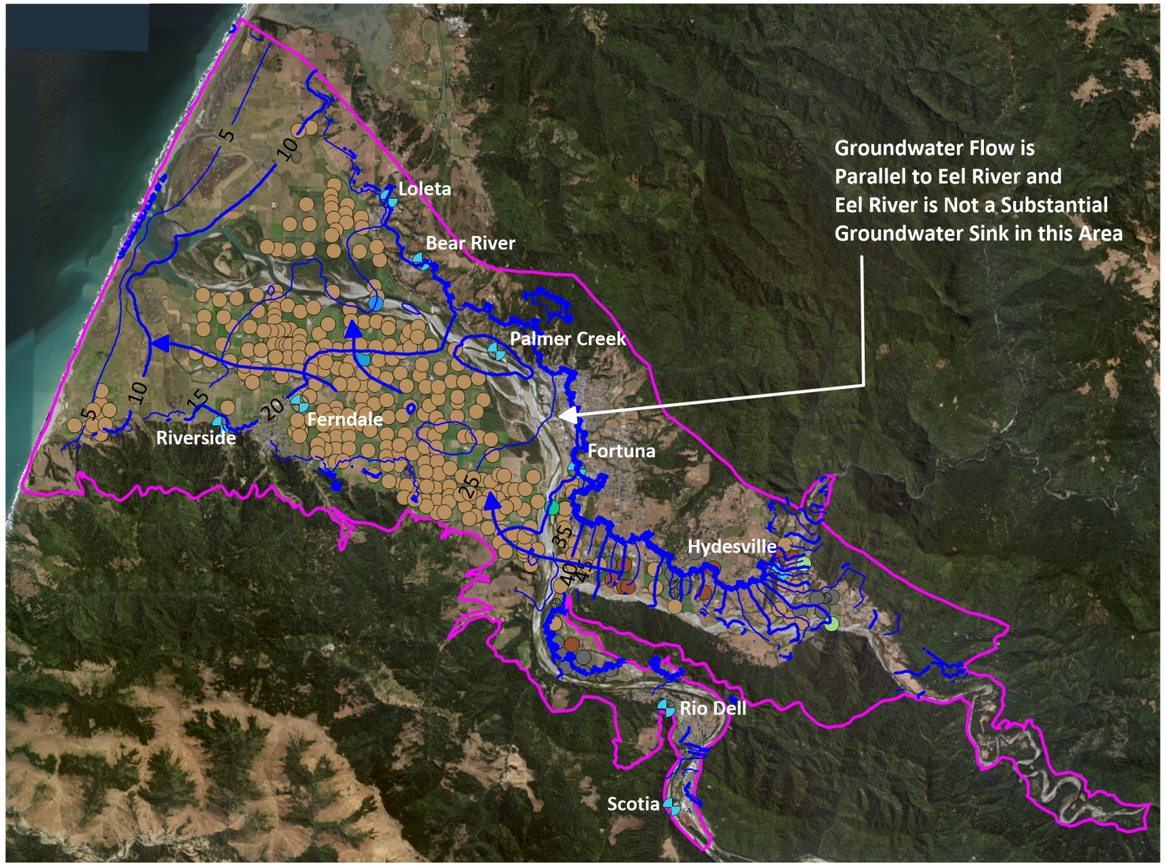
Project No. **11217388**
Date **November 2021**

FIGURE 5.7

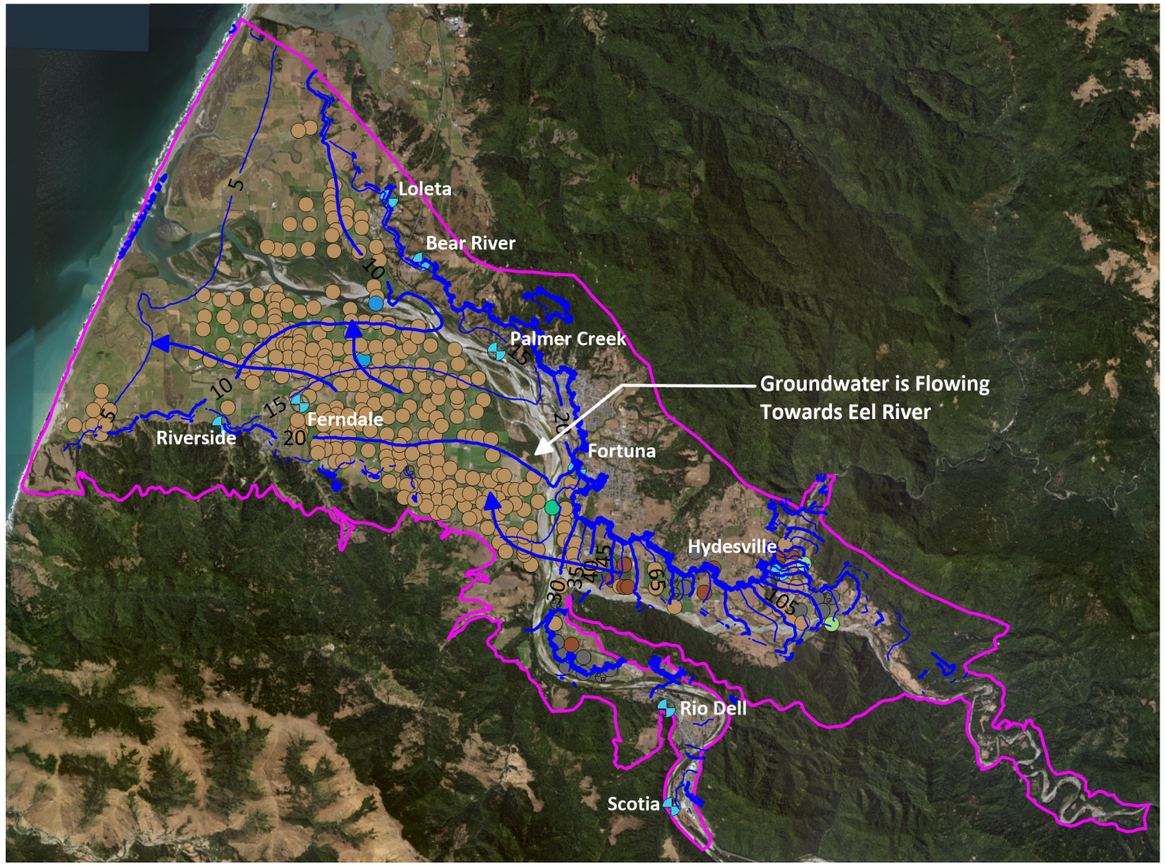
Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 5.7 ObservedVsSimulatedScatterPlot.srf
Plot Date: November 06 2021 4:11 PM

Data Source

Spring (March) 2003



Fall (October) 2003

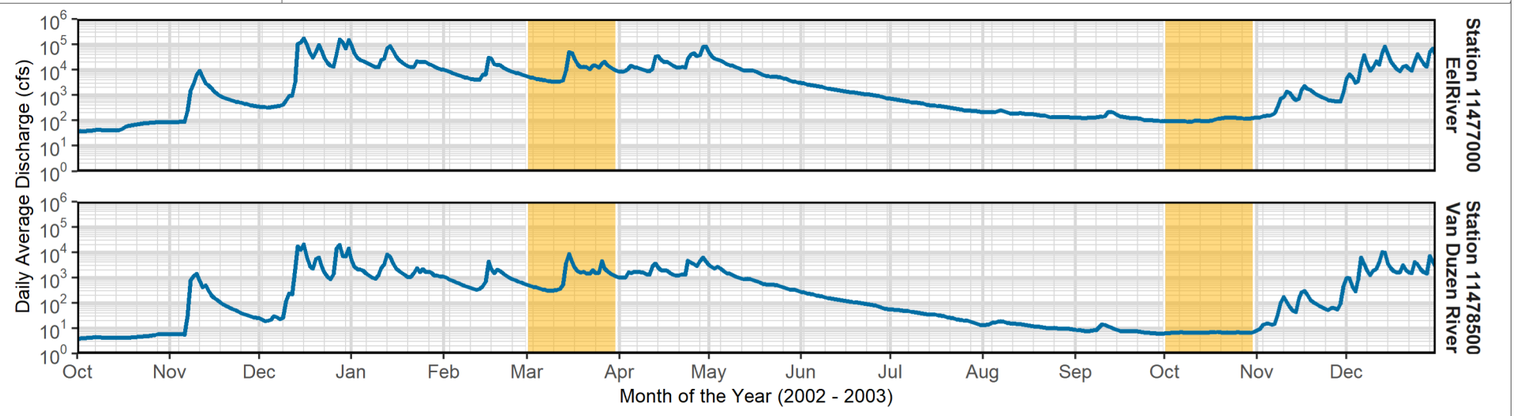


Legend

- 10 — Simulated Groundwater Elevation Contour (feet NAVD88) in Alluvium Deposits
- Groundwater Flow Directions

Extraction Well

- Agriculture
- Gravel Mining
- Grazing/Timber
- Multi Family Residential
- Municipal Supply
- Open Space/Parks
- Rural Residential
- Rural Residential - Vacant
- Timber Production



0 1.5 3miles

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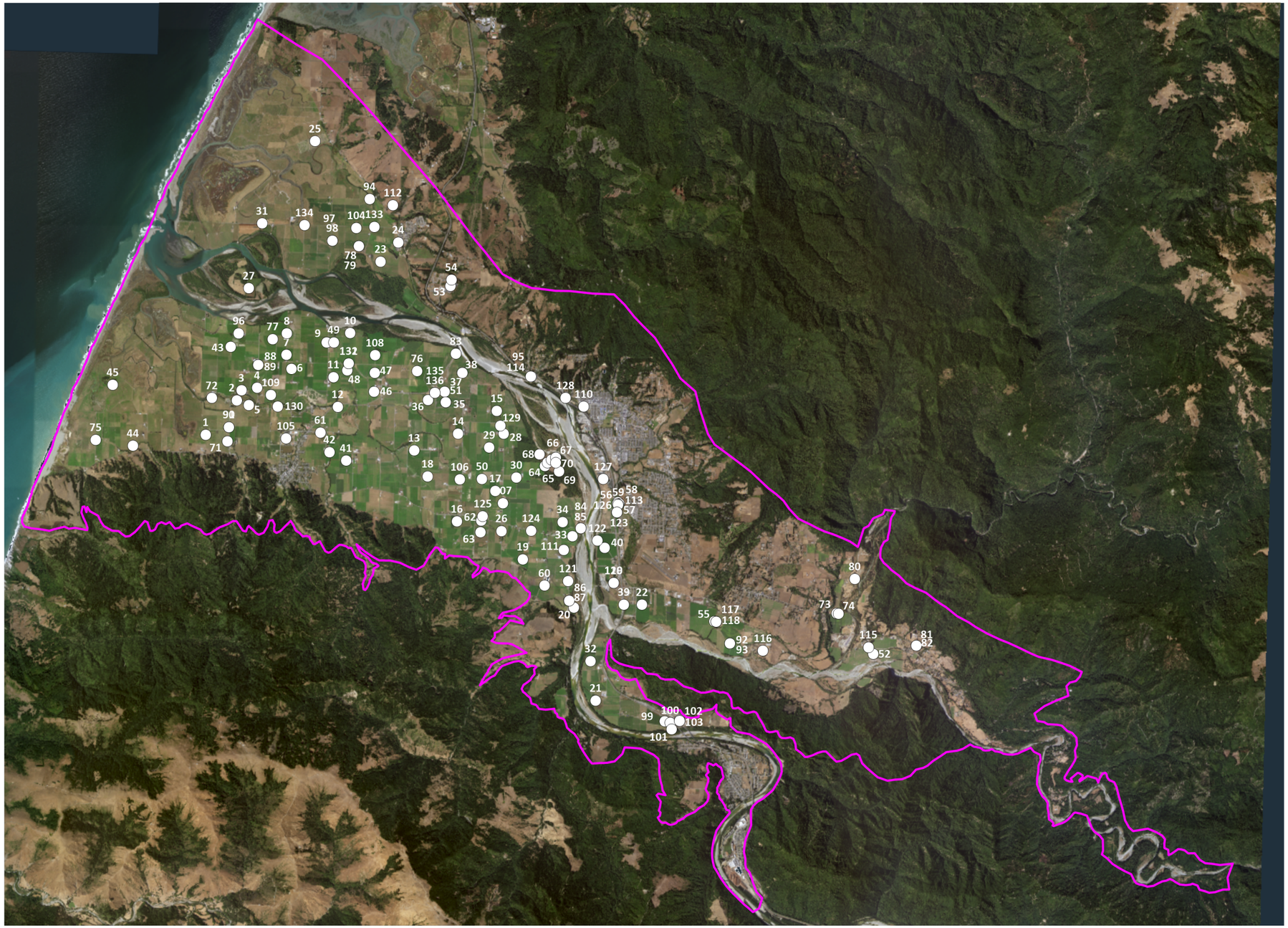
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

SPRING AND FALL 2003 SIMULATED GROUNDWATER ELEVATIONS

Project No. **11217388**
Date **November 2021**

FIGURE 5.8

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 5.8 SpringAndFallSimulatedGroundwaterElevations.srf
Plot Date: November 07 2021 1:11 PM



Legend

10 Well Identification Key(1)

◯ Chrinic Groundwater Lowering Evaluation Location

Note:

(1) Table 6.1 Relates Well Identification Key Value with Well Identification

0 700 1400ft

N

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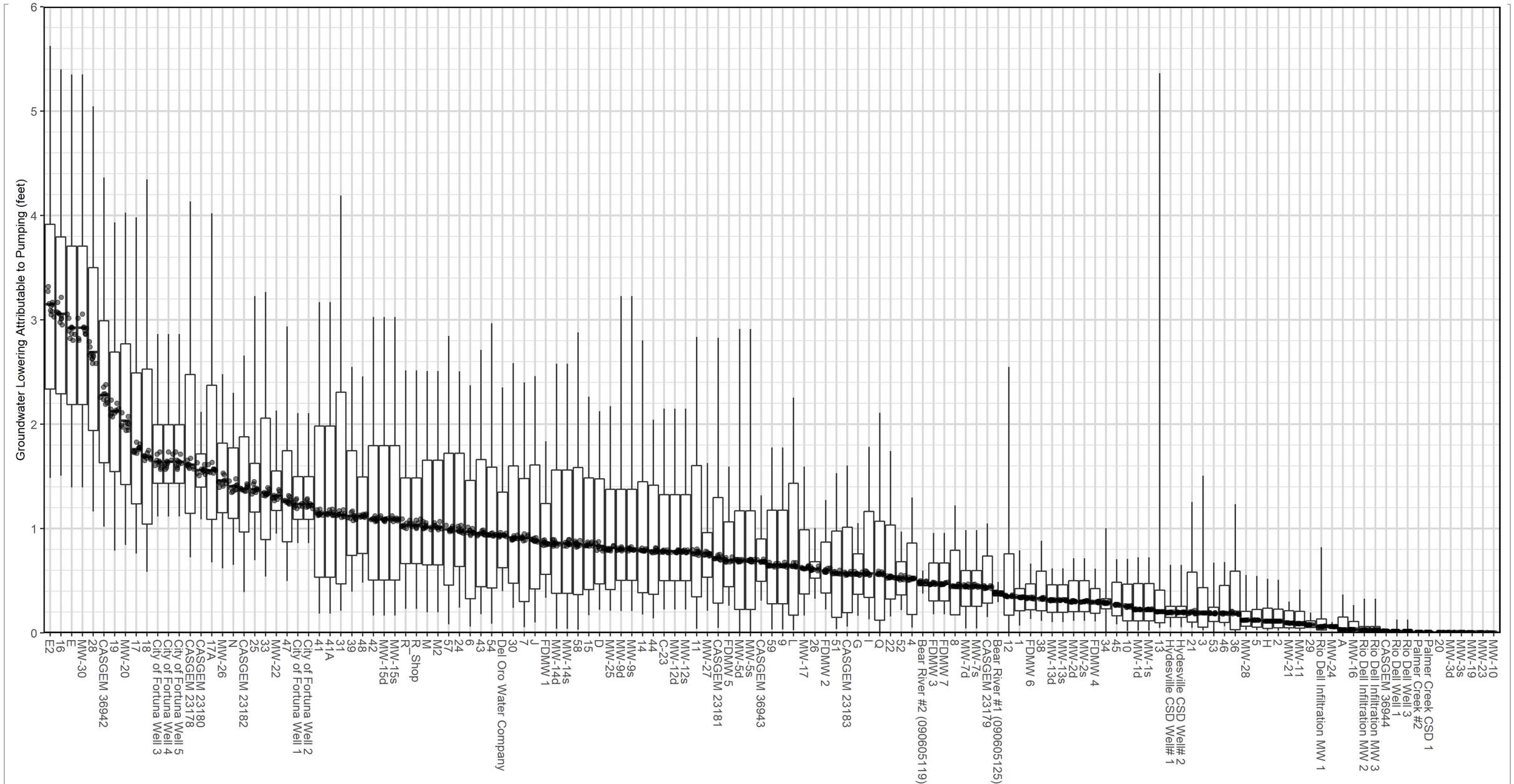
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

CHRONIC GROUNDWATER LOWERING EVALUATION LOCATIONS

Project No. **11217388**
Date **November 2021**

FIGURE 6.1

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.1 Chronic Lowering Evaluation Locations.srf
Plot Date: November 07 2021 5:11 PM



Legend

- Global Upper Range of Groundwater Displacement for 10 Calibrated Models (feet)
- Global 75th Percentile of Groundwater Displacement for 10 Calibrated Models (feet)
- Global Median of Groundwater Displacement for 10 Calibrated Models (feet)
- Global 25th Percentile of Groundwater Displacement for 10 Calibrated Models (feet)
- Global Lower Range of Groundwater Displacement for 10 Calibrated Models (feet)
- Median Displacement for each Calibrated Model (feet)

GHD

HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

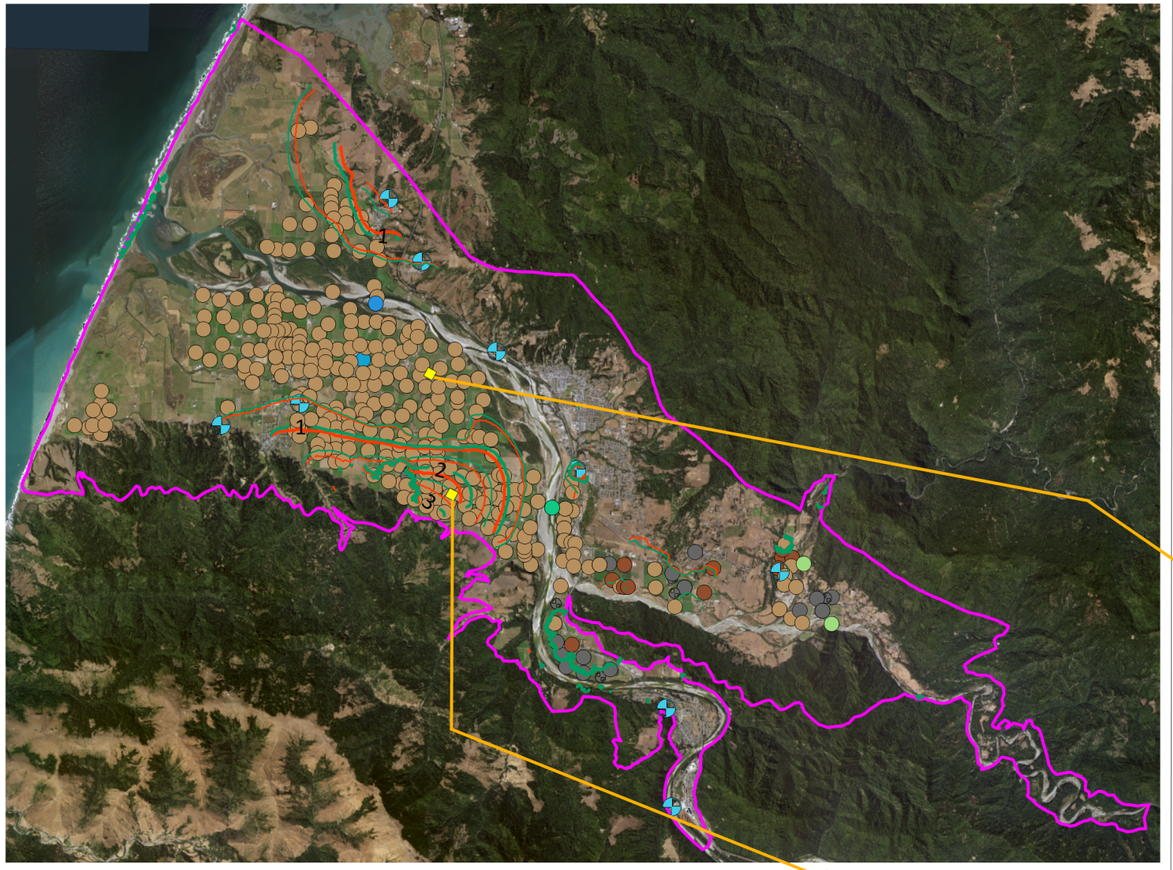
GROUNDWATER LOWERING ATTRIBUTABLE TO PUMPING

Project No. **11217388**
Date **November 2021**

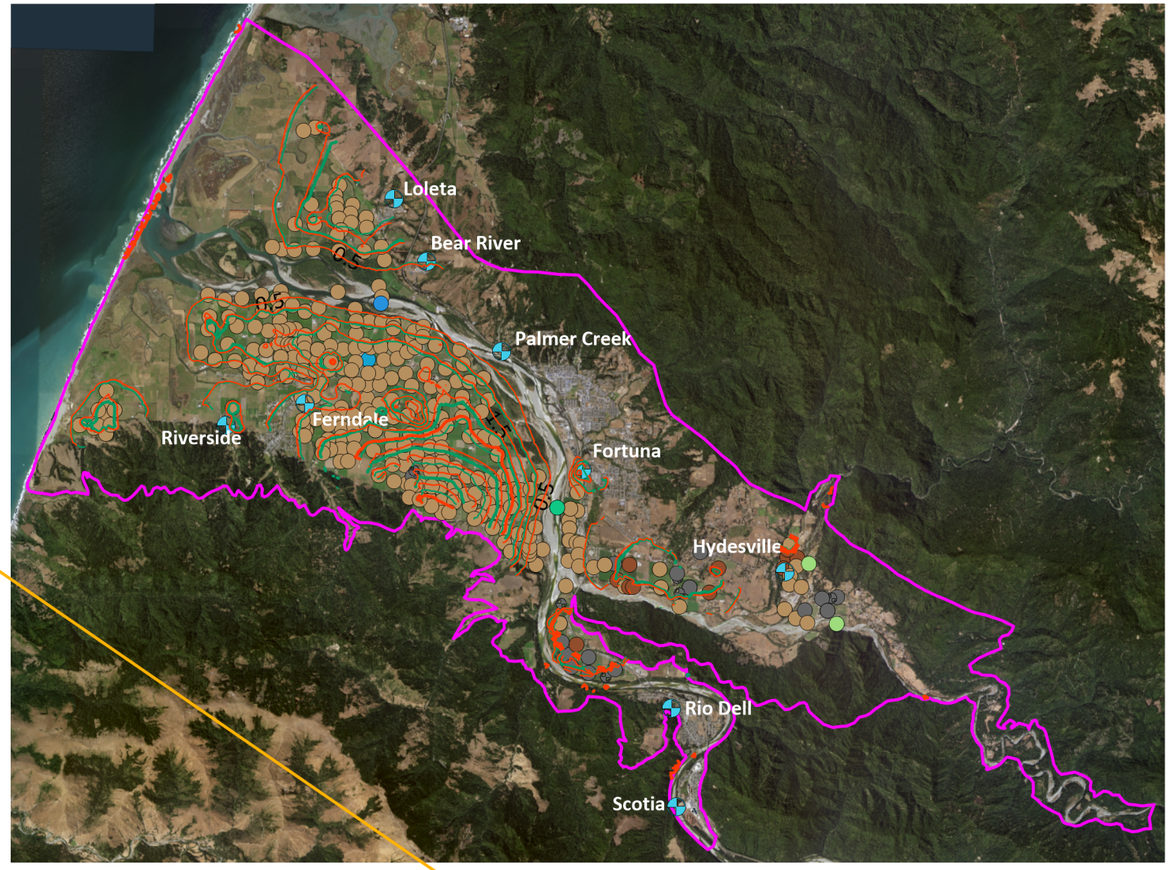
FIGURE 6.2

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.2 Chronic Lowering Evaluation.srf
Plot Date: November 08 2021 8:11 AM

Spring (March) 2003



Fall (September) 2003



Legend

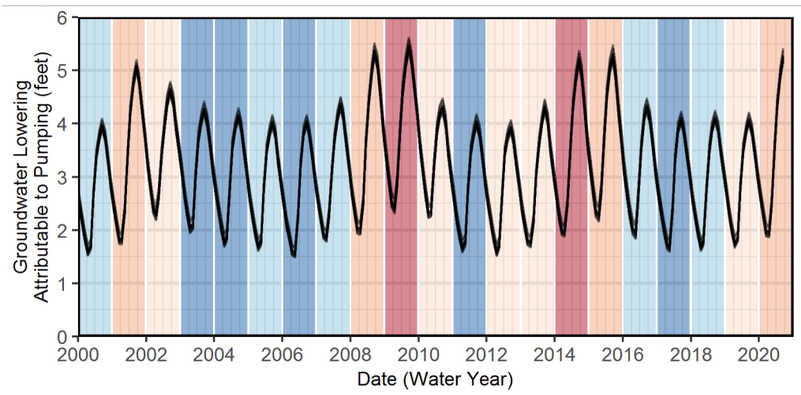
- 2 Minimum of 10 Realizations Groundwater Lowering Contour
- 2 Maximum of 10 Realizations Groundwater Lowering Contour

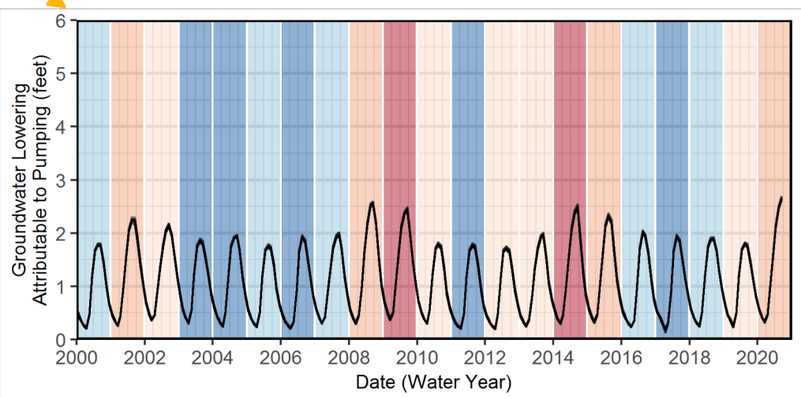
Bottom Panels

- One of 10 Model Realizations

Extraction Well

- Agriculture
- Gravel Mining
- Grazing/Timber
- Multi Family Residential
- Municipal Supply
- Open Space/Parks
- Rural Residential
- Rural Residential - Vacant
- Timber Production





0 1.5 3miles

N

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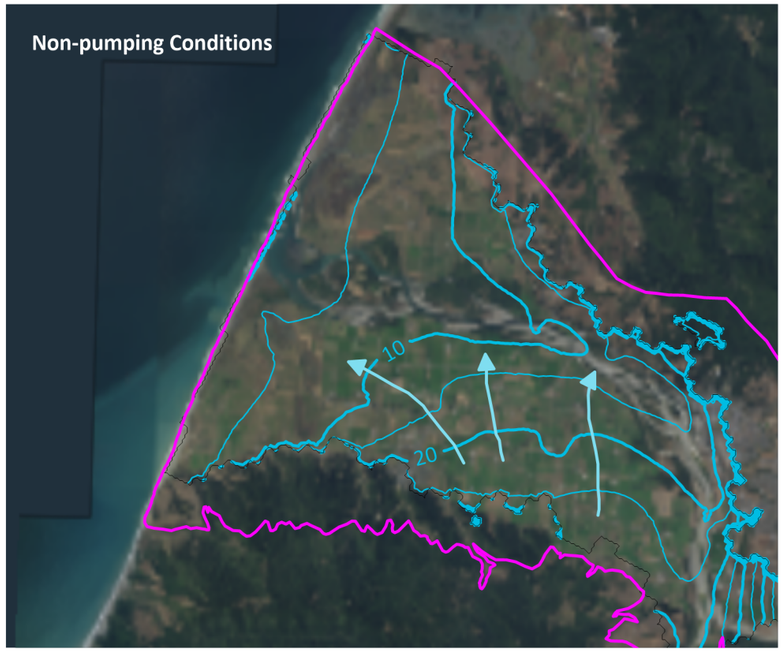
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

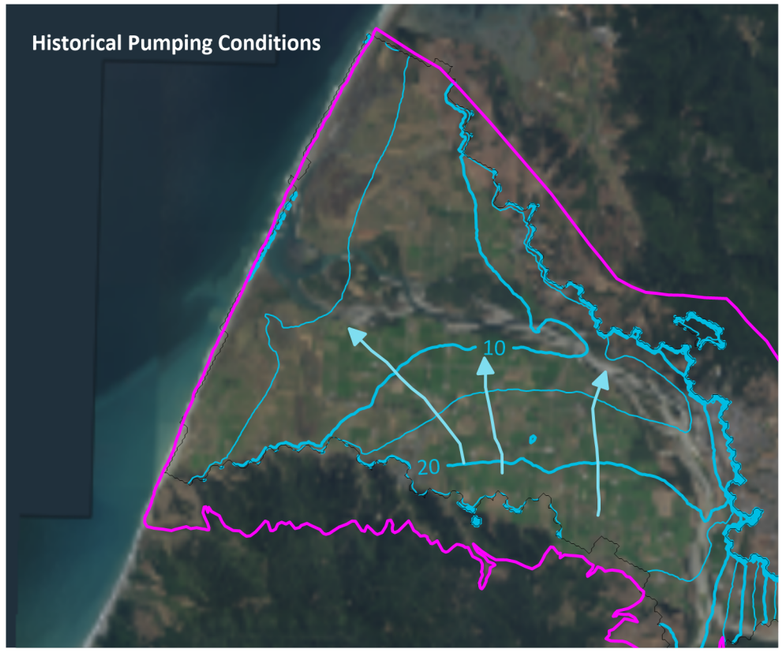
SPRING AND FALL 2003 SIMULATED GROUNDWATER LOWERING

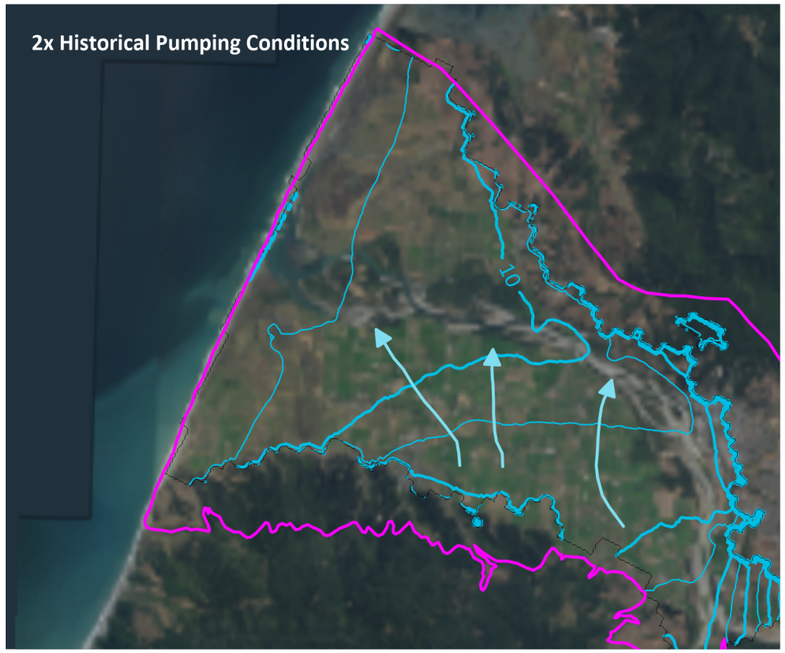
Project No. **11217388**
Date **January 2022**

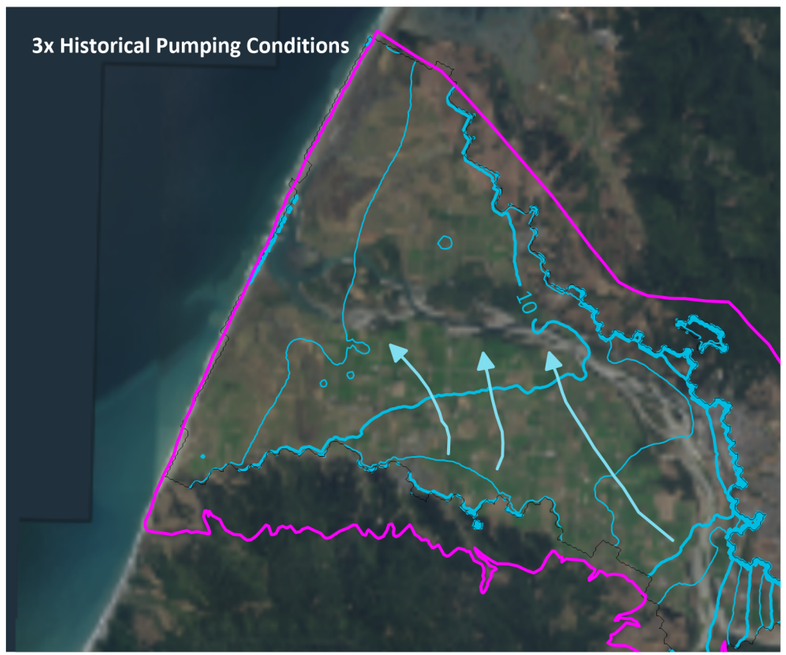
FIGURE 6.3

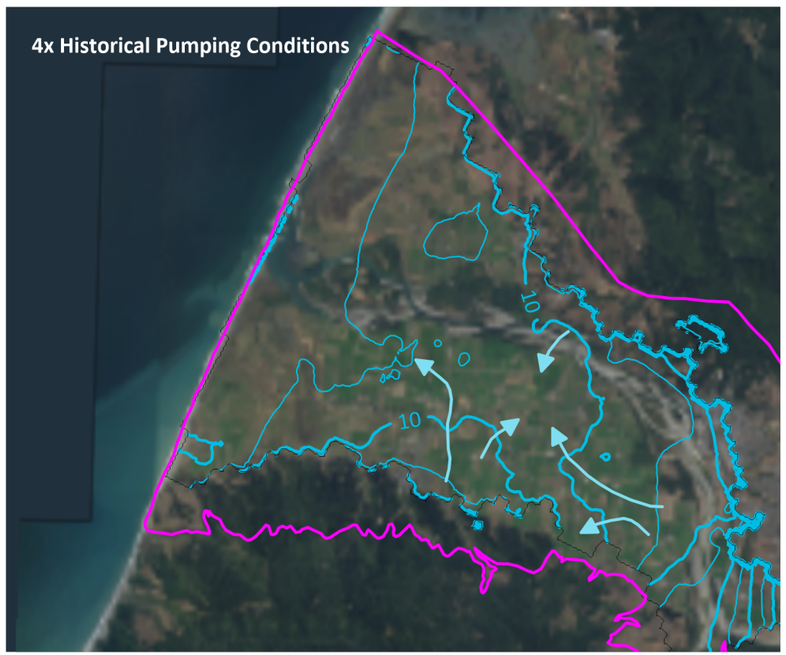
Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.3 March and September 2003 Groundwater Lowering.srf
Plot Date: January 10 2022 11:01 AM

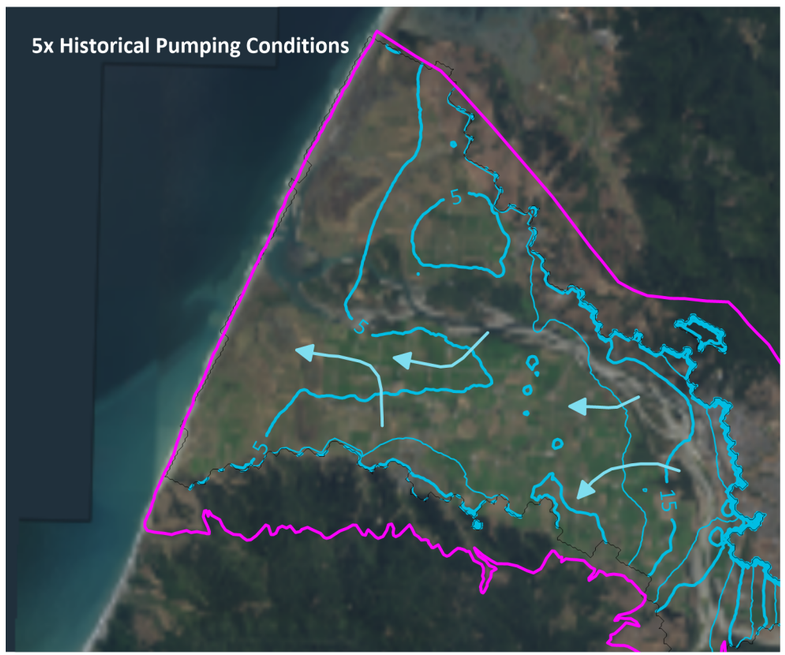












Legend

—10— 5 foot Interval Groundwater Elevation Contour (feet NAVD88)

Groundwater Flow Direction

Note:

Groundwater elevations represent average dry conditions from September 2003 with a range of increased pumping conditions to represent potential future demand and evaluate sustainable yield.

0 7,500 15,000ft

N

GHD

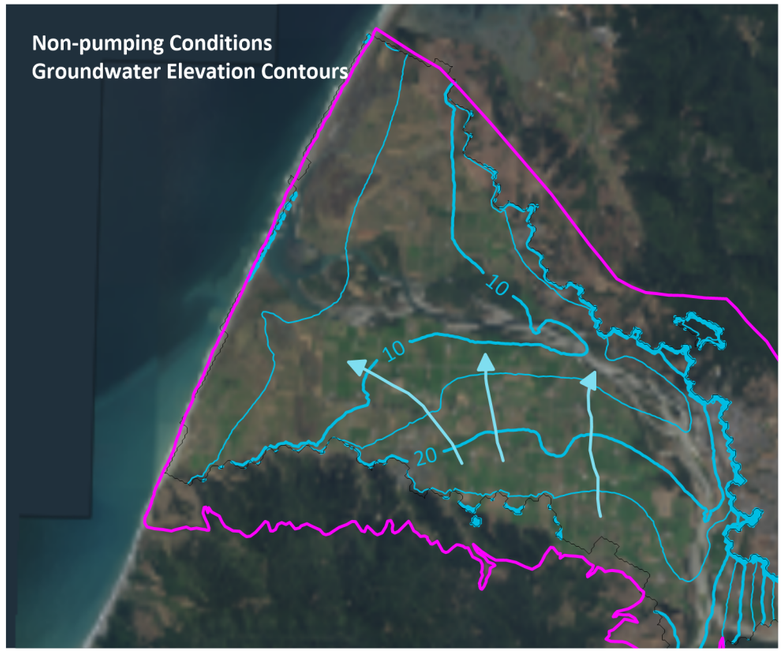
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

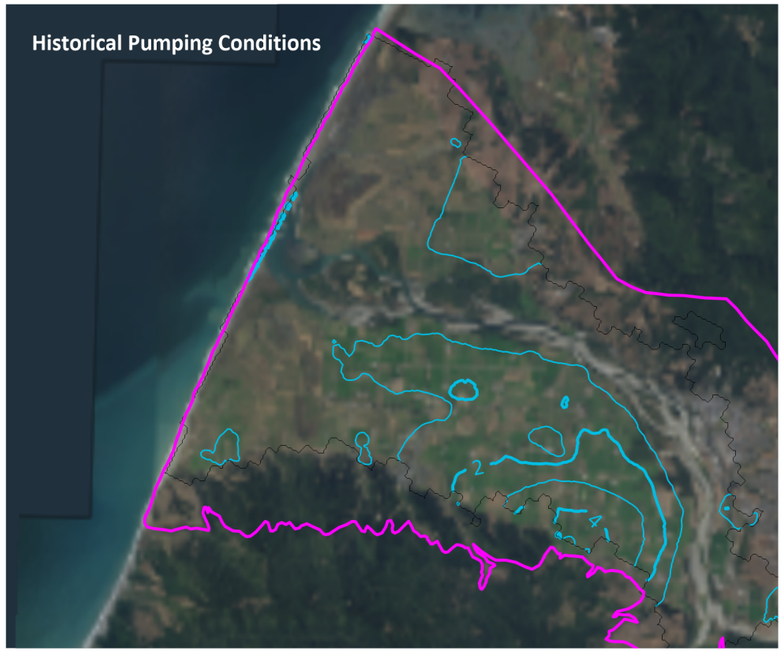
INCREASED PUMPING GROUNDWATER ELEVATION CONTOURS

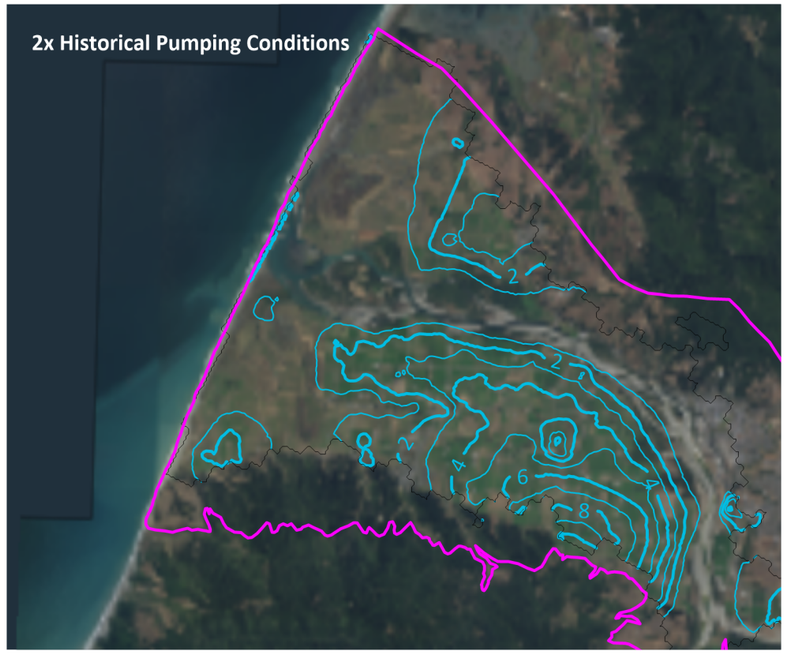
Project No. **11217388**
Date **November 2021**

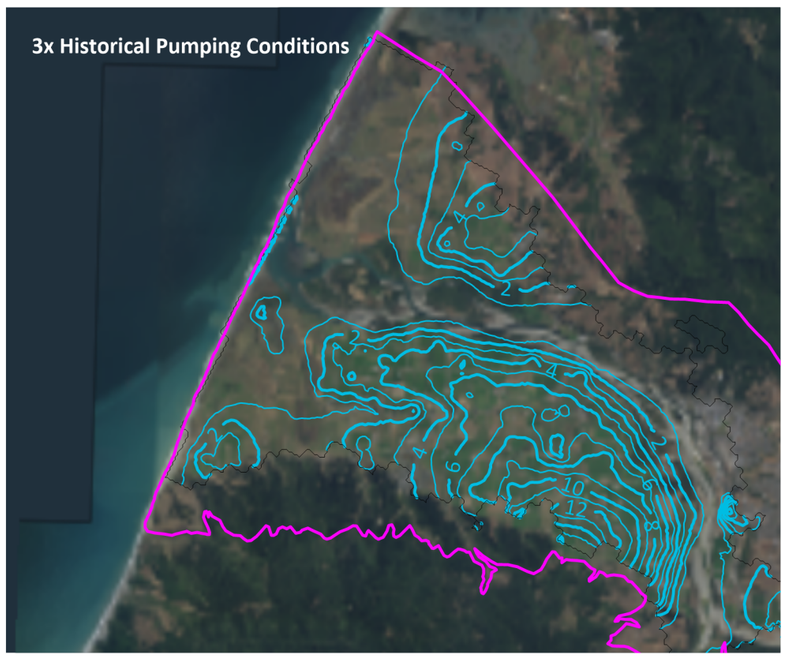
FIGURE 6.4

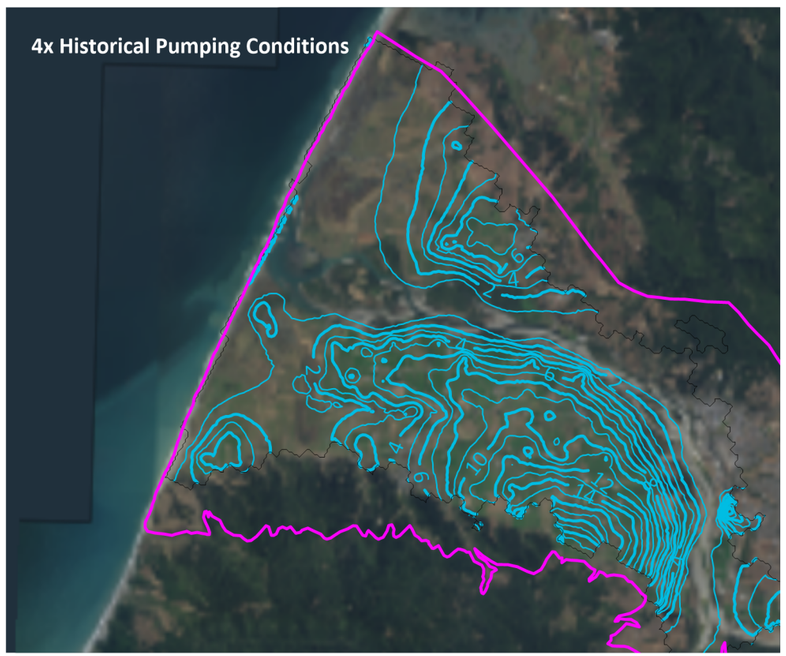
Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.4 GWE IncreasedPumping.srf
Plot Date: November 17 2021 7:11 PM

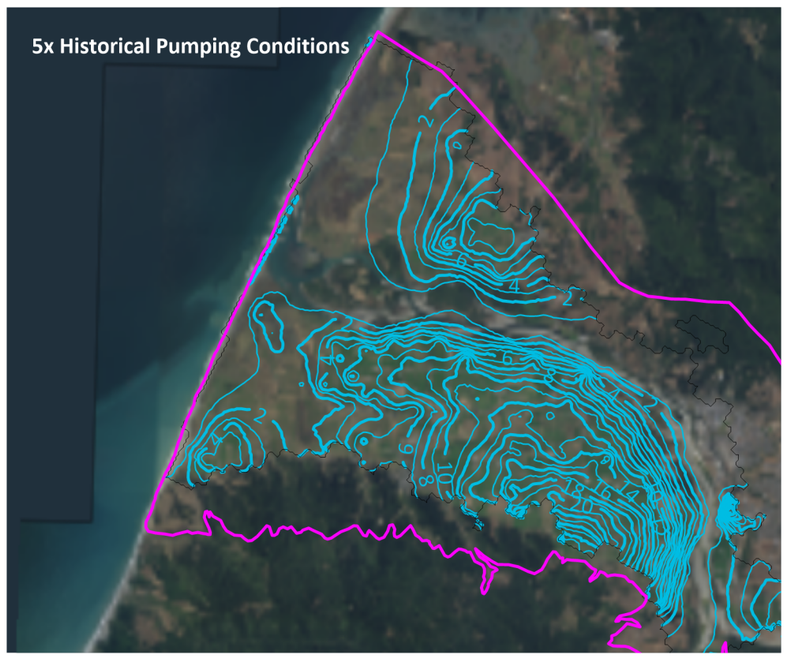












Legend

—10— 1 foot Interval Groundwater Elevation Lowering Contour (feet)/ 5 foot Interval Groundwater Elevation Contour - Non-Pumping Conditions (feet NAVD88)

Non-Pumping Conditions Groundwater Flow Direction

Note:

Groundwater elevation lowering represent average dry conditions from September 2003 with a range of increased pumping conditions to represent potential future demand and evaluate sustainable yield.

0 7,500 15,000ft

N

GHD

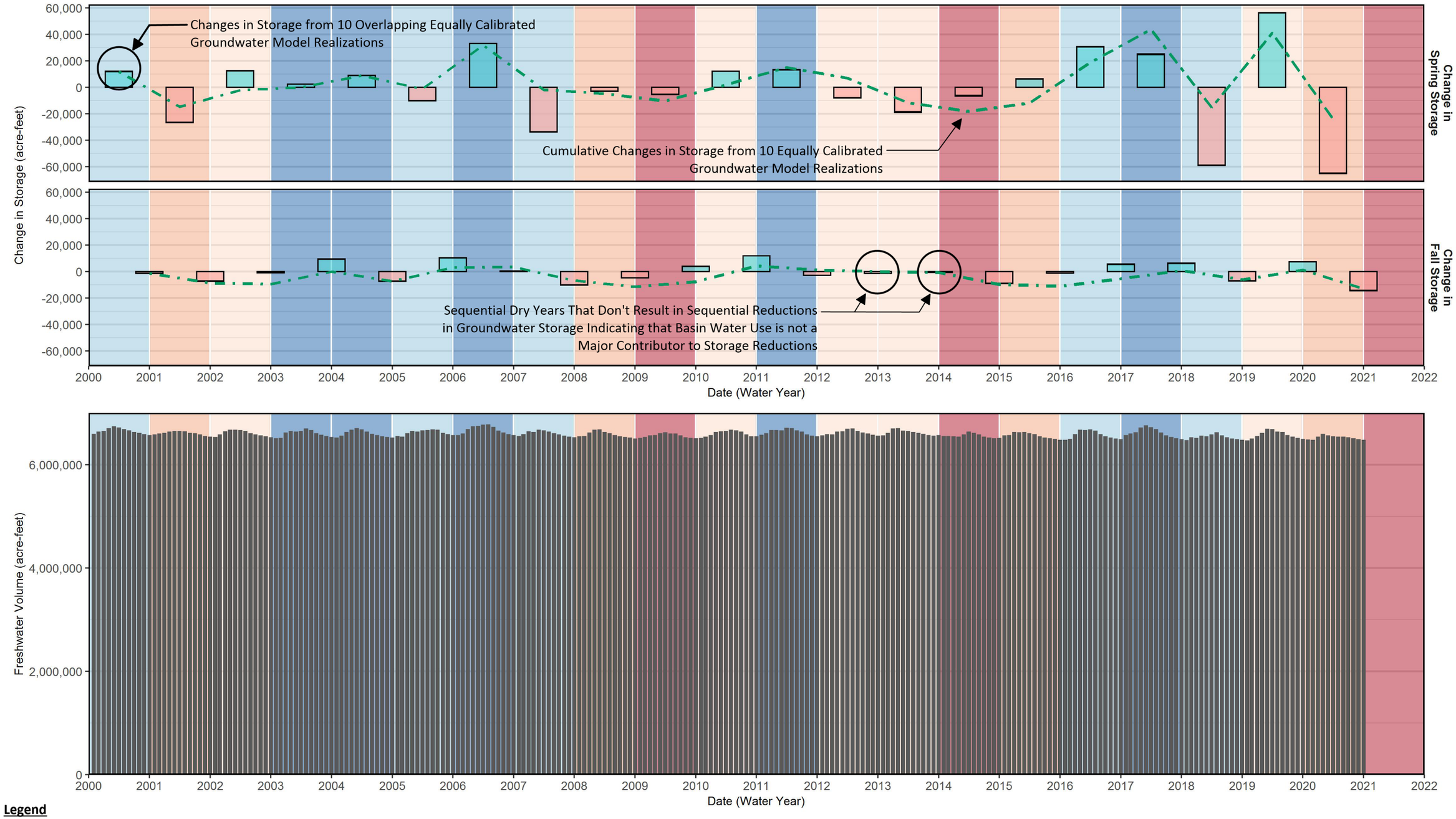
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

INCREASED PUMPING GROUNDWATER LOWERING CONTOURS

Project No. **11217388**
Date **November 2021**

FIGURE 6.5

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.5 GWE Lowering IncreasedPumping.srf
Plot Date: November 17 2021 7:11 PM



Legend

- Positive Change in Storage
- Negative Change in Storage
- Cumulative Change in Storage

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

Note:

Storage is calculated for groundwater in Quaternary alluvium

Freshwater volume is calculated for groundwater in transmissive water-bearing units including channel deposits, Quaternary alluvium, and Carlotta Formation

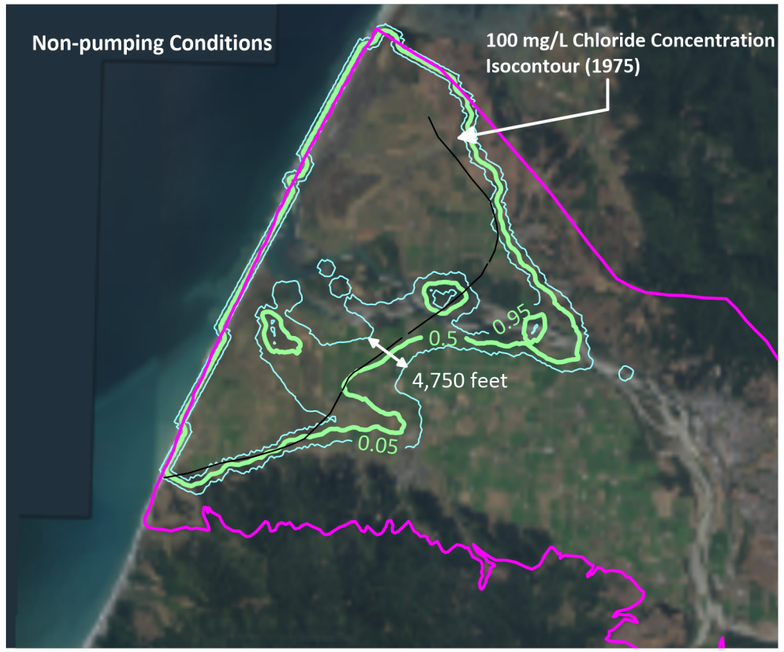
GHD

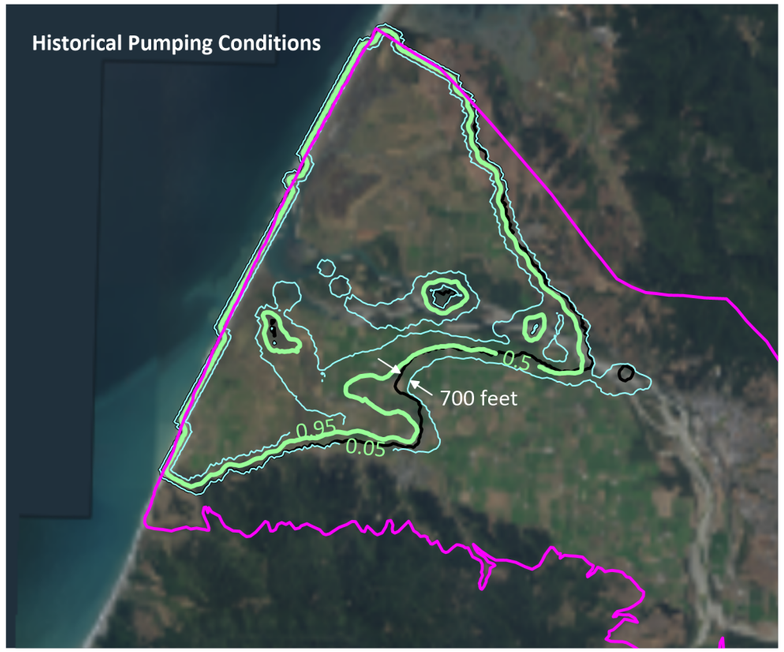
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN
CHANGE AND CUMULATIVE CHANGE IN GROUNDWATER STORAGE AND TOTAL FRESHWATER VOLUME

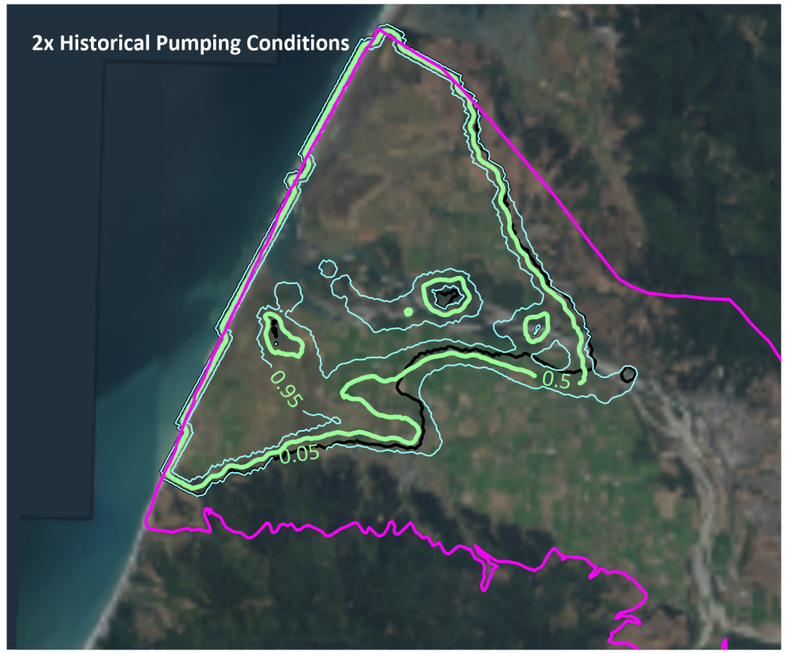
Project No. **11217388**
Date **January 2022**

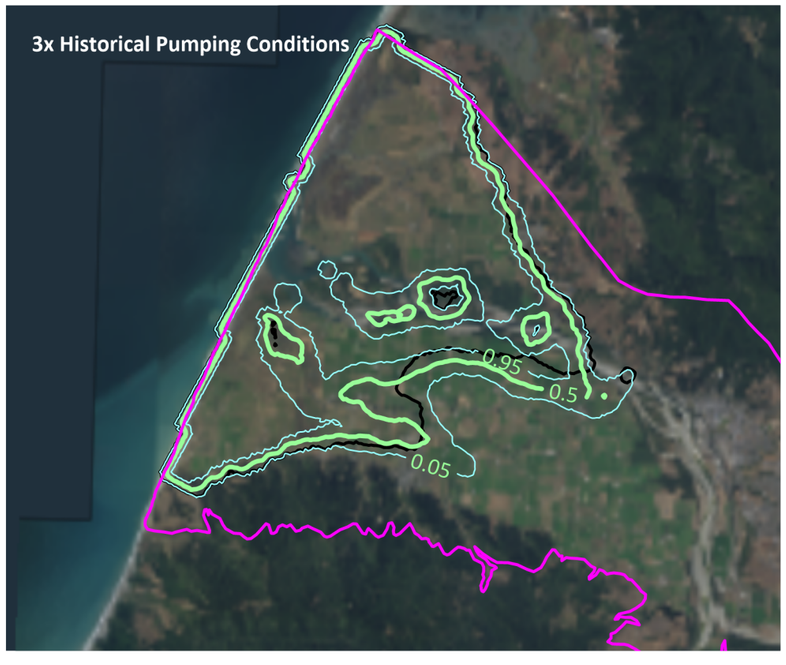
FIGURE 6.6

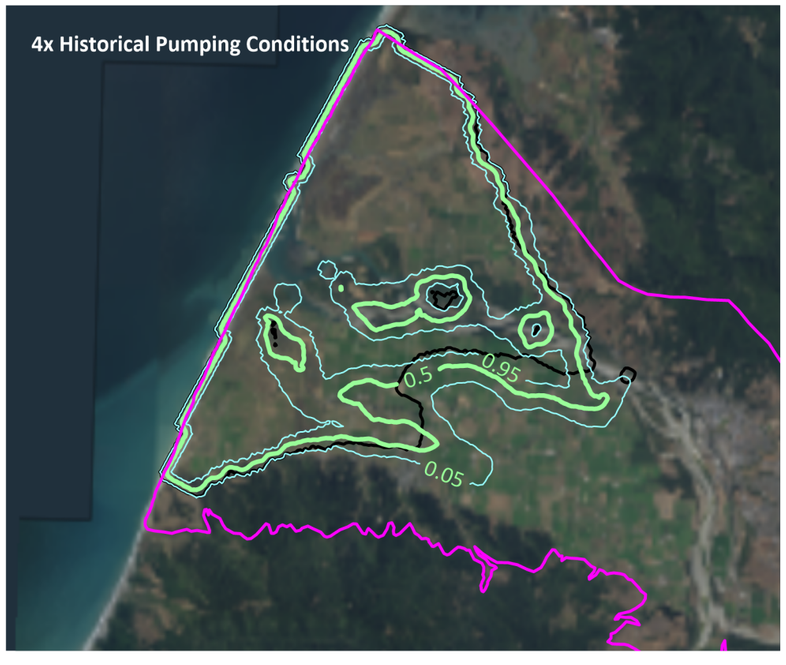
Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.6 SpringAndFallChangeInStorageWithBasinTotalVolume.srf
Plot Date: January 06 2022 8:01 AM

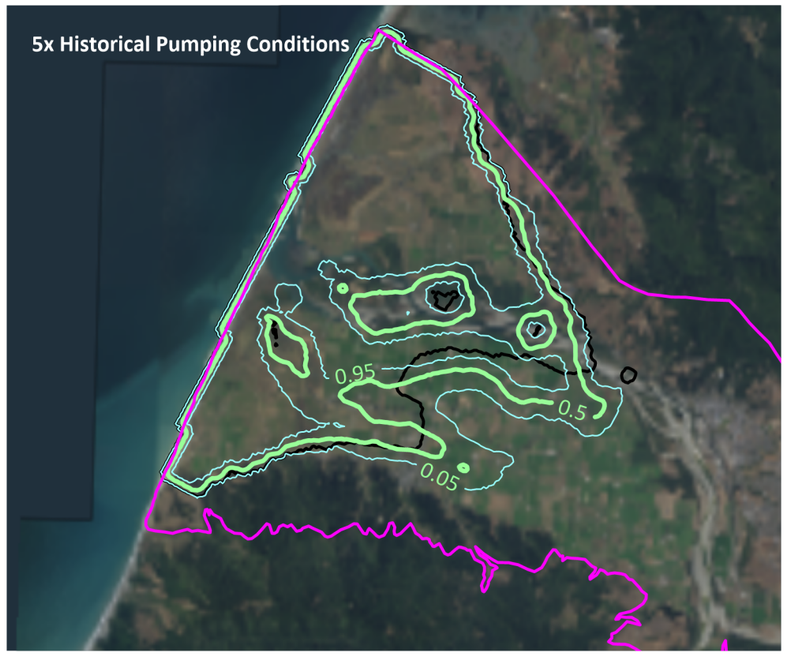












Legend

Isocontours representing 95% and 5% frequency within which chloride concentrations are equal to or greater than 100 mg/L

Isocontour representing 50% frequency within which chloride concentrations are equal to or greater than 100 mg/L

Note:
Black contour under pumping conditions represents 5% isocontour for non-pumping conditions. This is included as a reference line.

0 7,500 15,000ft

N

GHD

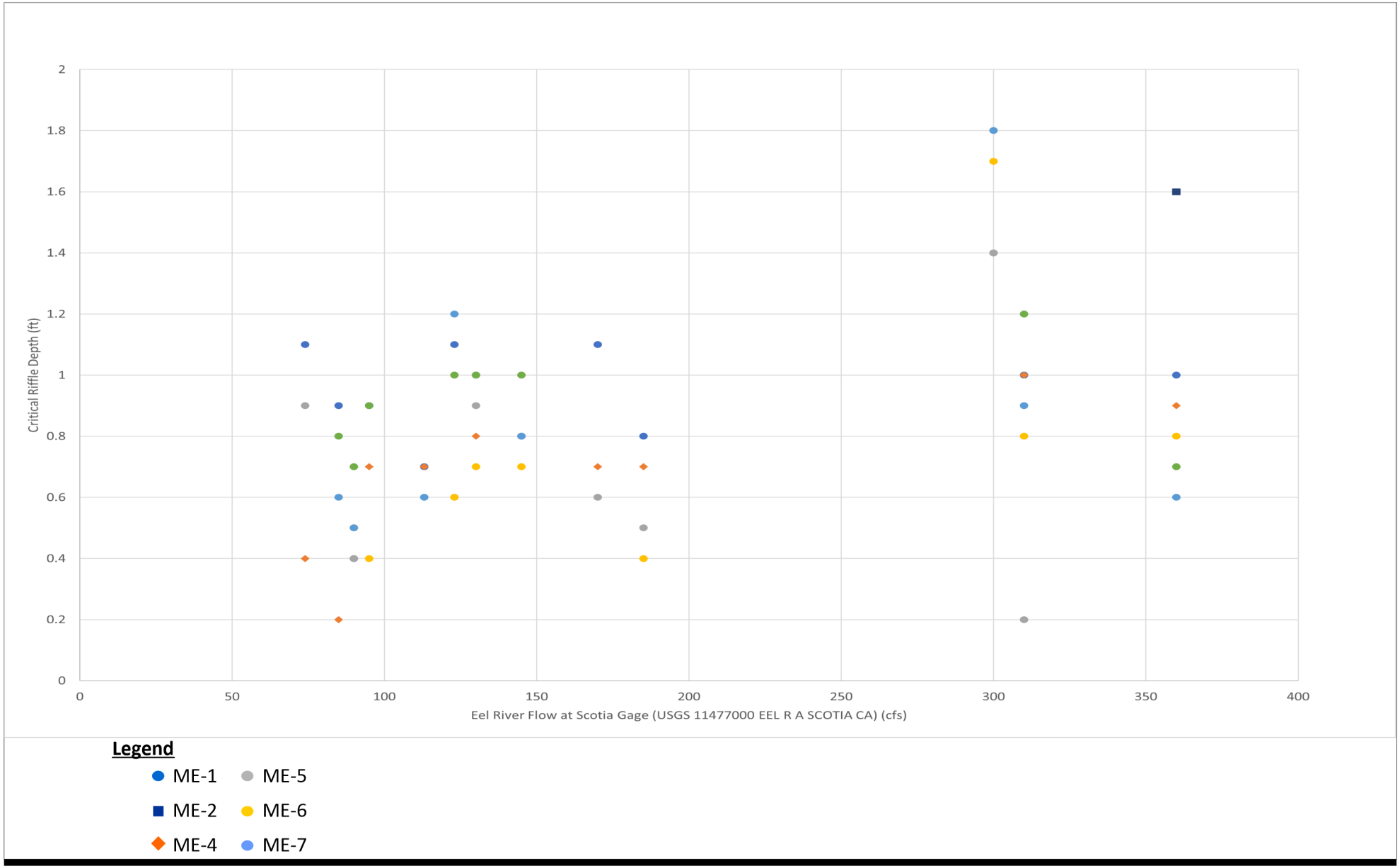
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

SEAWATER INTRUSION UNDER INCREASED WATER USE

Project No. **11217388**
Date **November 2021**

FIGURE 6.7

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.7 SaltwaterIntrusionIncreasedPumping.srf
Plot Date: November 17 2021 7:11 PM



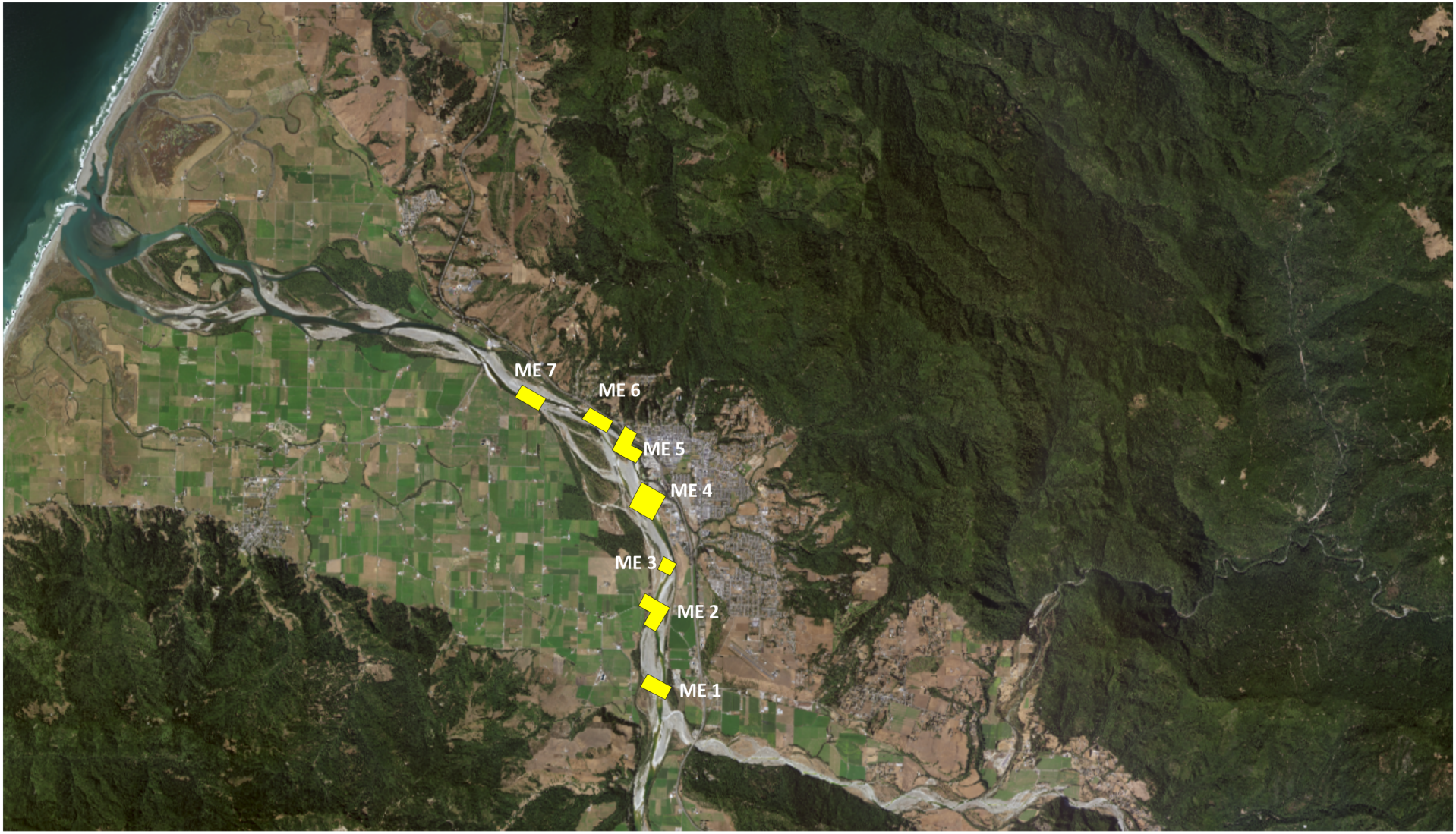
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

EEL RIVER CRITICAL RIFFLE DEPTH BY FLOW 2006-2020 (STILLWATER SCIENCES 2021)

Project No. **11217388**
Date **November 2021**

FIGURE 6.8

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.8 Critical Riffle Data.srf
Plot Date: November 17 2021 7:11 PM



0 1 2miles

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GHD

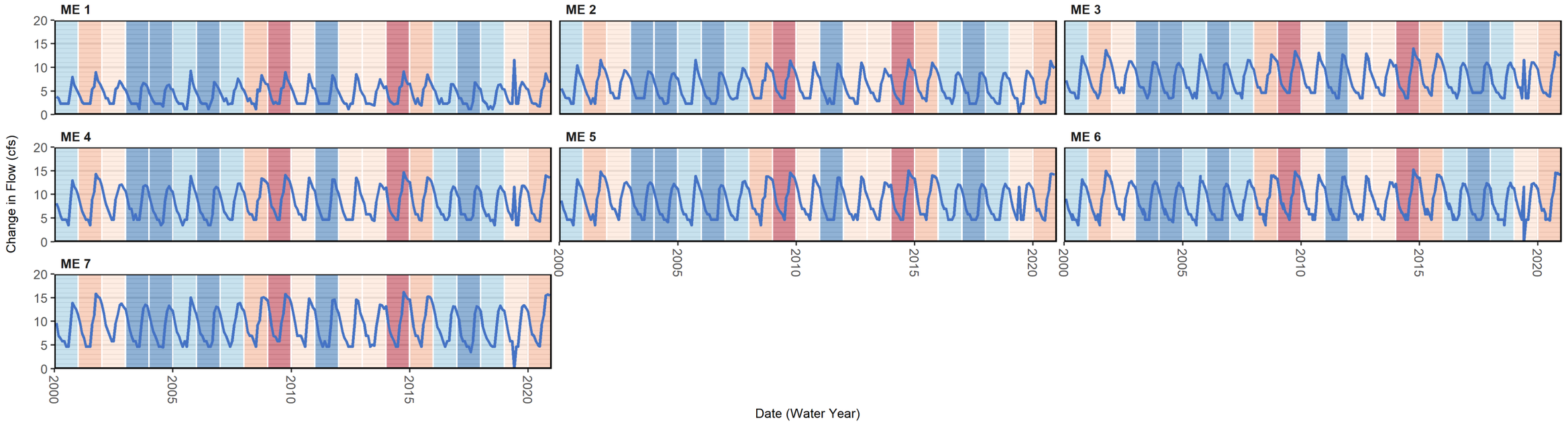
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

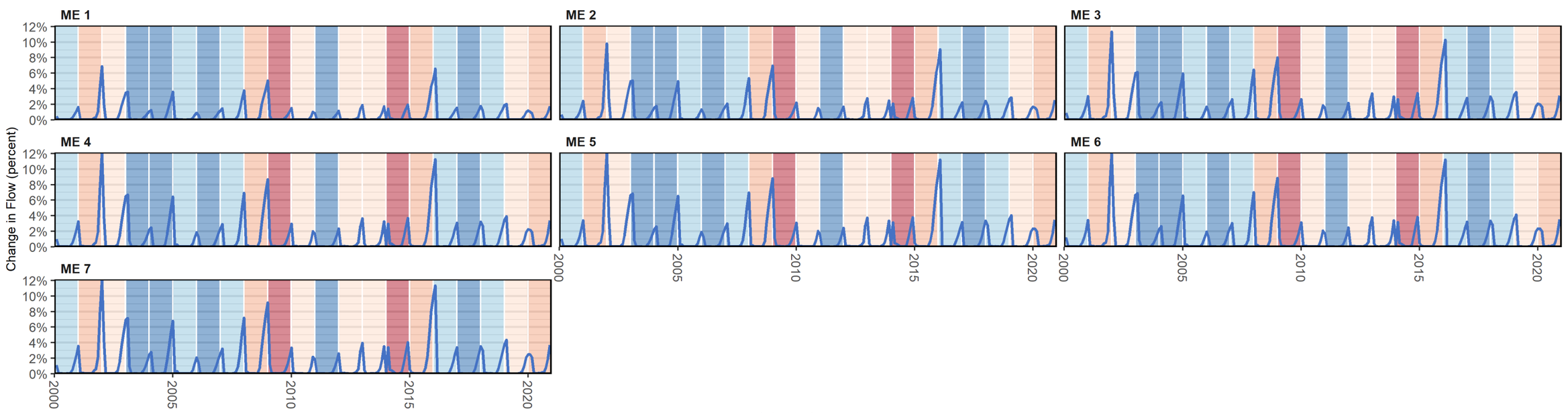
SURFACE WATER DEPLETION LOCATIONS OF INTEREST

Project No. **11217388**
Date **November 2021**

FIGURE 6.9

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.9 Surface Water Depletion.srf
Plot Date: November 17 2021 7:11 PM





Legend

Change and Percent Change in Flow Compared to Non-Pumping Conditions

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

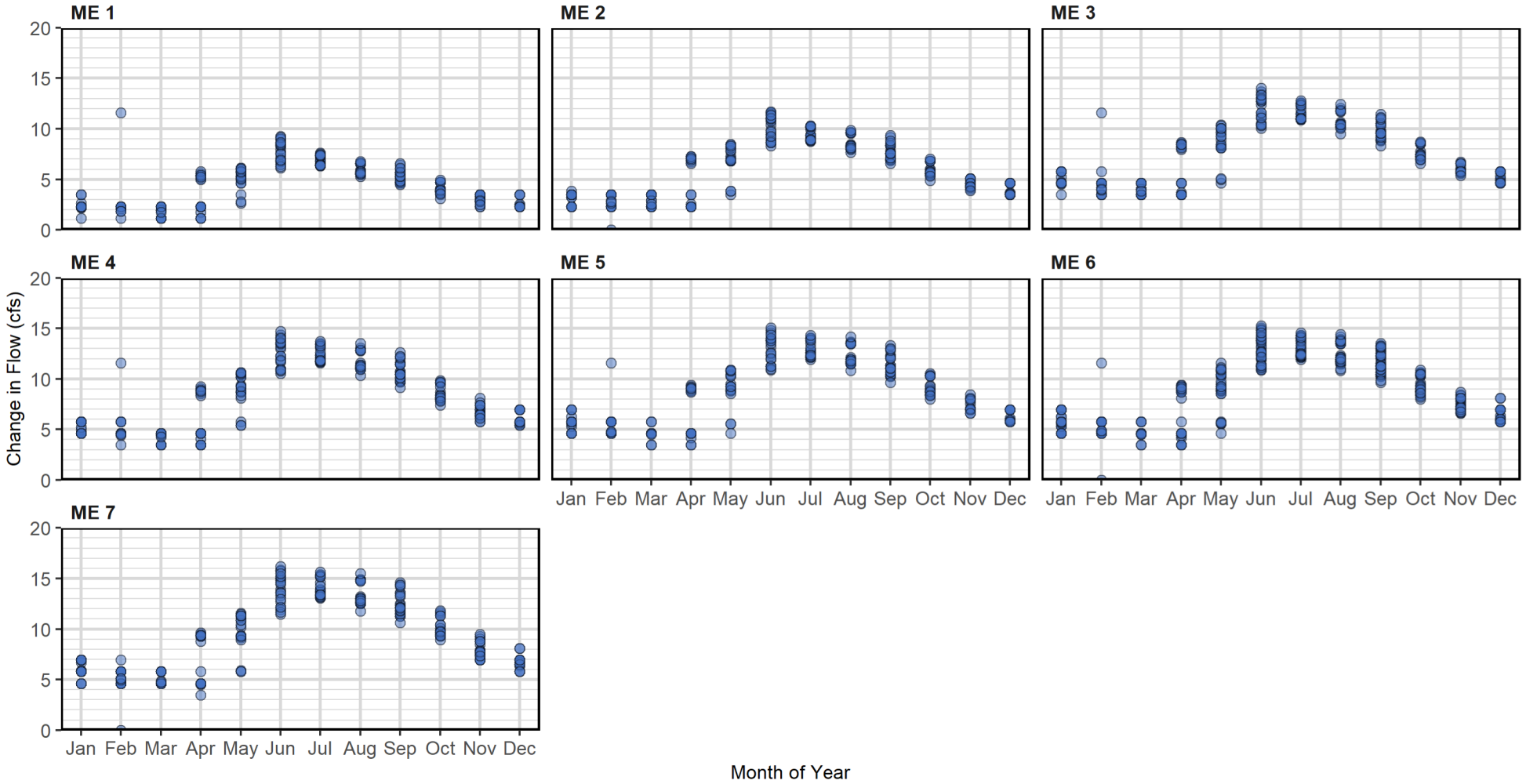
GHD

HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN
MONTHLY AVERAGE CHANGE AND PERCENT CHANGE IN EEL RIVER FLOW RATES

Project No. **11217388**
Date **January 2022**

FIGURE 6.10

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.10 Monthly Average and Percent Change in Eel River Flow Rates.srf
Plot Date: January 06 2022 9:01 AM



Legend

- Change in Flow from Non-Pumping Conditions

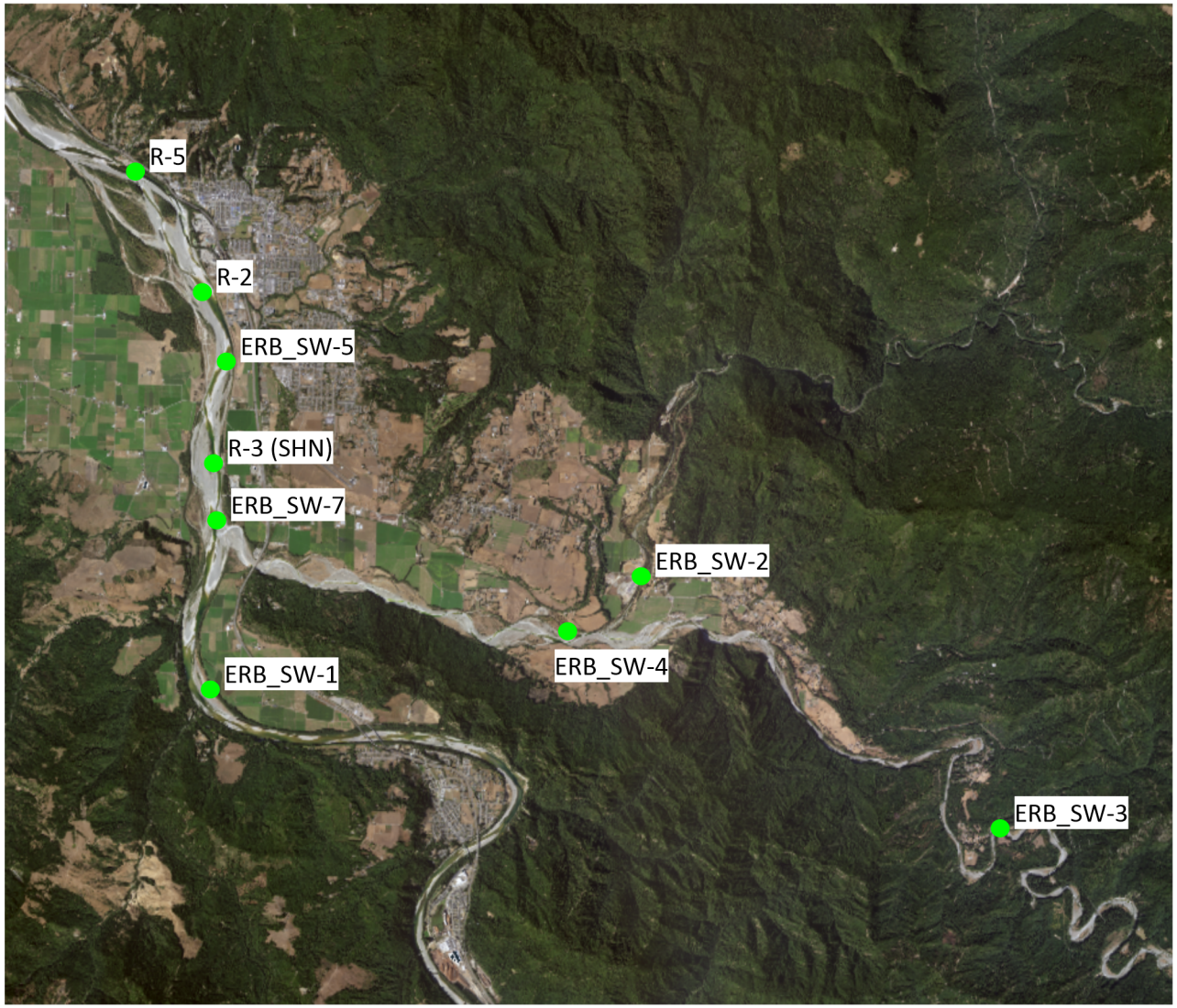
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

EEL RIVER CHANGE IN FLOW WITH AND WITHOUT EXTRACTION

Project No. **11217388**
Date **January 2022**

FIGURE 6.11

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.11 Year to Year Monthly Average Change in Eel River Flow.srf
Plot Date: January 06 2022 7:01 AM



0 1 2miles

N

GHD

HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

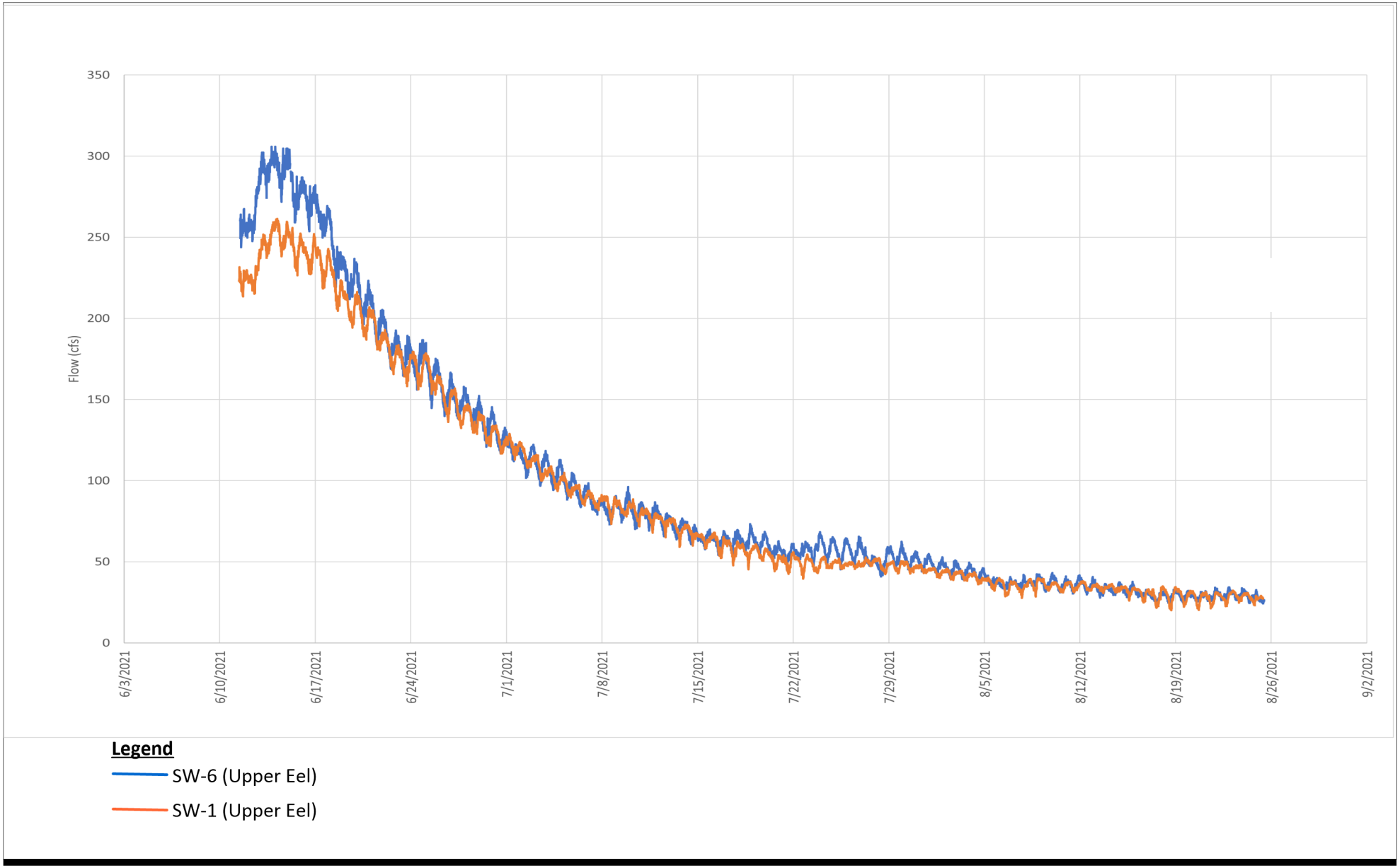
EEL RIVER GROUNDWATER ASSESSMENT SURFACE WATER MONITORING SITES

Project No. **11217388**
Date **November 2021**

FIGURE 6.12

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.12 Stream Gage Locations.srf
Plot Date: November 17 2021 7:11 PM

Data Source



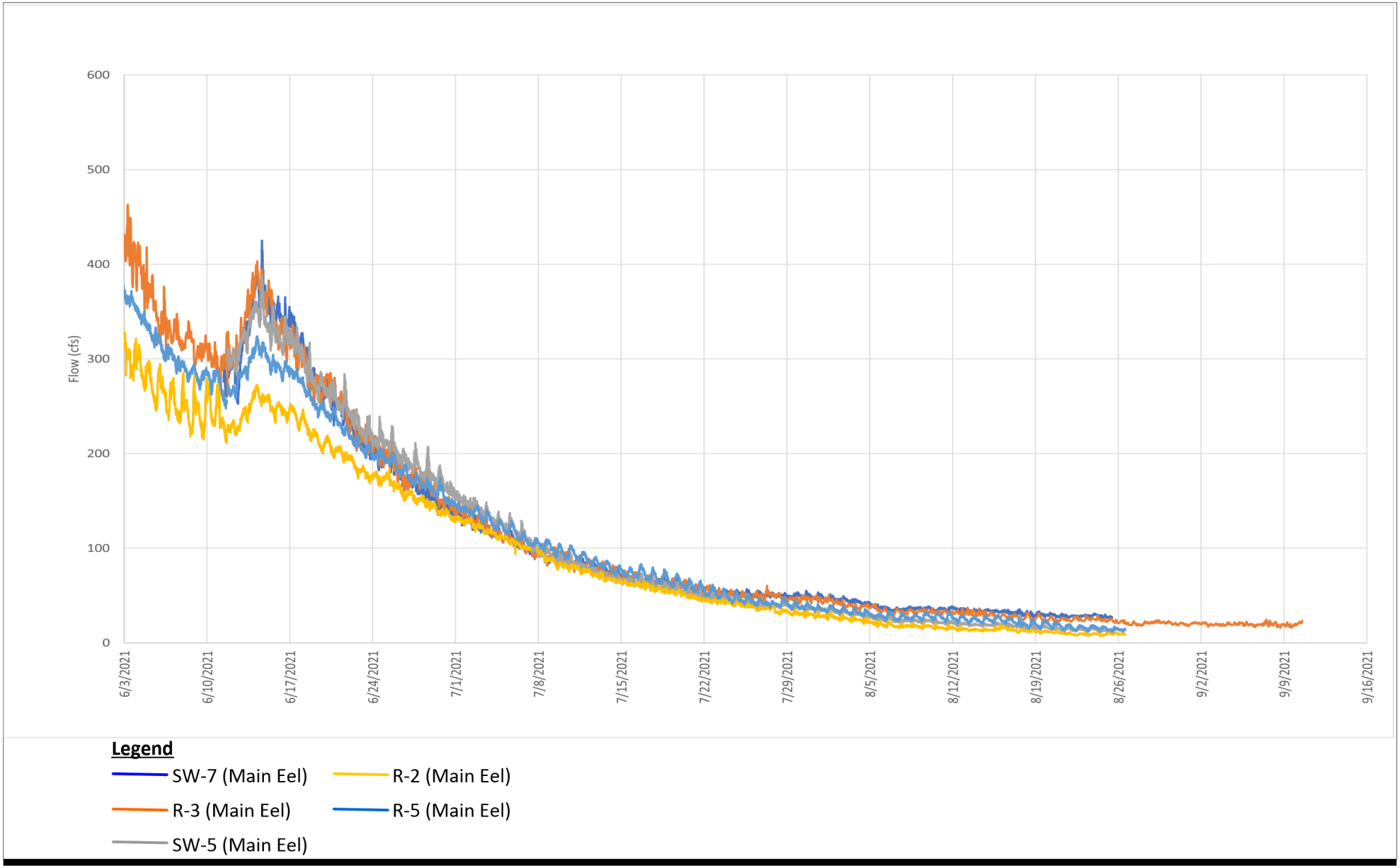
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

EEL RIVER FLOW MEASUREMENTS
(UPPER EEL ABOVE VAN DUZEN CONFLUENCE)

Project No. **11217388**
Date **November 2021**

FIGURE 6.13

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.13 Upper Eel Monitored Stream Flow.srf
Plot Date: November 17 2021 7:11 PM



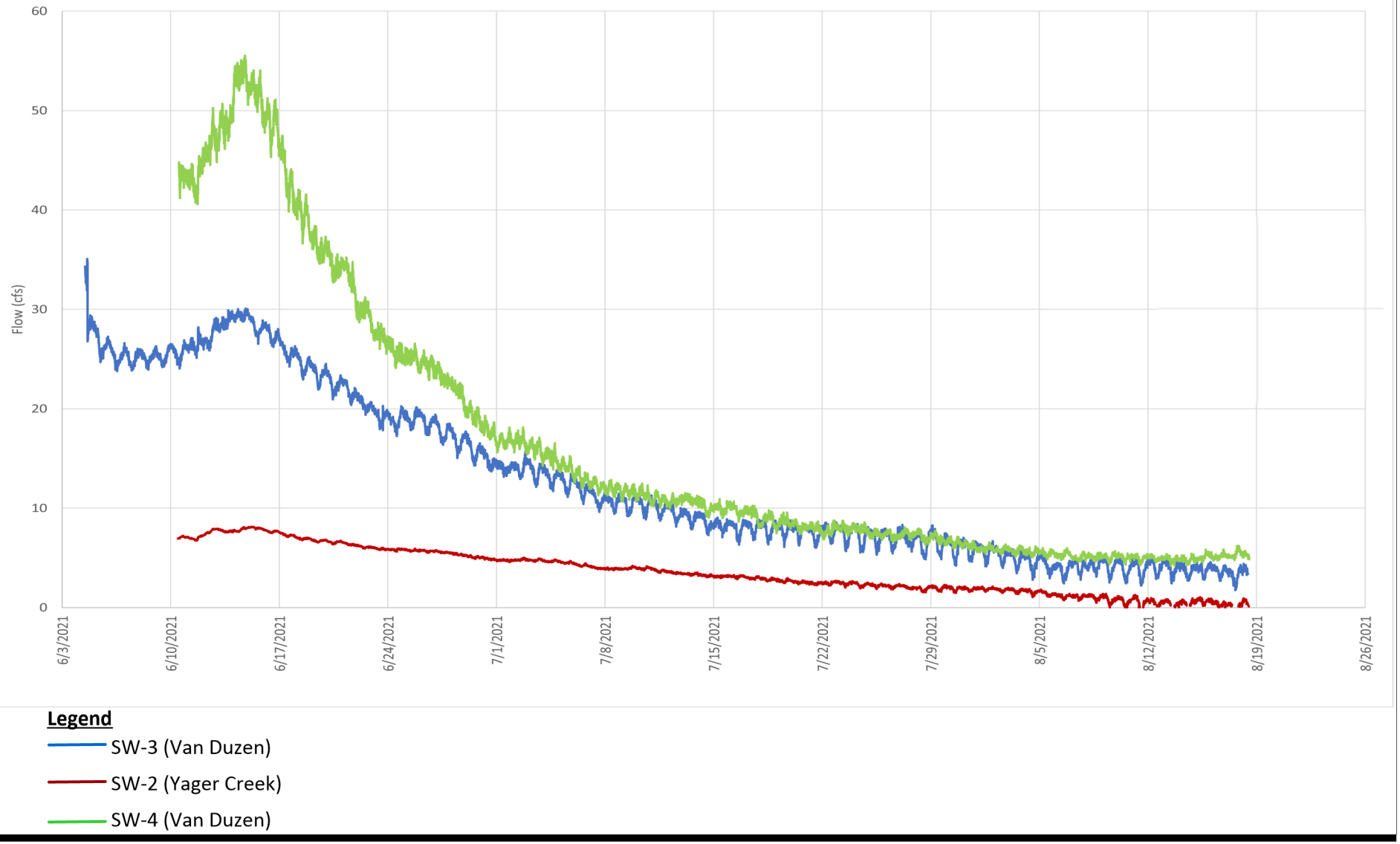
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

EEL RIVER FLOW MEASUREMENTS
(MAIN EEL BELOW VAN DUZEN CONFUENCE)

Project No. **11217388**
Date **November 2021**

FIGURE 6.14

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.14 Main Eel Monitored Stream Flow.srf
Plot Date: November 17 2021 7:11 PM



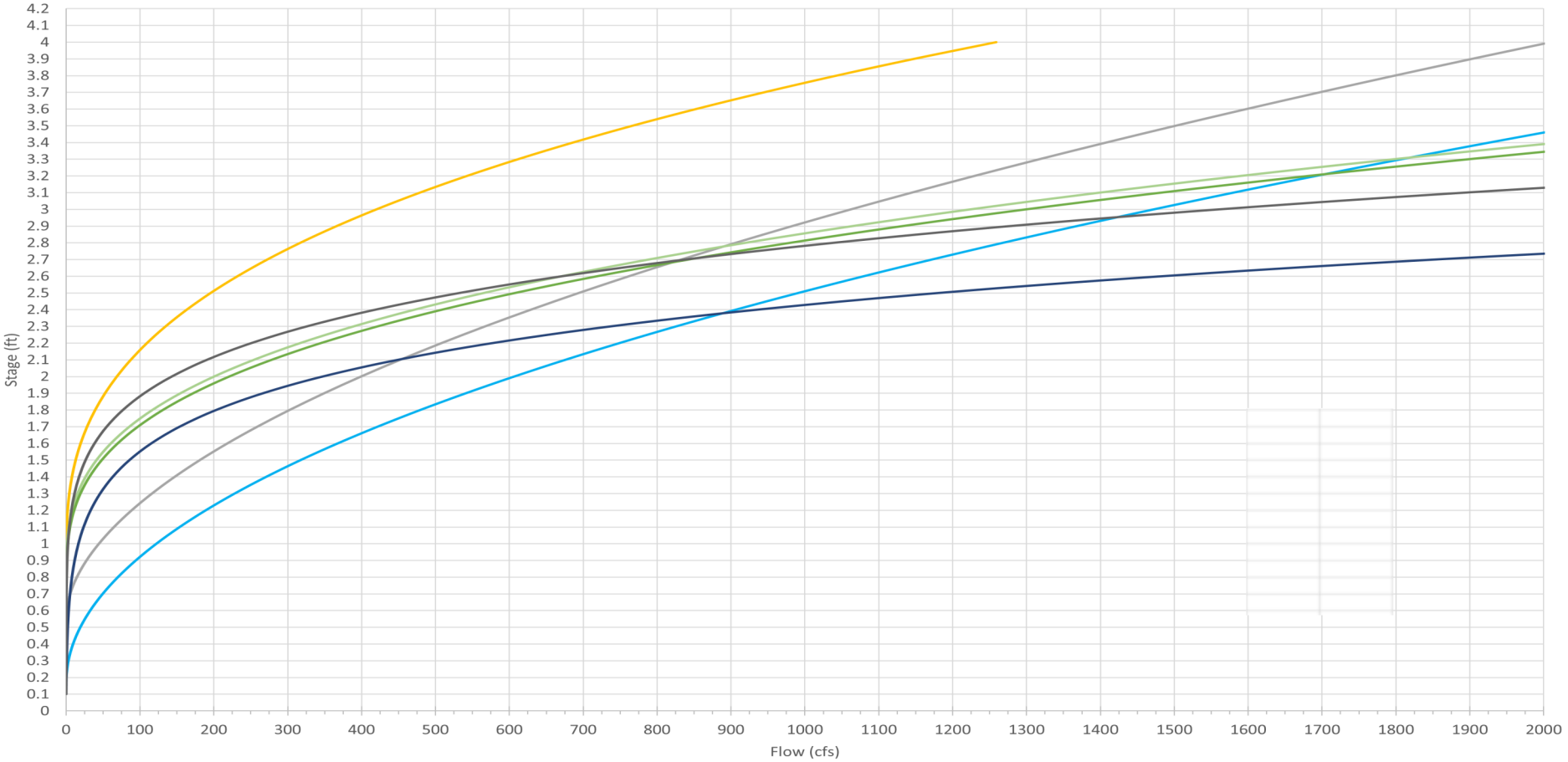
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

VAN DUZEN RIVER AND YAGER CREEK FLOW MEASUREMENTS

Project No. **11217388**
Date **November 2021**

FIGURE 6.15

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.15 Van Duzen Monitored Stream Flow.srf
Plot Date: November 17 2021 7:11 PM



Legend

- R-2 2
- SW-4
- R-3 2
- R-5
- SW-5 1
- SW-4
- SW-5-2

GHD

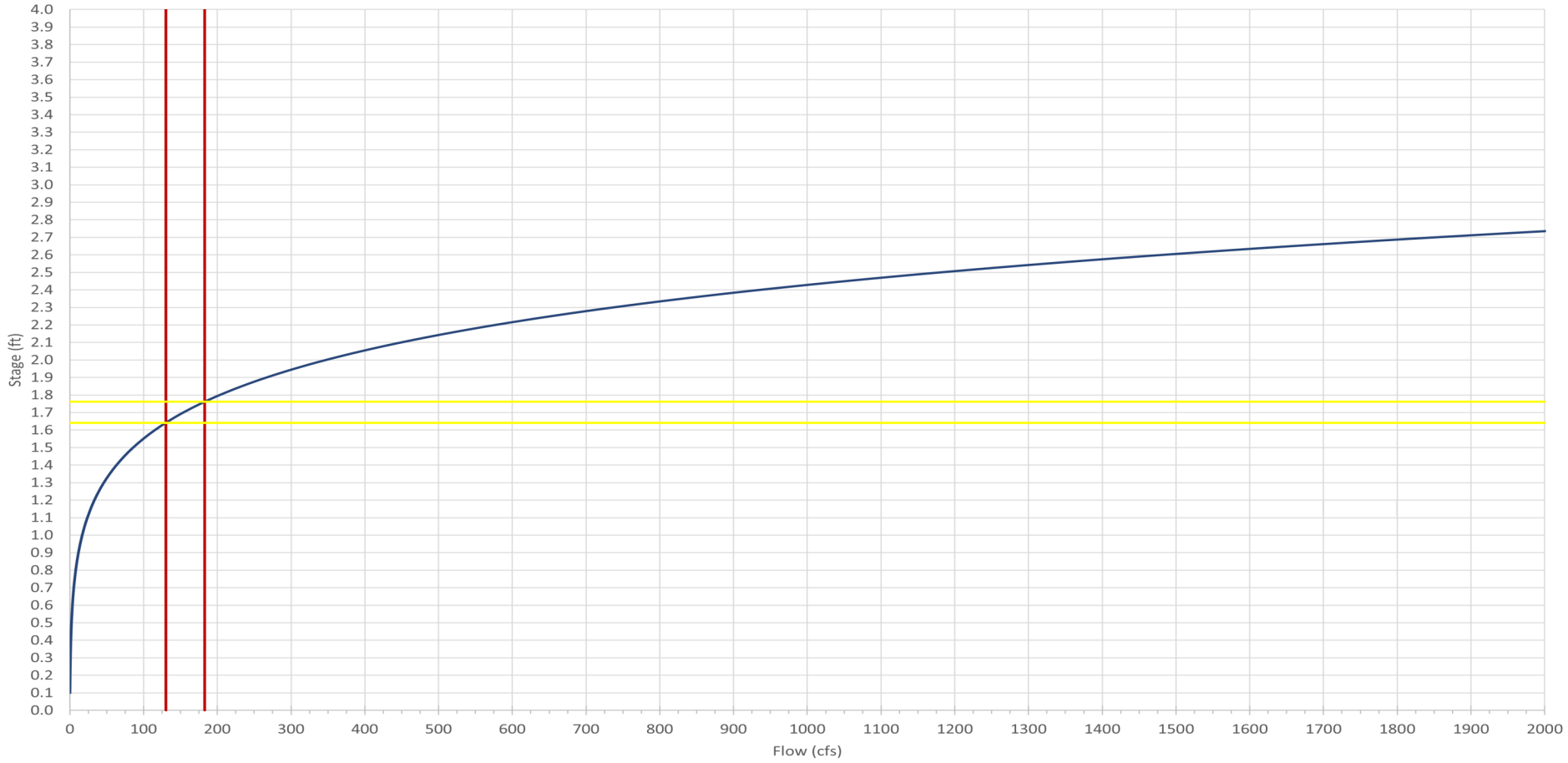
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

EEL RIVER DISCHARGE CURVES BY GAGE STATION

Project No. **11217388**
Date **November 2021**

FIGURE 6.16

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.16 Stage Dischagre Curve.srf
Plot Date: November 17 2021 7:11 PM



Legend

SW-7 Stream Gage

GHD

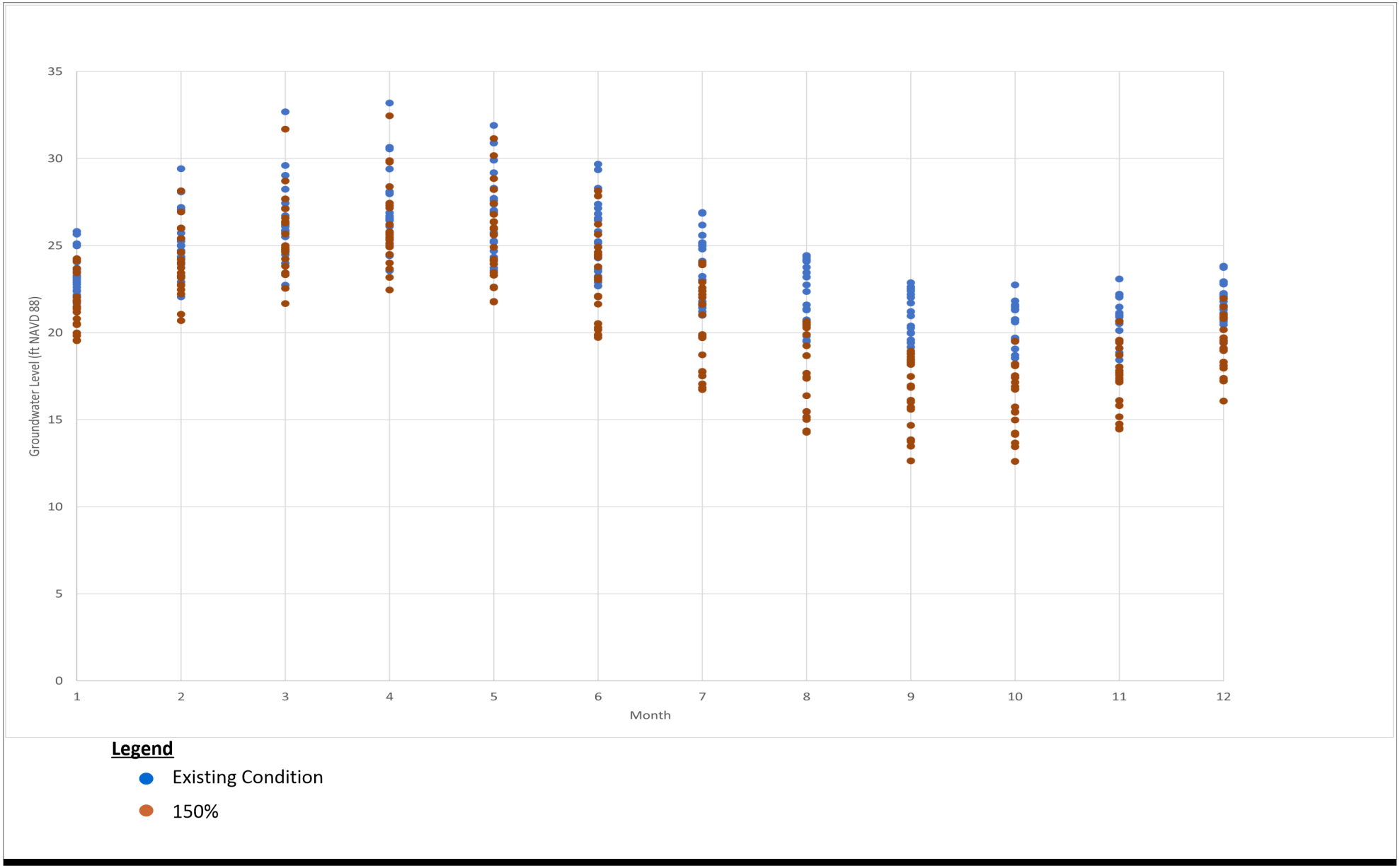
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

EEL RIVER ME-1
SW-7 STAGE DISCHARGE CURVE

Project No. **11217388**
Date **November 2021**

FIGURE 6.17

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.17 Stage Dischage Curve for SW-7.srf
Plot Date: November 17 2021 7:11 PM



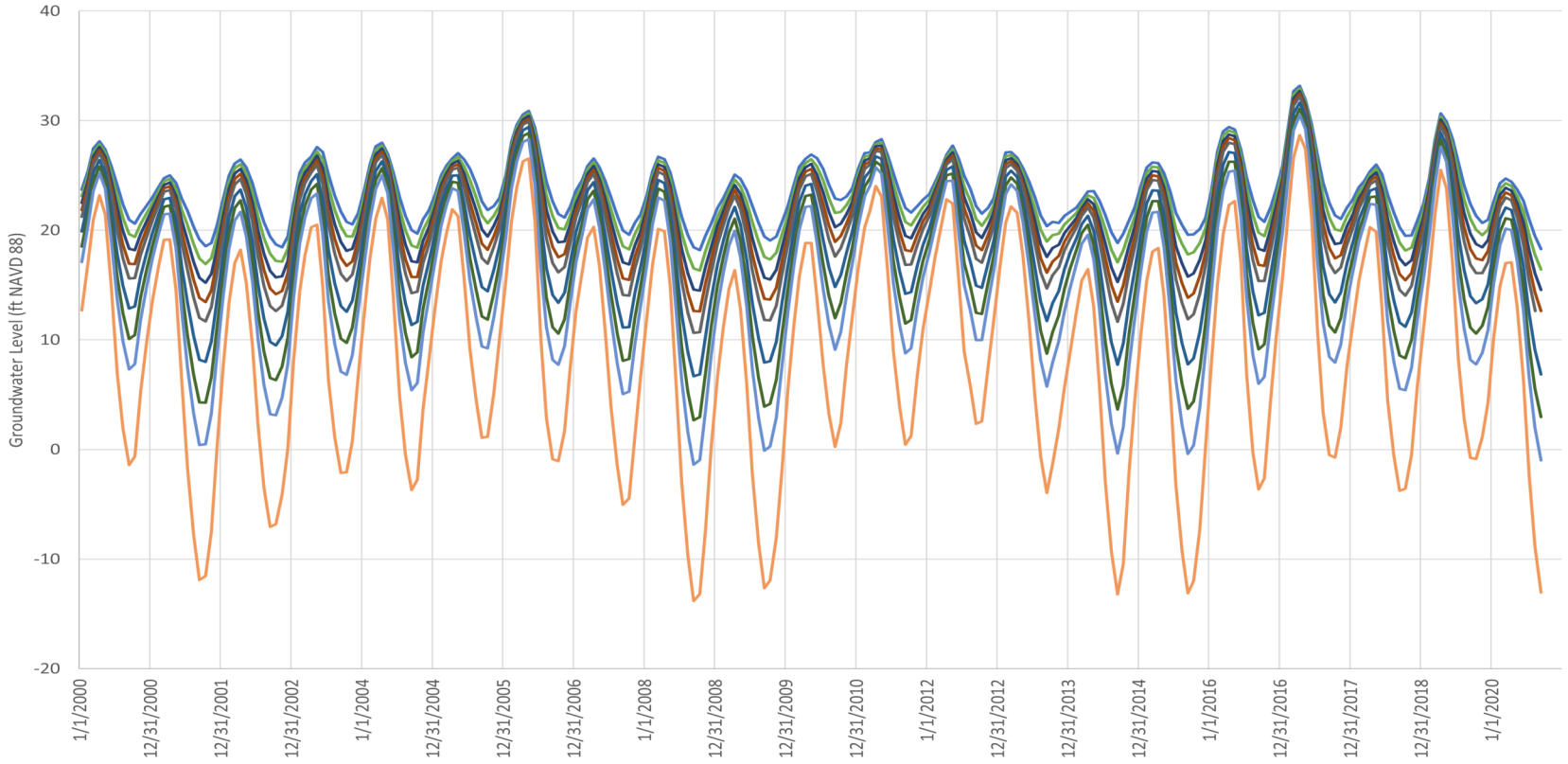
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

CASGEM 36942
MODELED HEAD BY MONTH

Project No. **11217388**
Date **November 2021**

FIGURE 6.18

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.18 Modeled Monthly Average Groundwater Levels by Month of CASGEM Well 36942.srf
Plot Date: November 17 2021 7:11 PM



Legend

Existing Condition	30%	100%	250%	500%
10%	40%	150%	300%	800%
20%	50%	200%	400%	

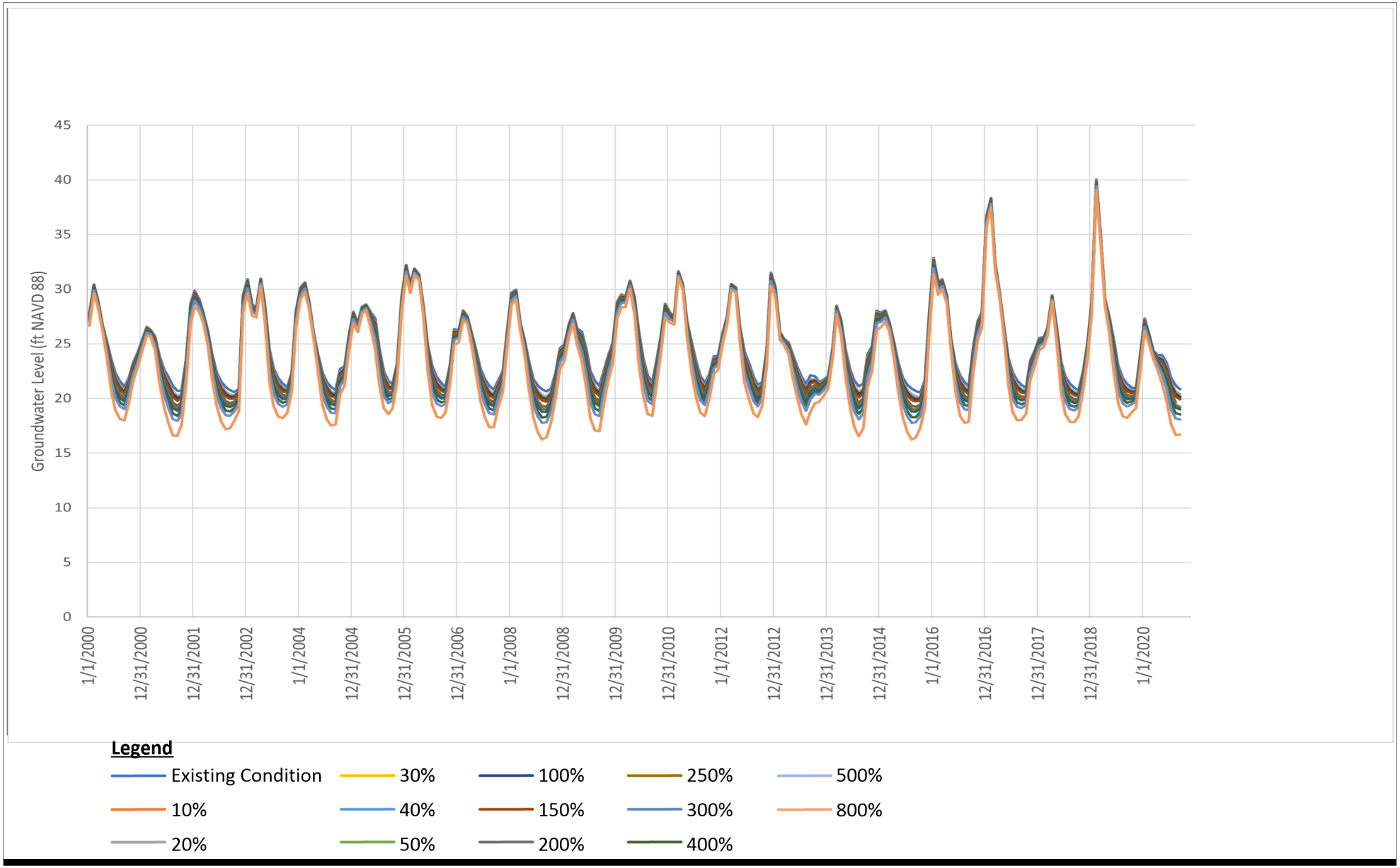
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

MONTHLY AVERAGE GROUNDWATER LEVELS CASGEM 36942

Project No. **11217388**
Date **November 2021**

FIGURE 6.19

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.19 Modeled Monthly Average Groundwater Levels of CASGEM Well 36942.srf
Plot Date: November 17 2021 8:11 PM



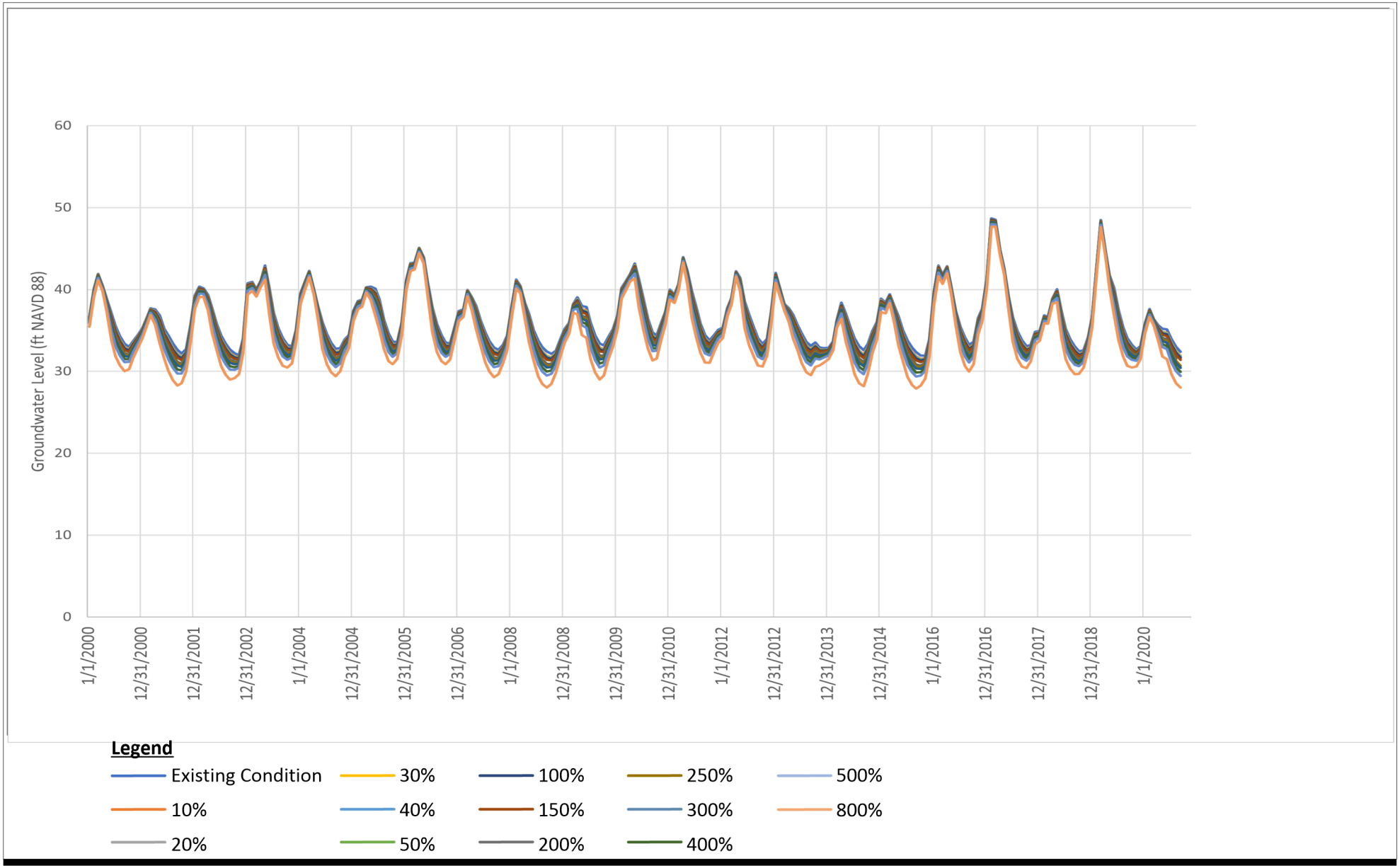
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

MONTHLY AVERAGE GROUNDWATER LEVELS MW-2s

Project No. **11217388**
Date **November 2021**

FIGURE 6.20

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.20 Modeled Monthly Average Groundwater Levels of Well MW-2s.srf
Plot Date: November 17 2021 8:11 PM



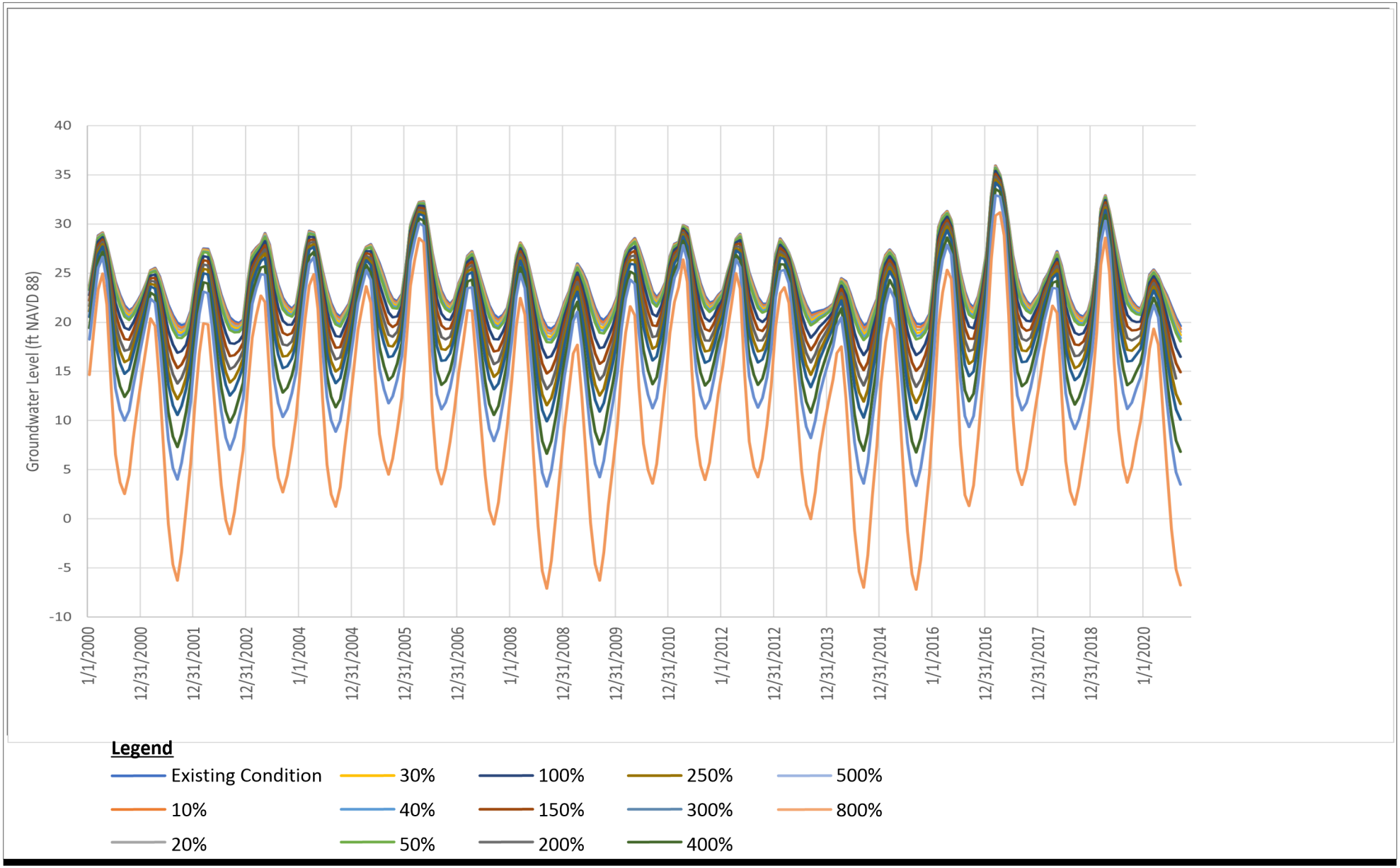
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

MONTHLY AVERAGE GROUNDWATER LEVELS MW-13

Project No. **11217388**
Date **November 2021**

FIGURE 6.21

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.21 Modeled Monthly Average Groundwater Levels of Well MW-13.srf
Plot Date: November 17 2021 8:11 PM



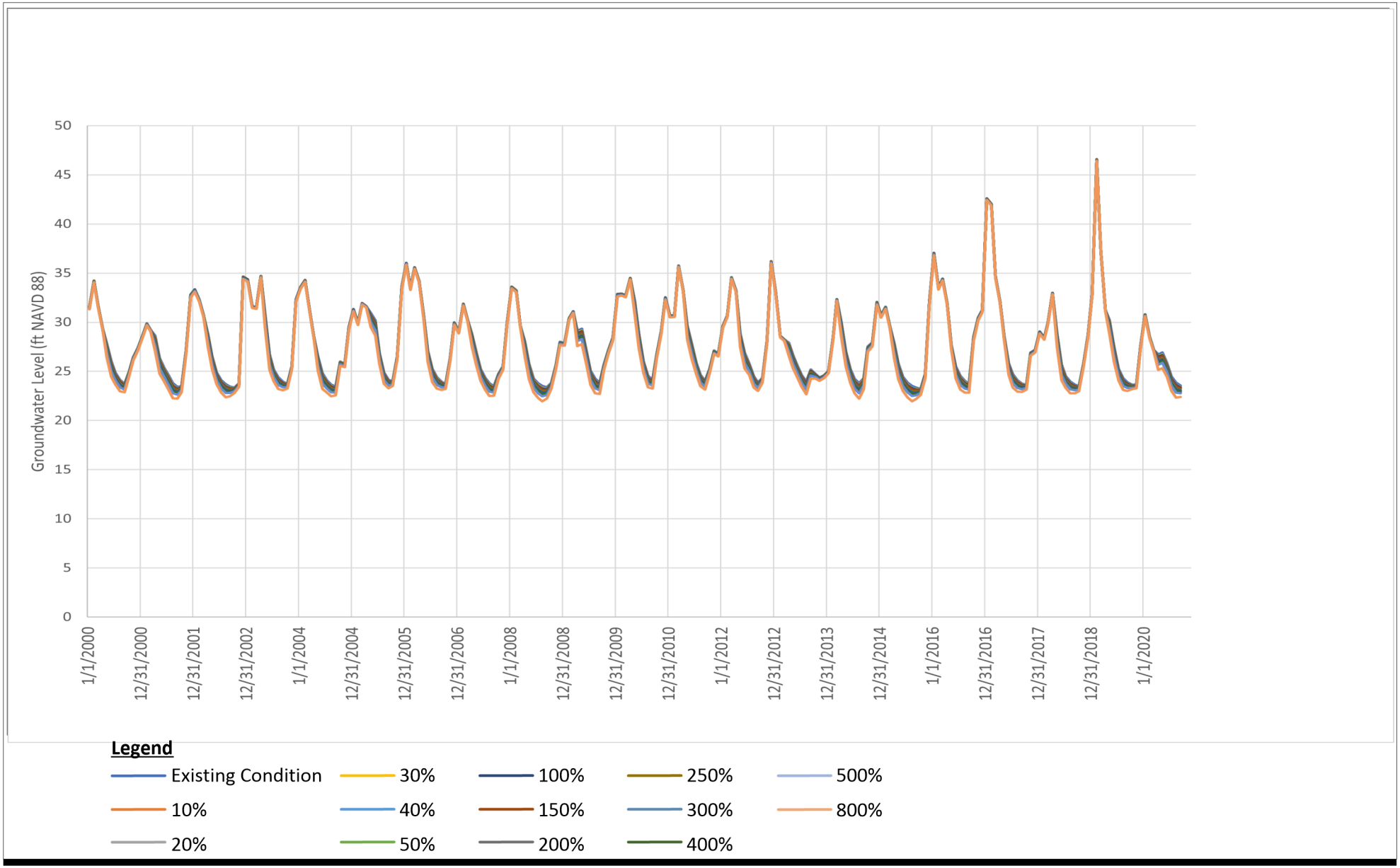
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

MONTHLY AVERAGE GROUNDWATER LEVELS MW-20

Project No. **11217388**
Date **November 2021**

FIGURE 6.22

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.22 Modeled Monthly Average Groundwater Levels of Well MW-20.srf
Plot Date: November 17 2021 8:11 PM



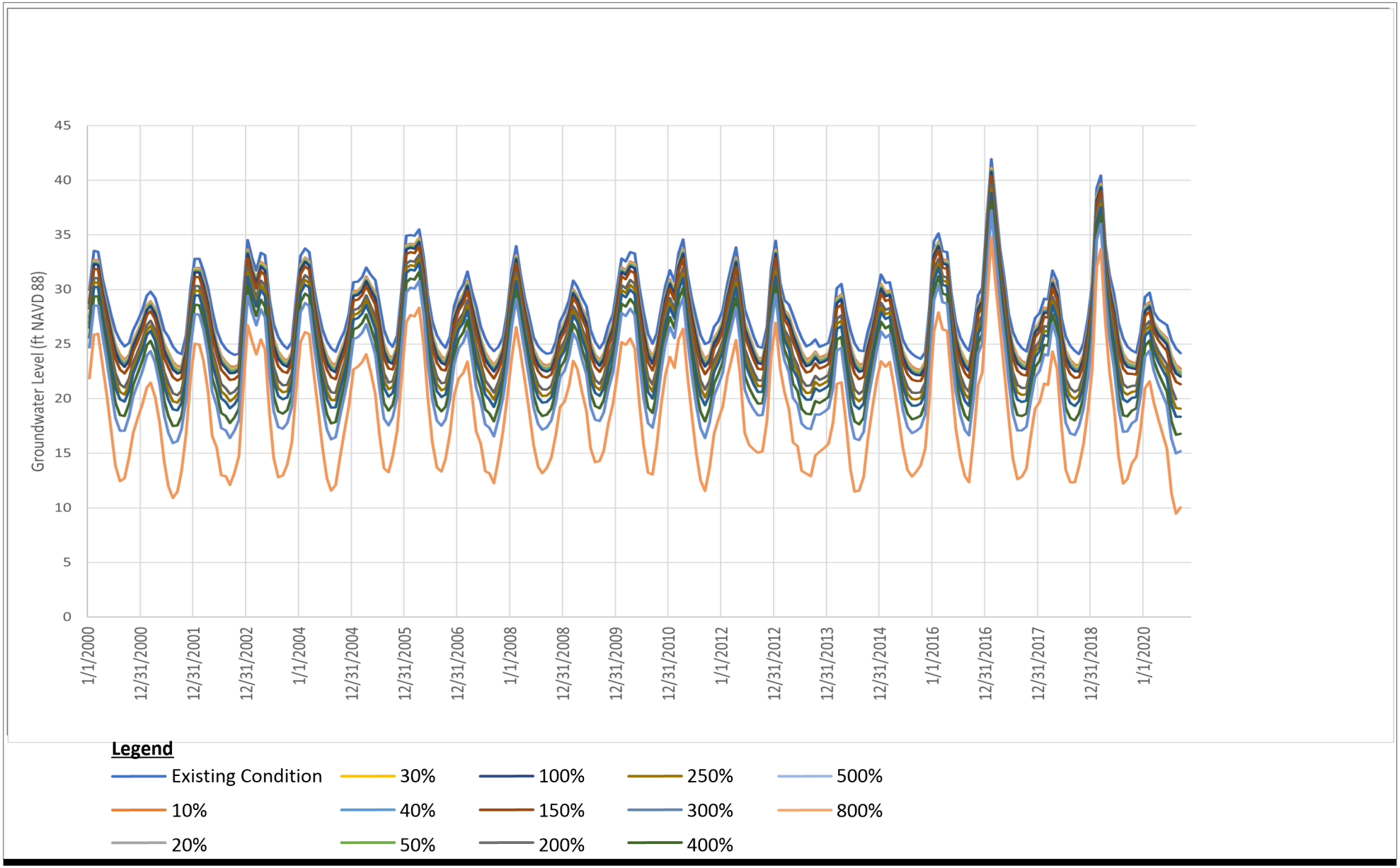
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

MONTHLY AVERAGE GROUNDWATER LEVELS MW-21

Project No. **11217388**
Date **November 2021**

FIGURE 6.23

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.23 Modeled Monthly Average Groundwater Levels of Well MW-21.srf
Plot Date: November 17 2021 8:11 PM



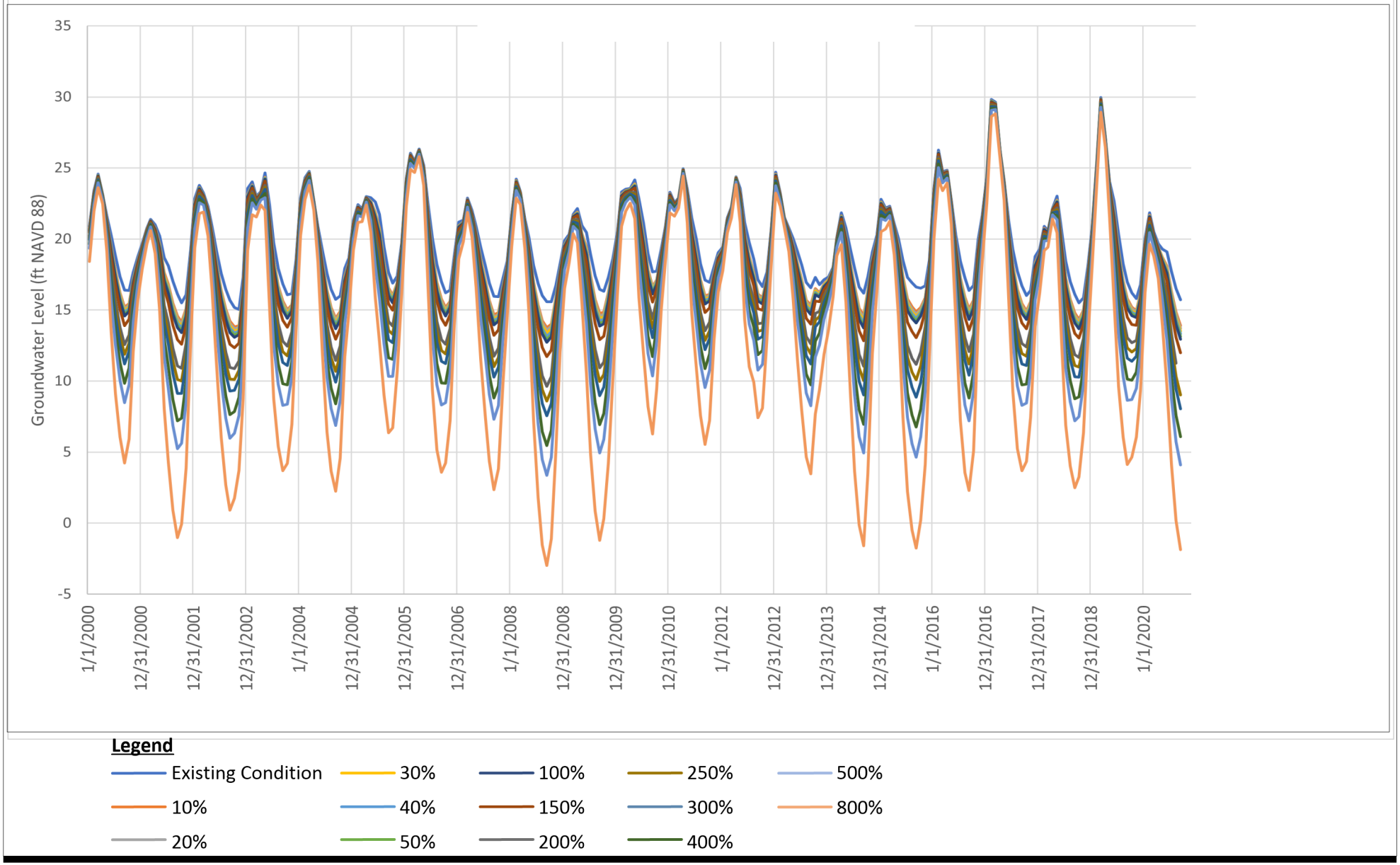
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

MONTHLY AVERAGE GROUNDWATER LEVELS MW-22

Project No. **11217388**
Date **November 2021**

FIGURE 6.24

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.24 Modeled Monthly Average Groundwater Levels of Well MW-22.srf
Plot Date: November 17 2021 8:11 PM



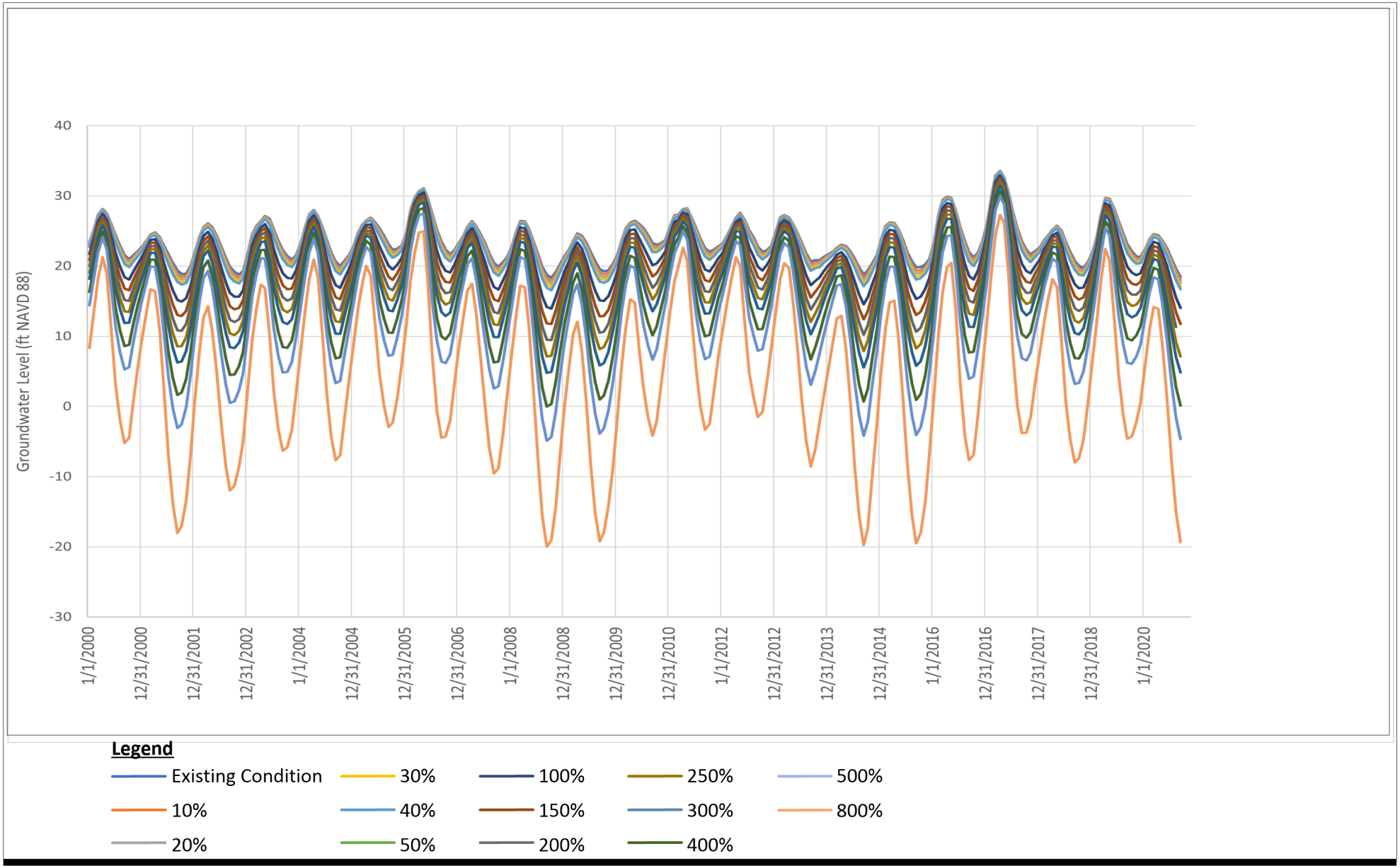
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

MONTHLY AVERAGE GROUNDWATER LEVELS MW-25

Project No. **11217388**
Date **November 2021**

FIGURE 6.25

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.25 Modeled Monthly Average Groundwater Levels of Well MW-25.srf
Plot Date: November 17 2021 8:11 PM



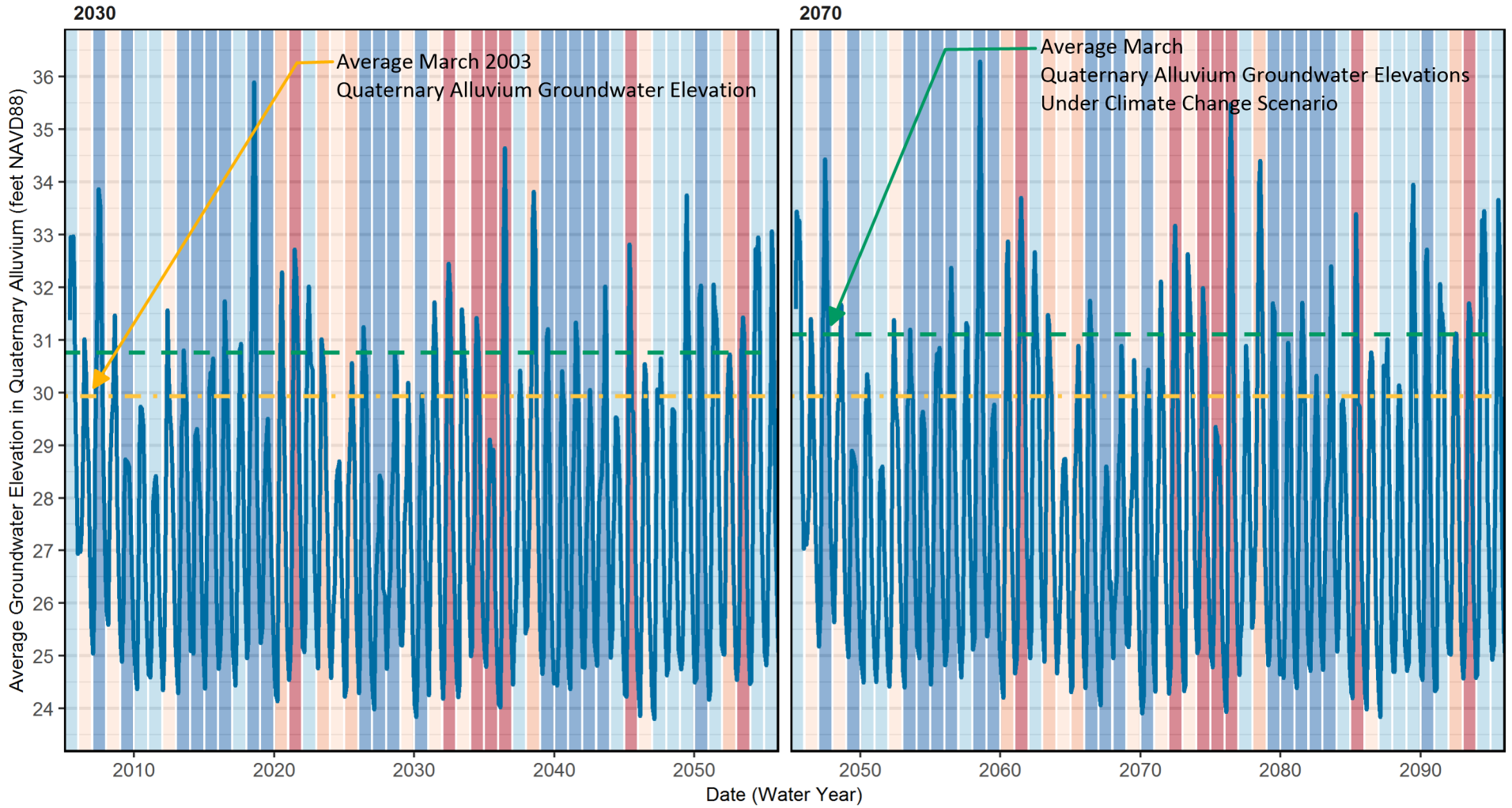
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

MONTHLY AVERAGE GROUNDWATER LEVELS MW-30

Project No. **11217388**
Date **November 2021**

FIGURE 6.26

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.26 Modeled Monthly Average Groundwater Levels of Well MW-30.srf
Plot Date: November 17 2021 8:11 PM



Note:
All averages represent average groundwater elevations in the Quaternary Alluvium

Water Year Type

Wet | Above Normal | Below Normal | Dry | Critical

HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

AVERAGE GROUNDWATER ELEVATIONS UNDER CLIMATE CHANGE SCENARIOS

Project No. **11217388**
Date **January 2022**

FIGURE 6.27

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.27 ClimateChangeGWE.srf
Plot Date: January 19 2022 5:01 PM

2030

2070

Change in Storage (acre-feet)

60,000
40,000
20,000
0
-20,000
-40,000
-60,000

2005 2010 2015 2020 2025 2030 2035 2040 2045 2050 2055 2045 2050 2055 2060 2065 2070 2075 2080 2085 2090 2095

Water Year

Legend

- Positive Change in Storage
- Negative Change in Storage
- Climate Change Scenario that Aligns with Current Time
- Cumulative Change in Storage

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

Notes:

Change in storage is calculated for storage in Quaternary Alluvium

Climate change scenarios that align with current time do not reflect actual recent climate conditions but rather are based on forecasted climate models

GHD

HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN
CHANGE AND CUMULATIVE CHANGE IN GROUNDWATER STORAGE UNDER CLIMATE CHANGE SCENARIOS

Project No. **11217388**
Date **January 2022**

FIGURE 6.28

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.28 ClimateChangeStorage.srf
Plot Date: January 19 2022 5:01 PM

ME 1

ME 2

ME 3

ME 4

ME 5

ME 6

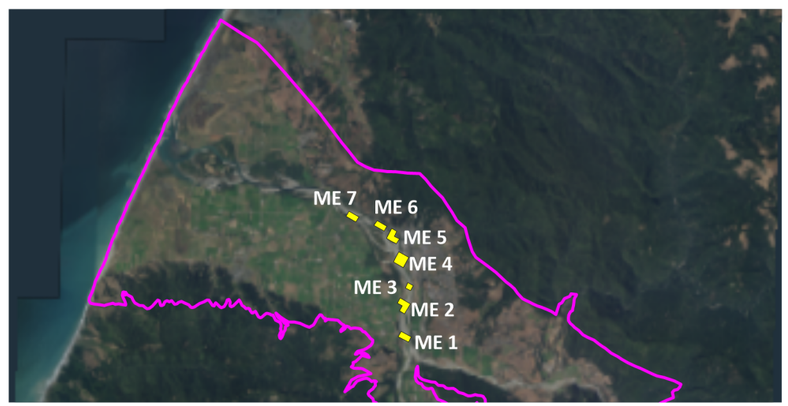
ME 7

Surface Water Flow (cfs)

1,000,000
100,000
10,000
1,000
100

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Month of the Year



Legend

1.5× Range from Median to 75th Percentile of Stream Flow (cfs) (Upper Whisker)

75th Percentile of Stream Flow (cfs)

Median of of Stream Flow (cfs)

25th Percentile of of Stream Flow (cfs)

1.5× Range from 25th Percentile to Median of Stream Flow (cfs) (Lower Whisker)

Values Outside of Range of Upper and Lower Box Plot Whiskers

2030 Near Future Scenario

2070 Late Future Scenario

Current Conditions (2000 - 2020)

GHD

HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

STREAM FLOWS UNDER CLIMATE CHANGE SCENARIOS

Project No. **11217388**
Date **January 2022**

FIGURE 6.29

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.29 ClimateChangeFlows.srf
Plot Date: January 19 2022 5:01 PM

ME 1

ME 2

ME 3

ME 4

ME 5

ME 6

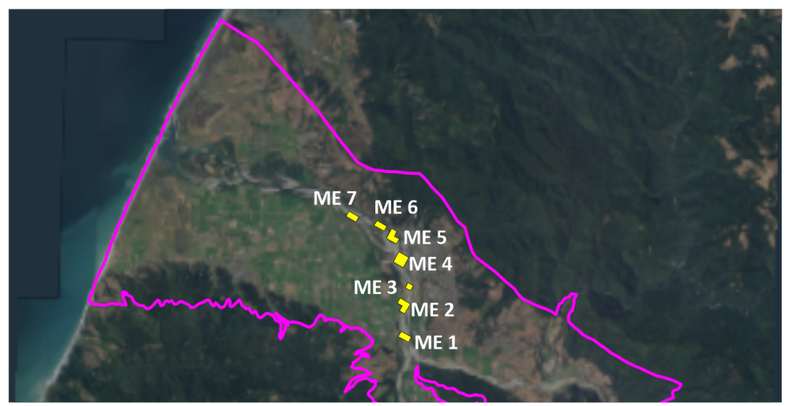
ME 7

Stage Elevation (feet NAVD88)

60
40
20

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Month of the Year



Legend

1.5× Range from Median to 75th Percentile of Stream Stage Elevations (feet NAVD88) (Upper Whisker)

75th Percentile of Stream Stage Elevations (feet NAVD88)

Median of of Stream Stage Elevations (feet NAVD88)

25th Percentile of of Stream Stage Elevations (feet NAVD88)

1.5× Range from 25th Percentile to Median of Stream Stage Elevations (feet NAVD88) (Lower Whisker)

Values Outside of Range of Upper and Lower Box Plot Whiskers

2030 Near Future Scenario
2070 Late Future Scenario
Current Conditions (2000 - 2020)

GHD

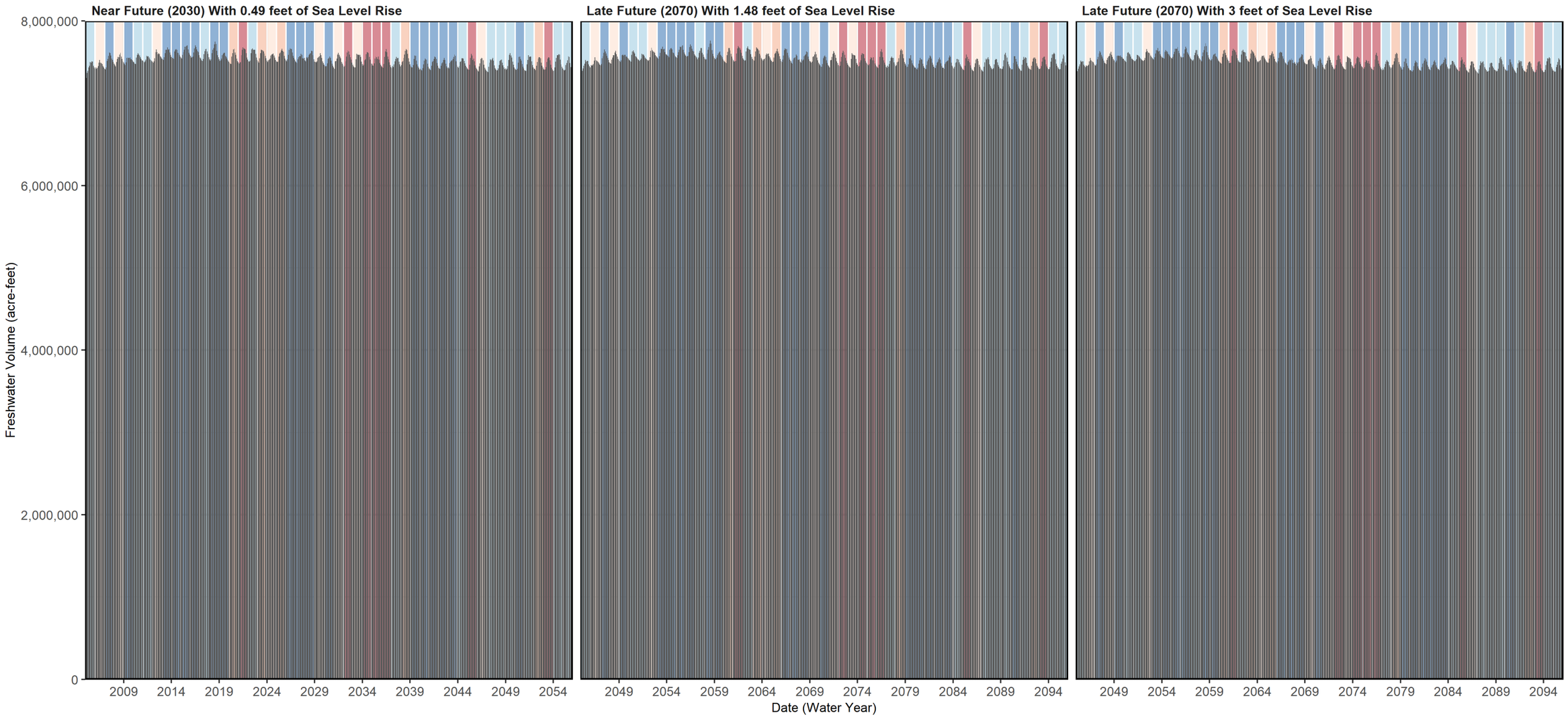
HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

STREAM STAGE ELEVATIONS UNDER CLIMATE CHANGE SCENARIOS

Project No. **11217388**
Date **January 2022**

FIGURE 6.30

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.30 ClimateChangeStages.srf
Plot Date: January 19 2022 5:01 PM



Minimum Volume (acre-feet): 7,307,659
Average Volume (acre-feet): 7,527,291
Maximum Volume (acre-feet): 7,747,069

Minimum Volume (acre-feet): 7,331,882
Average Volume (acre-feet): 7,534,436
Maximum Volume (acre-feet): 7,760,646

Minimum Volume (acre-feet): 7,330,634
Average Volume (acre-feet): 7,507,469
Maximum Volume (acre-feet): 7,729,701

Legend

Water Year Type
- Wet
- Above Normal
- Below Normal
- Dry
- Critical

Note:
Freshwater volume is calculated for groundwater in transmissive water-bearing units including channel deposits, Quaternary alluvium, and Carlotta Formation

HUMBOLDT COUNTY GROUNDWATER SUSTAINABILITY AGENCY
EEL RIVER VALLEY GROUNDWATER SUSTAINABILITY PLAN

FRESHWATER VOLUMES UNDER CLIMATE CHANGE SCENARIOS

Project No. **11217388**
Date **January 2022**

FIGURE 6.31

Filename:\\ghdnet\ghd\US\Eureka\Projects\561\11217388\Tech\Model Predictions\Figures\FigureFiles\Figure 6.31 ClimateChangeFreshwater.srf
Plot Date: January 19 2022 5:01 PM

Attachment A

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 62 27	2000	Above Normal	October	Used in Summary Table Analysis	380.5	379.0	1.5	0.4%	378.9	1.6	0.4%	378.7	1.8	0.5%	378.6	1.9	0.5%	378.4	2.1	0.5%	378.3	2.2	0.6%
ME 1	48 62 27	2000	Above Normal	November	Used in Summary Table Analysis	8,151.3	8,150.2	1.0	0.0%	8,149.9	1.4	0.0%	8,149.8	1.5	0.0%	8,149.7	1.6	0.0%	8,149.5	1.7	0.0%	8,149.4	1.9	0.0%
ME 1	48 62 27	2000	Above Normal	December	--	4,770.1	4,769.2	0.9	0.0%	4,769.1	1.0	0.0%	4,769.0	1.2	0.0%	4,768.9	1.3	0.0%	4,768.9	1.3	0.0%	4,768.8	1.4	0.0%
ME 1	48 62 27	2000	Above Normal	January	--	14,959.5	14,959.5	0.0	0.0%	14,958.3	1.2	0.0%	14,958.3	1.2	0.0%	14,958.3	1.2	0.0%	14,958.3	1.2	0.0%	14,958.3	1.2	0.0%
ME 1	48 62 27	2000	Above Normal	February	--	16,283.6	16,282.4	1.2	0.0%	16,282.4	1.2	0.0%	16,282.4	1.2	0.0%	16,282.4	1.2	0.0%	16,282.4	1.2	0.0%	16,282.4	1.2	0.0%
ME 1	48 62 27	2000	Above Normal	March	--	5,733.6	5,733.0	0.6	0.0%	5,732.9	0.7	0.0%	5,732.9	0.7	0.0%	5,732.8	0.8	0.0%	5,732.8	0.8	0.0%	5,732.6	0.9	0.0%
ME 1	48 62 27	2000	Above Normal	April	--	5,364.2	5,363.8	0.5	0.0%	5,363.8	0.5	0.0%	5,363.7	0.6	0.0%	5,363.7	0.6	0.0%	5,363.7	0.6	0.0%	5,363.5	0.7	0.0%
ME 1	48 62 27	2000	Above Normal	May	--	2,751.9	2,749.2	2.7	0.1%	2,748.8	3.0	0.1%	2,748.6	3.2	0.1%	2,748.4	3.5	0.1%	2,748.0	3.8	0.1%	2,747.8	4.1	0.1%
ME 1	48 62 27	2000	Above Normal	June	--	602.9	599.5	3.4	0.6%	599.2	3.7	0.6%	598.8	4.0	0.7%	598.5	4.4	0.7%	598.2	4.7	0.8%	597.8	5.0	0.8%
ME 1	48 62 27	2000	Above Normal	July	--	68.5	66.8	1.8	2.6%	66.6	2.0	2.9%	66.4	2.1	3.1%	66.2	2.3	3.4%	66.1	2.5	3.6%	65.9	2.7	3.9%
ME 1	48 62 27	2000	Above Normal	August	--	55.3	53.6	1.7	3.0%	53.4	1.9	3.4%	53.3	2.0	3.7%	53.1	2.2	4.0%	52.9	2.4	4.3%	52.8	2.5	4.6%
ME 1	48 62 27	2000	Above Normal	September	Used in Summary Table Analysis	48.9	47.4	1.5	3.0%	47.3	1.6	3.3%	47.1	1.8	3.6%	47.0	1.9	3.9%	46.9	2.0	4.2%	46.7	2.2	4.5%
ME 1	48 62 27	2001	Dry	October	Used in Summary Table Analysis	2,771.6	2,770.0	1.6	0.1%	2,769.9	1.7	0.1%	2,769.8	1.9	0.1%	2,769.6	2.1	0.1%	2,769.4	2.2	0.1%	2,769.3	2.3	0.1%
ME 1	48 62 27	2001	Dry	November	Used in Summary Table Analysis	3,308.9	3,307.6	1.3	0.0%	3,307.5	1.4	0.0%	3,307.4	1.5	0.0%	3,307.3	1.6	0.0%	3,307.2	1.7	0.1%	3,307.1	1.9	0.1%
ME 1	48 62 27	2001	Dry	December	--	4,924.0	4,922.9	1.0	0.0%	4,922.9	1.0	0.0%	4,922.8	1.2	0.0%	4,922.7	1.3	0.0%	4,922.6	1.4	0.0%	4,922.5	1.5	0.0%
ME 1	48 62 27	2001	Dry	January	--	6,508.2	6,507.4	0.8	0.0%	6,507.3	0.9	0.0%	6,507.2	1.0	0.0%	6,507.2	1.0	0.0%	6,507.1	1.2	0.0%	6,506.9	1.3	0.0%
ME 1	48 62 27	2001	Dry	February	--	8,597.5	8,596.8	0.7	0.0%	8,596.6	0.8	0.0%	8,596.6	0.8	0.0%	8,596.5	0.9	0.0%	8,596.5	0.9	0.0%	8,596.4	1.0	0.0%
ME 1	48 62 27	2001	Dry	March	--	5,147.5	5,146.9	0.6	0.0%	5,146.8	0.7	0.0%	5,146.8	0.7	0.0%	5,146.6	0.8	0.0%	5,146.6	0.8	0.0%	5,146.5	0.9	0.0%
ME 1	48 62 27	2001	Dry	April	--	5,085.8	5,082.8	3.0	0.1%	5,082.4	3.4	0.1%	5,082.1	3.7	0.1%	5,081.8	3.9	0.1%	5,081.5	4.3	0.1%	5,081.1	4.6	0.1%
ME 1	48 62 27	2001	Dry	May	--	603.3	600.7	2.5	0.4%	600.5	2.8	0.5%	600.2	3.1	0.5%	600.0	3.3	0.5%	599.7	3.5	0.6%	599.5	3.8	0.6%
ME 1	48 62 27	2001	Dry	June	--	1,342.2	1,338.4	3.8	0.3%	1,338.1	4.2	0.3%	1,337.7	4.5	0.3%	1,337.4	4.9	0.4%	1,336.9	5.3	0.4%	1,336.6	5.7	0.4%
ME 1	48 62 27	2001	Dry	July	--	66.6	64.5	2.1	3.1%	64.3	2.3	3.4%	64.1	2.5	3.7%	63.9	2.7	4.0%	63.7	2.9	4.3%	63.5	3.1	4.6%
ME 1	48 62 27	2001	Dry	August	--	53.3	51.2	2.1	4.0%	51.0	2.3	4.4%	50.8	2.5	4.8%	50.6	2.8	5.2%	50.3	3.0	5.6%	50.1	3.2	6.0%
ME 1	48 62 27	2001	Dry	September	Used in Summary Table Analysis	47.7	45.7	1.9	4.0%	45.6	2.1	4.4%	45.4	2.3	4.8%	45.2	2.5	5.3%	45.0	2.7	5.7%	44.8	2.9	6.1%
ME 1	48 62 27	2002	Below Normal	October	Used in Summary Table Analysis	135.9	133.8	2.1	1.5%	133.6	2.3	1.7%	133.4	2.5	1.8%	133.2	2.7	2.0%	133.0	2.9	2.1%	132.8	3.1	2.3%
ME 1	48 62 27	2002	Below Normal	November	Used in Summary Table Analysis	7,269.7	7,268.1	1.6	0.0%	7,267.9	1.7	0.0%	7,267.8	1.9	0.0%	7,267.6	2.1	0.0%	7,267.5	2.2	0.0%	7,267.2	2.4	0.0%
ME 1	48 62 27	2002	Below Normal	December	--	13,850.7	13,848.4	2.3	0.0%	13,848.4	2.3	0.0%	13,848.4	2.3	0.0%	13,848.4	2.3	0.0%	13,848.4	2.3	0.0%	13,848.4	2.3	0.0%
ME 1	48 62 27	2002	Below Normal	January	--	9,657.3	9,656.1	1.2	0.0%	9,656.0	1.3	0.0%	9,655.9	1.4	0.0%	9,655.8	1.5	0.0%	9,655.7	1.6	0.0%	9,655.6	1.7	0.0%
ME 1	48 62 27	2002	Below Normal	February	--	8,380.2	8,379.2	1.0	0.0%	8,379.2	1.0	0.0%	8,379.1	1.2	0.0%	8,378.9	1.3	0.0%	8,378.8	1.4	0.0%	8,378.7	1.5	0.0%
ME 1	48 62 27	2002	Below Normal	March	--	7,244.0	7,243.2	0.8	0.0%	7,243.2	0.8	0.0%	7,243.1	0.9	0.0%	7,242.9	1.0	0.0%	7,242.8	1.2	0.0%	7,242.8	1.2	0.0%
ME 1	48 62 27	2002	Below Normal	April	--	4,277.9	4,275.1	2.8	0.1%	4,274.9	3.0	0.1%	4,274.5	3.4	0.1%	4,274.3	3.6	0.1%	4,274.0	3.9	0.1%	4,273.7	4.2	0.1%
ME 1	48 62 27	2002	Below Normal	May	--	1,138.0	1,135.7	2.3	0.2%	1,135.5	2.5	0.2%	1,135.3	2.7	0.2%	1,135.0	2.9	0.3%	1,134.8	3.2	0.3%	1,134.6	3.4	0.3%
ME 1	48 62 27	2002	Below Normal	June	--	193.8	191.2	2.7	1.4%	190.9	3.0	1.5%	190.6	3.2	1.7%	190.4	3.5	1.8%	190.1	3.8	1.9%	189.8	4.0	2.1%
ME 1	48 62 27	2002	Below Normal	July	--	56.7	54.8	1.9	3.4%	54.6	2.1	3.7%	54.4	2.3	4.1%	54.2	2.5	4.4%	54.1	2.7	4.7%	53.9	2.9	5.1%
ME 1	48 62 27	2002	Below Normal	August	--	50.5	48.7	1.8	3.6%	48.5	2.0	4.0%	48.3	2.2	4.4%	48.1	2.4	4.7%	47.9	2.6	5.1%	47.8	2.8	5.5%
ME 1	48 62 27	2002	Below Normal	September	Used in Summary Table Analysis	46.5	44.8	1.6	3.5%	44.6	1.8	3.9%	44.5	2.0	4.2%	44.3	2.1	4.6%	44.2	2.3	5.0%	44.0	2.5	5.3%
ME 1	48 62 27	2003	Wet	October	Used in Summary Table Analysis	34.8	33.1	1.7	4.9%	32.9	1.9	5.4%	32.7	2.0	5.9%	32.6	2.2	6.4%	32.4	2.4	6.9%	32.2	2.6	7.3%
ME 1	48 62 27	2003	Wet	November	Used in Summary Table Analysis	620.0	618.6	1.4	0.2%	618.5	1.5	0.2%	618.3	1.6	0.3%	618.2	1.8	0.3%	618.0	1.9	0.3%	617.9	2.1	0.3%
ME 1	48 62 27	2003	Wet	December	--	29,729.2	29,728.0	1.2	0.0%	29,728.0	1.2	0.0%	29,728.0	1.2	0.0%	29,728.0	1.2	0.0%	29,728.0	1.2	0.0%	29,728.0	1.2	0.0%
ME 1	48 62 27	2003	Wet	January	--	7,596.1	7,595.1	0.9	0.0%	7,595.0	1.0	0.0%	7,594.9	1.2	0.0%	7,594.8	1.3	0.0%	7,594.7	1.4	0.0%	7,594.7	1.4	0.0%
ME 1	48 62 27	2003	Wet	February	--	5,526.9	5,526.0	0.8	0.0%	5,525.9	0.9	0.0%	5,525.9	0.9	0.0%	5,525.8	1.0	0.0%	5,525.7	1.2	0.0%	5,525.6	1.3	0.0%
ME 1	48 62 27	2003	Wet	March	--	11,054.9	11,054.2	0.7	0.0%	11,054.1	0.8	0.0%	11,054.1	0.8	0.0%	11,053.9	0.9	0.0%	11,053.8	1.0	0.0%	11,053.8	1.0	0.0%
ME 1	48 62 27	2003	Wet	April	--	21,741.9	21,741.9	0.0	0.0%	21,740.7	1.2	0.0%	21,740.7	1.2	0.0%	21,740.7	1.2	0.0%	21,740.7	1.2	0.0%	21,740.7	1.2	0.0%
ME 1	48 62 27	2003	Wet	May	--	2,078.5	2,075.6	2.9	0.1%	2,075.3	3.1	0.2%	2,075.0	3.5	0.2%	2,074.7	3.8	0.2%	2,074.4	4.1	0.2%	2,074.2	4.3	0.2%
ME 1	48 62 27	2003	Wet	June	--	78.4	76.6	1.8	2.3%	76.5	2.0	2.5%	76.3	2.1	2.7%	76.2	2.3	2.9%	76.0	2.4	3.1%	75.9	2.6	3.3%
ME 1	48 62 27	2003	Wet	July	--	62.4	60.5	1.9	3.0%	60.4	2.0	3.3%	60.2	2.3	3.6%	60.0	2.4	3.9%	59.8	2.6	4.2%	59.6	2.8	4.5%
ME 1	48 62 27	2003	Wet	August	--	63.9	61.9	2.0	3.2%	61.7	2.2	3.5%	61.5	2.4	3.8%	61.2	2.7	4.2%	61.0	2.9	4.5%	60.8	3.1	4.9%
ME 1	48 62 27	2003	Wet	September	Used in Summary Table Analysis	48.8	47.3	1.5	3.0%	47.2	1.6	3.3%	47.0	1.8	3.7%	46.9	1.9	3.9%	46.7	2.1	4.2%	46.6	2.2	4.6%
ME 1	48 62 27	2004	Wet	October	Used in Summary Table Analysis	36.0	34.6	1.5	4.1%	34.4	1.6	4.5%	34.3	1.8	5.0%	34.1	1.9	5.4%	34.0	2.1	5.8%	33.8	2.2	6.2%
ME 1	48 62 27	2004	Wet	November	Used in Summary Table Analysis	4,121.1	4,119.8	1.3	0.0%	4,119.7	1.4	0.0%	4,119.6	1.5	0.0%	4,119.4	1.6	0.0%	4,119.3	1.7	0.0%	4,119.2	1.9	0.0%
ME 1	48 62 27	2004	Wet	December	--	18,019.7	18,018.5	1.2	0.0%	18,018.5	1.2	0.0%	18,018.5	1.2	0.0%	18,017.4	2.3	0.0%	18,017.4	2.3	0.0%	18,017.4	2.3	0.0%
ME 1	48 62 27	2004	Wet	January	--	10,196.3	10,195.4	0.9	0.0%	10,195.4	0.9	0.0%	10,195.3	1.0	0.0%	10,195.1	1.2	0.0%	10,195.1	1.2	0.0%	10,195.0	1.3	0.0%
ME 1	48 62 27	2004	Wet	February	--	17,441.0	17,439.8	1.2	0.0%	17,439.8	1.2	0.0%	17,439.8	1.2	0.0%	17,439.8	1.2	0.0%	17,439.8	1.2	0.0%	17,439.8	1.2	0.0%
ME 1	48 62 27	2004	Wet	March	--	4,147.7	4,147.1	0.6	0.0%	4,147.0	0.7	0.0%	4,147.0	0.7	0.0%	4,146.9	0.8	0.0%	4,146.9	0.8	0.0%	4,146.8	0.9	0.0%
ME 1	48 62 27	2004	Wet	April	--	3,533.6	3,533.1	0.5	0.0%	3,533.0	0.6	0.0%	3,533.0	0.6	0.0%	3,533.0	0.6	0.0%	3,532.9	0.7	0.0%	3,532.9	0.7	0.0%
ME 1	48 62 27	2004	Wet	May	--	1,054.5	1,051.8	2.7	0.3%	1,051.6	3.0	0.3%	1,051.3	3.2	0.3%	1,051.0	3.5	0.3%	1,050.8	3.8	0.4%	1,050.5	4.0	0.4%
ME 1	48 62 27	2004	Wet	June	--	68.8	67.3	1.5	2.1%	67.2	1.6	2.3%	67.0	1.7	2.5%	66.9	1.9	2.7%	66.8	2.0	2.9%	66.6	2.1	3.1%
ME 1	48 62 27	2004	Wet	July	--	55.9	54.0	1.8	3.3%	53.9	2.0	3.6%	53.7	2.2	3.9%	53.5	2.4	4.2%	53.3	2.5	4.5%	53.1	2.7	4.9%
ME 1	48 62 27	2004	Wet	August	--	49.2	47.5	1.7	3.5%	47.4	1.9	3.8%	47.2	2.0	4.1%	47.0	2.2	4.5%	46.8	2.4	4.8%	46.7	2.5	5.2%
ME 1	48 62 27	2004	Wet	September	Used in Summary Table Analysis	43.1	40.9	2.2	5.0%	40.7	2.4	5.5%	40.5	2.6	6.0%	40.3	2.8	6.5%	40.1	3.0	7.0%	39.8	3.2	7.5%
ME 1	48 62 27	2005	Above Normal	October	Used in Summary Table Analysis	5,793.5	5,791.9	1.6	0.0%	5,791.8	1.7	0.0%	5,791.6	2.0	0.0%	5,791.4	2.1	0.0%	5,791.2	2.3	0.0%	5,791.1	2.4	0.0%
ME 1	48 62 27	2005	Above Normal	November	Used in Summary Table Analysis	959.5	958.3	1.2	0.1%	958.2	1.3	0.1%	958.0	1.5	0.2%	957.9	1.6	0.2%	957.8	1.7	0.2%	957.7	1.8	0.2%
ME 1	48 62 27	2005	Above Normal	December	--	11,813.7	11,812.5	1.2	0.0%	11,812.5	1.2	0.0%	11,812.5	1.2	0.0%	11,812.5	1.2	0.0%	11,812.5	1.2	0.0%	11,812.5	1.2	0.0%
ME 1	48 62 27	2005	Above Normal	January	--	8,355.4	8,354.6	0.8	0.0%	8,354.5	0.9	0.0%	8,354.4	1.0	0.0%	8,354.3	1.2	0.0%	8,354.3	1.2	0.0%	8,354.2	1.3	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 62 27	2005	Above Normal	February	--	4,628.9	4,628.2	0.7	0.0%	4,628.1	0.8	0.0%	4,628.1	0.8	0.0%	4,628.0	0.9	0.0%	4,627.9	1.0	0.0%	4,627.9	1.0	0.0%
ME 1	48 62 27	2005	Above Normal	March	--	14,200.2	14,200.2	0.0	0.0%	14,200.2	0.0	0.0%	14,200.2	0.0	0.0%	14,200.2	0.0	0.0%	14,199.1	1.2	0.0%	14,199.1	1.2	0.0%
ME 1	48 62 27	2005	Above Normal	April	--	9,180.0	9,179.5	0.5	0.0%	9,179.4	0.6	0.0%	9,179.4	0.6	0.0%	9,179.3	0.7	0.0%	9,179.3	0.7	0.0%	9,179.2	0.8	0.0%
ME 1	48 62 27	2005	Above Normal	May	--	8,471.5	8,468.6	2.9	0.0%	8,468.3	3.2	0.0%	8,468.1	3.5	0.0%	8,467.7	3.8	0.0%	8,467.5	4.1	0.0%	8,467.1	4.4	0.1%
ME 1	48 62 27	2005	Above Normal	June	--	6,334.0	6,330.4	3.6	0.1%	6,330.1	3.9	0.1%	6,329.7	4.3	0.1%	6,329.4	4.6	0.1%	6,329.1	5.0	0.1%	6,328.7	5.3	0.1%
ME 1	48 62 27	2005	Above Normal	July	--	91.8	89.5	2.2	2.4%	89.3	2.4	2.7%	89.1	2.7	2.9%	88.9	2.9	3.1%	88.7	3.1	3.4%	88.4	3.3	3.6%
ME 1	48 62 27	2005	Above Normal	August	--	64.8	63.1	1.7	2.6%	62.9	1.8	2.8%	62.8	2.0	3.1%	62.6	2.2	3.4%	62.4	2.3	3.6%	62.3	2.5	3.9%
ME 1	48 62 27	2005	Above Normal	September	Used in Summary Table Analysis	54.8	53.3	1.4	2.6%	53.2	1.6	2.9%	53.0	1.7	3.2%	52.9	1.9	3.4%	52.7	2.0	3.7%	52.6	2.2	4.0%
ME 1	48 62 27	2006	Wet	October	Used in Summary Table Analysis	247.6	246.0	1.5	0.6%	245.9	1.7	0.7%	245.7	1.8	0.7%	245.6	2.0	0.8%	245.4	2.1	0.9%	245.3	2.3	0.9%
ME 1	48 62 27	2006	Wet	November	Used in Summary Table Analysis	6,495.8	6,494.8	1.0	0.0%	6,494.7	1.2	0.0%	6,494.6	1.3	0.0%	6,494.4	1.4	0.0%	6,494.3	1.5	0.0%	6,494.2	1.6	0.0%
ME 1	48 62 27	2006	Wet	December	--	19,958.3	19,957.2	1.2	0.0%	19,957.2	1.2	0.0%	19,957.2	1.2	0.0%	19,957.2	1.2	0.0%	19,957.2	1.2	0.0%	19,957.2	1.2	0.0%
ME 1	48 62 27	2006	Wet	January	--	16,843.8	16,842.6	1.2	0.0%	16,842.6	1.2	0.0%	16,842.6	1.2	0.0%	16,842.6	1.2	0.0%	16,842.6	1.2	0.0%	16,842.6	1.2	0.0%
ME 1	48 62 27	2006	Wet	February	--	9,294.4	9,293.9	0.6	0.0%	9,293.8	0.7	0.0%	9,293.8	0.7	0.0%	9,293.6	0.8	0.0%	9,293.6	0.8	0.0%	9,293.5	0.9	0.0%
ME 1	48 62 27	2006	Wet	March	--	23,150.5	23,150.5	0.0	0.0%	23,150.5	0.0	0.0%	23,150.5	0.0	0.0%	23,150.5	0.0	0.0%	23,149.3	1.2	0.0%	23,149.3	1.2	0.0%
ME 1	48 62 27	2006	Wet	April	--	11,453.2	11,452.8	0.5	0.0%	11,452.7	0.6	0.0%	11,452.7	0.6	0.0%	11,452.5	0.7	0.0%	11,452.5	0.7	0.0%	11,452.5	0.7	0.0%
ME 1	48 62 27	2006	Wet	May	--	4,628.2	4,627.3	0.9	0.0%	4,627.2	1.0	0.0%	4,627.1	1.2	0.0%	4,627.0	1.3	0.0%	4,626.9	1.4	0.0%	4,626.9	1.4	0.0%
ME 1	48 62 27	2006	Wet	June	--	561.9	558.9	3.0	0.5%	558.6	3.3	0.6%	558.3	3.6	0.6%	558.0	3.9	0.7%	557.7	4.2	0.8%	557.4	4.5	0.8%
ME 1	48 62 27	2006	Wet	July	--	74.6	72.8	1.8	2.4%	72.6	2.0	2.7%	72.4	2.2	2.9%	72.3	2.3	3.1%	72.1	2.5	3.4%	71.9	2.7	3.6%
ME 1	48 62 27	2006	Wet	August	--	60.4	58.7	1.7	2.8%	58.5	1.9	3.1%	58.4	2.0	3.4%	58.2	2.2	3.7%	58.0	2.4	4.0%	57.8	2.6	4.3%
ME 1	48 62 27	2006	Wet	September	Used in Summary Table Analysis	53.0	51.6	1.4	2.7%	51.4	1.6	3.0%	51.3	1.8	3.3%	51.1	1.9	3.6%	51.0	2.0	3.8%	50.8	2.2	4.1%
ME 1	48 62 27	2007	Above Normal	October	Used in Summary Table Analysis	43.8	42.3	1.5	3.4%	42.1	1.6	3.7%	42.0	1.8	4.1%	41.9	1.9	4.4%	41.7	2.1	4.7%	41.6	2.2	5.1%
ME 1	48 62 27	2007	Above Normal	November	Used in Summary Table Analysis	5,881.8	5,880.7	1.2	0.0%	5,880.6	1.3	0.0%	5,880.4	1.4	0.0%	5,880.3	1.5	0.0%	5,880.1	1.7	0.0%	5,880.0	1.9	0.0%
ME 1	48 62 27	2007	Above Normal	December	--	10,860.9	10,859.8	1.0	0.0%	10,859.7	1.2	0.0%	10,859.6	1.3	0.0%	10,859.5	1.4	0.0%	10,859.4	1.5	0.0%	10,859.3	1.6	0.0%
ME 1	48 62 27	2007	Above Normal	January	--	2,463.4	2,462.5	0.9	0.0%	2,462.5	0.9	0.0%	2,462.4	1.0	0.0%	2,462.3	1.2	0.0%	2,462.3	1.2	0.0%	2,462.2	1.3	0.1%
ME 1	48 62 27	2007	Above Normal	February	--	17,594.9	17,594.9	0.0	0.0%	17,594.9	0.0	0.0%	17,594.9	0.0	0.0%	17,593.8	1.2	0.0%	17,593.8	1.2	0.0%	17,593.8	1.2	0.0%
ME 1	48 62 27	2007	Above Normal	March	--	5,045.7	5,045.0	0.7	0.0%	5,045.0	0.7	0.0%	5,044.9	0.8	0.0%	5,044.9	0.8	0.0%	5,044.8	0.9	0.0%	5,044.8	0.9	0.0%
ME 1	48 62 27	2007	Above Normal	April	--	6,482.5	6,479.7	2.8	0.0%	6,479.5	3.0	0.0%	6,479.3	3.2	0.0%	6,478.9	3.6	0.1%	6,478.7	3.8	0.1%	6,478.5	4.1	0.1%
ME 1	48 62 27	2007	Above Normal	May	--	1,264.5	1,262.4	2.1	0.2%	1,262.2	2.3	0.2%	1,261.9	2.5	0.2%	1,261.8	2.7	0.2%	1,261.6	2.9	0.2%	1,261.3	3.1	0.2%
ME 1	48 62 27	2007	Above Normal	June	--	458.8	455.6	3.2	0.7%	455.3	3.5	0.8%	454.9	3.8	0.8%	454.6	4.1	0.9%	454.3	4.5	1.0%	454.0	4.8	1.0%
ME 1	48 62 27	2007	Above Normal	July	--	107.3	105.0	2.3	2.2%	104.8	2.5	2.4%	104.5	2.8	2.6%	104.3	3.0	2.8%	104.1	3.2	3.0%	103.9	3.5	3.2%
ME 1	48 62 27	2007	Above Normal	August	--	53.5	51.7	1.8	3.3%	51.6	2.0	3.7%	51.4	2.1	4.0%	51.2	2.3	4.3%	51.1	2.5	4.6%	50.9	2.7	5.0%
ME 1	48 62 27	2007	Above Normal	September	Used in Summary Table Analysis	48.5	47.0	1.6	3.3%	46.8	1.7	3.6%	46.6	1.9	3.9%	46.5	2.1	4.2%	46.3	2.2	4.6%	46.2	2.4	4.9%
ME 1	48 62 27	2008	Dry	October	Used in Summary Table Analysis	2,917.7	2,916.1	1.6	0.1%	2,915.9	1.9	0.1%	2,915.7	2.0	0.1%	2,915.6	2.1	0.1%	2,915.4	2.3	0.1%	2,915.3	2.4	0.1%
ME 1	48 62 27	2008	Dry	November	Used in Summary Table Analysis	2,156.0	2,154.9	1.2	0.1%	2,154.6	1.4	0.1%	2,154.5	1.5	0.1%	2,154.4	1.6	0.1%	2,154.3	1.7	0.1%	2,154.2	1.9	0.1%
ME 1	48 62 27	2008	Dry	December	--	14,186.3	14,185.2	1.2	0.0%	14,185.2	1.2	0.0%	14,185.2	1.2	0.0%	14,185.2	1.2	0.0%	14,185.2	1.2	0.0%	14,185.2	1.2	0.0%
ME 1	48 62 27	2008	Dry	January	--	15,875.0	15,873.8	1.2	0.0%	15,873.8	1.2	0.0%	15,873.8	1.2	0.0%	15,873.8	1.2	0.0%	15,873.8	1.2	0.0%	15,872.7	2.3	0.0%
ME 1	48 62 27	2008	Dry	February	--	6,489.9	6,489.1	0.8	0.0%	6,489.1	0.8	0.0%	6,489.0	0.9	0.0%	6,489.0	0.9	0.0%	6,488.9	1.0	0.0%	6,488.8	1.2	0.0%
ME 1	48 62 27	2008	Dry	March	--	3,163.8	3,163.2	0.6	0.0%	3,163.2	0.6	0.0%	3,163.1	0.7	0.0%	3,163.1	0.7	0.0%	3,163.0	0.8	0.0%	3,163.0	0.8	0.0%
ME 1	48 62 27	2008	Dry	April	--	4,317.8	4,314.7	3.1	0.1%	4,314.5	3.4	0.1%	4,314.1	3.7	0.1%	4,313.8	4.1	0.1%	4,313.5	4.3	0.1%	4,313.2	4.6	0.1%
ME 1	48 62 27	2008	Dry	May	--	76.0	74.5	1.5	2.0%	74.4	1.6	2.2%	74.2	1.8	2.4%	74.1	2.0	2.6%	73.9	2.1	2.8%	73.7	2.3	3.0%
ME 1	48 62 27	2008	Dry	June	--	75.7	72.4	3.3	4.3%	72.1	3.6	4.8%	71.8	3.9	5.2%	71.5	4.3	5.6%	71.1	4.6	6.1%	70.8	4.9	6.5%
ME 1	48 62 27	2008	Dry	July	--	48.1	45.8	2.3	4.8%	45.6	2.5	5.2%	45.3	2.7	5.7%	45.1	3.0	6.2%	44.9	3.2	6.6%	44.7	3.4	7.1%
ME 1	48 62 27	2008	Dry	August	--	44.6	42.4	2.2	5.0%	42.1	2.4	5.5%	41.9	2.7	6.0%	41.7	2.9	6.5%	41.5	3.1	7.0%	41.2	3.3	7.5%
ME 1	48 62 27	2008	Dry	September	Used in Summary Table Analysis	33.3	30.5	2.8	8.4%	30.2	3.1	9.3%	29.9	3.4	10.1%	29.6	3.6	10.9%	29.4	3.9	11.8%	29.1	4.2	12.6%
ME 1	48 62 27	2009	Critical	October	Used in Summary Table Analysis	650.9	648.8	2.1	0.3%	648.6	2.3	0.4%	648.4	2.5	0.4%	648.1	2.8	0.4%	647.9	3.0	0.5%	647.7	3.2	0.5%
ME 1	48 62 27	2009	Critical	November	Used in Summary Table Analysis	3,864.9	3,863.4	1.5	0.0%	3,863.3	1.6	0.0%	3,863.1	1.9	0.0%	3,863.0	2.0	0.1%	3,862.8	2.1	0.1%	3,862.6	2.3	0.1%
ME 1	48 62 27	2009	Critical	December	--	7,165.9	7,164.5	1.4	0.0%	7,164.4	1.5	0.0%	7,164.2	1.6	0.0%	7,164.1	1.7	0.0%	7,164.0	1.9	0.0%	7,163.9	2.0	0.0%
ME 1	48 62 27	2009	Critical	January	--	4,429.4	4,428.4	1.0	0.0%	4,428.2	1.2	0.0%	4,428.1	1.3	0.0%	4,428.0	1.4	0.0%	4,427.9	1.5	0.0%	4,427.8	1.6	0.0%
ME 1	48 62 27	2009	Critical	February	--	13,515.0	13,513.9	1.2	0.0%	13,513.9	1.2	0.0%	13,513.9	1.2	0.0%	13,513.9	1.2	0.0%	13,513.9	1.2	0.0%	13,512.7	2.3	0.0%
ME 1	48 62 27	2009	Critical	March	--	10,992.5	10,991.7	0.8	0.0%	10,991.6	0.9	0.0%	10,991.6	0.9	0.0%	10,991.4	1.0	0.0%	10,991.3	1.2	0.0%	10,991.3	1.2	0.0%
ME 1	48 62 27	2009	Critical	April	--	4,796.2	4,792.9	3.2	0.1%	4,792.6	3.6	0.1%	4,792.2	3.9	0.1%	4,792.1	4.1	0.1%	4,791.8	4.4	0.1%	4,791.4	4.7	0.1%
ME 1	48 62 27	2009	Critical	May	--	10,345.9	10,342.9	3.0	0.0%	10,342.7	3.2	0.0%	10,342.5	3.5	0.0%	10,342.1	3.8	0.0%	10,341.9	4.1	0.0%	10,341.6	4.4	0.0%
ME 1	48 62 27	2009	Critical	June	--	336.9	333.1	3.8	1.1%	332.7	4.1	1.2%	332.3	4.5	1.3%	331.9	4.9	1.5%	331.6	5.3	1.6%	331.2	5.6	1.7%
ME 1	48 62 27	2009	Critical	July	--	68.3	65.9	2.4	3.5%	65.7	2.6	3.8%	65.5	2.8	4.1%	65.2	3.0	4.5%	65.0	3.2	4.7%	64.8	3.5	5.1%
ME 1	48 62 27	2009	Critical	August	--	54.2	52.0	2.2	4.1%	51.8	2.5	4.5%	51.5	2.7	4.9%	51.3	2.9	5.3%	51.1	3.1	5.7%	50.9	3.3	6.1%
ME 1	48 62 27	2009	Critical	September	Used in Summary Table Analysis	48.2	46.2	2.0	4.1%	46.0	2.2	4.5%	45.8	2.4	4.9%	45.6	2.6	5.3%	45.4	2.7	5.7%	45.3	2.9	6.1%
ME 1	48 62 27	2010	Below Normal	October	Used in Summary Table Analysis	5,087.3	5,085.2	2.1	0.0%	5,085.1	2.2	0.0%	5,084.8	2.4	0.0%	5,084.6	2.7	0.1%	5,084.5	2.8	0.1%	5,084.3	3.0	0.1%
ME 1	48 62 27	2010	Below Normal	November	Used in Summary Table Analysis	6,061.6	6,060.1	1.5	0.0%	6,059.8	1.7	0.0%	6,059.7	1.9	0.0%	6,059.6	2.0	0.0%	6,059.4	2.2	0.0%	6,059.3	2.3	0.0%
ME 1	48 62 27	2010	Below Normal	December	--	6,261.1	6,259.8	1.3	0.0%	6,259.7	1.4	0.0%	6,259.6	1.5	0.0%	6,259.5	1.6	0.0%	6,259.4	1.7	0.0%	6,259.3	1.9	0.0%
ME 1	48 62 27	2010	Below Normal	January	--	17,998.8	17,997.7	1.2	0.0%	17,997.7	1.2	0.0%	17,997.7	1.2	0.0%	17,997.7	1.2	0.0%	17,997.7	1.2	0.0%	17,997.7	1.2	0.0%
ME 1	48 62 27	2010	Below Normal	February	--	11,604.2	11,603.0	1.2	0.0%	11,603.0	1.2	0.0%	11,603.0	1.2	0.0%	11,603.0	1.2	0.0%	11,603.0	1.2	0.0%	11,603.0	1.2	0.0%
ME 1	48 62 27	2010	Below Normal	March	--	15,943.3	15,942.1	1.2	0.0%	15,942.1	1.2	0.0%	15,942.1	1.2	0.0%	15,942.1	1.2	0.0%	15,942.1	1.2	0.0%	15,942.1	1.2	0.0%
ME 1	48 62 27	2010	Below Normal	April	--	22,751.2	22,751.2	0.0	0.0%	22,751.2	0.0	0.0%	22,751.2	0.0	0.0%	22,751.2	0.0	0.0%	22,751.2	0.0	0.0%	22,751.2	0.0	0.0%
ME 1	48 62 27	2010	Below Normal	May	--	6,388.7	6,385.6	3.0	0.0%	6,385.4	3.2	0.1%	6,385.1	3.6	0.1%	6,384.7	3.9	0.1%	6,384.5	4.2	0.1%	6,384.3	4.4	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 62 27	2010	Below Normal	June	--	3,599.0	3,595.4	3.6	0.1%	3,595.0	3.9	0.1%	3,594.6	4.4	0.1%	3,594.2	4.7	0.1%	3,593.9	5.1	0.1%	3,593.5	5.4	0.2%
ME 1	48 62 27	2010	Below Normal	July	--	88.4	86.3	2.1	2.4%	86.0	2.3	2.6%	85.8	2.6	2.9%	85.6	2.8	3.1%	85.4	3.0	3.4%	85.2	3.2	3.6%
ME 1	48 62 27	2010	Below Normal	August	--	66.3	64.5	1.8	2.8%	64.4	2.0	3.0%	64.2	2.2	3.3%	64.0	2.4	3.6%	63.9	2.5	3.7%	63.7	2.7	4.0%
ME 1	48 62 27	2010	Below Normal	September	Used in Summary Table Analysis	319.5	317.2	2.3	0.7%	317.0	2.5	0.8%	316.7	2.7	0.9%	316.5	3.0	0.9%	316.3	3.2	1.0%	316.0	3.4	1.1%
ME 1	48 62 27	2011	Wet	October	Used in Summary Table Analysis	7,127.0	7,125.5	1.5	0.0%	7,125.3	1.6	0.0%	7,125.1	1.9	0.0%	7,125.0	2.0	0.0%	7,124.9	2.1	0.0%	7,124.7	2.3	0.0%
ME 1	48 62 27	2011	Wet	November	Used in Summary Table Analysis	6,143.3	6,142.1	1.2	0.0%	6,142.0	1.3	0.0%	6,141.9	1.4	0.0%	6,141.8	1.5	0.0%	6,141.7	1.6	0.0%	6,141.6	1.7	0.0%
ME 1	48 62 27	2011	Wet	December	--	17,415.5	17,414.4	1.2	0.0%	17,414.4	1.2	0.0%	17,414.4	1.2	0.0%	17,414.4	1.2	0.0%	17,414.4	1.2	0.0%	17,414.4	1.2	0.0%
ME 1	48 62 27	2011	Wet	January	--	3,454.4	3,453.7	0.7	0.0%	3,453.6	0.8	0.0%	3,453.6	0.8	0.0%	3,453.5	0.9	0.0%	3,453.4	1.0	0.0%	3,453.4	1.0	0.0%
ME 1	48 62 27	2011	Wet	February	--	10,677.4	10,676.7	0.7	0.0%	10,676.6	0.8	0.0%	10,676.6	0.8	0.0%	10,676.5	0.9	0.0%	10,676.4	1.0	0.0%	10,676.4	1.0	0.0%
ME 1	48 62 27	2011	Wet	March	--	28,556.7	28,555.6	1.2	0.0%	28,555.6	1.2	0.0%	28,555.6	1.2	0.0%	28,555.6	1.2	0.0%	28,555.6	1.2	0.0%	28,555.6	1.2	0.0%
ME 1	48 62 27	2011	Wet	April	--	11,030.7	11,030.1	0.6	0.0%	11,030.1	0.6	0.0%	11,030.0	0.7	0.0%	11,030.0	0.7	0.0%	11,029.9	0.8	0.0%	11,029.9	0.8	0.0%
ME 1	48 62 27	2011	Wet	May	--	4,788.8	4,786.2	2.5	0.1%	4,785.9	2.9	0.1%	4,785.6	3.1	0.1%	4,785.3	3.5	0.1%	4,785.1	3.7	0.1%	4,784.7	4.1	0.1%
ME 1	48 62 27	2011	Wet	June	--	3,122.9	3,119.3	3.6	0.1%	3,119.0	3.9	0.1%	3,118.6	4.3	0.1%	3,118.3	4.6	0.1%	3,117.9	5.0	0.2%	3,117.6	5.3	0.2%
ME 1	48 62 27	2011	Wet	July	--	215.1	212.0	3.1	1.4%	211.7	3.4	1.6%	211.4	3.7	1.7%	211.1	4.0	1.9%	210.8	4.3	2.0%	210.5	4.6	2.2%
ME 1	48 62 27	2011	Wet	August	--	65.2	63.5	1.7	2.6%	63.3	1.8	2.8%	63.2	2.0	3.1%	63.0	2.2	3.3%	62.8	2.3	3.6%	62.7	2.5	3.9%
ME 1	48 62 27	2011	Wet	September	Used in Summary Table Analysis	54.8	53.3	1.5	2.7%	53.2	1.6	2.9%	53.0	1.8	3.2%	52.9	1.9	3.5%	52.7	2.0	3.7%	52.6	2.2	4.0%
ME 1	48 62 27	2012	Below Normal	October	Used in Summary Table Analysis	3,519.2	3,517.8	1.4	0.0%	3,517.6	1.6	0.0%	3,517.5	1.7	0.0%	3,517.4	1.9	0.1%	3,517.2	2.0	0.1%	3,517.0	2.2	0.1%
ME 1	48 62 27	2012	Below Normal	November	Used in Summary Table Analysis	4,803.2	4,802.1	1.2	0.0%	4,802.0	1.3	0.0%	4,801.9	1.4	0.0%	4,801.7	1.5	0.0%	4,801.6	1.6	0.0%	4,801.5	1.7	0.0%
ME 1	48 62 27	2012	Below Normal	December	--	1,952.0	1,950.9	1.0	0.1%	1,950.9	1.0	0.1%	1,950.8	1.2	0.1%	1,950.7	1.3	0.1%	1,950.6	1.4	0.1%	1,950.5	1.5	0.1%
ME 1	48 62 27	2012	Below Normal	January	--	11,396.2	11,395.4	0.8	0.0%	11,395.3	0.9	0.0%	11,395.1	1.0	0.0%	11,395.1	1.0	0.0%	11,395.0	1.2	0.0%	11,394.9	1.3	0.0%
ME 1	48 62 27	2012	Below Normal	February	--	6,636.2	6,635.5	0.7	0.0%	6,635.5	0.7	0.0%	6,635.4	0.8	0.0%	6,635.3	0.9	0.0%	6,635.3	0.9	0.0%	6,635.2	1.0	0.0%
ME 1	48 62 27	2012	Below Normal	March	--	25,053.2	25,052.1	1.2	0.0%	25,052.1	1.2	0.0%	25,052.1	1.2	0.0%	25,052.1	1.2	0.0%	25,052.1	1.2	0.0%	25,052.1	1.2	0.0%
ME 1	48 62 27	2012	Below Normal	April	--	12,476.9	12,475.7	1.2	0.0%	12,475.7	1.2	0.0%	12,475.7	1.2	0.0%	12,475.7	1.2	0.0%	12,475.7	1.2	0.0%	12,475.7	1.2	0.0%
ME 1	48 62 27	2012	Below Normal	May	--	2,041.2	2,038.4	2.8	0.1%	2,038.1	3.1	0.2%	2,037.8	3.4	0.2%	2,037.5	3.7	0.2%	2,037.4	3.8	0.2%	2,037.2	4.1	0.2%
ME 1	48 62 27	2012	Below Normal	June	--	3,028.2	3,024.7	3.6	0.1%	3,024.3	3.9	0.1%	3,023.8	4.4	0.1%	3,023.5	4.7	0.2%	3,023.1	5.1	0.2%	3,022.8	5.4	0.2%
ME 1	48 62 27	2012	Below Normal	July	--	1,079.9	1,076.7	3.2	0.3%	1,076.4	3.5	0.3%	1,076.1	3.8	0.4%	1,075.8	4.1	0.4%	1,075.5	4.4	0.4%	1,075.2	4.7	0.4%
ME 1	48 62 27	2012	Below Normal	August	--	72.1	70.4	1.7	2.4%	70.2	1.9	2.6%	70.1	2.0	2.8%	69.9	2.2	3.0%	69.8	2.3	3.2%	69.6	2.5	3.4%
ME 1	48 62 27	2012	Below Normal	September	Used in Summary Table Analysis	58.6	57.1	1.5	2.5%	57.0	1.6	2.8%	56.8	1.8	3.1%	56.7	1.9	3.3%	56.5	2.1	3.6%	56.4	2.2	3.8%
ME 1	48 62 27	2013	Below Normal	October	Used in Summary Table Analysis	1,478.7	1,477.1	1.6	0.1%	1,476.9	1.9	0.1%	1,476.7	2.0	0.1%	1,476.5	2.2	0.1%	1,476.4	2.3	0.2%	1,476.3	2.4	0.2%
ME 1	48 62 27	2013	Below Normal	November	Used in Summary Table Analysis	9,451.6	9,450.3	1.3	0.0%	9,450.2	1.4	0.0%	9,450.1	1.5	0.0%	9,450.0	1.6	0.0%	9,449.9	1.7	0.0%	9,449.8	1.9	0.0%
ME 1	48 62 27	2013	Below Normal	December	--	32,023.1	32,022.0	1.2	0.0%	32,022.0	1.2	0.0%	32,020.8	2.3	0.0%	32,020.8	2.3	0.0%	32,020.8	2.3	0.0%	32,020.8	2.3	0.0%
ME 1	48 62 27	2013	Below Normal	January	--	4,806.3	4,805.4	0.8	0.0%	4,805.3	0.9	0.0%	4,805.2	1.0	0.0%	4,805.2	1.0	0.0%	4,805.2	1.0	0.0%	4,805.1	1.2	0.0%
ME 1	48 62 27	2013	Below Normal	February	--	3,058.8	3,058.1	0.7	0.0%	3,058.0	0.8	0.0%	3,057.9	0.9	0.0%	3,057.9	0.9	0.0%	3,057.8	1.0	0.0%	3,057.6	1.2	0.0%
ME 1	48 62 27	2013	Below Normal	March	--	5,617.1	5,616.6	0.6	0.0%	5,616.4	0.7	0.0%	5,616.4	0.7	0.0%	5,616.3	0.8	0.0%	5,616.3	0.8	0.0%	5,616.2	0.9	0.0%
ME 1	48 62 27	2013	Below Normal	April	--	4,383.1	4,380.4	2.7	0.1%	4,380.2	2.9	0.1%	4,379.9	3.2	0.1%	4,379.6	3.5	0.1%	4,379.4	3.7	0.1%	4,379.2	3.9	0.1%
ME 1	48 62 27	2013	Below Normal	May	--	2,265.5	2,263.4	2.1	0.1%	2,263.2	2.3	0.1%	2,263.0	2.5	0.1%	2,262.7	2.8	0.1%	2,262.5	3.0	0.1%	2,262.3	3.2	0.1%
ME 1	48 62 27	2013	Below Normal	June	--	1,010.3	1,007.1	3.2	0.3%	1,006.8	3.5	0.3%	1,006.5	3.8	0.4%	1,006.2	4.1	0.4%	1,005.9	4.4	0.4%	1,005.5	4.7	0.5%
ME 1	48 62 27	2013	Below Normal	July	--	68.1	66.3	1.9	2.7%	66.1	2.0	3.0%	65.9	2.2	3.3%	65.7	2.4	3.5%	65.5	2.6	3.8%	65.3	2.8	4.1%
ME 1	48 62 27	2013	Below Normal	August	--	55.1	53.3	1.8	3.2%	53.1	2.0	3.5%	53.0	2.1	3.9%	52.8	2.3	4.2%	52.6	2.5	4.5%	52.4	2.7	4.8%
ME 1	48 62 27	2013	Below Normal	September	Used in Summary Table Analysis	3,820.4	3,817.9	2.4	0.1%	3,817.7	2.7	0.1%	3,817.5	2.9	0.1%	3,817.1	3.2	0.1%	3,816.9	3.5	0.1%	3,816.7	3.7	0.1%
ME 1	48 62 27	2014	Critical	October	Used in Summary Table Analysis	89.3	87.7	1.6	1.8%	87.6	1.8	2.0%	87.4	1.9	2.1%	87.3	2.1	2.3%	87.1	2.2	2.5%	87.0	2.4	2.6%
ME 1	48 62 27	2014	Critical	November	Used in Summary Table Analysis	1,146.0	1,144.7	1.3	0.1%	1,144.6	1.4	0.1%	1,144.5	1.5	0.1%	1,144.4	1.6	0.1%	1,144.2	1.7	0.2%	1,144.1	1.9	0.2%
ME 1	48 62 27	2014	Critical	December	--	915.0	914.0	1.0	0.1%	913.9	1.1	0.1%	913.8	1.2	0.1%	913.7	1.3	0.1%	913.6	1.4	0.2%	913.5	1.5	0.2%
ME 1	48 62 27	2014	Critical	January	--	1,812.0	1,811.2	0.8	0.0%	1,811.1	0.9	0.1%	1,811.0	1.0	0.1%	1,810.9	1.2	0.1%	1,810.9	1.2	0.1%	1,810.8	1.3	0.1%
ME 1	48 62 27	2014	Critical	February	--	9,847.8	9,847.0	0.8	0.0%	9,847.0	0.8	0.0%	9,846.9	0.9	0.0%	9,846.8	1.0	0.0%	9,846.8	1.0	0.0%	9,846.6	1.2	0.0%
ME 1	48 62 27	2014	Critical	March	--	14,798.6	14,798.6	0.0	0.0%	14,798.6	0.0	0.0%	14,798.6	0.0	0.0%	14,798.6	0.0	0.0%	14,798.6	0.0	0.0%	14,798.6	0.0	0.0%
ME 1	48 62 27	2014	Critical	April	--	3,617.5	3,614.5	3.0	0.1%	3,614.1	3.4	0.1%	3,613.9	3.6	0.1%	3,613.5	3.9	0.1%	3,613.2	4.3	0.1%	3,612.8	4.6	0.1%
ME 1	48 62 27	2014	Critical	May	--	1,846.1	1,843.4	2.7	0.1%	1,843.2	2.9	0.2%	1,842.9	3.1	0.2%	1,842.6	3.5	0.2%	1,842.4	3.7	0.2%	1,842.1	3.9	0.2%
ME 1	48 62 27	2014	Critical	June	--	120.6	116.8	3.8	3.2%	116.4	4.2	3.5%	116.0	4.5	3.8%	115.6	4.9	4.1%	115.3	5.3	4.4%	114.9	5.7	4.7%
ME 1	48 62 27	2014	Critical	July	--	57.0	54.8	2.2	3.9%	54.6	2.4	4.3%	54.4	2.7	4.7%	54.2	2.9	5.1%	54.0	3.1	5.4%	53.7	3.3	5.8%
ME 1	48 62 27	2014	Critical	August	--	49.6	47.5	2.2	4.4%	47.2	2.4	4.8%	47.0	2.6	5.3%	46.8	2.8	5.7%	46.6	3.1	6.2%	46.4	3.3	6.6%
ME 1	48 62 27	2014	Critical	September	Used in Summary Table Analysis	2,098.1	2,095.1	3.0	0.1%	2,094.8	3.4	0.2%	2,094.6	3.6	0.2%	2,094.2	3.9	0.2%	2,094.0	4.2	0.2%	2,093.6	4.5	0.2%
ME 1	48 62 27	2015	Dry	October	Used in Summary Table Analysis	8,226.7	8,224.5	2.2	0.0%	8,224.4	2.3	0.0%	8,224.2	2.5	0.0%	8,223.3	3.5	0.0%	8,223.1	3.6	0.0%	8,222.9	3.8	0.0%
ME 1	48 62 27	2015	Dry	November	Used in Summary Table Analysis	4,147.0	4,145.5	1.5	0.0%	4,145.3	1.7	0.0%	4,145.1	1.9	0.0%	4,144.9	2.1	0.1%	4,144.8	2.2	0.1%	4,144.7	2.3	0.1%
ME 1	48 62 27	2015	Dry	December	--	15,217.6	15,216.4	1.2	0.0%	15,216.4	1.2	0.0%	15,216.4	1.2	0.0%	15,216.4	1.2	0.0%	15,216.4	1.2	0.0%	15,216.4	1.2	0.0%
ME 1	48 62 27	2015	Dry	January	--	2,392.7	2,391.8	0.9	0.0%	2,391.7	1.0	0.0%	2,391.6	1.2	0.0%	2,391.4	1.3	0.1%	2,391.3	1.4	0.1%	2,391.2	1.5	0.1%
ME 1	48 62 27	2015	Dry	February	--	15,027.8	15,026.6	1.2	0.0%	15,026.6	1.2	0.0%	15,026.6	1.2	0.0%	15,026.6	1.2	0.0%	15,026.6	1.2	0.0%	15,026.6	1.2	0.0%
ME 1	48 62 27	2015	Dry	March	--	4,129.6	4,128.9	0.7	0.0%	4,128.8	0.8	0.0%	4,128.8	0.8	0.0%	4,128.7	0.9	0.0%	4,128.6	1.0	0.0%	4,128.6	1.0	0.0%
ME 1	48 62 27	2015	Dry	April	--	4,470.7	4,467.6	3.1	0.1%	4,467.2	3.5	0.1%	4,466.9	3.8	0.1%	4,466.6	4.2	0.1%	4,466.3	4.4	0.1%	4,466.0	4.7	0.1%
ME 1	48 62 27	2015	Dry	May	--	141.3	138.7	2.6	1.8%	138.4	2.8	2.0%	138.2	3.1	2.2%	137.9	3.4	2.4%	137.7	3.6	2.6%	137.4	3.9	2.7%
ME 1	48 62 27	2015	Dry	June	--	175.4	172.1	3.4	1.9%	171.7	3.7	2.1%	171.4	4.1	2.3%	171.1	4.4	2.5%	170.7	4.7	2.7%	170.4	5.0	2.9%
ME 1	48 62 27	2015	Dry	July	--	53.0	50.7	2.3	4.4%	50.4	2.5	4.8%	50.2	2.8	5.2%	50.0	3.0	5.7%	49.7	3.2	6.1%	49.5	3.5	6.5%
ME 1	48 62 27	2015	Dry	August	--	47.4	45.2	2.2	4.7%	44.9	2.5	5.2%	44.7	2.7	5.6%	44.5	2.9	6.1%	44.3	3.1	6.6%	44.0	3.3	7.1%
ME 1	48 62 27	2015	Dry	September	Used in Summary Table Analysis	45.7	43.7	2.0	4.4%	43.5	2.2	4.8%	43.3	2.4	5.3%	43.1	2.6	5.7%	42.9	2.8	6.2%	42.7	3.0	6.6%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 62 27	2016	Above Normal	October	Used in Summary Table Analysis	37.6	35.2	2.4	6.4%	34.9	2.7	7.1%	34.7	2.9	7.8%	35.0	2.6	6.9%	34.9	2.7	7.1%	34.3	3.3	8.7%
ME 1	48 62 27	2016	Above Normal	November	Used in Summary Table Analysis	2,977.0	2,975.3	1.6	0.1%	2,975.2	1.7	0.1%	2,975.1	1.9	0.1%	2,974.9	2.1	0.1%	2,974.8	2.2	0.1%	2,974.7	2.3	0.1%
ME 1	48 62 27	2016	Above Normal	December	--	19,766.2	19,763.9	2.3	0.0%	19,763.9	2.3	0.0%	19,763.9	2.3	0.0%	19,763.9	2.3	0.0%	19,763.9	2.3	0.0%	19,763.9	2.3	0.0%
ME 1	48 62 27	2016	Above Normal	January	--	20,850.7	20,849.5	1.2	0.0%	20,849.5	1.2	0.0%	20,849.5	1.2	0.0%	20,849.5	1.2	0.0%	20,849.5	1.2	0.0%	20,849.5	1.2	0.0%
ME 1	48 62 27	2016	Above Normal	February	--	5,489.1	5,488.2	0.9	0.0%	5,488.1	1.0	0.0%	5,488.1	1.0	0.0%	5,488.0	1.2	0.0%	5,487.8	1.3	0.0%	5,487.7	1.4	0.0%
ME 1	48 62 27	2016	Above Normal	March	--	20,191.0	20,191.0	0.0	0.0%	20,191.0	0.0	0.0%	20,191.0	0.0	0.0%	20,189.8	1.2	0.0%	20,189.8	1.2	0.0%	20,189.8	1.2	0.0%
ME 1	48 62 27	2016	Above Normal	April	--	5,666.4	5,665.7	0.7	0.0%	5,665.7	0.7	0.0%	5,665.6	0.8	0.0%	5,665.6	0.8	0.0%	5,665.5	0.9	0.0%	5,665.4	1.0	0.0%
ME 1	48 62 27	2016	Above Normal	May	--	1,239.8	1,238.9	0.9	0.1%	1,238.8	1.0	0.1%	1,238.7	1.2	0.1%	1,238.5	1.3	0.1%	1,238.4	1.4	0.1%	1,238.3	1.5	0.1%
ME 1	48 62 27	2016	Above Normal	June	--	80.3	77.8	2.4	3.0%	77.6	2.7	3.3%	77.4	2.9	3.6%	77.1	3.1	3.9%	76.9	3.4	4.2%	76.6	3.6	4.5%
ME 1	48 62 27	2016	Above Normal	July	--	59.9	58.0	1.8	3.1%	57.9	2.0	3.4%	57.7	2.2	3.7%	57.5	2.4	4.0%	57.3	2.6	4.3%	57.1	2.7	4.6%
ME 1	48 62 27	2016	Above Normal	August	--	51.1	49.3	1.8	3.4%	49.2	1.9	3.8%	49.0	2.1	4.1%	48.8	2.3	4.5%	48.6	2.5	4.8%	48.5	2.6	5.1%
ME 1	48 62 27	2016	Above Normal	September	Used in Summary Table Analysis	47.3	45.8	1.5	3.2%	45.7	1.6	3.5%	45.5	1.8	3.8%	45.4	1.9	4.1%	45.2	2.1	4.4%	45.1	2.2	4.7%
ME 1	48 62 27	2017	Wet	October	Used in Summary Table Analysis	12,827.5	12,826.4	1.2	0.0%	12,826.4	1.2	0.0%	12,826.4	1.2	0.0%	12,826.4	1.2	0.0%	12,826.4	1.2	0.0%	12,825.2	2.3	0.0%
ME 1	48 62 27	2017	Wet	November	Used in Summary Table Analysis	7,380.0	7,378.7	1.3	0.0%	7,378.6	1.4	0.0%	7,378.5	1.5	0.0%	7,378.4	1.6	0.0%	7,378.2	1.7	0.0%	7,378.1	1.9	0.0%
ME 1	48 62 27	2017	Wet	December	--	9,425.5	9,424.4	1.0	0.0%	9,424.3	1.2	0.0%	9,424.2	1.3	0.0%	9,424.1	1.4	0.0%	9,424.0	1.5	0.0%	9,423.8	1.6	0.0%
ME 1	48 62 27	2017	Wet	January	--	35,022.0	35,020.8	1.2	0.0%	35,020.8	1.2	0.0%	35,020.8	1.2	0.0%	35,020.8	1.2	0.0%	35,020.8	1.2	0.0%	35,020.8	1.2	0.0%
ME 1	48 62 27	2017	Wet	February	--	33,784.7	33,784.7	0.0	0.0%	33,784.7	0.0	0.0%	33,784.7	0.0	0.0%	33,783.6	1.2	0.0%	33,783.6	1.2	0.0%	33,783.6	1.2	0.0%
ME 1	48 62 27	2017	Wet	March	--	6,422.2	6,421.6	0.6	0.0%	6,421.5	0.7	0.0%	6,421.5	0.7	0.0%	6,421.4	0.8	0.0%	6,421.4	0.8	0.0%	6,421.3	0.9	0.0%
ME 1	48 62 27	2017	Wet	April	--	8,124.2	8,123.7	0.5	0.0%	8,123.6	0.6	0.0%	8,123.6	0.6	0.0%	8,123.5	0.7	0.0%	8,123.5	0.7	0.0%	8,123.4	0.8	0.0%
ME 1	48 62 27	2017	Wet	May	--	192.4	191.6	0.9	0.5%	191.5	1.0	0.5%	191.4	1.1	0.6%	191.3	1.2	0.6%	191.2	1.3	0.7%	191.1	1.4	0.7%
ME 1	48 62 27	2017	Wet	June	--	182.7	179.8	2.9	1.6%	179.5	3.2	1.7%	179.2	3.5	1.9%	178.9	3.8	2.1%	178.6	4.1	2.2%	178.3	4.4	2.4%
ME 1	48 62 27	2017	Wet	July	--	55.9	54.1	1.8	3.2%	53.9	2.0	3.5%	53.8	2.1	3.8%	53.6	2.3	4.1%	53.4	2.5	4.4%	53.2	2.7	4.8%
ME 1	48 62 27	2017	Wet	August	--	51.2	49.5	1.7	3.3%	49.3	1.9	3.7%	49.2	2.0	4.0%	49.0	2.2	4.3%	48.8	2.4	4.7%	48.7	2.6	5.0%
ME 1	48 62 27	2017	Wet	September	Used in Summary Table Analysis	46.4	44.3	2.1	4.6%	44.1	2.3	5.1%	43.9	2.6	5.5%	43.7	2.8	6.0%	43.5	3.0	6.4%	43.3	3.2	6.9%
ME 1	48 62 27	2018	Above Normal	October	Used in Summary Table Analysis	53.6	52.9	0.7	1.4%	52.3	1.3	2.4%	52.0	1.6	2.9%	51.6	2.0	3.7%	51.3	2.3	4.2%	51.2	2.4	4.5%
ME 1	48 62 27	2018	Above Normal	November	Used in Summary Table Analysis	7,127.7	7,126.5	1.2	0.0%	7,126.4	1.3	0.0%	7,126.3	1.4	0.0%	7,126.2	1.5	0.0%	7,126.0	1.6	0.0%	7,125.9	1.7	0.0%
ME 1	48 62 27	2018	Above Normal	December	--	613.0	612.1	0.9	0.1%	612.0	1.0	0.2%	612.0	1.1	0.2%	611.9	1.2	0.2%	611.8	1.3	0.2%	611.7	1.4	0.2%
ME 1	48 62 27	2018	Above Normal	January	--	9,033.8	9,033.0	0.8	0.0%	9,032.9	0.9	0.0%	9,032.9	0.9	0.0%	9,032.8	1.0	0.0%	9,032.6	1.2	0.0%	9,032.6	1.2	0.0%
ME 1	48 62 27	2018	Above Normal	February	--	727.0	726.5	0.5	0.1%	726.4	0.6	0.1%	726.4	0.7	0.1%	726.3	0.8	0.1%	726.3	0.8	0.1%	726.2	0.9	0.1%
ME 1	48 62 27	2018	Above Normal	March	--	9,553.8	9,553.2	0.6	0.0%	9,553.2	0.6	0.0%	9,553.1	0.7	0.0%	9,553.1	0.7	0.0%	9,553.0	0.8	0.0%	9,553.0	0.8	0.0%
ME 1	48 62 27	2018	Above Normal	April	--	17,384.3	17,383.1	1.2	0.0%	17,383.1	1.2	0.0%	17,383.1	1.2	0.0%	17,383.1	1.2	0.0%	17,383.1	1.2	0.0%	17,383.1	1.2	0.0%
ME 1	48 62 27	2018	Above Normal	May	--	725.0	722.3	2.7	0.4%	722.0	3.0	0.4%	721.7	3.3	0.4%	721.5	3.5	0.5%	721.2	3.8	0.5%	720.9	4.1	0.6%
ME 1	48 62 27	2018	Above Normal	June	--	64.8	63.2	1.5	2.4%	63.1	1.7	2.6%	62.9	1.8	2.8%	62.8	2.0	3.1%	62.6	2.2	3.3%	62.5	2.3	3.6%
ME 1	48 62 27	2018	Above Normal	July	--	53.8	51.9	1.8	3.4%	51.7	2.0	3.7%	51.6	2.2	4.1%	51.4	2.4	4.4%	51.2	2.6	4.8%	51.0	2.7	5.1%
ME 1	48 62 27	2018	Above Normal	August	--	49.4	47.7	1.7	3.4%	47.5	1.9	3.8%	47.4	2.0	4.1%	47.2	2.2	4.5%	47.0	2.4	4.8%	46.9	2.5	5.2%
ME 1	48 62 27	2018	Above Normal	September	Used in Summary Table Analysis	42.9	40.8	2.1	5.0%	40.5	2.3	5.5%	40.3	2.6	6.0%	40.1	2.8	6.5%	39.9	3.0	7.0%	39.7	3.2	7.5%
ME 1	48 62 27	2019	Below Normal	October	Used in Summary Table Analysis	57.5	55.7	1.8	3.1%	55.5	2.0	3.4%	55.3	2.1	3.7%	55.1	2.3	4.0%	55.0	2.4	4.2%	54.9	2.6	4.5%
ME 1	48 62 27	2019	Below Normal	November	Used in Summary Table Analysis	4,560.6	4,559.5	1.2	0.0%	4,559.3	1.4	0.0%	4,559.1	1.5	0.0%	4,559.0	1.6	0.0%	4,558.9	1.7	0.0%	4,558.8	1.9	0.0%
ME 1	48 62 27	2019	Below Normal	December	--	7,083.3	7,082.3	1.0	0.0%	7,082.3	1.0	0.0%	7,082.2	1.2	0.0%	7,082.1	1.3	0.0%	7,081.9	1.4	0.0%	7,081.8	1.5	0.0%
ME 1	48 62 27	2019	Below Normal	January	--	16,199.1	16,197.9	1.2	0.0%	16,197.9	1.2	0.0%	16,197.9	1.2	0.0%	16,197.9	1.2	0.0%	16,197.9	1.2	0.0%	16,197.9	1.2	0.0%
ME 1	48 62 27	2019	Below Normal	February	--	44,743.1	44,743.1	0.0	0.0%	44,743.1	0.0	0.0%	44,741.9	1.2	0.0%	44,741.9	1.2	0.0%	44,741.9	1.2	0.0%	44,741.9	1.2	0.0%
ME 1	48 62 27	2019	Below Normal	March	--	10,377.0	10,376.4	0.6	0.0%	10,376.3	0.7	0.0%	10,376.2	0.8	0.0%	10,376.2	0.8	0.0%	10,376.0	0.9	0.0%	10,376.0	0.9	0.0%
ME 1	48 62 27	2019	Below Normal	April	--	3,490.0	3,489.6	0.5	0.0%	3,489.6	0.5	0.0%	3,489.5	0.6	0.0%	3,489.5	0.6	0.0%	3,489.4	0.7	0.0%	3,489.4	0.7	0.0%
ME 1	48 62 27	2019	Below Normal	May	--	6,610.0	6,607.2	2.8	0.0%	6,606.8	3.1	0.0%	6,606.6	3.4	0.1%	6,606.4	3.6	0.1%	6,606.0	3.9	0.1%	6,605.8	4.2	0.1%
ME 1	48 62 27	2019	Below Normal	June	--	81.6	79.5	2.1	2.6%	79.3	2.3	2.8%	79.1	2.5	3.1%	78.9	2.7	3.3%	78.7	2.9	3.6%	78.5	3.1	3.9%
ME 1	48 62 27	2019	Below Normal	July	--	64.0	62.2	1.8	2.9%	62.0	2.0	3.2%	61.8	2.2	3.4%	61.6	2.4	3.7%	61.5	2.6	4.0%	61.3	2.8	4.3%
ME 1	48 62 27	2019	Below Normal	August	--	53.9	52.2	1.7	3.1%	52.0	1.8	3.4%	51.9	2.0	3.7%	51.7	2.2	4.1%	51.5	2.4	4.4%	51.3	2.5	4.7%
ME 1	48 62 27	2019	Below Normal	September	Used in Summary Table Analysis	124.6	122.4	2.1	1.7%	122.2	2.4	1.9%	122.0	2.6	2.1%	121.8	2.8	2.2%	121.6	3.0	2.4%	121.4	3.2	2.6%
ME 1	48 62 27	2020	Dry	October	Used in Summary Table Analysis	157.7	156.3	1.5	0.9%	156.1	1.6	1.0%	156.0	1.8	1.1%	155.8	1.9	1.2%	155.7	2.1	1.3%	155.5	2.2	1.4%
ME 1	48 62 27	2020	Dry	November	Used in Summary Table Analysis	85.1	84.2	0.9	1.0%	84.1	0.9	1.1%	84.0	1.0	1.2%	83.9	1.1	1.3%	83.9	1.2	1.4%	83.8	1.3	1.5%
ME 1	48 62 27	2020	Dry	December	--	7,846.3	7,845.4	0.9	0.0%	7,845.3	1.0	0.0%	7,845.1	1.2	0.0%	7,845.1	1.2	0.0%	7,845.0	1.3	0.0%	7,844.9	1.4	0.0%
ME 1	48 62 27	2020	Dry	January	--	8,976.4	8,975.6	0.8	0.0%	8,975.5	0.9	0.0%	8,975.5	0.9	0.0%	8,975.3	1.0	0.0%	8,975.2	1.2	0.0%	8,975.1	1.3	0.0%
ME 1	48 62 27	2020	Dry	February	--	253.9	253.3	0.6	0.3%	253.2	0.7	0.3%	253.1	0.8	0.3%	253.1	0.8	0.3%	253.0	0.9	0.4%	253.0	1.0	0.4%
ME 1	48 62 27	2020	Dry	March	--	2,657.1	2,656.5	0.6	0.0%	2,656.5	0.6	0.0%	2,656.4	0.7	0.0%	2,656.4	0.7	0.0%	2,656.3	0.8	0.0%	2,656.3	0.8	0.0%
ME 1	48 62 27	2020	Dry	April	--	2,150.1	2,147.1	3.0	0.1%	2,146.8	3.4	0.2%	2,146.5	3.6	0.2%	2,146.2	3.9	0.2%	2,145.8	4.3	0.2%	2,145.6	4.5	0.2%
ME 1	48 62 27	2020	Dry	May	--	3,756.1	3,753.5	2.7	0.1%	3,753.2	2.9	0.1%	3,753.0	3.1	0.1%	3,752.8	3.4	0.1%	3,752.5	3.6	0.1%	3,752.2	3.9	0.1%
ME 1	48 62 27	2020	Dry	June	--	91.8	88.2	3.6	3.9%	87.9	4.0	4.3%	87.5	4.3	4.7%	87.2	4.7	5.1%	86.8	5.1	5.5%	86.5	5.4	5.9%
ME 1	48 62 27	2020	Dry	July	--	54.1	51.9	2.2	4.0%	51.7	2.4	4.4%	51.5	2.6	4.8%	51.3	2.8	5.2%	51.1	3.0	5.6%	50.9	3.2	6.0%
ME 1	48 62 27	2020	Dry	August	--	47.0	44.9	2.2	4.6%	44.7	2.4	5.1%	44.4	2.6	5.5%	44.2	2.8	6.0%	44.0	3.0	6.5%	43.8	3.3	6.9%
ME 1	48 62 27	2020	Dry	September	Used in Summary Table Analysis	44.7	42.7	2.0	4.4%	42.5	2.2	4.8%	42.3	2.4	5.3%	42.1	2.6	5.7%	41.9	2.8	6.2%	41.7	3.0	6.6%
ME 1	48 61 28	2000	Above Normal	October	Used in Summary Table Analysis	382.0	380.5	1.5	0.4%	380.3	1.7	0.4%	380.2	1.8	0.5%	380.0	2.0	0.5%	379.9	2.1	0.6%	379.7	2.3	0.6%
ME 1	48 61 28	2000	Above Normal	November	Used in Summary Table Analysis	8,171.5	8,170.5	1.0	0.0%	8,170.1	1.4	0.0%	8,170.0	1.5	0.0%	8,169.9	1.6	0.0%	8,169.8	1.7	0.0%	8,169.7	1.9	0.0%
ME 1	48 61 28	2000	Above Normal	December	--	4,781.5	4,780.6	0.9	0.0%	4,780.4	1.0	0.0%	4,780.3	1.2	0.0%	4,780.3	1.2	0.0%	4,780.2	1.3	0.0%	4,780.1	1.4	0.0%
ME 1	48 61 28	2000	Above Normal	January	--	14,993.1	14,991.9	1.2	0.0%	14,991.9	1.2	0.0%	14,991.9	1.2	0.0%	14,991.9	1.2	0.0%	14,991.9	1.2	0.0%	14,991.9	1.2	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 61 28	2000	Above Normal	February	--	16,317.1	16,316.0	1.2	0.0%	16,316.0	1.2	0.0%	16,316.0	1.2	0.0%	16,316.0	1.2	0.0%	16,316.0	1.2	0.0%	16,316.0	1.2	0.0%
ME 1	48 61 28	2000	Above Normal	March	--	5,745.5	5,744.9	0.6	0.0%	5,744.9	0.6	0.0%	5,744.8	0.7	0.0%	5,744.8	0.7	0.0%	5,744.7	0.8	0.0%	5,744.7	0.8	0.0%
ME 1	48 61 28	2000	Above Normal	April	--	5,376.9	5,376.4	0.5	0.0%	5,376.4	0.5	0.0%	5,376.3	0.6	0.0%	5,376.3	0.6	0.0%	5,376.3	0.6	0.0%	5,376.2	0.7	0.0%
ME 1	48 61 28	2000	Above Normal	May	--	2,761.7	2,759.0	2.7	0.1%	2,758.8	2.9	0.1%	2,758.4	3.2	0.1%	2,758.2	3.5	0.1%	2,758.0	3.7	0.1%	2,757.6	4.1	0.1%
ME 1	48 61 28	2000	Above Normal	June	--	605.1	601.7	3.4	0.6%	601.3	3.8	0.6%	601.0	4.1	0.7%	600.7	4.4	0.7%	600.3	4.7	0.8%	600.0	5.1	0.8%
ME 1	48 61 28	2000	Above Normal	July	--	68.9	67.1	1.8	2.6%	66.9	2.0	2.9%	66.7	2.2	3.2%	66.5	2.4	3.4%	66.3	2.5	3.7%	66.2	2.7	4.0%
ME 1	48 61 28	2000	Above Normal	August	--	55.8	54.0	1.7	3.1%	53.9	1.9	3.4%	53.7	2.1	3.7%	53.5	2.2	4.0%	53.4	2.4	4.3%	53.2	2.6	4.6%
ME 1	48 61 28	2000	Above Normal	September	Used in Summary Table Analysis	49.4	47.9	1.5	3.0%	47.8	1.6	3.3%	47.6	1.8	3.6%	47.5	1.9	3.9%	47.3	2.1	4.2%	47.2	2.3	4.6%
ME 1	48 61 28	2001	Dry	October	Used in Summary Table Analysis	2,777.0	2,775.3	1.6	0.1%	2,775.2	1.7	0.1%	2,775.1	1.9	0.1%	2,774.9	2.1	0.1%	2,774.8	2.2	0.1%	2,774.5	2.4	0.1%
ME 1	48 61 28	2001	Dry	November	Used in Summary Table Analysis	3,317.2	3,316.1	1.2	0.0%	3,316.0	1.3	0.0%	3,315.9	1.4	0.0%	3,315.7	1.5	0.0%	3,315.6	1.6	0.0%	3,315.4	1.9	0.1%
ME 1	48 61 28	2001	Dry	December	--	4,932.4	4,931.4	1.0	0.0%	4,931.4	1.0	0.0%	4,931.3	1.2	0.0%	4,931.1	1.3	0.0%	4,931.0	1.4	0.0%	4,930.9	1.5	0.0%
ME 1	48 61 28	2001	Dry	January	--	6,524.3	6,523.5	0.8	0.0%	6,523.4	0.9	0.0%	6,523.4	0.9	0.0%	6,523.3	1.0	0.0%	6,523.1	1.2	0.0%	6,523.0	1.3	0.0%
ME 1	48 61 28	2001	Dry	February	--	8,614.4	8,613.7	0.7	0.0%	8,613.5	0.8	0.0%	8,613.5	0.8	0.0%	8,613.4	0.9	0.0%	8,613.3	1.0	0.0%	8,613.3	1.0	0.0%
ME 1	48 61 28	2001	Dry	March	--	5,158.2	5,157.6	0.6	0.0%	5,157.5	0.7	0.0%	5,157.5	0.7	0.0%	5,157.4	0.8	0.0%	5,157.4	0.8	0.0%	5,157.3	0.9	0.0%
ME 1	48 61 28	2001	Dry	April	--	5,099.2	5,096.1	3.1	0.1%	5,095.7	3.5	0.1%	5,095.4	3.8	0.1%	5,095.1	4.1	0.1%	5,094.8	4.4	0.1%	5,094.4	4.7	0.1%
ME 1	48 61 28	2001	Dry	May	--	604.4	601.8	2.6	0.4%	601.5	2.8	0.5%	601.3	3.1	0.5%	601.1	3.3	0.5%	600.8	3.6	0.6%	600.5	3.8	0.6%
ME 1	48 61 28	2001	Dry	June	--	1,344.1	1,340.3	3.8	0.3%	1,339.8	4.3	0.3%	1,339.5	4.6	0.3%	1,339.1	5.0	0.4%	1,338.7	5.4	0.4%	1,338.3	5.8	0.4%
ME 1	48 61 28	2001	Dry	July	--	66.6	64.5	2.1	3.2%	64.3	2.3	3.5%	64.1	2.5	3.8%	63.9	2.7	4.1%	63.7	2.9	4.4%	63.5	3.1	4.7%
ME 1	48 61 28	2001	Dry	August	--	53.6	51.4	2.2	4.1%	51.2	2.4	4.5%	51.0	2.6	4.9%	50.8	2.8	5.3%	50.6	3.0	5.7%	50.3	3.3	6.1%
ME 1	48 61 28	2001	Dry	September	Used in Summary Table Analysis	48.1	46.1	2.0	4.1%	45.9	2.2	4.5%	45.7	2.4	4.9%	45.5	2.6	5.3%	45.3	2.8	5.7%	45.1	3.0	6.2%
ME 1	48 61 28	2002	Below Normal	October	Used in Summary Table Analysis	136.6	134.4	2.1	1.6%	134.2	2.3	1.7%	134.0	2.5	1.9%	133.8	2.8	2.0%	133.6	3.0	2.2%	133.4	3.2	2.3%
ME 1	48 61 28	2002	Below Normal	November	Used in Summary Table Analysis	7,283.1	7,281.5	1.6	0.0%	7,281.4	1.7	0.0%	7,281.1	2.0	0.0%	7,281.0	2.1	0.0%	7,280.8	2.3	0.0%	7,280.7	2.4	0.0%
ME 1	48 61 28	2002	Below Normal	December	--	13,884.3	13,883.1	1.2	0.0%	13,883.1	1.2	0.0%	13,881.9	2.3	0.0%	13,881.9	2.3	0.0%	13,881.9	2.3	0.0%	13,881.9	2.3	0.0%
ME 1	48 61 28	2002	Below Normal	January	--	9,677.1	9,675.9	1.2	0.0%	9,675.8	1.3	0.0%	9,675.7	1.4	0.0%	9,675.5	1.6	0.0%	9,675.3	1.7	0.0%	9,675.2	1.9	0.0%
ME 1	48 61 28	2002	Below Normal	February	--	8,397.2	8,396.3	0.9	0.0%	8,396.2	1.0	0.0%	8,396.1	1.2	0.0%	8,395.9	1.3	0.0%	8,395.8	1.4	0.0%	8,395.7	1.5	0.0%
ME 1	48 61 28	2002	Below Normal	March	--	7,261.5	7,260.6	0.8	0.0%	7,260.6	0.8	0.0%	7,260.5	0.9	0.0%	7,260.4	1.0	0.0%	7,260.3	1.2	0.0%	7,260.3	1.2	0.0%
ME 1	48 61 28	2002	Below Normal	April	--	4,287.6	4,284.8	2.8	0.1%	4,284.5	3.1	0.1%	4,284.3	3.4	0.1%	4,283.9	3.7	0.1%	4,283.7	3.9	0.1%	4,283.4	4.2	0.1%
ME 1	48 61 28	2002	Below Normal	May	--	1,141.7	1,139.4	2.3	0.2%	1,139.2	2.5	0.2%	1,138.9	2.7	0.2%	1,138.7	3.0	0.3%	1,138.5	3.2	0.3%	1,138.2	3.5	0.3%
ME 1	48 61 28	2002	Below Normal	June	--	193.9	191.1	2.7	1.4%	190.9	3.0	1.5%	190.6	3.3	1.7%	190.3	3.5	1.8%	190.1	3.8	2.0%	189.8	4.1	2.1%
ME 1	48 61 28	2002	Below Normal	July	--	57.0	55.0	2.0	3.5%	54.8	2.2	3.8%	54.6	2.4	4.2%	54.4	2.6	4.5%	54.2	2.7	4.8%	54.0	2.9	5.2%
ME 1	48 61 28	2002	Below Normal	August	--	51.0	49.1	1.9	3.7%	48.9	2.1	4.1%	48.7	2.3	4.4%	48.5	2.5	4.8%	48.3	2.6	5.2%	48.1	2.8	5.6%
ME 1	48 61 28	2002	Below Normal	September	Used in Summary Table Analysis	47.0	45.3	1.7	3.6%	45.1	1.8	3.9%	44.9	2.0	4.3%	44.8	2.2	4.7%	44.6	2.4	5.0%	44.4	2.5	5.4%
ME 1	48 61 28	2003	Wet	October	Used in Summary Table Analysis	35.3	33.6	1.7	4.9%	33.4	1.9	5.4%	33.3	2.1	5.9%	33.1	2.3	6.4%	32.9	2.4	6.9%	32.7	2.6	7.4%
ME 1	48 61 28	2003	Wet	November	Used in Summary Table Analysis	620.9	619.5	1.4	0.2%	619.4	1.5	0.2%	619.2	1.7	0.3%	619.1	1.8	0.3%	619.0	2.0	0.3%	618.8	2.1	0.3%
ME 1	48 61 28	2003	Wet	December	--	29,795.1	29,794.0	1.2	0.0%	29,794.0	1.2	0.0%	29,794.0	1.2	0.0%	29,794.0	1.2	0.0%	29,794.0	1.2	0.0%	29,794.0	1.2	0.0%
ME 1	48 61 28	2003	Wet	January	--	7,612.6	7,611.6	1.0	0.0%	7,611.5	1.2	0.0%	7,611.5	1.2	0.0%	7,611.3	1.3	0.0%	7,611.2	1.4	0.0%	7,611.1	1.5	0.0%
ME 1	48 61 28	2003	Wet	February	--	5,539.1	5,538.3	0.8	0.0%	5,538.2	0.9	0.0%	5,538.1	1.0	0.0%	5,538.1	1.0	0.0%	5,538.0	1.2	0.0%	5,537.8	1.3	0.0%
ME 1	48 61 28	2003	Wet	March	--	11,079.3	11,078.6	0.7	0.0%	11,078.5	0.8	0.0%	11,078.5	0.8	0.0%	11,078.4	0.9	0.0%	11,078.4	0.9	0.0%	11,078.2	1.0	0.0%
ME 1	48 61 28	2003	Wet	April	--	21,796.3	21,795.1	1.2	0.0%	21,795.1	1.2	0.0%	21,795.1	1.2	0.0%	21,795.1	1.2	0.0%	21,795.1	1.2	0.0%	21,795.1	1.2	0.0%
ME 1	48 61 28	2003	Wet	May	--	2,085.1	2,082.3	2.8	0.1%	2,081.9	3.1	0.1%	2,081.6	3.5	0.2%	2,081.4	3.7	0.2%	2,081.1	3.9	0.2%	2,080.8	4.3	0.2%
ME 1	48 61 28	2003	Wet	June	--	78.6	76.8	1.9	2.4%	76.6	2.0	2.5%	76.5	2.2	2.8%	76.3	2.3	2.9%	76.2	2.5	3.2%	76.0	2.6	3.4%
ME 1	48 61 28	2003	Wet	July	--	63.0	61.1	1.9	3.0%	60.9	2.1	3.3%	60.7	2.3	3.7%	60.5	2.5	4.0%	60.3	2.7	4.2%	60.1	2.9	4.5%
ME 1	48 61 28	2003	Wet	August	--	64.6	62.5	2.1	3.2%	62.3	2.3	3.5%	62.1	2.5	3.8%	61.8	2.7	4.2%	61.6	2.9	4.6%	61.4	3.2	4.9%
ME 1	48 61 28	2003	Wet	September	Used in Summary Table Analysis	49.4	47.9	1.5	3.1%	47.7	1.7	3.4%	47.6	1.8	3.7%	47.4	2.0	4.0%	47.3	2.1	4.3%	47.1	2.3	4.6%
ME 1	48 61 28	2004	Wet	October	Used in Summary Table Analysis	36.7	35.2	1.5	4.1%	35.0	1.7	4.5%	34.9	1.8	5.0%	34.7	2.0	5.4%	34.6	2.1	5.8%	34.4	2.3	6.2%
ME 1	48 61 28	2004	Wet	November	Used in Summary Table Analysis	4,127.8	4,126.5	1.3	0.0%	4,126.4	1.4	0.0%	4,126.3	1.5	0.0%	4,126.2	1.6	0.0%	4,126.0	1.7	0.0%	4,125.9	1.9	0.0%
ME 1	48 61 28	2004	Wet	December	--	18,060.2	18,059.0	1.2	0.0%	18,059.0	1.2	0.0%	18,057.9	2.3	0.0%	18,057.9	2.3	0.0%	18,057.9	2.3	0.0%	18,057.9	2.3	0.0%
ME 1	48 61 28	2004	Wet	January	--	10,221.3	10,220.5	0.8	0.0%	10,220.4	0.9	0.0%	10,220.3	1.0	0.0%	10,220.3	1.0	0.0%	10,220.1	1.2	0.0%	10,220.0	1.3	0.0%
ME 1	48 61 28	2004	Wet	February	--	17,475.7	17,475.7	0.0	0.0%	17,475.7	0.0	0.0%	17,475.7	0.0	0.0%	17,475.7	0.0	0.0%	17,475.7	0.0	0.0%	17,474.5	1.2	0.0%
ME 1	48 61 28	2004	Wet	March	--	4,157.1	4,156.5	0.6	0.0%	4,156.5	0.6	0.0%	4,156.4	0.7	0.0%	4,156.3	0.8	0.0%	4,156.3	0.8	0.0%	4,156.1	0.9	0.0%
ME 1	48 61 28	2004	Wet	April	--	3,542.5	3,542.0	0.5	0.0%	3,541.9	0.6	0.0%	3,541.9	0.6	0.0%	3,541.9	0.6	0.0%	3,541.8	0.7	0.0%	3,541.8	0.7	0.0%
ME 1	48 61 28	2004	Wet	May	--	1,058.6	1,055.8	2.7	0.3%	1,055.6	3.0	0.3%	1,055.3	3.3	0.3%	1,055.0	3.5	0.3%	1,054.8	3.8	0.4%	1,054.5	4.1	0.4%
ME 1	48 61 28	2004	Wet	June	--	68.8	67.3	1.5	2.2%	67.2	1.6	2.4%	67.1	1.8	2.6%	66.9	1.9	2.8%	66.8	2.1	3.0%	66.6	2.2	3.2%
ME 1	48 61 28	2004	Wet	July	--	56.2	54.4	1.9	3.3%	54.2	2.0	3.6%	54.0	2.2	4.0%	53.8	2.4	4.3%	53.6	2.6	4.6%	53.4	2.8	4.9%
ME 1	48 61 28	2004	Wet	August	--	49.7	48.0	1.7	3.5%	47.8	1.9	3.8%	47.6	2.1	4.2%	47.4	2.3	4.5%	47.3	2.4	4.9%	47.1	2.6	5.2%
ME 1	48 61 28	2004	Wet	September	Used in Summary Table Analysis	43.6	41.4	2.2	5.0%	41.2	2.4	5.5%	41.0	2.6	6.0%	40.8	2.8	6.5%	40.5	3.1	7.0%	40.3	3.3	7.5%
ME 1	48 61 28	2005	Above Normal	October	Used in Summary Table Analysis	5,807.1	5,805.4	1.6	0.0%	5,805.2	1.9	0.0%	5,805.1	2.0	0.0%	5,805.0	2.1	0.0%	5,804.7	2.3	0.0%	5,804.6	2.4	0.0%
ME 1	48 61 28	2005	Above Normal	November	Used in Summary Table Analysis	961.9	960.6	1.2	0.1%	960.5	1.4	0.1%	960.4	1.5	0.2%	960.2	1.6	0.2%	960.1	1.7	0.2%	960.0	1.9	0.2%
ME 1	48 61 28	2005	Above Normal	December	--	11,843.8	11,842.6	1.2	0.0%	11,842.6	1.2	0.0%	11,842.6	1.2	0.0%	11,842.6	1.2	0.0%	11,842.6	1.2	0.0%	11,842.6	1.2	0.0%
ME 1	48 61 28	2005	Above Normal	January	--	8,378.1	8,377.2	0.9	0.0%	8,377.2	0.9	0.0%	8,377.1	1.0	0.0%	8,377.0	1.2	0.0%	8,376.9	1.3	0.0%	8,376.7	1.4	0.0%
ME 1	48 61 28	2005	Above Normal	February	--	4,637.8	4,637.2	0.7	0.0%	4,637.0	0.8	0.0%	4,637.0	0.8	0.0%	4,636.9	0.9	0.0%	4,636.9	0.9	0.0%	4,636.8	1.0	0.0%
ME 1	48 61 28	2005	Above Normal	March	--	14,233.8	14,233.8	0.0	0.0%	14,233.8	0.0	0.0%	14,233.8	0.0	0.0%	14,232.6	1.2	0.0%	14,232.6	1.2	0.0%	14,232.6	1.2	0.0%
ME 1	48 61 28	2005	Above Normal	April	--	9,202.3	9,201.9	0.5	0.0%	9,201.7	0.6	0.0%	9,201.7	0.6	0.0%	9,201.6	0.7	0.0%	9,201.6	0.7	0.0%	9,201.5	0.8	0.0%
ME 1	48 61 28	2005	Above Normal	May	--	8,498.4	8,495.5	2.9	0.0%	8,495.1	3.2	0.0%	8,494.9	3.5	0.0%	8,494.6	3.8	0.0%	8,494.3	4.1	0.0%	8,494.0	4.4	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 61 28	2005	Above Normal	June	--	6,358.1	6,354.5	3.6	0.1%	6,354.2	3.9	0.1%	6,353.8	4.3	0.1%	6,353.5	4.6	0.1%	6,353.1	5.0	0.1%	6,352.7	5.4	0.1%
ME 1	48 61 28	2005	Above Normal	July	--	91.3	89.0	2.3	2.5%	88.8	2.5	2.7%	88.6	2.7	3.0%	88.4	2.9	3.2%	88.1	3.2	3.5%	87.9	3.4	3.7%
ME 1	48 61 28	2005	Above Normal	August	--	65.2	63.5	1.7	2.6%	63.3	1.9	2.9%	63.2	2.1	3.2%	63.0	2.2	3.4%	62.8	2.4	3.7%	62.7	2.6	3.9%
ME 1	48 61 28	2005	Above Normal	September	Used in Summary Table Analysis	55.4	53.9	1.5	2.7%	53.8	1.6	2.9%	53.6	1.8	3.2%	53.5	1.9	3.5%	53.3	2.1	3.8%	53.2	2.2	4.0%
ME 1	48 61 28	2006	Wet	October	Used in Summary Table Analysis	248.9	247.4	1.6	0.6%	247.2	1.7	0.7%	247.1	1.9	0.8%	246.9	2.0	0.8%	246.8	2.2	0.9%	246.6	2.3	0.9%
ME 1	48 61 28	2006	Wet	November	Used in Summary Table Analysis	6,511.1	6,510.0	1.2	0.0%	6,509.8	1.3	0.0%	6,509.7	1.4	0.0%	6,509.6	1.5	0.0%	6,509.5	1.6	0.0%	6,509.4	1.7	0.0%
ME 1	48 61 28	2006	Wet	December	--	20,006.9	20,005.8	1.2	0.0%	20,005.8	1.2	0.0%	20,005.8	1.2	0.0%	20,004.6	2.3	0.0%	20,004.6	2.3	0.0%	20,004.6	2.3	0.0%
ME 1	48 61 28	2006	Wet	January	--	16,886.6	16,885.4	1.2	0.0%	16,885.4	1.2	0.0%	16,885.4	1.2	0.0%	16,885.4	1.2	0.0%	16,885.4	1.2	0.0%	16,885.4	1.2	0.0%
ME 1	48 61 28	2006	Wet	February	--	9,316.0	9,315.3	0.7	0.0%	9,315.2	0.8	0.0%	9,315.2	0.8	0.0%	9,315.0	0.9	0.0%	9,315.0	0.9	0.0%	9,314.9	1.0	0.0%
ME 1	48 61 28	2006	Wet	March	--	23,204.9	23,203.7	1.2	0.0%	23,203.7	1.2	0.0%	23,203.7	1.2	0.0%	23,203.7	1.2	0.0%	23,203.7	1.2	0.0%	23,203.7	1.2	0.0%
ME 1	48 61 28	2006	Wet	April	--	11,477.3	11,476.9	0.5	0.0%	11,476.7	0.6	0.0%	11,476.7	0.6	0.0%	11,476.7	0.6	0.0%	11,476.6	0.7	0.0%	11,476.6	0.7	0.0%
ME 1	48 61 28	2006	Wet	May	--	4,638.8	4,637.8	0.9	0.0%	4,637.7	1.0	0.0%	4,637.6	1.2	0.0%	4,637.5	1.3	0.0%	4,637.5	1.3	0.0%	4,637.4	1.4	0.0%
ME 1	48 61 28	2006	Wet	June	--	562.5	559.4	3.1	0.5%	559.1	3.3	0.6%	558.8	3.7	0.7%	558.5	4.0	0.7%	558.2	4.3	0.8%	557.9	4.6	0.8%
ME 1	48 61 28	2006	Wet	July	--	75.1	73.2	1.9	2.5%	73.1	2.0	2.7%	72.9	2.2	2.9%	72.7	2.4	3.2%	72.5	2.6	3.4%	72.3	2.7	3.7%
ME 1	48 61 28	2006	Wet	August	--	61.1	59.3	1.7	2.8%	59.2	1.9	3.1%	59.0	2.1	3.4%	58.8	2.3	3.8%	58.6	2.5	4.0%	58.4	2.6	4.3%
ME 1	48 61 28	2006	Wet	September	Used in Summary Table Analysis	53.7	52.2	1.5	2.8%	52.0	1.6	3.0%	51.9	1.8	3.3%	51.7	1.9	3.6%	51.6	2.1	3.9%	51.4	2.2	4.2%
ME 1	48 61 28	2007	Above Normal	October	Used in Summary Table Analysis	44.4	42.9	1.5	3.4%	42.7	1.7	3.7%	42.6	1.8	4.1%	42.4	2.0	4.4%	42.3	2.1	4.8%	42.1	2.3	5.1%
ME 1	48 61 28	2007	Above Normal	November	Used in Summary Table Analysis	5,895.4	5,894.1	1.3	0.0%	5,894.0	1.4	0.0%	5,893.9	1.5	0.0%	5,893.8	1.6	0.0%	5,893.6	1.7	0.0%	5,893.5	1.9	0.0%
ME 1	48 61 28	2007	Above Normal	December	--	10,887.2	10,886.0	1.2	0.0%	10,886.0	1.2	0.0%	10,885.9	1.3	0.0%	10,885.8	1.4	0.0%	10,885.6	1.5	0.0%	10,885.5	1.6	0.0%
ME 1	48 61 28	2007	Above Normal	January	--	2,469.3	2,468.5	0.8	0.0%	2,468.4	0.9	0.0%	2,468.3	1.0	0.0%	2,468.3	1.0	0.0%	2,468.2	1.2	0.0%	2,468.1	1.3	0.1%
ME 1	48 61 28	2007	Above Normal	February	--	17,635.4	17,634.3	1.2	0.0%	17,634.3	1.2	0.0%	17,634.3	1.2	0.0%	17,634.3	1.2	0.0%	17,634.3	1.2	0.0%	17,634.3	1.2	0.0%
ME 1	48 61 28	2007	Above Normal	March	--	5,055.1	5,054.5	0.6	0.0%	5,054.4	0.7	0.0%	5,054.3	0.8	0.0%	5,054.3	0.8	0.0%	5,054.2	0.9	0.0%	5,054.2	0.9	0.0%
ME 1	48 61 28	2007	Above Normal	April	--	6,495.5	6,492.8	2.7	0.0%	6,492.6	2.9	0.0%	6,492.2	3.2	0.0%	6,492.0	3.5	0.1%	6,491.7	3.8	0.1%	6,491.4	4.1	0.1%
ME 1	48 61 28	2007	Above Normal	May	--	1,269.0	1,266.8	2.2	0.2%	1,266.6	2.4	0.2%	1,266.4	2.5	0.2%	1,266.2	2.8	0.2%	1,266.0	3.0	0.2%	1,265.7	3.2	0.3%
ME 1	48 61 28	2007	Above Normal	June	--	459.3	456.0	3.2	0.7%	455.7	3.5	0.8%	455.4	3.9	0.8%	455.1	4.2	0.9%	454.8	4.5	1.0%	454.4	4.8	1.1%
ME 1	48 61 28	2007	Above Normal	July	--	107.6	105.2	2.4	2.2%	105.0	2.6	2.4%	104.8	2.8	2.6%	104.5	3.1	2.8%	104.3	3.3	3.1%	104.1	3.5	3.3%
ME 1	48 61 28	2007	Above Normal	August	--	53.9	52.1	1.8	3.4%	51.9	2.0	3.7%	51.7	2.2	4.1%	51.6	2.4	4.4%	51.4	2.5	4.7%	51.2	2.7	5.0%
ME 1	48 61 28	2007	Above Normal	September	Used in Summary Table Analysis	49.0	47.4	1.6	3.3%	47.2	1.8	3.7%	47.1	2.0	4.0%	46.9	2.1	4.3%	46.8	2.3	4.6%	46.6	2.4	5.0%
ME 1	48 61 28	2008	Dry	October	Used in Summary Table Analysis	2,923.5	2,921.8	1.7	0.1%	2,921.6	1.9	0.1%	2,921.4	2.1	0.1%	2,921.3	2.2	0.1%	2,921.1	2.4	0.1%	2,920.9	2.5	0.1%
ME 1	48 61 28	2008	Dry	November	Used in Summary Table Analysis	2,159.6	2,158.3	1.3	0.1%	2,158.2	1.4	0.1%	2,158.1	1.5	0.1%	2,158.0	1.6	0.1%	2,157.9	1.7	0.1%	2,157.8	1.9	0.1%
ME 1	48 61 28	2008	Dry	December	--	14,219.9	14,218.8	1.2	0.0%	14,218.8	1.2	0.0%	14,218.8	1.2	0.0%	14,218.8	1.2	0.0%	14,218.8	1.2	0.0%	14,218.8	1.2	0.0%
ME 1	48 61 28	2008	Dry	January	--	15,909.7	15,908.6	1.2	0.0%	15,908.6	1.2	0.0%	15,908.6	1.2	0.0%	15,908.6	1.2	0.0%	15,908.6	1.2	0.0%	15,908.6	1.2	0.0%
ME 1	48 61 28	2008	Dry	February	--	6,502.7	6,502.0	0.7	0.0%	6,501.9	0.8	0.0%	6,501.7	0.9	0.0%	6,501.7	0.9	0.0%	6,501.6	1.0	0.0%	6,501.6	1.0	0.0%
ME 1	48 61 28	2008	Dry	March	--	3,171.1	3,170.5	0.6	0.0%	3,170.4	0.7	0.0%	3,170.4	0.7	0.0%	3,170.3	0.8	0.0%	3,170.3	0.8	0.0%	3,170.1	0.9	0.0%
ME 1	48 61 28	2008	Dry	April	--	4,326.6	4,323.5	3.1	0.1%	4,323.3	3.4	0.1%	4,322.9	3.7	0.1%	4,322.6	4.1	0.1%	4,322.3	4.3	0.1%	4,322.0	4.6	0.1%
ME 1	48 61 28	2008	Dry	May	--	75.4	73.9	1.6	2.1%	73.7	1.7	2.2%	73.6	1.8	2.5%	73.4	2.0	2.7%	73.3	2.2	2.9%	73.1	2.3	3.1%
ME 1	48 61 28	2008	Dry	June	--	76.0	72.6	3.3	4.4%	72.3	3.7	4.8%	72.0	4.0	5.3%	71.6	4.3	5.7%	71.3	4.7	6.1%	71.0	5.0	6.5%
ME 1	48 61 28	2008	Dry	July	--	48.4	46.1	2.3	4.8%	45.8	2.6	5.3%	45.6	2.8	5.8%	45.4	3.0	6.3%	45.1	3.3	6.7%	44.9	3.5	7.2%
ME 1	48 61 28	2008	Dry	August	--	45.0	42.7	2.3	5.0%	42.5	2.5	5.5%	42.3	2.7	6.1%	42.0	3.0	6.6%	41.8	3.2	7.1%	41.6	3.4	7.6%
ME 1	48 61 28	2008	Dry	September	Used in Summary Table Analysis	33.8	30.9	2.8	8.4%	30.6	3.1	9.3%	30.4	3.4	10.1%	30.1	3.7	11.0%	29.8	4.0	11.8%	29.5	4.3	12.6%
ME 1	48 61 28	2009	Critical	October	Used in Summary Table Analysis	652.6	650.4	2.1	0.3%	650.2	2.4	0.4%	650.0	2.6	0.4%	649.8	2.8	0.4%	649.6	3.0	0.5%	649.3	3.2	0.5%
ME 1	48 61 28	2009	Critical	November	Used in Summary Table Analysis	3,874.8	3,873.1	1.6	0.0%	3,873.0	1.7	0.0%	3,872.8	2.0	0.1%	3,872.7	2.1	0.1%	3,872.6	2.2	0.1%	3,872.3	2.4	0.1%
ME 1	48 61 28	2009	Critical	December	--	7,184.4	7,183.0	1.4	0.0%	7,182.9	1.5	0.0%	7,182.8	1.6	0.0%	7,182.6	1.7	0.0%	7,182.5	1.9	0.0%	7,182.4	2.0	0.0%
ME 1	48 61 28	2009	Critical	January	--	4,435.0	4,433.8	1.2	0.0%	4,433.7	1.3	0.0%	4,433.6	1.4	0.0%	4,433.4	1.5	0.0%	4,433.3	1.6	0.0%	4,433.3	1.6	0.0%
ME 1	48 61 28	2009	Critical	February	--	13,541.7	13,540.5	1.2	0.0%	13,540.5	1.2	0.0%	13,540.5	1.2	0.0%	13,540.5	1.2	0.0%	13,540.5	1.2	0.0%	13,540.5	1.2	0.0%
ME 1	48 61 28	2009	Critical	March	--	11,012.7	11,011.9	0.8	0.0%	11,011.8	0.9	0.0%	11,011.8	0.9	0.0%	11,011.7	1.0	0.0%	11,011.6	1.2	0.0%	11,011.6	1.2	0.0%
ME 1	48 61 28	2009	Critical	April	--	4,801.4	4,798.1	3.2	0.1%	4,797.8	3.6	0.1%	4,797.5	3.9	0.1%	4,797.2	4.2	0.1%	4,796.9	4.5	0.1%	4,796.6	4.7	0.1%
ME 1	48 61 28	2009	Critical	May	--	10,363.4	10,360.4	3.0	0.0%	10,360.1	3.4	0.0%	10,359.8	3.6	0.0%	10,359.5	3.9	0.0%	10,359.3	4.2	0.0%	10,358.9	4.5	0.0%
ME 1	48 61 28	2009	Critical	June	--	336.7	332.8	3.8	1.1%	332.5	4.2	1.2%	332.1	4.6	1.4%	331.7	5.0	1.5%	331.3	5.4	1.6%	330.9	5.7	1.7%
ME 1	48 61 28	2009	Critical	July	--	68.7	66.3	2.4	3.5%	66.0	2.6	3.8%	65.8	2.9	4.2%	65.6	3.1	4.5%	65.4	3.3	4.8%	65.1	3.6	5.2%
ME 1	48 61 28	2009	Critical	August	--	54.8	52.5	2.3	4.2%	52.3	2.5	4.6%	52.0	2.7	5.0%	51.8	3.0	5.4%	51.6	3.2	5.8%	51.4	3.4	6.2%
ME 1	48 61 28	2009	Critical	September	Used in Summary Table Analysis	48.8	46.7	2.0	4.1%	46.5	2.2	4.5%	46.3	2.4	5.0%	46.1	2.6	5.4%	46.0	2.8	5.8%	45.8	3.0	6.2%
ME 1	48 61 28	2010	Below Normal	October	Used in Summary Table Analysis	5,090.3	5,088.3	2.0	0.0%	5,088.1	2.2	0.0%	5,087.8	2.4	0.0%	5,087.6	2.7	0.1%	5,087.4	2.9	0.1%	5,087.3	3.0	0.1%
ME 1	48 61 28	2010	Below Normal	November	Used in Summary Table Analysis	6,068.9	6,067.2	1.6	0.0%	6,067.1	1.7	0.0%	6,066.9	2.0	0.0%	6,066.8	2.1	0.0%	6,066.7	2.2	0.0%	6,066.4	2.4	0.0%
ME 1	48 61 28	2010	Below Normal	December	--	6,273.8	6,272.6	1.3	0.0%	6,272.5	1.4	0.0%	6,272.2	1.6	0.0%	6,272.1	1.7	0.0%	6,272.0	1.9	0.0%	6,271.9	2.0	0.0%
ME 1	48 61 28	2010	Below Normal	January	--	18,039.4	18,039.4	0.0	0.0%	18,038.2	1.2	0.0%	18,038.2	1.2	0.0%	18,038.2	1.2	0.0%	18,038.2	1.2	0.0%	18,038.2	1.2	0.0%
ME 1	48 61 28	2010	Below Normal	February	--	11,623.8	11,622.7	1.2	0.0%	11,622.7	1.2	0.0%	11,622.7	1.2	0.0%	11,622.7	1.2	0.0%	11,622.7	1.2	0.0%	11,622.7	1.2	0.0%
ME 1	48 61 28	2010	Below Normal	March	--	15,967.6	15,966.4	1.2	0.0%	15,966.4	1.2	0.0%	15,966.4	1.2	0.0%	15,966.4	1.2	0.0%	15,966.4	1.2	0.0%	15,966.4	1.2	0.0%
ME 1	48 61 28	2010	Below Normal	April	--	22,789.4	22,788.2	1.2	0.0%	22,788.2	1.2	0.0%	22,788.2	1.2	0.0%	22,788.2	1.2	0.0%	22,788.2	1.2	0.0%	22,788.2	1.2	0.0%
ME 1	48 61 28	2010	Below Normal	May	--	6,408.3	6,405.3	3.0	0.0%	6,405.1	3.2	0.1%	6,404.7	3.6	0.1%	6,404.5	3.8	0.1%	6,404.2	4.2	0.1%	6,403.9	4.4	0.1%
ME 1	48 61 28	2010	Below Normal	June	--	3,612.6	3,608.9	3.7	0.1%	3,608.6	4.1	0.1%	3,608.1	4.5	0.1%	3,607.8	4.9	0.1%	3,607.4	5.2	0.1%	3,607.1	5.6	0.2%
ME 1	48 61 28	2010	Below Normal	July	--	88.2	86.0	2.2	2.4%	85.8	2.4	2.7%	85.5	2.6	3.0%	85.3	2.8	3.2%	85.1	3.0	3.5%	84.9	3.3	3.7%
ME 1	48 61 28	2010	Below Normal	August	--	66.8	64.9	1.9	2.8%	64.8	2.0	3.1%	64.6	2.2	3.3%	64.4	2.4	3.6%	64.3	2.5	3.8%	64.1	2.7	4.1%
ME 1	48 61 28	2010	Below Normal	September	Used in Summary Table Analysis	320.7	318.4	2.3	0.7%	318.1	2.5	0.8%	317.9	2.8	0.9%	317.6	3.0	0.9%	317.4	3.3	1.0%	317.2	3.5	1.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 61 28	2011	Wet	October	Used in Summary Table Analysis	7,138.7	7,137.0	1.6	0.0%	7,136.9	1.7	0.0%	7,136.8	1.9	0.0%	7,136.6	2.1	0.0%	7,136.5	2.2	0.0%	7,136.3	2.3	0.0%
ME 1	48 61 28	2011	Wet	November	Used in Summary Table Analysis	6,155.2	6,153.9	1.3	0.0%	6,153.8	1.4	0.0%	6,153.7	1.5	0.0%	6,153.6	1.6	0.0%	6,153.5	1.7	0.0%	6,153.4	1.9	0.0%
ME 1	48 61 28	2011	Wet	December	--	17,456.0	17,456.0	0.0	0.0%	17,456.0	0.0	0.0%	17,454.9	1.2	0.0%	17,454.9	1.2	0.0%	17,454.9	1.2	0.0%	17,454.9	1.2	0.0%
ME 1	48 61 28	2011	Wet	January	--	3,461.1	3,460.5	0.6	0.0%	3,460.4	0.7	0.0%	3,460.4	0.7	0.0%	3,460.3	0.8	0.0%	3,460.2	0.9	0.0%	3,460.1	1.0	0.0%
ME 1	48 61 28	2011	Wet	February	--	10,692.9	10,692.1	0.8	0.0%	10,692.1	0.8	0.0%	10,692.0	0.9	0.0%	10,691.9	1.0	0.0%	10,691.9	1.0	0.0%	10,691.8	1.2	0.0%
ME 1	48 61 28	2011	Wet	March	--	28,608.8	28,608.8	0.0	0.0%	28,608.8	0.0	0.0%	28,608.8	0.0	0.0%	28,608.8	0.0	0.0%	28,608.8	0.0	0.0%	28,608.8	0.0	0.0%
ME 1	48 61 28	2011	Wet	April	--	11,049.4	11,048.8	0.6	0.0%	11,048.8	0.6	0.0%	11,048.8	0.6	0.0%	11,048.7	0.7	0.0%	11,048.7	0.7	0.0%	11,048.6	0.8	0.0%
ME 1	48 61 28	2011	Wet	May	--	4,800.1	4,797.6	2.5	0.1%	4,797.2	2.9	0.1%	4,797.0	3.1	0.1%	4,796.6	3.5	0.1%	4,796.4	3.7	0.1%	4,796.1	4.1	0.1%
ME 1	48 61 28	2011	Wet	June	--	3,130.9	3,127.2	3.7	0.1%	3,126.9	4.1	0.1%	3,126.5	4.4	0.1%	3,126.2	4.7	0.2%	3,125.8	5.1	0.2%	3,125.5	5.4	0.2%
ME 1	48 61 28	2011	Wet	July	--	215.0	211.9	3.2	1.5%	211.6	3.5	1.6%	211.3	3.8	1.8%	211.0	4.1	1.9%	210.6	4.4	2.0%	210.3	4.7	2.2%
ME 1	48 61 28	2011	Wet	August	--	65.6	63.8	1.7	2.6%	63.7	1.9	2.9%	63.5	2.1	3.2%	63.3	2.2	3.4%	63.2	2.4	3.7%	63.0	2.6	3.9%
ME 1	48 61 28	2011	Wet	September	Used in Summary Table Analysis	55.3	53.8	1.5	2.7%	53.7	1.7	3.0%	53.5	1.8	3.3%	53.4	2.0	3.5%	53.2	2.1	3.8%	53.1	2.2	4.1%
ME 1	48 61 28	2012	Below Normal	October	Used in Summary Table Analysis	3,523.8	3,522.3	1.5	0.0%	3,522.2	1.6	0.0%	3,522.1	1.7	0.0%	3,522.0	1.9	0.1%	3,521.8	2.1	0.1%	3,521.6	2.2	0.1%
ME 1	48 61 28	2012	Below Normal	November	Used in Summary Table Analysis	4,810.8	4,809.6	1.2	0.0%	4,809.5	1.3	0.0%	4,809.4	1.4	0.0%	4,809.1	1.6	0.0%	4,809.0	1.7	0.0%	4,808.9	1.9	0.0%
ME 1	48 61 28	2012	Below Normal	December	--	1,955.9	1,955.0	0.9	0.0%	1,954.9	1.0	0.1%	1,954.9	1.0	0.1%	1,954.7	1.2	0.1%	1,954.6	1.3	0.1%	1,954.5	1.4	0.1%
ME 1	48 61 28	2012	Below Normal	January	--	11,418.8	11,417.9	0.8	0.0%	11,417.9	0.8	0.0%	11,417.8	0.9	0.0%	11,417.7	1.0	0.0%	11,417.7	1.0	0.0%	11,417.6	1.2	0.0%
ME 1	48 61 28	2012	Below Normal	February	--	6,648.4	6,647.7	0.7	0.0%	6,647.7	0.7	0.0%	6,647.6	0.8	0.0%	6,647.6	0.8	0.0%	6,647.5	0.9	0.0%	6,647.3	1.0	0.0%
ME 1	48 61 28	2012	Below Normal	March	--	25,101.9	25,101.9	0.0	0.0%	25,101.9	0.0	0.0%	25,101.9	0.0	0.0%	25,100.7	1.2	0.0%	25,100.7	1.2	0.0%	25,100.7	1.2	0.0%
ME 1	48 61 28	2012	Below Normal	April	--	12,497.7	12,496.5	1.2	0.0%	12,496.5	1.2	0.0%	12,496.5	1.2	0.0%	12,496.5	1.2	0.0%	12,496.5	1.2	0.0%	12,496.5	1.2	0.0%
ME 1	48 61 28	2012	Below Normal	May	--	2,045.4	2,042.6	2.8	0.1%	2,042.2	3.1	0.2%	2,042.0	3.4	0.2%	2,041.7	3.7	0.2%	2,041.4	3.9	0.2%	2,041.3	4.1	0.2%
ME 1	48 61 28	2012	Below Normal	June	--	3,034.1	3,030.4	3.7	0.1%	3,030.1	4.1	0.1%	3,029.7	4.4	0.1%	3,029.4	4.7	0.2%	3,029.1	5.1	0.2%	3,028.7	5.4	0.2%
ME 1	48 61 28	2012	Below Normal	July	--	1,081.3	1,078.1	3.2	0.3%	1,077.8	3.5	0.3%	1,077.5	3.8	0.4%	1,077.2	4.2	0.4%	1,076.9	4.5	0.4%	1,076.6	4.8	0.4%
ME 1	48 61 28	2012	Below Normal	August	--	72.2	70.5	1.8	2.4%	70.3	1.9	2.6%	70.2	2.1	2.9%	70.0	2.2	3.1%	69.8	2.4	3.3%	69.7	2.5	3.5%
ME 1	48 61 28	2012	Below Normal	September	Used in Summary Table Analysis	59.1	57.6	1.5	2.6%	57.4	1.7	2.9%	57.2	1.8	3.1%	57.1	2.0	3.4%	56.9	2.1	3.6%	56.8	2.3	3.9%
ME 1	48 61 28	2013	Below Normal	October	Used in Summary Table Analysis	1,481.0	1,479.4	1.6	0.1%	1,479.2	1.9	0.1%	1,479.1	2.0	0.1%	1,478.9	2.1	0.1%	1,478.7	2.3	0.2%	1,478.6	2.4	0.2%
ME 1	48 61 28	2013	Below Normal	November	Used in Summary Table Analysis	9,471.1	9,469.9	1.2	0.0%	9,469.7	1.4	0.0%	9,469.6	1.5	0.0%	9,469.4	1.6	0.0%	9,469.3	1.7	0.0%	9,469.2	1.9	0.0%
ME 1	48 61 28	2013	Below Normal	December	--	32,061.3	32,060.2	1.2	0.0%	32,060.2	1.2	0.0%	32,060.2	1.2	0.0%	32,060.2	1.2	0.0%	32,060.2	1.2	0.0%	32,060.2	1.2	0.0%
ME 1	48 61 28	2013	Below Normal	January	--	4,815.9	4,815.0	0.8	0.0%	4,814.9	0.9	0.0%	4,814.9	0.9	0.0%	4,814.8	1.0	0.0%	4,814.8	1.0	0.0%	4,814.7	1.2	0.0%
ME 1	48 61 28	2013	Below Normal	February	--	3,064.5	3,063.7	0.8	0.0%	3,063.7	0.8	0.0%	3,063.5	0.9	0.0%	3,063.4	1.0	0.0%	3,063.4	1.0	0.0%	3,063.3	1.2	0.0%
ME 1	48 61 28	2013	Below Normal	March	--	5,628.8	5,628.2	0.6	0.0%	5,628.1	0.7	0.0%	5,628.1	0.7	0.0%	5,628.0	0.8	0.0%	5,628.0	0.8	0.0%	5,627.9	0.9	0.0%
ME 1	48 61 28	2013	Below Normal	April	--	4,390.7	4,388.1	2.7	0.1%	4,387.7	3.0	0.1%	4,387.5	3.2	0.1%	4,387.3	3.5	0.1%	4,386.9	3.8	0.1%	4,386.7	4.1	0.1%
ME 1	48 61 28	2013	Below Normal	May	--	2,269.2	2,267.0	2.2	0.1%	2,266.8	2.4	0.1%	2,266.6	2.7	0.1%	2,266.3	2.9	0.1%	2,266.1	3.1	0.1%	2,265.9	3.4	0.1%
ME 1	48 61 28	2013	Below Normal	June	--	1,010.5	1,007.3	3.2	0.3%	1,007.0	3.5	0.3%	1,006.7	3.8	0.4%	1,006.4	4.2	0.4%	1,006.1	4.5	0.4%	1,005.8	4.8	0.5%
ME 1	48 61 28	2013	Below Normal	July	--	68.2	66.3	1.9	2.8%	66.1	2.1	3.1%	65.9	2.3	3.3%	65.7	2.5	3.6%	65.6	2.6	3.9%	65.4	2.8	4.2%
ME 1	48 61 28	2013	Below Normal	August	--	55.5	53.6	1.8	3.3%	53.5	2.0	3.6%	53.3	2.2	3.9%	53.1	2.4	4.3%	52.9	2.5	4.6%	52.7	2.7	4.9%
ME 1	48 61 28	2013	Below Normal	September	Used in Summary Table Analysis	3,826.7	3,824.2	2.5	0.1%	3,824.0	2.8	0.1%	3,823.7	3.0	0.1%	3,823.4	3.4	0.1%	3,823.1	3.6	0.1%	3,822.9	3.8	0.1%
ME 1	48 61 28	2014	Critical	October	Used in Summary Table Analysis	88.9	87.3	1.6	1.8%	87.1	1.8	2.0%	87.0	1.9	2.2%	86.8	2.1	2.4%	86.6	2.3	2.6%	86.5	2.4	2.7%
ME 1	48 61 28	2014	Critical	November	Used in Summary Table Analysis	1,146.9	1,145.6	1.3	0.1%	1,145.5	1.4	0.1%	1,145.4	1.5	0.1%	1,145.2	1.6	0.1%	1,145.1	1.8	0.2%	1,145.0	1.9	0.2%
ME 1	48 61 28	2014	Critical	December	--	916.0	915.0	1.0	0.1%	914.9	1.1	0.1%	914.8	1.2	0.1%	914.7	1.3	0.1%	914.6	1.4	0.2%	914.5	1.5	0.2%
ME 1	48 61 28	2014	Critical	January	--	1,813.8	1,812.8	0.9	0.1%	1,812.8	0.9	0.1%	1,812.7	1.0	0.1%	1,812.6	1.2	0.1%	1,812.6	1.2	0.1%	1,812.5	1.3	0.1%
ME 1	48 61 28	2014	Critical	February	--	9,864.4	9,863.5	0.8	0.0%	9,863.4	0.9	0.0%	9,863.4	0.9	0.0%	9,863.3	1.0	0.0%	9,863.3	1.0	0.0%	9,863.2	1.2	0.0%
ME 1	48 61 28	2014	Critical	March	--	14,825.2	14,824.1	1.2	0.0%	14,824.1	1.2	0.0%	14,824.1	1.2	0.0%	14,824.1	1.2	0.0%	14,824.1	1.2	0.0%	14,824.1	1.2	0.0%
ME 1	48 61 28	2014	Critical	April	--	3,624.4	3,621.3	3.1	0.1%	3,621.1	3.4	0.1%	3,620.7	3.7	0.1%	3,620.4	4.1	0.1%	3,620.0	4.4	0.1%	3,619.8	4.6	0.1%
ME 1	48 61 28	2014	Critical	May	--	1,849.9	1,847.3	2.5	0.1%	1,847.0	2.9	0.2%	1,846.8	3.1	0.2%	1,846.5	3.4	0.2%	1,846.2	3.7	0.2%	1,845.9	3.9	0.2%
ME 1	48 61 28	2014	Critical	June	--	120.8	117.0	3.8	3.2%	116.6	4.2	3.5%	116.2	4.6	3.8%	115.8	5.0	4.1%	115.5	5.4	4.4%	115.1	5.7	4.8%
ME 1	48 61 28	2014	Critical	July	--	57.3	55.1	2.3	4.0%	54.8	2.5	4.4%	54.6	2.7	4.8%	54.4	3.0	5.1%	54.2	3.2	5.5%	53.9	3.4	5.9%
ME 1	48 61 28	2014	Critical	August	--	50.1	47.9	2.2	4.5%	47.7	2.5	4.9%	47.4	2.7	5.3%	47.2	2.9	5.8%	47.0	3.1	6.2%	46.8	3.4	6.7%
ME 1	48 61 28	2014	Critical	September	Used in Summary Table Analysis	2,100.0	2,096.9	3.1	0.1%	2,096.6	3.4	0.2%	2,096.3	3.7	0.2%	2,095.9	4.1	0.2%	2,095.7	4.3	0.2%	2,095.4	4.6	0.2%
ME 1	48 61 28	2015	Dry	October	Used in Summary Table Analysis	8,240.5	8,238.4	2.1	0.0%	8,238.2	2.3	0.0%	8,238.0	2.5	0.0%	8,237.0	3.5	0.0%	8,236.9	3.6	0.0%	8,236.7	3.8	0.0%
ME 1	48 61 28	2015	Dry	November	Used in Summary Table Analysis	4,155.9	4,154.3	1.6	0.0%	4,154.2	1.7	0.0%	4,153.9	2.0	0.0%	4,153.8	2.1	0.1%	4,153.6	2.3	0.1%	4,153.5	2.4	0.1%
ME 1	48 61 28	2015	Dry	December	--	15,250.0	15,248.8	1.2	0.0%	15,248.8	1.2	0.0%	15,247.7	2.3	0.0%	15,247.7	2.3	0.0%	15,247.7	2.3	0.0%	15,247.7	2.3	0.0%
ME 1	48 61 28	2015	Dry	January	--	2,397.3	2,396.3	1.0	0.0%	2,396.2	1.2	0.0%	2,396.1	1.3	0.1%	2,396.1	1.3	0.1%	2,395.9	1.4	0.1%	2,395.8	1.5	0.1%
ME 1	48 61 28	2015	Dry	February	--	15,054.4	15,053.2	1.2	0.0%	15,053.2	1.2	0.0%	15,053.2	1.2	0.0%	15,053.2	1.2	0.0%	15,053.2	1.2	0.0%	15,053.2	1.2	0.0%
ME 1	48 61 28	2015	Dry	March	--	4,137.6	4,136.9	0.7	0.0%	4,136.8	0.8	0.0%	4,136.8	0.8	0.0%	4,136.7	0.9	0.0%	4,136.7	0.9	0.0%	4,136.6	1.0	0.0%
ME 1	48 61 28	2015	Dry	April	--	4,484.1	4,481.0	3.1	0.1%	4,480.7	3.5	0.1%	4,480.3	3.8	0.1%	4,480.0	4.2	0.1%	4,479.7	4.4	0.1%	4,479.4	4.7	0.1%
ME 1	48 61 28	2015	Dry	May	--	141.5	138.8	2.6	1.9%	138.6	2.9	2.0%	138.3	3.2	2.2%	138.0	3.4	2.4%	137.8	3.7	2.6%	137.5	3.9	2.8%
ME 1	48 61 28	2015	Dry	June	--	175.5	172.1	3.4	1.9%	171.8	3.8	2.1%	171.4	4.1	2.3%	171.1	4.4	2.5%	170.8	4.8	2.7%	170.4	5.1	2.9%
ME 1	48 61 28	2015	Dry	July	--	53.3	50.9	2.4	4.4%	50.7	2.6	4.9%	50.5	2.8	5.3%	50.2	3.1	5.8%	50.0	3.3	6.2%	49.8	3.5	6.6%
ME 1	48 61 28	2015	Dry	August	--	47.8	45.5	2.3	4.8%	45.3	2.5	5.3%	45.1	2.7	5.7%	44.8	3.0	6.2%	44.6	3.2	6.7%	44.4	3.4	7.2%
ME 1	48 61 28	2015	Dry	September	Used in Summary Table Analysis	46.2	44.2	2.1	4.5%	44.0	2.3	4.9%	43.8	2.5	5.4%	43.5	2.7	5.8%	43.3	2.9	6.2%	43.1	3.1	6.7%
ME 1	48 61 28	2016	Above Normal	October	Used in Summary Table Analysis	38.1	35.6	2.4	6.4%	35.3	2.7	7.2%	35.1	3.0	7.8%	35.4	2.6	6.9%	35.4	2.7	7.1%	34.8	3.3	8.7%
ME 1	48 61 28	2016	Above Normal	November	Used in Summary Table Analysis	2,983.0	2,981.5	1.5	0.1%	2,981.3	1.7	0.1%	2,981.1	1.9	0.1%	2,980.9	2.1	0.1%	2,980.8	2.2	0.1%	2,980.7	2.3	0.1%
ME 1	48 61 28	2016	Above Normal	December	--	19,809.0	19,806.7	2.3	0.0%	19,806.7	2.3	0.0%	19,806.7	2.3	0.0%	19,806.7	2.3	0.0%	19,806.7	2.3	0.0%	19,806.7	2.3	0.0%
ME 1	48 61 28	2016	Above Normal	January	--	20,895.8	20,894.7	1.2	0.0%	20,894.7	1.2	0.0%	20,894.7	1.2	0.0%	20,894.7	1.2	0.0%	20,894.7	1.2	0.0%	20,894.7	1.2	0.0%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 61 28	2016	Above Normal	February	--	5,498.6	5,497.7	0.9	0.0%	5,497.6	1.0	0.0%	5,497.5	1.2	0.0%	5,497.5	1.2	0.0%	5,497.3	1.3	0.0%	5,497.2	1.4	0.0%
ME 1	48 61 28	2016	Above Normal	March	--	20,233.8	20,233.8	0.0	0.0%	20,233.8	0.0	0.0%	20,232.6	1.2	0.0%	20,232.6	1.2	0.0%	20,232.6	1.2	0.0%	20,232.6	1.2	0.0%
ME 1	48 61 28	2016	Above Normal	April	--	5,678.8	5,678.1	0.7	0.0%	5,678.1	0.7	0.0%	5,678.0	0.8	0.0%	5,678.0	0.8	0.0%	5,677.9	0.9	0.0%	5,677.9	0.9	0.0%
ME 1	48 61 28	2016	Above Normal	May	--	1,244.7	1,243.8	0.9	0.1%	1,243.6	1.0	0.1%	1,243.5	1.2	0.1%	1,243.4	1.3	0.1%	1,243.4	1.3	0.1%	1,243.3	1.4	0.1%
ME 1	48 61 28	2016	Above Normal	June	--	80.5	78.0	2.5	3.1%	77.8	2.7	3.3%	77.5	2.9	3.7%	77.3	3.2	4.0%	77.1	3.4	4.2%	76.8	3.7	4.5%
ME 1	48 61 28	2016	Above Normal	July	--	60.4	58.5	1.9	3.1%	58.3	2.1	3.4%	58.1	2.3	3.7%	57.9	2.4	4.0%	57.8	2.6	4.3%	57.6	2.8	4.6%
ME 1	48 61 28	2016	Above Normal	August	--	51.7	49.9	1.8	3.5%	49.7	2.0	3.8%	49.5	2.2	4.2%	49.3	2.3	4.5%	49.1	2.5	4.9%	49.0	2.7	5.2%
ME 1	48 61 28	2016	Above Normal	September	Used in Summary Table Analysis	47.9	46.4	1.5	3.2%	46.2	1.7	3.5%	46.1	1.8	3.8%	45.9	2.0	4.2%	45.8	2.1	4.5%	45.6	2.3	4.8%
ME 1	48 61 28	2017	Wet	October	Used in Summary Table Analysis	12,855.3	12,853.0	2.3	0.0%	12,853.0	2.3	0.0%	12,853.0	2.3	0.0%	12,853.0	2.3	0.0%	12,853.0	2.3	0.0%	12,853.0	2.3	0.0%
ME 1	48 61 28	2017	Wet	November	Used in Summary Table Analysis	7,398.1	7,396.9	1.3	0.0%	7,396.8	1.4	0.0%	7,396.6	1.5	0.0%	7,396.5	1.6	0.0%	7,396.4	1.7	0.0%	7,396.2	2.0	0.0%
ME 1	48 61 28	2017	Wet	December	--	9,449.3	9,448.3	1.0	0.0%	9,448.1	1.2	0.0%	9,448.0	1.3	0.0%	9,448.0	1.3	0.0%	9,447.9	1.4	0.0%	9,447.8	1.5	0.0%
ME 1	48 61 28	2017	Wet	January	--	35,086.8	35,085.6	1.2	0.0%	35,085.6	1.2	0.0%	35,085.6	1.2	0.0%	35,085.6	1.2	0.0%	35,085.6	1.2	0.0%	35,085.6	1.2	0.0%
ME 1	48 61 28	2017	Wet	February	--	33,828.7	33,827.5	1.2	0.0%	33,827.5	1.2	0.0%	33,827.5	1.2	0.0%	33,827.5	1.2	0.0%	33,827.5	1.2	0.0%	33,827.5	1.2	0.0%
ME 1	48 61 28	2017	Wet	March	--	6,441.1	6,440.5	0.6	0.0%	6,440.4	0.7	0.0%	6,440.4	0.7	0.0%	6,440.3	0.8	0.0%	6,440.3	0.8	0.0%	6,440.2	0.9	0.0%
ME 1	48 61 28	2017	Wet	April	--	8,151.6	8,151.2	0.5	0.0%	8,151.0	0.6	0.0%	8,151.0	0.6	0.0%	8,150.9	0.7	0.0%	8,150.9	0.7	0.0%	8,150.9	0.7	0.0%
ME 1	48 61 28	2017	Wet	May	--	193.3	192.4	0.9	0.5%	192.3	1.0	0.5%	192.2	1.1	0.6%	192.1	1.2	0.6%	192.0	1.3	0.7%	191.9	1.4	0.7%
ME 1	48 61 28	2017	Wet	June	--	183.1	180.2	2.9	1.6%	179.9	3.2	1.8%	179.6	3.5	1.9%	179.3	3.8	2.1%	179.0	4.1	2.2%	178.7	4.4	2.4%
ME 1	48 61 28	2017	Wet	July	--	56.4	54.6	1.8	3.2%	54.4	2.0	3.6%	54.2	2.2	3.9%	54.0	2.4	4.2%	53.9	2.5	4.5%	53.7	2.7	4.8%
ME 1	48 61 28	2017	Wet	August	--	51.8	50.1	1.7	3.4%	49.9	1.9	3.7%	49.7	2.1	4.0%	49.6	2.3	4.4%	49.4	2.4	4.7%	49.2	2.6	5.1%
ME 1	48 61 28	2017	Wet	September	Used in Summary Table Analysis	47.1	44.9	2.2	4.6%	44.7	2.4	5.1%	44.5	2.6	5.5%	44.3	2.8	6.0%	44.1	3.0	6.4%	43.8	3.2	6.9%
ME 1	48 61 28	2018	Above Normal	October	Used in Summary Table Analysis	54.8	54.1	0.8	1.4%	53.5	1.3	2.4%	53.2	1.6	2.9%	52.8	2.0	3.7%	52.5	2.3	4.2%	52.4	2.5	4.5%
ME 1	48 61 28	2018	Above Normal	November	Used in Summary Table Analysis	7,147.7	7,146.5	1.2	0.0%	7,146.4	1.3	0.0%	7,146.3	1.4	0.0%	7,146.2	1.5	0.0%	7,146.1	1.6	0.0%	7,145.9	1.7	0.0%
ME 1	48 61 28	2018	Above Normal	December	--	614.8	613.9	0.9	0.1%	613.8	1.0	0.2%	613.7	1.1	0.2%	613.6	1.2	0.2%	613.6	1.3	0.2%	613.4	1.4	0.2%
ME 1	48 61 28	2018	Above Normal	January	--	9,058.8	9,058.0	0.8	0.0%	9,057.9	0.9	0.0%	9,057.9	0.9	0.0%	9,057.8	1.0	0.0%	9,057.6	1.2	0.0%	9,057.6	1.2	0.0%
ME 1	48 61 28	2018	Above Normal	February	--	729.1	728.5	0.6	0.1%	728.4	0.6	0.1%	728.4	0.7	0.1%	728.3	0.8	0.1%	728.2	0.8	0.1%	728.2	0.9	0.1%
ME 1	48 61 28	2018	Above Normal	March	--	9,582.8	9,582.3	0.5	0.0%	9,582.2	0.6	0.0%	9,582.2	0.6	0.0%	9,582.1	0.7	0.0%	9,581.9	0.8	0.0%	9,581.9	0.8	0.0%
ME 1	48 61 28	2018	Above Normal	April	--	17,414.4	17,413.2	1.2	0.0%	17,413.2	1.2	0.0%	17,413.2	1.2	0.0%	17,413.2	1.2	0.0%	17,413.2	1.2	0.0%	17,413.2	1.2	0.0%
ME 1	48 61 28	2018	Above Normal	May	--	726.0	723.2	2.7	0.4%	722.9	3.0	0.4%	722.7	3.3	0.5%	722.4	3.5	0.5%	722.1	3.8	0.5%	721.9	4.1	0.6%
ME 1	48 61 28	2018	Above Normal	June	--	64.8	63.2	1.6	2.4%	63.0	1.7	2.7%	62.9	1.9	2.9%	62.7	2.0	3.2%	62.6	2.2	3.4%	62.4	2.4	3.6%
ME 1	48 61 28	2018	Above Normal	July	--	54.1	52.3	1.9	3.5%	52.1	2.1	3.8%	51.9	2.2	4.1%	51.7	2.4	4.5%	51.5	2.6	4.8%	51.3	2.8	5.2%
ME 1	48 61 28	2018	Above Normal	August	--	50.0	48.2	1.7	3.5%	48.0	1.9	3.8%	47.9	2.1	4.2%	47.7	2.3	4.5%	47.5	2.4	4.9%	47.3	2.6	5.2%
ME 1	48 61 28	2018	Above Normal	September	Used in Summary Table Analysis	43.5	41.3	2.2	5.0%	41.1	2.4	5.5%	40.9	2.6	6.0%	40.7	2.8	6.5%	40.5	3.0	7.0%	40.3	3.3	7.5%
ME 1	48 61 28	2019	Below Normal	October	Used in Summary Table Analysis	58.3	56.5	1.8	3.1%	56.3	2.0	3.4%	56.1	2.1	3.7%	55.9	2.4	4.0%	55.8	2.5	4.2%	55.6	2.6	4.5%
ME 1	48 61 28	2019	Below Normal	November	Used in Summary Table Analysis	4,573.7	4,572.5	1.3	0.0%	4,572.3	1.4	0.0%	4,572.2	1.5	0.0%	4,572.1	1.6	0.0%	4,571.9	1.9	0.0%	4,571.8	2.0	0.0%
ME 1	48 61 28	2019	Below Normal	December	--	7,103.8	7,102.8	1.0	0.0%	7,102.7	1.2	0.0%	7,102.5	1.3	0.0%	7,102.4	1.4	0.0%	7,102.3	1.5	0.0%	7,102.2	1.6	0.0%
ME 1	48 61 28	2019	Below Normal	January	--	16,232.6	16,231.5	1.2	0.0%	16,231.5	1.2	0.0%	16,231.5	1.2	0.0%	16,231.5	1.2	0.0%	16,231.5	1.2	0.0%	16,230.3	2.3	0.0%
ME 1	48 61 28	2019	Below Normal	February	--	44,789.4	44,788.2	1.2	0.0%	44,788.2	1.2	0.0%	44,788.2	1.2	0.0%	44,788.2	1.2	0.0%	44,788.2	1.2	0.0%	44,788.2	1.2	0.0%
ME 1	48 61 28	2019	Below Normal	March	--	10,405.6	10,405.0	0.6	0.0%	10,404.9	0.7	0.0%	10,404.9	0.7	0.0%	10,404.7	0.8	0.0%	10,404.6	0.9	0.0%	10,404.6	0.9	0.0%
ME 1	48 61 28	2019	Below Normal	April	--	3,501.0	3,500.6	0.5	0.0%	3,500.5	0.6	0.0%	3,500.5	0.6	0.0%	3,500.3	0.7	0.0%	3,500.3	0.7	0.0%	3,500.2	0.8	0.0%
ME 1	48 61 28	2019	Below Normal	May	--	6,640.2	6,637.4	2.8	0.0%	6,637.0	3.1	0.0%	6,636.8	3.4	0.1%	6,636.6	3.6	0.1%	6,636.2	3.9	0.1%	6,636.0	4.2	0.1%
ME 1	48 61 28	2019	Below Normal	June	--	81.1	79.0	2.1	2.6%	78.7	2.3	2.9%	78.5	2.6	3.2%	78.3	2.8	3.4%	78.1	3.0	3.7%	77.9	3.2	4.0%
ME 1	48 61 28	2019	Below Normal	July	--	64.5	62.6	1.9	2.9%	62.4	2.1	3.2%	62.2	2.3	3.5%	62.0	2.4	3.8%	61.9	2.6	4.1%	61.7	2.8	4.4%
ME 1	48 61 28	2019	Below Normal	August	--	54.5	52.7	1.7	3.2%	52.6	1.9	3.5%	52.4	2.1	3.8%	52.2	2.2	4.1%	52.1	2.4	4.4%	51.9	2.6	4.7%
ME 1	48 61 28	2019	Below Normal	September	Used in Summary Table Analysis	125.9	123.7	2.2	1.7%	123.5	2.4	1.9%	123.3	2.6	2.1%	123.1	2.8	2.2%	122.9	3.1	2.4%	122.7	3.3	2.6%
ME 1	48 61 28	2020	Dry	October	Used in Summary Table Analysis	158.7	157.2	1.5	0.9%	157.0	1.7	1.0%	156.8	1.8	1.1%	156.7	2.0	1.2%	156.5	2.1	1.3%	156.4	2.3	1.4%
ME 1	48 61 28	2020	Dry	November	Used in Summary Table Analysis	85.7	84.9	0.9	1.0%	84.8	1.0	1.1%	84.7	1.1	1.2%	84.6	1.2	1.3%	84.5	1.2	1.5%	84.4	1.3	1.6%
ME 1	48 61 28	2020	Dry	December	--	7,868.1	7,867.1	0.9	0.0%	7,867.0	1.0	0.0%	7,866.9	1.2	0.0%	7,866.9	1.2	0.0%	7,866.8	1.3	0.0%	7,866.7	1.4	0.0%
ME 1	48 61 28	2020	Dry	January	--	8,997.6	8,996.6	0.9	0.0%	8,996.6	0.9	0.0%	8,996.5	1.0	0.0%	8,996.4	1.2	0.0%	8,996.3	1.3	0.0%	8,996.3	1.3	0.0%
ME 1	48 61 28	2020	Dry	February	--	254.6	254.0	0.6	0.3%	253.9	0.7	0.3%	253.8	0.8	0.3%	253.8	0.9	0.3%	253.7	0.9	0.4%	253.6	1.0	0.4%
ME 1	48 61 28	2020	Dry	March	--	2,666.4	2,666.0	0.5	0.0%	2,665.9	0.6	0.0%	2,665.7	0.7	0.0%	2,665.7	0.7	0.0%	2,665.6	0.8	0.0%	2,665.6	0.8	0.0%
ME 1	48 61 28	2020	Dry	April	--	2,157.2	2,154.2	3.0	0.1%	2,153.8	3.4	0.2%	2,153.6	3.6	0.2%	2,153.2	3.9	0.2%	2,152.9	4.3	0.2%	2,152.7	4.5	0.2%
ME 1	48 61 28	2020	Dry	May	--	3,770.8	3,768.2	2.7	0.1%	3,767.9	2.9	0.1%	3,767.7	3.1	0.1%	3,767.5	3.4	0.1%	3,767.1	3.7	0.1%	3,766.9	3.9	0.1%
ME 1	48 61 28	2020	Dry	June	--	91.2	87.5	3.7	4.0%	87.2	4.0	4.4%	86.8	4.4	4.8%	86.4	4.7	5.2%	86.0	5.1	5.6%	85.7	5.5	6.0%
ME 1	48 61 28	2020	Dry	July	--	54.2	52.0	2.2	4.1%	51.8	2.4	4.5%	51.5	2.7	4.9%	51.3	2.9	5.3%	51.1	3.1	5.7%	50.9	3.3	6.1%
ME 1	48 61 28	2020	Dry	August	--	47.4	45.2	2.2	4.7%	45.0	2.4	5.1%	44.7	2.7	5.6%	44.5	2.9	6.1%	44.3	3.1	6.6%	44.1	3.3	7.0%
ME 1	48 61 28	2020	Dry	September	Used in Summary Table Analysis	45.1	43.1	2.0	4.5%	42.9	2.2	4.9%	42.7	2.4	5.3%	42.5	2.6	5.8%	42.3	2.8	6.2%	42.1	3.0	6.7%
ME 1	47 60 29	2000	Above Normal	October	Used in Summary Table Analysis	383.4	381.8	1.5	0.4%	381.7	1.7	0.4%	381.5	1.8	0.5%	381.4	2.0	0.5%	381.2	2.1	0.6%	381.1	2.3	0.6%
ME 1	47 60 29	2000	Above Normal	November	Used in Summary Table Analysis	8,191.2	8,190.0	1.2	0.0%	8,189.7	1.5	0.0%	8,189.6	1.6	0.0%	8,189.5	1.7	0.0%	8,189.4	1.9	0.0%	8,189.2	2.0	0.0%
ME 1	47 60 29	2000	Above Normal	December	--	4,792.5	4,791.6	0.9	0.0%	4,791.4	1.0	0.0%	4,791.3	1.2	0.0%	4,791.2	1.3	0.0%	4,791.2	1.3	0.0%	4,791.1	1.4	0.0%
ME 1	47 60 29	2000	Above Normal	January	--	15,025.5	15,024.3	1.2	0.0%	15,024.3	1.2	0.0%	15,024.3	1.2	0.0%	15,024.3	1.2	0.0%	15,024.3	1.2	0.0%	15,024.3	1.2	0.0%
ME 1	47 60 29	2000	Above Normal	February	--	16,349.5	16,349.5	0.0	0.0%	16,349.5	0.0	0.0%	16,348.4	1.2	0.0%	16,348.4	1.2	0.0%	16,348.4	1.2	0.0%	16,348.4	1.2	0.0%
ME 1	47 60 29	2000	Above Normal	March	--	5,756.9	5,756.4	0.6	0.0%	5,756.3	0.7	0.0%	5,756.3	0.7	0.0%	5,756.1	0.8	0.0%	5,756.1	0.8	0.0%	5,756.0	0.9	0.0%
ME 1	47 60 29	2000	Above Normal	April	--	5,388.9	5,388.4	0.5	0.0%	5,388.4	0.5	0.0%	5,388.3	0.6	0.0%	5,388.3	0.6	0.0%	5,388.2	0.7	0.0%	5,388.2	0.7	0.0%
ME 1	47 60 29	2000	Above Normal	May	--	2,771.1	2,768.4	2.7	0.1%	2,768.2	2.9	0.1%	2,767.9	3.1	0.1%	2,767.6	3.5	0.1%	2,767.4	3.7	0.1%	2,767.1	3.9	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 60 29	2000	Above Normal	June	--	607.1	603.6	3.4	0.6%	603.3	3.8	0.6%	603.0	4.1	0.7%	602.6	4.4	0.7%	602.3	4.8	0.8%	601.9	5.1	0.8%
ME 1	47 60 29	2000	Above Normal	July	--	69.1	67.2	1.8	2.7%	67.1	2.0	2.9%	66.9	2.2	3.2%	66.7	2.4	3.5%	66.5	2.6	3.7%	66.3	2.8	4.0%
ME 1	47 60 29	2000	Above Normal	August	--	56.2	54.4	1.7	3.1%	54.2	1.9	3.4%	54.1	2.1	3.7%	53.9	2.3	4.0%	53.7	2.4	4.3%	53.6	2.6	4.6%
ME 1	47 60 29	2000	Above Normal	September	Used in Summary Table Analysis	49.9	48.3	1.5	3.0%	48.2	1.7	3.3%	48.0	1.8	3.6%	47.9	2.0	4.0%	47.7	2.1	4.3%	47.6	2.3	4.6%
ME 1	47 60 29	2001	Dry	October	Used in Summary Table Analysis	2,782.1	2,780.4	1.6	0.1%	2,780.3	1.7	0.1%	2,780.2	1.9	0.1%	2,780.0	2.1	0.1%	2,779.9	2.2	0.1%	2,779.7	2.3	0.1%
ME 1	47 60 29	2001	Dry	November	Used in Summary Table Analysis	3,325.3	3,324.1	1.3	0.0%	3,324.0	1.4	0.0%	3,323.8	1.5	0.0%	3,323.7	1.6	0.0%	3,323.6	1.7	0.1%	3,323.5	1.9	0.1%
ME 1	47 60 29	2001	Dry	December	--	4,940.5	4,939.6	0.9	0.0%	4,939.5	1.0	0.0%	4,939.4	1.2	0.0%	4,939.2	1.3	0.0%	4,939.1	1.4	0.0%	4,939.0	1.5	0.0%
ME 1	47 60 29	2001	Dry	January	--	6,539.9	6,539.0	0.9	0.0%	6,539.0	0.9	0.0%	6,538.9	1.0	0.0%	6,538.8	1.2	0.0%	6,538.8	1.2	0.0%	6,538.7	1.3	0.0%
ME 1	47 60 29	2001	Dry	February	--	8,630.7	8,630.0	0.7	0.0%	8,629.9	0.8	0.0%	8,629.7	0.9	0.0%	8,629.7	0.9	0.0%	8,629.6	1.0	0.0%	8,629.6	1.0	0.0%
ME 1	47 60 29	2001	Dry	March	--	5,168.5	5,167.9	0.6	0.0%	5,167.9	0.6	0.0%	5,167.8	0.7	0.0%	5,167.8	0.7	0.0%	5,167.7	0.8	0.0%	5,167.6	0.9	0.0%
ME 1	47 60 29	2001	Dry	April	--	5,111.9	5,108.8	3.1	0.1%	5,108.6	3.4	0.1%	5,108.2	3.7	0.1%	5,107.9	4.1	0.1%	5,107.6	4.3	0.1%	5,107.3	4.6	0.1%
ME 1	47 60 29	2001	Dry	May	--	605.3	602.7	2.6	0.4%	602.4	2.9	0.5%	602.1	3.1	0.5%	601.9	3.3	0.5%	601.7	3.6	0.6%	601.4	3.9	0.6%
ME 1	47 60 29	2001	Dry	June	--	1,345.7	1,341.8	3.9	0.3%	1,341.4	4.3	0.3%	1,341.1	4.6	0.3%	1,340.6	5.1	0.4%	1,340.3	5.4	0.4%	1,339.9	5.8	0.4%
ME 1	47 60 29	2001	Dry	July	--	66.6	64.5	2.1	3.2%	64.3	2.3	3.5%	64.1	2.5	3.8%	63.9	2.8	4.1%	63.7	3.0	4.5%	63.5	3.2	4.8%
ME 1	47 60 29	2001	Dry	August	--	53.8	51.6	2.2	4.1%	51.4	2.4	4.5%	51.2	2.6	4.9%	50.9	2.9	5.3%	50.7	3.1	5.7%	50.5	3.3	6.1%
ME 1	47 60 29	2001	Dry	September	Used in Summary Table Analysis	48.4	46.4	2.0	4.1%	46.2	2.2	4.5%	46.0	2.4	5.0%	45.8	2.6	5.4%	45.6	2.8	5.8%	45.4	3.0	6.2%
ME 1	47 60 29	2002	Below Normal	October	Used in Summary Table Analysis	137.2	135.0	2.1	1.6%	134.8	2.3	1.7%	134.6	2.6	1.9%	134.4	2.8	2.0%	134.2	3.0	2.2%	134.0	3.2	2.3%
ME 1	47 60 29	2002	Below Normal	November	Used in Summary Table Analysis	7,296.2	7,294.4	1.7	0.0%	7,294.3	1.9	0.0%	7,294.1	2.1	0.0%	7,294.0	2.2	0.0%	7,293.9	2.3	0.0%	7,293.6	2.5	0.0%
ME 1	47 60 29	2002	Below Normal	December	--	13,917.8	13,915.5	2.3	0.0%	13,915.5	2.3	0.0%	13,915.5	2.3	0.0%	13,915.5	2.3	0.0%	13,915.5	2.3	0.0%	13,915.5	2.3	0.0%
ME 1	47 60 29	2002	Below Normal	January	--	9,696.2	9,695.0	1.2	0.0%	9,694.9	1.3	0.0%	9,694.8	1.4	0.0%	9,694.7	1.5	0.0%	9,694.6	1.6	0.0%	9,694.4	1.7	0.0%
ME 1	47 60 29	2002	Below Normal	February	--	8,413.7	8,412.7	0.9	0.0%	8,412.6	1.0	0.0%	8,412.5	1.2	0.0%	8,412.4	1.3	0.0%	8,412.3	1.4	0.0%	8,412.2	1.5	0.0%
ME 1	47 60 29	2002	Below Normal	March	--	7,278.2	7,277.4	0.8	0.0%	7,277.4	0.8	0.0%	7,277.3	0.9	0.0%	7,277.2	1.0	0.0%	7,277.2	1.0	0.0%	7,277.1	1.2	0.0%
ME 1	47 60 29	2002	Below Normal	April	--	4,296.8	4,294.0	2.8	0.1%	4,293.6	3.1	0.1%	4,293.4	3.4	0.1%	4,293.1	3.7	0.1%	4,292.8	3.9	0.1%	4,292.6	4.2	0.1%
ME 1	47 60 29	2002	Below Normal	May	--	1,145.1	1,142.8	2.3	0.2%	1,142.6	2.5	0.2%	1,142.3	2.8	0.2%	1,142.1	3.0	0.3%	1,141.9	3.2	0.3%	1,141.6	3.5	0.3%
ME 1	47 60 29	2002	Below Normal	June	--	193.7	191.0	2.8	1.4%	190.7	3.0	1.6%	190.5	3.3	1.7%	190.2	3.6	1.8%	189.9	3.8	2.0%	189.6	4.1	2.1%
ME 1	47 60 29	2002	Below Normal	July	--	57.1	55.1	2.0	3.5%	54.9	2.2	3.8%	54.7	2.4	4.2%	54.5	2.6	4.5%	54.3	2.8	4.9%	54.1	3.0	5.2%
ME 1	47 60 29	2002	Below Normal	August	--	51.3	49.4	1.9	3.7%	49.2	2.1	4.1%	49.0	2.3	4.5%	48.8	2.5	4.8%	48.6	2.7	5.2%	48.4	2.9	5.6%
ME 1	47 60 29	2002	Below Normal	September	Used in Summary Table Analysis	47.4	45.7	1.7	3.6%	45.5	1.9	3.9%	45.4	2.0	4.3%	45.2	2.2	4.7%	45.0	2.4	5.0%	44.8	2.6	5.4%
ME 1	47 60 29	2003	Wet	October	Used in Summary Table Analysis	35.8	34.1	1.7	4.9%	33.9	1.9	5.4%	33.7	2.1	5.9%	33.6	2.3	6.3%	33.4	2.5	6.8%	33.2	2.6	7.3%
ME 1	47 60 29	2003	Wet	November	Used in Summary Table Analysis	621.8	620.4	1.4	0.2%	620.3	1.6	0.2%	620.1	1.7	0.3%	620.0	1.8	0.3%	619.8	2.0	0.3%	619.7	2.1	0.3%
ME 1	47 60 29	2003	Wet	December	--	29,858.8	29,858.8	0.0	0.0%	29,857.6	1.2	0.0%	29,857.6	1.2	0.0%	29,857.6	1.2	0.0%	29,857.6	1.2	0.0%	29,857.6	1.2	0.0%
ME 1	47 60 29	2003	Wet	January	--	7,628.6	7,627.5	1.0	0.0%	7,627.4	1.2	0.0%	7,627.4	1.2	0.0%	7,627.3	1.3	0.0%	7,627.2	1.4	0.0%	7,627.1	1.5	0.0%
ME 1	47 60 29	2003	Wet	February	--	5,550.8	5,550.0	0.8	0.0%	5,550.0	0.8	0.0%	5,549.9	0.9	0.0%	5,549.8	1.0	0.0%	5,549.7	1.2	0.0%	5,549.7	1.2	0.0%
ME 1	47 60 29	2003	Wet	March	--	11,102.9	11,102.2	0.7	0.0%	11,102.1	0.8	0.0%	11,102.1	0.8	0.0%	11,102.0	0.9	0.0%	11,101.9	1.0	0.0%	11,101.9	1.0	0.0%
ME 1	47 60 29	2003	Wet	April	--	21,848.4	21,847.2	1.2	0.0%	21,847.2	1.2	0.0%	21,847.2	1.2	0.0%	21,847.2	1.2	0.0%	21,847.2	1.2	0.0%	21,847.2	1.2	0.0%
ME 1	47 60 29	2003	Wet	May	--	2,091.3	2,088.4	2.9	0.1%	2,088.1	3.2	0.2%	2,087.8	3.5	0.2%	2,087.5	3.8	0.2%	2,087.3	4.1	0.2%	2,087.0	4.3	0.2%
ME 1	47 60 29	2003	Wet	June	--	78.6	76.7	1.9	2.4%	76.6	2.0	2.6%	76.4	2.2	2.8%	76.3	2.3	3.0%	76.1	2.5	3.2%	75.9	2.7	3.4%
ME 1	47 60 29	2003	Wet	July	--	63.4	61.5	1.9	3.1%	61.3	2.1	3.3%	61.1	2.3	3.7%	60.9	2.5	4.0%	60.7	2.7	4.3%	60.5	2.9	4.6%
ME 1	47 60 29	2003	Wet	August	--	65.1	63.0	2.1	3.2%	62.8	2.3	3.5%	62.6	2.5	3.8%	62.4	2.8	4.2%	62.1	3.0	4.6%	61.9	3.2	4.9%
ME 1	47 60 29	2003	Wet	September	Used in Summary Table Analysis	49.9	48.4	1.5	3.1%	48.2	1.7	3.4%	48.1	1.8	3.7%	47.9	2.0	4.0%	47.8	2.1	4.3%	47.6	2.3	4.6%
ME 1	47 60 29	2004	Wet	October	Used in Summary Table Analysis	37.3	35.7	1.5	4.1%	35.6	1.7	4.5%	35.4	1.8	4.9%	35.3	2.0	5.3%	35.1	2.1	5.7%	35.0	2.3	6.2%
ME 1	47 60 29	2004	Wet	November	Used in Summary Table Analysis	4,134.3	4,133.0	1.3	0.0%	4,132.9	1.4	0.0%	4,132.8	1.5	0.0%	4,132.6	1.6	0.0%	4,132.5	1.7	0.0%	4,132.4	1.9	0.0%
ME 1	47 60 29	2004	Wet	December	--	18,099.5	18,098.4	1.2	0.0%	18,098.4	1.2	0.0%	18,097.2	2.3	0.0%	18,097.2	2.3	0.0%	18,097.2	2.3	0.0%	18,097.2	2.3	0.0%
ME 1	47 60 29	2004	Wet	January	--	10,245.6	10,244.7	0.9	0.0%	10,244.7	0.9	0.0%	10,244.6	1.0	0.0%	10,244.4	1.2	0.0%	10,244.4	1.2	0.0%	10,244.3	1.3	0.0%
ME 1	47 60 29	2004	Wet	February	--	17,510.4	17,509.3	1.2	0.0%	17,509.3	1.2	0.0%	17,509.3	1.2	0.0%	17,509.3	1.2	0.0%	17,509.3	1.2	0.0%	17,509.3	1.2	0.0%
ME 1	47 60 29	2004	Wet	March	--	4,166.0	4,165.4	0.6	0.0%	4,165.4	0.6	0.0%	4,165.3	0.7	0.0%	4,165.2	0.8	0.0%	4,165.2	0.8	0.0%	4,165.0	0.9	0.0%
ME 1	47 60 29	2004	Wet	April	--	3,550.9	3,550.5	0.5	0.0%	3,550.3	0.6	0.0%	3,550.3	0.6	0.0%	3,550.3	0.6	0.0%	3,550.2	0.7	0.0%	3,550.2	0.7	0.0%
ME 1	47 60 29	2004	Wet	May	--	1,062.3	1,059.5	2.7	0.3%	1,059.3	3.0	0.3%	1,059.0	3.3	0.3%	1,058.7	3.5	0.3%	1,058.4	3.8	0.4%	1,058.2	4.1	0.4%
ME 1	47 60 29	2004	Wet	June	--	68.8	67.3	1.5	2.2%	67.1	1.7	2.4%	67.0	1.8	2.6%	66.8	1.9	2.8%	66.7	2.1	3.0%	66.5	2.2	3.2%
ME 1	47 60 29	2004	Wet	July	--	56.5	54.6	1.9	3.3%	54.4	2.1	3.7%	54.2	2.3	4.0%	54.0	2.4	4.3%	53.9	2.6	4.7%	53.7	2.8	5.0%
ME 1	47 60 29	2004	Wet	August	--	50.1	48.3	1.8	3.5%	48.2	1.9	3.9%	48.0	2.1	4.2%	47.8	2.3	4.6%	47.6	2.5	4.9%	47.4	2.6	5.3%
ME 1	47 60 29	2004	Wet	September	Used in Summary Table Analysis	44.1	41.9	2.2	5.0%	41.6	2.4	5.5%	41.4	2.6	6.0%	41.2	2.9	6.5%	41.0	3.1	7.0%	40.8	3.3	7.5%
ME 1	47 60 29	2005	Above Normal	October	Used in Summary Table Analysis	5,820.1	5,818.5	1.6	0.0%	5,818.4	1.7	0.0%	5,818.2	2.0	0.0%	5,818.1	2.1	0.0%	5,817.8	2.3	0.0%	5,817.7	2.4	0.0%
ME 1	47 60 29	2005	Above Normal	November	Used in Summary Table Analysis	964.0	962.8	1.2	0.1%	962.7	1.4	0.1%	962.5	1.5	0.2%	962.4	1.6	0.2%	962.3	1.7	0.2%	962.2	1.9	0.2%
ME 1	47 60 29	2005	Above Normal	December	--	11,873.8	11,872.7	1.2	0.0%	11,872.7	1.2	0.0%	11,872.7	1.2	0.0%	11,872.7	1.2	0.0%	11,872.7	1.2	0.0%	11,871.5	2.3	0.0%
ME 1	47 60 29	2005	Above Normal	January	--	8,400.0	8,399.2	0.8	0.0%	8,399.1	0.9	0.0%	8,399.0	1.0	0.0%	8,399.0	1.0	0.0%	8,398.8	1.2	0.0%	8,398.7	1.3	0.0%
ME 1	47 60 29	2005	Above Normal	February	--	4,646.4	4,645.7	0.7	0.0%	4,645.6	0.8	0.0%	4,645.6	0.8	0.0%	4,645.5	0.9	0.0%	4,645.5	0.9	0.0%	4,645.4	1.0	0.0%
ME 1	47 60 29	2005	Above Normal	March	--	14,266.2	14,266.2	0.0	0.0%	14,266.2	0.0	0.0%	14,266.2	0.0	0.0%	14,266.2	0.0	0.0%	14,265.0	1.2	0.0%	14,265.0	1.2	0.0%
ME 1	47 60 29	2005	Above Normal	April	--	9,223.8	9,223.3	0.6	0.0%	9,223.3	0.6	0.0%	9,223.1	0.7	0.0%	9,223.1	0.7	0.0%	9,223.0	0.8	0.0%	9,223.0	0.8	0.0%
ME 1	47 60 29	2005	Above Normal	May	--	8,524.3	8,521.4	2.9	0.0%	8,521.1	3.2	0.0%	8,520.8	3.5	0.0%	8,520.5	3.8	0.0%	8,520.3	4.1	0.0%	8,519.9	4.4	0.1%
ME 1	47 60 29	2005	Above Normal	June	--	6,381.4	6,377.7	3.7	0.1%	6,377.3	4.1	0.1%	6,377.0	4.4	0.1%	6,376.6	4.7	0.1%	6,376.3	5.1	0.1%	6,375.9	5.4	0.1%
ME 1	47 60 29	2005	Above Normal	July	--	90.6	88.3	2.3	2.5%	88.1	2.5	2.8%	87.9	2.7	3.0%	87.6	3.0	3.3%	87.4	3.2	3.5%	87.2	3.4	3.8%
ME 1	47 60 29	2005	Above Normal	August	--	65.5	63.8	1.8	2.7%	63.6	1.9	2.9%	63.4	2.1	3.2%	63.3	2.3	3.5%	63.1	2.4	3.7%	62.9	2.6	4.0%
ME 1	47 60 29	2005	Above Normal	September	Used in Summary Table Analysis	55.9	54.4	1.5	2.7%	54.3	1.7	3.0%	54.1	1.8	3.2%	54.0	1.9	3.5%	53.8	2.1	3.8%	53.6	2.3	4.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 60 29	2006	Wet	October	Used in Summary Table Analysis	250.2	248.6	1.6	0.6%	248.5	1.7	0.7%	248.3	1.9	0.8%	248.2	2.0	0.8%	248.0	2.2	0.9%	247.9	2.3	0.9%
ME 1	47 60 29	2006	Wet	November	Used in Summary Table Analysis	6,525.8	6,524.7	1.2	0.0%	6,524.5	1.3	0.0%	6,524.4	1.4	0.0%	6,524.4	1.4	0.0%	6,524.3	1.5	0.0%	6,524.2	1.6	0.0%
ME 1	47 60 29	2006	Wet	December	--	20,053.2	20,052.1	1.2	0.0%	20,052.1	1.2	0.0%	20,052.1	1.2	0.0%	20,052.1	1.2	0.0%	20,052.1	1.2	0.0%	20,052.1	1.2	0.0%
ME 1	47 60 29	2006	Wet	January	--	16,928.2	16,927.1	1.2	0.0%	16,927.1	1.2	0.0%	16,927.1	1.2	0.0%	16,927.1	1.2	0.0%	16,927.1	1.2	0.0%	16,927.1	1.2	0.0%
ME 1	47 60 29	2006	Wet	February	--	9,336.6	9,335.9	0.7	0.0%	9,335.8	0.8	0.0%	9,335.8	0.8	0.0%	9,335.6	0.9	0.0%	9,335.5	1.0	0.0%	9,335.5	1.0	0.0%
ME 1	47 60 29	2006	Wet	March	--	23,255.8	23,255.8	0.0	0.0%	23,255.8	0.0	0.0%	23,255.8	0.0	0.0%	23,255.8	0.0	0.0%	23,255.8	0.0	0.0%	23,255.8	0.0	0.0%
ME 1	47 60 29	2006	Wet	April	--	11,500.5	11,499.9	0.6	0.0%	11,499.9	0.6	0.0%	11,499.9	0.6	0.0%	11,499.8	0.7	0.0%	11,499.8	0.7	0.0%	11,499.7	0.8	0.0%
ME 1	47 60 29	2006	Wet	May	--	4,648.7	4,647.8	0.9	0.0%	4,647.7	1.0	0.0%	4,647.6	1.2	0.0%	4,647.5	1.3	0.0%	4,647.3	1.4	0.0%	4,647.3	1.4	0.0%
ME 1	47 60 29	2006	Wet	June	--	562.7	559.7	3.1	0.5%	559.4	3.4	0.6%	559.1	3.7	0.7%	558.8	4.0	0.7%	558.4	4.3	0.8%	558.1	4.6	0.8%
ME 1	47 60 29	2006	Wet	July	--	75.4	73.5	1.9	2.5%	73.3	2.1	2.7%	73.1	2.2	3.0%	73.0	2.4	3.2%	72.8	2.6	3.4%	72.6	2.8	3.7%
ME 1	47 60 29	2006	Wet	August	--	61.6	59.8	1.7	2.8%	59.6	1.9	3.1%	59.5	2.1	3.4%	59.2	2.3	3.8%	59.1	2.5	4.1%	58.9	2.7	4.3%
ME 1	47 60 29	2006	Wet	September	Used in Summary Table Analysis	54.2	52.7	1.5	2.8%	52.6	1.7	3.0%	52.4	1.8	3.3%	52.3	2.0	3.6%	52.1	2.1	3.9%	52.0	2.3	4.2%
ME 1	47 60 29	2007	Above Normal	October	Used in Summary Table Analysis	44.9	43.4	1.5	3.4%	43.2	1.7	3.7%	43.1	1.8	4.1%	42.9	2.0	4.4%	42.8	2.1	4.7%	42.6	2.3	5.1%
ME 1	47 60 29	2007	Above Normal	November	Used in Summary Table Analysis	5,908.3	5,907.2	1.2	0.0%	5,907.1	1.3	0.0%	5,906.9	1.4	0.0%	5,906.7	1.6	0.0%	5,906.6	1.7	0.0%	5,906.5	1.9	0.0%
ME 1	47 60 29	2007	Above Normal	December	--	10,912.5	10,911.5	1.0	0.0%	10,911.3	1.2	0.0%	10,911.2	1.3	0.0%	10,911.1	1.4	0.0%	10,911.0	1.5	0.0%	10,910.9	1.6	0.0%
ME 1	47 60 29	2007	Above Normal	January	--	2,475.0	2,474.2	0.8	0.0%	2,474.1	0.9	0.0%	2,474.0	1.0	0.0%	2,474.0	1.0	0.0%	2,473.8	1.2	0.0%	2,473.7	1.3	0.1%
ME 1	47 60 29	2007	Above Normal	February	--	17,673.6	17,673.6	0.0	0.0%	17,673.6	0.0	0.0%	17,672.5	1.2	0.0%	17,672.5	1.2	0.0%	17,672.5	1.2	0.0%	17,672.5	1.2	0.0%
ME 1	47 60 29	2007	Above Normal	March	--	5,064.0	5,063.3	0.7	0.0%	5,063.3	0.7	0.0%	5,063.2	0.8	0.0%	5,063.2	0.8	0.0%	5,063.1	0.9	0.0%	5,063.1	0.9	0.0%
ME 1	47 60 29	2007	Above Normal	April	--	6,507.9	6,505.2	2.7	0.0%	6,505.0	2.9	0.0%	6,504.6	3.2	0.0%	6,504.4	3.5	0.1%	6,504.1	3.8	0.1%	6,503.8	4.1	0.1%
ME 1	47 60 29	2007	Above Normal	May	--	1,273.0	1,270.8	2.2	0.2%	1,270.7	2.3	0.2%	1,270.5	2.5	0.2%	1,270.3	2.8	0.2%	1,270.0	3.0	0.2%	1,269.8	3.2	0.3%
ME 1	47 60 29	2007	Above Normal	June	--	459.6	456.3	3.3	0.7%	456.0	3.6	0.8%	455.7	3.9	0.8%	455.4	4.2	0.9%	455.0	4.5	1.0%	454.7	4.9	1.1%
ME 1	47 60 29	2007	Above Normal	July	--	107.7	105.3	2.4	2.2%	105.1	2.6	2.4%	104.9	2.9	2.7%	104.6	3.1	2.9%	104.4	3.3	3.1%	104.2	3.6	3.3%
ME 1	47 60 29	2007	Above Normal	August	--	54.2	52.3	1.9	3.4%	52.2	2.0	3.8%	52.0	2.2	4.1%	51.8	2.4	4.4%	51.6	2.6	4.7%	51.4	2.8	5.1%
ME 1	47 60 29	2007	Above Normal	September	Used in Summary Table Analysis	49.5	47.8	1.6	3.3%	47.6	1.8	3.7%	47.5	2.0	4.0%	47.3	2.1	4.3%	47.2	2.3	4.6%	47.0	2.5	5.0%
ME 1	47 60 29	2008	Dry	October	Used in Summary Table Analysis	2,928.9	2,927.2	1.7	0.1%	2,927.1	1.9	0.1%	2,926.9	2.1	0.1%	2,926.7	2.2	0.1%	2,926.5	2.4	0.1%	2,926.4	2.5	0.1%
ME 1	47 60 29	2008	Dry	November	Used in Summary Table Analysis	2,163.1	2,161.8	1.3	0.1%	2,161.7	1.4	0.1%	2,161.5	1.6	0.1%	2,161.3	1.7	0.1%	2,161.2	1.9	0.1%	2,161.1	2.0	0.1%
ME 1	47 60 29	2008	Dry	December	--	14,252.3	14,251.2	1.2	0.0%	14,251.2	1.2	0.0%	14,251.2	1.2	0.0%	14,251.2	1.2	0.0%	14,251.2	1.2	0.0%	14,251.2	1.2	0.0%
ME 1	47 60 29	2008	Dry	January	--	15,944.4	15,943.3	1.2	0.0%	15,943.3	1.2	0.0%	15,943.3	1.2	0.0%	15,943.3	1.2	0.0%	15,942.1	2.3	0.0%	15,942.1	2.3	0.0%
ME 1	47 60 29	2008	Dry	February	--	6,515.0	6,514.2	0.8	0.0%	6,514.2	0.8	0.0%	6,514.1	0.9	0.0%	6,514.0	1.0	0.0%	6,514.0	1.0	0.0%	6,513.9	1.2	0.0%
ME 1	47 60 29	2008	Dry	March	--	3,178.0	3,177.4	0.6	0.0%	3,177.3	0.7	0.0%	3,177.2	0.8	0.0%	3,177.2	0.8	0.0%	3,177.1	0.9	0.0%	3,177.1	0.9	0.0%
ME 1	47 60 29	2008	Dry	April	--	4,335.1	4,331.9	3.1	0.1%	4,331.6	3.5	0.1%	4,331.3	3.8	0.1%	4,330.9	4.2	0.1%	4,330.7	4.4	0.1%	4,330.3	4.7	0.1%
ME 1	47 60 29	2008	Dry	May	--	74.7	73.1	1.6	2.1%	72.9	1.7	2.3%	72.8	1.9	2.5%	72.6	2.0	2.7%	72.5	2.2	2.9%	72.3	2.4	3.2%
ME 1	47 60 29	2008	Dry	June	--	76.1	72.7	3.4	4.4%	72.4	3.7	4.9%	72.1	4.0	5.3%	71.7	4.4	5.7%	71.4	4.7	6.2%	71.1	5.0	6.6%
ME 1	47 60 29	2008	Dry	July	--	48.6	46.3	2.4	4.9%	46.0	2.6	5.4%	45.8	2.8	5.8%	45.5	3.1	6.3%	45.3	3.3	6.8%	45.1	3.5	7.3%
ME 1	47 60 29	2008	Dry	August	--	45.4	43.1	2.3	5.1%	42.8	2.5	5.6%	42.6	2.8	6.1%	42.4	3.0	6.6%	42.1	3.2	7.1%	41.9	3.4	7.6%
ME 1	47 60 29	2008	Dry	September	Used in Summary Table Analysis	34.2	31.3	2.9	8.4%	31.1	3.2	9.2%	30.8	3.4	10.1%	30.5	3.7	10.9%	30.2	4.0	11.7%	29.9	4.3	12.6%
ME 1	47 60 29	2009	Critical	October	Used in Summary Table Analysis	654.2	652.0	2.2	0.3%	651.8	2.4	0.4%	651.6	2.6	0.4%	651.4	2.8	0.4%	651.1	3.0	0.5%	650.9	3.3	0.5%
ME 1	47 60 29	2009	Critical	November	Used in Summary Table Analysis	3,884.1	3,882.6	1.5	0.0%	3,882.4	1.7	0.0%	3,882.3	1.9	0.0%	3,882.1	2.1	0.1%	3,881.9	2.2	0.1%	3,881.8	2.3	0.1%
ME 1	47 60 29	2009	Critical	December	--	7,202.3	7,200.9	1.4	0.0%	7,200.8	1.5	0.0%	7,200.7	1.6	0.0%	7,200.6	1.7	0.0%	7,200.3	2.0	0.0%	7,200.2	2.1	0.0%
ME 1	47 60 29	2009	Critical	January	--	4,440.2	4,439.1	1.0	0.0%	4,439.0	1.2	0.0%	4,438.9	1.3	0.0%	4,438.8	1.4	0.0%	4,438.7	1.5	0.0%	4,438.5	1.6	0.0%
ME 1	47 60 29	2009	Critical	February	--	13,567.1	13,566.0	1.2	0.0%	13,566.0	1.2	0.0%	13,566.0	1.2	0.0%	13,566.0	1.2	0.0%	13,566.0	1.2	0.0%	13,566.0	1.2	0.0%
ME 1	47 60 29	2009	Critical	March	--	11,032.2	11,031.4	0.8	0.0%	11,031.4	0.8	0.0%	11,031.3	0.9	0.0%	11,031.1	1.0	0.0%	11,031.1	1.0	0.0%	11,031.0	1.2	0.0%
ME 1	47 60 29	2009	Critical	April	--	4,806.3	4,802.9	3.4	0.1%	4,802.5	3.7	0.1%	4,802.2	4.1	0.1%	4,802.1	4.2	0.1%	4,801.7	4.5	0.1%	4,801.4	4.9	0.1%
ME 1	47 60 29	2009	Critical	May	--	10,380.1	10,377.1	3.0	0.0%	10,376.9	3.2	0.0%	10,376.5	3.6	0.0%	10,376.2	3.9	0.0%	10,375.9	4.2	0.0%	10,375.6	4.5	0.0%
ME 1	47 60 29	2009	Critical	June	--	336.2	332.4	3.8	1.1%	332.0	4.2	1.3%	331.6	4.6	1.4%	331.2	5.0	1.5%	330.8	5.4	1.6%	330.5	5.8	1.7%
ME 1	47 60 29	2009	Critical	July	--	68.9	66.5	2.4	3.5%	66.3	2.7	3.9%	66.0	2.9	4.2%	65.8	3.1	4.6%	65.6	3.4	4.9%	65.3	3.6	5.2%
ME 1	47 60 29	2009	Critical	August	--	55.2	52.9	2.3	4.2%	52.7	2.5	4.6%	52.5	2.8	5.0%	52.2	3.0	5.4%	52.0	3.2	5.8%	51.8	3.4	6.2%
ME 1	47 60 29	2009	Critical	September	Used in Summary Table Analysis	49.3	47.2	2.0	4.1%	47.0	2.2	4.5%	46.8	2.4	5.0%	46.6	2.6	5.4%	46.4	2.8	5.8%	46.2	3.0	6.2%
ME 1	47 60 29	2010	Below Normal	October	Used in Summary Table Analysis	5,093.2	5,091.1	2.1	0.0%	5,090.9	2.3	0.0%	5,090.6	2.5	0.0%	5,090.5	2.7	0.1%	5,090.3	2.9	0.1%	5,090.0	3.1	0.1%
ME 1	47 60 29	2010	Below Normal	November	Used in Summary Table Analysis	6,075.7	6,074.1	1.6	0.0%	6,074.0	1.7	0.0%	6,073.8	1.9	0.0%	6,073.6	2.1	0.0%	6,073.5	2.2	0.0%	6,073.3	2.4	0.0%
ME 1	47 60 29	2010	Below Normal	December	--	6,286.1	6,284.8	1.3	0.0%	6,284.6	1.5	0.0%	6,284.5	1.6	0.0%	6,284.4	1.7	0.0%	6,284.3	1.9	0.0%	6,284.1	2.0	0.0%
ME 1	47 60 29	2010	Below Normal	January	--	18,079.9	18,078.7	1.2	0.0%	18,078.7	1.2	0.0%	18,078.7	1.2	0.0%	18,078.7	1.2	0.0%	18,078.7	1.2	0.0%	18,078.7	1.2	0.0%
ME 1	47 60 29	2010	Below Normal	February	--	11,642.4	11,641.2	1.2	0.0%	11,641.2	1.2	0.0%	11,641.2	1.2	0.0%	11,641.2	1.2	0.0%	11,641.2	1.2	0.0%	11,641.2	1.2	0.0%
ME 1	47 60 29	2010	Below Normal	March	--	15,990.7	15,989.6	1.2	0.0%	15,989.6	1.2	0.0%	15,989.6	1.2	0.0%	15,989.6	1.2	0.0%	15,989.6	1.2	0.0%	15,989.6	1.2	0.0%
ME 1	47 60 29	2010	Below Normal	April	--	22,825.2	22,824.1	1.2	0.0%	22,824.1	1.2	0.0%	22,824.1	1.2	0.0%	22,824.1	1.2	0.0%	22,824.1	1.2	0.0%	22,824.1	1.2	0.0%
ME 1	47 60 29	2010	Below Normal	May	--	6,427.2	6,424.3	2.9	0.0%	6,424.0	3.2	0.1%	6,423.6	3.6	0.1%	6,423.4	3.8	0.1%	6,423.1	4.1	0.1%	6,422.8	4.4	0.1%
ME 1	47 60 29	2010	Below Normal	June	--	3,625.6	3,621.8	3.8	0.1%	3,621.4	4.2	0.1%	3,621.1	4.5	0.1%	3,620.7	4.9	0.1%	3,620.4	5.2	0.1%	3,619.9	5.7	0.2%
ME 1	47 60 29	2010	Below Normal	July	--	87.7	85.5	2.2	2.5%	85.3	2.4	2.7%	85.0	2.6	3.0%	84.8	2.8	3.2%	84.6	3.1	3.5%	84.4	3.3	3.8%
ME 1	47 60 29	2010	Below Normal	August	--	67.1	65.2	1.9	2.8%	65.0	2.1	3.1%	64.8	2.3	3.4%	64.7	2.4	3.6%	64.5	2.6	3.8%	64.3	2.8	4.1%
ME 1	47 60 29	2010	Below Normal	September	Used in Summary Table Analysis	321.7	319.4	2.3	0.7%	319.1	2.6	0.8%	318.9	2.8	0.9%	318.7	3.0	0.9%	318.4	3.3	1.0%	318.2	3.5	1.1%
ME 1	47 60 29	2011	Wet	October	Used in Summary Table Analysis	7,149.9	7,148.3	1.6	0.0%	7,148.0	1.9	0.0%	7,147.9	2.0	0.0%	7,147.8	2.1	0.0%	7,147.6	2.3	0.0%	7,147.5	2.4	0.0%
ME 1	47 60 29	2011	Wet	November	Used in Summary Table Analysis	6,166.7	6,165.4	1.3	0.0%	6,165.3	1.4	0.0%	6,165.2	1.5	0.0%	6,165.0	1.6	0.0%	6,164.9	1.7	0.0%	6,164.8	1.9	0.0%
ME 1	47 60 29	2011	Wet	December	--	17,496.5	17,495.4	1.2	0.0%	17,495.4	1.2	0.0%	17,495.4	1.2	0.0%	17,495.4	1.2	0.0%	17,495.4	1.2	0.0%	17,495.4	1.2	0.0%
ME 1	47 60 29	2011	Wet	January	--	3,467.6	3,466.9	0.7	0.0%	3,466.9	0.7	0.0%	3,466.8	0.8	0.0%	3,466.7	0.9	0.0%	3,466.7	0.9	0.0%	3,466.6	1.0	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 60 29	2011	Wet	February	--	10,707.8	10,706.9	0.8	0.0%	10,706.9	0.8	0.0%	10,706.8	0.9	0.0%	10,706.7	1.0	0.0%	10,706.7	1.0	0.0%	10,706.6	1.2	0.0%
ME 1	47 60 29	2011	Wet	March	--	28,659.7	28,659.7	0.0	0.0%	28,659.7	0.0	0.0%	28,659.7	0.0	0.0%	28,659.7	0.0	0.0%	28,659.7	0.0	0.0%	28,658.6	1.2	0.0%
ME 1	47 60 29	2011	Wet	April	--	11,067.4	11,066.8	0.6	0.0%	11,066.8	0.6	0.0%	11,066.7	0.7	0.0%	11,066.7	0.7	0.0%	11,066.6	0.8	0.0%	11,066.6	0.8	0.0%
ME 1	47 60 29	2011	Wet	May	--	4,810.9	4,808.2	2.7	0.1%	4,807.9	3.0	0.1%	4,807.6	3.2	0.1%	4,807.4	3.5	0.1%	4,807.1	3.8	0.1%	4,806.8	4.1	0.1%
ME 1	47 60 29	2011	Wet	June	--	3,138.3	3,134.6	3.7	0.1%	3,134.3	4.1	0.1%	3,133.9	4.4	0.1%	3,133.6	4.7	0.2%	3,133.2	5.1	0.2%	3,132.9	5.4	0.2%
ME 1	47 60 29	2011	Wet	July	--	214.8	211.6	3.2	1.5%	211.3	3.5	1.6%	211.0	3.8	1.8%	210.7	4.1	1.9%	210.3	4.4	2.1%	210.0	4.7	2.2%
ME 1	47 60 29	2011	Wet	August	--	65.8	64.1	1.7	2.7%	63.9	1.9	2.9%	63.7	2.1	3.2%	63.5	2.3	3.4%	63.4	2.4	3.7%	63.2	2.6	4.0%
ME 1	47 60 29	2011	Wet	September	Used in Summary Table Analysis	55.7	54.2	1.5	2.7%	54.1	1.7	3.0%	53.9	1.8	3.3%	53.8	2.0	3.5%	53.6	2.1	3.8%	53.5	2.3	4.1%
ME 1	47 60 29	2012	Below Normal	October	Used in Summary Table Analysis	3,528.2	3,526.7	1.5	0.0%	3,526.6	1.6	0.0%	3,526.5	1.7	0.0%	3,526.3	2.0	0.1%	3,526.2	2.1	0.1%	3,526.0	2.2	0.1%
ME 1	47 60 29	2012	Below Normal	November	Used in Summary Table Analysis	4,817.9	4,816.8	1.2	0.0%	4,816.7	1.3	0.0%	4,816.6	1.4	0.0%	4,816.4	1.5	0.0%	4,816.3	1.6	0.0%	4,816.1	1.9	0.0%
ME 1	47 60 29	2012	Below Normal	December	--	1,959.7	1,958.8	0.9	0.0%	1,958.7	1.0	0.1%	1,958.6	1.2	0.1%	1,958.6	1.2	0.1%	1,958.4	1.3	0.1%	1,958.3	1.4	0.1%
ME 1	47 60 29	2012	Below Normal	January	--	11,440.7	11,439.8	0.9	0.0%	11,439.8	0.9	0.0%	11,439.7	1.0	0.0%	11,439.6	1.2	0.0%	11,439.6	1.2	0.0%	11,439.5	1.3	0.0%
ME 1	47 60 29	2012	Below Normal	February	--	6,660.1	6,659.5	0.6	0.0%	6,659.4	0.7	0.0%	6,659.3	0.8	0.0%	6,659.3	0.8	0.0%	6,659.1	0.9	0.0%	6,659.1	0.9	0.0%
ME 1	47 60 29	2012	Below Normal	March	--	25,149.3	25,149.3	0.0	0.0%	25,149.3	0.0	0.0%	25,149.3	0.0	0.0%	25,149.3	0.0	0.0%	25,149.3	0.0	0.0%	25,148.1	1.2	0.0%
ME 1	47 60 29	2012	Below Normal	April	--	12,517.4	12,516.2	1.2	0.0%	12,516.2	1.2	0.0%	12,516.2	1.2	0.0%	12,516.2	1.2	0.0%	12,516.2	1.2	0.0%	12,516.2	1.2	0.0%
ME 1	47 60 29	2012	Below Normal	May	--	2,049.2	2,046.3	2.9	0.1%	2,046.1	3.1	0.2%	2,045.7	3.5	0.2%	2,045.5	3.7	0.2%	2,045.3	3.9	0.2%	2,045.0	4.2	0.2%
ME 1	47 60 29	2012	Below Normal	June	--	3,039.6	3,036.0	3.6	0.1%	3,035.5	4.1	0.1%	3,035.2	4.4	0.1%	3,034.8	4.7	0.2%	3,034.5	5.1	0.2%	3,034.1	5.4	0.2%
ME 1	47 60 29	2012	Below Normal	July	--	1,082.5	1,079.3	3.2	0.3%	1,079.0	3.5	0.3%	1,078.7	3.9	0.4%	1,078.3	4.2	0.4%	1,078.0	4.5	0.4%	1,077.7	4.8	0.4%
ME 1	47 60 29	2012	Below Normal	August	--	72.2	70.4	1.8	2.5%	70.2	1.9	2.7%	70.1	2.1	2.9%	69.9	2.3	3.1%	69.8	2.4	3.4%	69.6	2.6	3.6%
ME 1	47 60 29	2012	Below Normal	September	Used in Summary Table Analysis	59.4	57.9	1.5	2.6%	57.7	1.7	2.9%	57.5	1.9	3.1%	57.4	2.0	3.4%	57.2	2.2	3.7%	57.1	2.3	3.9%
ME 1	47 60 29	2013	Below Normal	October	Used in Summary Table Analysis	1,483.2	1,481.6	1.6	0.1%	1,481.4	1.9	0.1%	1,481.3	2.0	0.1%	1,481.0	2.2	0.1%	1,480.9	2.3	0.2%	1,480.8	2.4	0.2%
ME 1	47 60 29	2013	Below Normal	November	Used in Summary Table Analysis	9,489.9	9,488.8	1.2	0.0%	9,488.5	1.4	0.0%	9,488.4	1.5	0.0%	9,488.3	1.6	0.0%	9,488.2	1.7	0.0%	9,488.1	1.9	0.0%
ME 1	47 60 29	2013	Below Normal	December	--	32,099.5	32,097.2	2.3	0.0%	32,097.2	2.3	0.0%	32,097.2	2.3	0.0%	32,097.2	2.3	0.0%	32,097.2	2.3	0.0%	32,097.2	2.3	0.0%
ME 1	47 60 29	2013	Below Normal	January	--	4,825.1	4,824.3	0.8	0.0%	4,824.2	0.9	0.0%	4,824.1	1.0	0.0%	4,824.0	1.2	0.0%	4,824.0	1.2	0.0%	4,824.0	1.2	0.0%
ME 1	47 60 29	2013	Below Normal	February	--	3,069.7	3,069.0	0.7	0.0%	3,068.9	0.8	0.0%	3,068.9	0.8	0.0%	3,068.8	0.9	0.0%	3,068.6	1.0	0.0%	3,068.6	1.0	0.0%
ME 1	47 60 29	2013	Below Normal	March	--	5,639.9	5,639.4	0.6	0.0%	5,639.2	0.7	0.0%	5,639.2	0.7	0.0%	5,639.1	0.8	0.0%	5,639.1	0.8	0.0%	5,639.0	0.9	0.0%
ME 1	47 60 29	2013	Below Normal	April	--	4,397.9	4,395.3	2.7	0.1%	4,394.9	3.0	0.1%	4,394.7	3.2	0.1%	4,394.4	3.5	0.1%	4,394.1	3.8	0.1%	4,393.9	4.1	0.1%
ME 1	47 60 29	2013	Below Normal	May	--	2,272.6	2,270.4	2.2	0.1%	2,270.1	2.4	0.1%	2,269.9	2.7	0.1%	2,269.7	2.9	0.1%	2,269.4	3.1	0.1%	2,269.2	3.4	0.1%
ME 1	47 60 29	2013	Below Normal	June	--	1,010.6	1,007.4	3.2	0.3%	1,007.1	3.5	0.3%	1,006.8	3.9	0.4%	1,006.4	4.2	0.4%	1,006.1	4.5	0.4%	1,005.8	4.8	0.5%
ME 1	47 60 29	2013	Below Normal	July	--	68.2	66.3	1.9	2.8%	66.1	2.1	3.1%	65.9	2.3	3.4%	65.7	2.5	3.7%	65.5	2.7	3.9%	65.3	2.9	4.2%
ME 1	47 60 29	2013	Below Normal	August	--	55.8	53.9	1.8	3.3%	53.7	2.0	3.6%	53.6	2.2	4.0%	53.4	2.4	4.3%	53.2	2.6	4.6%	53.0	2.8	4.9%
ME 1	47 60 29	2013	Below Normal	September	Used in Summary Table Analysis	3,832.8	3,830.2	2.5	0.1%	3,830.0	2.8	0.1%	3,829.7	3.0	0.1%	3,829.4	3.4	0.1%	3,829.2	3.6	0.1%	3,828.9	3.8	0.1%
ME 1	47 60 29	2014	Critical	October	Used in Summary Table Analysis	88.4	86.7	1.7	1.9%	86.5	1.8	2.1%	86.4	2.0	2.2%	86.2	2.1	2.4%	86.1	2.3	2.6%	85.9	2.4	2.8%
ME 1	47 60 29	2014	Critical	November	Used in Summary Table Analysis	1,147.7	1,146.4	1.3	0.1%	1,146.3	1.4	0.1%	1,146.2	1.5	0.1%	1,146.0	1.7	0.1%	1,145.9	1.8	0.2%	1,145.8	1.9	0.2%
ME 1	47 60 29	2014	Critical	December	--	916.9	915.9	1.0	0.1%	915.8	1.1	0.1%	915.7	1.2	0.1%	915.6	1.3	0.1%	915.5	1.4	0.2%	915.4	1.5	0.2%
ME 1	47 60 29	2014	Critical	January	--	1,815.4	1,814.5	0.9	0.1%	1,814.5	0.9	0.1%	1,814.4	1.0	0.1%	1,814.2	1.2	0.1%	1,814.1	1.3	0.1%	1,814.1	1.3	0.1%
ME 1	47 60 29	2014	Critical	February	--	9,880.3	9,879.5	0.8	0.0%	9,879.5	0.8	0.0%	9,879.4	0.9	0.0%	9,879.3	1.0	0.0%	9,879.3	1.0	0.0%	9,879.2	1.2	0.0%
ME 1	47 60 29	2014	Critical	March	--	14,849.5	14,848.4	1.2	0.0%	14,848.4	1.2	0.0%	14,848.4	1.2	0.0%	14,848.4	1.2	0.0%	14,848.4	1.2	0.0%	14,848.4	1.2	0.0%
ME 1	47 60 29	2014	Critical	April	--	3,630.9	3,627.9	3.0	0.1%	3,627.5	3.4	0.1%	3,627.2	3.7	0.1%	3,626.9	4.1	0.1%	3,626.5	4.4	0.1%	3,626.3	4.6	0.1%
ME 1	47 60 29	2014	Critical	May	--	1,853.6	1,850.9	2.7	0.1%	1,850.6	3.0	0.2%	1,850.3	3.2	0.2%	1,850.1	3.5	0.2%	1,849.8	3.8	0.2%	1,849.5	4.1	0.2%
ME 1	47 60 29	2014	Critical	June	--	121.0	117.1	3.9	3.2%	116.7	4.2	3.5%	116.3	4.6	3.8%	115.9	5.0	4.2%	115.6	5.4	4.5%	115.2	5.8	4.8%
ME 1	47 60 29	2014	Critical	July	--	57.5	55.2	2.3	4.0%	55.0	2.5	4.4%	54.8	2.8	4.8%	54.5	3.0	5.2%	54.3	3.2	5.6%	54.1	3.4	6.0%
ME 1	47 60 29	2014	Critical	August	--	50.5	48.3	2.3	4.5%	48.1	2.5	4.9%	47.8	2.7	5.4%	47.6	2.9	5.8%	47.4	3.2	6.3%	47.1	3.4	6.7%
ME 1	47 60 29	2014	Critical	September	Used in Summary Table Analysis	2,101.6	2,098.6	3.0	0.1%	2,098.3	3.4	0.2%	2,097.9	3.7	0.2%	2,097.6	4.1	0.2%	2,097.3	4.3	0.2%	2,097.0	4.6	0.2%
ME 1	47 60 29	2015	Dry	October	Used in Summary Table Analysis	8,253.8	8,251.6	2.2	0.0%	8,251.5	2.3	0.0%	8,251.3	2.5	0.0%	8,250.3	3.5	0.0%	8,250.2	3.6	0.0%	8,250.0	3.8	0.0%
ME 1	47 60 29	2015	Dry	November	Used in Summary Table Analysis	4,164.4	4,162.7	1.6	0.0%	4,162.6	1.7	0.0%	4,162.4	2.0	0.0%	4,162.3	2.1	0.1%	4,162.0	2.3	0.1%	4,161.9	2.4	0.1%
ME 1	47 60 29	2015	Dry	December	--	15,281.3	15,280.1	1.2	0.0%	15,278.9	2.3	0.0%	15,278.9	2.3	0.0%	15,278.9	2.3	0.0%	15,278.9	2.3	0.0%	15,278.9	2.3	0.0%
ME 1	47 60 29	2015	Dry	January	--	2,401.7	2,400.7	1.0	0.0%	2,400.6	1.2	0.0%	2,400.5	1.3	0.1%	2,400.3	1.4	0.1%	2,400.2	1.5	0.1%	2,400.1	1.6	0.1%
ME 1	47 60 29	2015	Dry	February	--	15,079.9	15,079.9	0.0	0.0%	15,079.9	0.0	0.0%	15,078.7	1.2	0.0%	15,078.7	1.2	0.0%	15,078.7	1.2	0.0%	15,078.7	1.2	0.0%
ME 1	47 60 29	2015	Dry	March	--	4,145.3	4,144.6	0.7	0.0%	4,144.4	0.8	0.0%	4,144.3	0.9	0.0%	4,144.3	0.9	0.0%	4,144.2	1.0	0.0%	4,144.1	1.2	0.0%
ME 1	47 60 29	2015	Dry	April	--	4,497.0	4,493.9	3.1	0.1%	4,493.5	3.5	0.1%	4,493.2	3.8	0.1%	4,492.8	4.2	0.1%	4,492.6	4.4	0.1%	4,492.2	4.7	0.1%
ME 1	47 60 29	2015	Dry	May	--	141.4	138.8	2.7	1.9%	138.5	2.9	2.1%	138.2	3.2	2.3%	138.0	3.4	2.4%	137.7	3.7	2.6%	137.5	4.0	2.8%
ME 1	47 60 29	2015	Dry	June	--	175.5	172.1	3.4	2.0%	171.7	3.8	2.2%	171.4	4.1	2.4%	171.0	4.5	2.6%	170.7	4.8	2.7%	170.4	5.1	2.9%
ME 1	47 60 29	2015	Dry	July	--	53.6	51.2	2.4	4.5%	50.9	2.6	4.9%	50.7	2.9	5.4%	50.5	3.1	5.8%	50.2	3.3	6.2%	50.0	3.6	6.7%
ME 1	47 60 29	2015	Dry	August	--	48.2	45.8	2.3	4.8%	45.6	2.5	5.3%	45.4	2.8	5.8%	45.1	3.0	6.2%	44.9	3.2	6.7%	44.7	3.5	7.2%
ME 1	47 60 29	2015	Dry	September	Used in Summary Table Analysis	46.7	44.6	2.1	4.5%	44.4	2.3	4.9%	44.2	2.5	5.4%	44.0	2.7	5.8%	43.7	2.9	6.3%	43.5	3.1	6.7%
ME 1	47 60 29	2016	Above Normal	October	Used in Summary Table Analysis	38.5	36.1	2.4	6.4%	35.8	2.7	7.1%	35.5	3.0	7.8%	35.9	2.7	6.9%	35.8	2.7	7.1%	35.2	3.3	8.7%
ME 1	47 60 29	2016	Above Normal	November	Used in Summary Table Analysis	2,988.9	2,987.3	1.6	0.1%	2,987.2	1.7	0.1%	2,986.9	2.0	0.1%	2,986.8	2.1	0.1%	2,986.7	2.2	0.1%	2,986.5	2.4	0.1%
ME 1	47 60 29	2016	Above Normal	December	--	19,850.7	19,848.4	2.3	0.0%	19,848.4	2.3	0.0%	19,848.4	2.3	0.0%	19,848.4	2.3	0.0%	19,848.4	2.3	0.0%	19,848.4	2.3	0.0%
ME 1	47 60 29	2016	Above Normal	January	--	20,939.8	20,938.7	1.2	0.0%	20,938.7	1.2	0.0%	20,937.5	2.3	0.0%	20,937.5	2.3	0.0%	20,937.5	2.3	0.0%	20,937.5	2.3	0.0%
ME 1	47 60 29	2016	Above Normal	February	--	5,507.6	5,506.7	0.9	0.0%	5,506.7	0.9	0.0%	5,506.6	1.0	0.0%	5,506.5	1.2	0.0%	5,506.4	1.3	0.0%	5,506.3	1.4	0.0%
ME 1	47 60 29	2016	Above Normal	March	--	20,275.5	20,274.3	1.2	0.0%	20,274.3	1.2	0.0%	20,274.3	1.2	0.0%	20,274.3	1.2	0.0%	20,274.3	1.2	0.0%	20,274.3	1.2	0.0%
ME 1	47 60 29	2016	Above Normal	April	--	5,690.6	5,689.9	0.7	0.0%	5,689.9	0.7	0.0%	5,689.8	0.8	0.0%	5,689.7	0.9	0.0%	5,689.7	0.9	0.0%	5,689.6	1.0	0.0%
ME 1	47 60 29	2016	Above Normal	May	--	1,249.2	1,248.3	0.9	0.1%	1,248.1	1.0	0.1%	1,248.0	1.2	0.1%	1,247.9	1.3	0.1%	1,247.8	1.4	0.1%	1,247.8	1.4	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 60 29	2016	Above Normal	June	--	80.5	78.0	2.5	3.1%	77.8	2.7	3.4%	77.5	3.0	3.7%	77.3	3.2	4.0%	77.1	3.4	4.3%	76.8	3.7	4.6%
ME 1	47 60 29	2016	Above Normal	July	--	60.7	58.8	1.9	3.1%	58.6	2.1	3.4%	58.5	2.3	3.7%	58.3	2.5	4.1%	58.1	2.6	4.4%	57.9	2.8	4.7%
ME 1	47 60 29	2016	Above Normal	August	--	52.1	50.3	1.8	3.5%	50.1	2.0	3.8%	49.9	2.2	4.2%	49.8	2.4	4.5%	49.6	2.5	4.9%	49.4	2.7	5.2%
ME 1	47 60 29	2016	Above Normal	September	Used in Summary Table Analysis	48.4	46.9	1.5	3.2%	46.7	1.7	3.5%	46.6	1.9	3.8%	46.4	2.0	4.2%	46.3	2.2	4.5%	46.1	2.3	4.8%
ME 1	47 60 29	2017	Wet	October	Used in Summary Table Analysis	12,881.9	12,879.6	2.3	0.0%	12,879.6	2.3	0.0%	12,879.6	2.3	0.0%	12,879.6	2.3	0.0%	12,879.6	2.3	0.0%	12,878.5	3.5	0.0%
ME 1	47 60 29	2017	Wet	November	Used in Summary Table Analysis	7,415.7	7,414.5	1.3	0.0%	7,414.4	1.4	0.0%	7,414.2	1.5	0.0%	7,414.1	1.6	0.0%	7,413.9	1.9	0.0%	7,413.8	2.0	0.0%
ME 1	47 60 29	2017	Wet	December	--	9,472.5	9,471.4	1.0	0.0%	9,471.3	1.2	0.0%	9,471.2	1.3	0.0%	9,471.2	1.3	0.0%	9,471.1	1.4	0.0%	9,470.9	1.5	0.0%
ME 1	47 60 29	2017	Wet	January	--	35,149.3	35,149.3	0.0	0.0%	35,149.3	0.0	0.0%	35,149.3	0.0	0.0%	35,148.1	1.2	0.0%	35,148.1	1.2	0.0%	35,148.1	1.2	0.0%
ME 1	47 60 29	2017	Wet	February	--	33,871.5	33,870.4	1.2	0.0%	33,870.4	1.2	0.0%	33,870.4	1.2	0.0%	33,870.4	1.2	0.0%	33,870.4	1.2	0.0%	33,870.4	1.2	0.0%
ME 1	47 60 29	2017	Wet	March	--	6,459.0	6,458.4	0.6	0.0%	6,458.4	0.6	0.0%	6,458.3	0.7	0.0%	6,458.3	0.7	0.0%	6,458.2	0.8	0.0%	6,458.2	0.8	0.0%
ME 1	47 60 29	2017	Wet	April	--	8,178.0	8,177.5	0.5	0.0%	8,177.5	0.5	0.0%	8,177.4	0.6	0.0%	8,177.4	0.6	0.0%	8,177.3	0.7	0.0%	8,177.3	0.7	0.0%
ME 1	47 60 29	2017	Wet	May	--	193.8	192.9	0.9	0.5%	192.8	1.0	0.5%	192.7	1.1	0.6%	192.6	1.2	0.6%	192.5	1.3	0.7%	192.4	1.4	0.7%
ME 1	47 60 29	2017	Wet	June	--	183.3	180.4	2.9	1.6%	180.1	3.2	1.8%	179.8	3.5	1.9%	179.5	3.8	2.1%	179.2	4.1	2.2%	178.9	4.4	2.4%
ME 1	47 60 29	2017	Wet	July	--	56.8	54.9	1.8	3.3%	54.8	2.0	3.6%	54.6	2.2	3.9%	54.4	2.4	4.2%	54.2	2.6	4.5%	54.0	2.7	4.8%
ME 1	47 60 29	2017	Wet	August	--	52.3	50.6	1.8	3.4%	50.4	1.9	3.7%	50.2	2.1	4.1%	50.0	2.3	4.4%	49.9	2.5	4.7%	49.7	2.7	5.1%
ME 1	47 60 29	2017	Wet	September	Used in Summary Table Analysis	47.6	45.4	2.2	4.6%	45.2	2.4	5.0%	45.0	2.6	5.5%	44.8	2.8	5.9%	44.6	3.0	6.4%	44.4	3.3	6.9%
ME 1	47 60 29	2018	Above Normal	October	Used in Summary Table Analysis	56.0	55.2	0.8	1.4%	54.7	1.3	2.4%	54.4	1.6	2.9%	54.0	2.0	3.6%	53.7	2.3	4.1%	53.5	2.5	4.4%
ME 1	47 60 29	2018	Above Normal	November	Used in Summary Table Analysis	7,167.2	7,166.0	1.3	0.0%	7,165.9	1.4	0.0%	7,165.7	1.5	0.0%	7,165.6	1.6	0.0%	7,165.5	1.7	0.0%	7,165.4	1.9	0.0%
ME 1	47 60 29	2018	Above Normal	December	--	616.5	615.6	0.9	0.1%	615.5	1.0	0.2%	615.4	1.1	0.2%	615.3	1.2	0.2%	615.2	1.3	0.2%	615.2	1.4	0.2%
ME 1	47 60 29	2018	Above Normal	January	--	9,083.1	9,082.3	0.8	0.0%	9,082.2	0.9	0.0%	9,082.1	1.0	0.0%	9,082.1	1.0	0.0%	9,081.9	1.2	0.0%	9,081.8	1.3	0.0%
ME 1	47 60 29	2018	Above Normal	February	--	730.9	730.4	0.6	0.1%	730.3	0.6	0.1%	730.2	0.7	0.1%	730.2	0.8	0.1%	730.1	0.8	0.1%	730.0	0.9	0.1%
ME 1	47 60 29	2018	Above Normal	March	--	9,610.9	9,610.4	0.5	0.0%	9,610.3	0.6	0.0%	9,610.2	0.7	0.0%	9,610.2	0.7	0.0%	9,610.1	0.8	0.0%	9,610.1	0.8	0.0%
ME 1	47 60 29	2018	Above Normal	April	--	17,443.3	17,442.1	1.2	0.0%	17,442.1	1.2	0.0%	17,442.1	1.2	0.0%	17,442.1	1.2	0.0%	17,442.1	1.2	0.0%	17,442.1	1.2	0.0%
ME 1	47 60 29	2018	Above Normal	May	--	726.7	723.9	2.7	0.4%	723.6	3.0	0.4%	723.4	3.3	0.5%	723.1	3.5	0.5%	722.8	3.8	0.5%	722.6	4.1	0.6%
ME 1	47 60 29	2018	Above Normal	June	--	64.6	63.0	1.6	2.5%	62.9	1.7	2.7%	62.7	1.9	3.0%	62.5	2.1	3.2%	62.4	2.2	3.5%	62.2	2.4	3.7%
ME 1	47 60 29	2018	Above Normal	July	--	54.4	52.5	1.9	3.5%	52.3	2.1	3.8%	52.1	2.3	4.2%	52.0	2.5	4.5%	51.8	2.7	4.9%	51.6	2.8	5.2%
ME 1	47 60 29	2018	Above Normal	August	--	50.4	48.7	1.8	3.5%	48.5	1.9	3.8%	48.3	2.1	4.2%	48.1	2.3	4.5%	48.0	2.5	4.9%	47.8	2.6	5.2%
ME 1	47 60 29	2018	Above Normal	September	Used in Summary Table Analysis	44.1	41.9	2.2	5.0%	41.7	2.4	5.5%	41.4	2.6	5.9%	41.2	2.8	6.4%	41.0	3.1	6.9%	40.8	3.3	7.4%
ME 1	47 60 29	2019	Below Normal	October	Used in Summary Table Analysis	59.0	57.2	1.8	3.1%	57.0	2.0	3.4%	56.9	2.2	3.7%	56.6	2.4	4.0%	56.5	2.5	4.2%	56.4	2.6	4.5%
ME 1	47 60 29	2019	Below Normal	November	Used in Summary Table Analysis	4,586.3	4,585.1	1.3	0.0%	4,585.0	1.4	0.0%	4,584.8	1.5	0.0%	4,584.6	1.7	0.0%	4,584.5	1.9	0.0%	4,584.4	2.0	0.0%
ME 1	47 60 29	2019	Below Normal	December	--	7,123.7	7,122.7	1.0	0.0%	7,122.6	1.2	0.0%	7,122.5	1.3	0.0%	7,122.3	1.4	0.0%	7,122.2	1.5	0.0%	7,122.1	1.6	0.0%
ME 1	47 60 29	2019	Below Normal	January	--	16,265.0	16,263.9	1.2	0.0%	16,263.9	1.2	0.0%	16,263.9	1.2	0.0%	16,263.9	1.2	0.0%	16,263.9	1.2	0.0%	16,262.7	2.3	0.0%
ME 1	47 60 29	2019	Below Normal	February	--	44,833.3	44,833.3	0.0	0.0%	44,833.3	0.0	0.0%	44,833.3	0.0	0.0%	44,833.3	0.0	0.0%	44,833.3	0.0	0.0%	44,832.2	1.2	0.0%
ME 1	47 60 29	2019	Below Normal	March	--	10,433.1	10,432.5	0.6	0.0%	10,432.4	0.7	0.0%	10,432.4	0.7	0.0%	10,432.3	0.8	0.0%	10,432.2	0.9	0.0%	10,432.2	0.9	0.0%
ME 1	47 60 29	2019	Below Normal	April	--	3,511.5	3,510.9	0.6	0.0%	3,510.9	0.6	0.0%	3,510.8	0.7	0.0%	3,510.8	0.7	0.0%	3,510.6	0.8	0.0%	3,510.6	0.8	0.0%
ME 1	47 60 29	2019	Below Normal	May	--	6,669.3	6,666.6	2.8	0.0%	6,666.2	3.1	0.0%	6,666.0	3.4	0.1%	6,665.7	3.6	0.1%	6,665.4	3.9	0.1%	6,665.2	4.2	0.1%
ME 1	47 60 29	2019	Below Normal	June	--	80.3	78.2	2.2	2.7%	78.0	2.4	2.9%	77.7	2.6	3.2%	77.5	2.8	3.5%	77.3	3.0	3.8%	77.1	3.2	4.0%
ME 1	47 60 29	2019	Below Normal	July	--	64.8	62.9	1.9	3.0%	62.7	2.1	3.3%	62.5	2.3	3.5%	62.3	2.5	3.8%	62.1	2.7	4.1%	61.9	2.9	4.4%
ME 1	47 60 29	2019	Below Normal	August	--	54.9	53.2	1.7	3.2%	53.0	1.9	3.5%	52.9	2.1	3.8%	52.7	2.3	4.1%	52.5	2.4	4.4%	52.3	2.6	4.8%
ME 1	47 60 29	2019	Below Normal	September	Used in Summary Table Analysis	127.1	124.9	2.2	1.7%	124.7	2.4	1.9%	124.5	2.6	2.1%	124.3	2.8	2.2%	124.1	3.1	2.4%	123.8	3.3	2.6%
ME 1	47 60 29	2020	Dry	October	Used in Summary Table Analysis	159.5	158.0	1.5	1.0%	157.8	1.7	1.1%	157.7	1.8	1.1%	157.5	2.0	1.2%	157.4	2.1	1.3%	157.2	2.3	1.4%
ME 1	47 60 29	2020	Dry	November	Used in Summary Table Analysis	86.3	85.4	0.9	1.0%	85.3	1.0	1.1%	85.2	1.1	1.2%	85.2	1.2	1.4%	85.1	1.3	1.5%	85.0	1.4	1.6%
ME 1	47 60 29	2020	Dry	December	--	7,889.2	7,888.3	0.9	0.0%	7,888.2	1.0	0.0%	7,888.1	1.2	0.0%	7,888.0	1.3	0.0%	7,887.8	1.4	0.0%	7,887.8	1.4	0.0%
ME 1	47 60 29	2020	Dry	January	--	9,018.1	9,017.2	0.8	0.0%	9,017.1	0.9	0.0%	9,017.0	1.0	0.0%	9,016.9	1.2	0.0%	9,016.9	1.2	0.0%	9,016.8	1.3	0.0%
ME 1	47 60 29	2020	Dry	February	--	255.2	254.5	0.7	0.3%	254.5	0.7	0.3%	254.4	0.8	0.3%	254.3	0.9	0.3%	254.2	0.9	0.4%	254.2	1.0	0.4%
ME 1	47 60 29	2020	Dry	March	--	2,675.6	2,675.0	0.6	0.0%	2,674.9	0.7	0.0%	2,674.9	0.7	0.0%	2,674.8	0.8	0.0%	2,674.8	0.8	0.0%	2,674.7	0.9	0.0%
ME 1	47 60 29	2020	Dry	April	--	2,164.0	2,161.0	3.0	0.1%	2,160.6	3.4	0.2%	2,160.3	3.7	0.2%	2,160.1	3.9	0.2%	2,159.7	4.3	0.2%	2,159.4	4.6	0.2%
ME 1	47 60 29	2020	Dry	May	--	3,785.1	3,782.4	2.7	0.1%	3,782.2	2.9	0.1%	3,781.9	3.1	0.1%	3,781.6	3.5	0.1%	3,781.4	3.7	0.1%	3,781.1	3.9	0.1%
ME 1	47 60 29	2020	Dry	June	--	90.4	86.7	3.7	4.1%	86.4	4.0	4.5%	86.0	4.4	4.9%	85.6	4.8	5.3%	85.2	5.2	5.7%	84.9	5.5	6.1%
ME 1	47 60 29	2020	Dry	July	--	54.2	52.0	2.3	4.2%	51.7	2.5	4.6%	51.5	2.7	5.0%	51.3	2.9	5.4%	51.1	3.1	5.8%	50.8	3.4	6.2%
ME 1	47 60 29	2020	Dry	August	--	47.7	45.5	2.2	4.7%	45.2	2.5	5.2%	45.0	2.7	5.6%	44.8	2.9	6.1%	44.6	3.1	6.6%	44.3	3.4	7.1%
ME 1	47 60 29	2020	Dry	September	Used in Summary Table Analysis	45.6	43.6	2.0	4.5%	43.4	2.2	4.9%	43.2	2.4	5.4%	43.0	2.6	5.8%	42.8	2.9	6.3%	42.6	3.1	6.7%
ME 1	48 59 42	2000	Above Normal	October	Used in Summary Table Analysis	413.2	411.1	2.1	0.5%	410.9	2.3	0.6%	410.7	2.5	0.6%	410.5	2.7	0.6%	410.3	2.9	0.7%	410.1	3.1	0.8%
ME 1	48 59 42	2000	Above Normal	November	Used in Summary Table Analysis	3,551.2	3,549.7	1.5	0.0%	3,549.5	1.6	0.0%	3,549.4	1.7	0.0%	3,549.2	2.0	0.1%	3,549.1	2.1	0.1%	3,549.0	2.2	0.1%
ME 1	48 59 42	2000	Above Normal	December	--	5,814.5	5,813.2	1.3	0.0%	5,813.1	1.4	0.0%	5,813.0	1.5	0.0%	5,812.7	1.7	0.0%	5,812.6	1.9	0.0%	5,812.5	2.0	0.0%
ME 1	48 59 42	2000	Above Normal	January	--	12,915.5	12,914.4	1.2	0.0%	12,914.4	1.2	0.0%	12,914.4	1.2	0.0%	12,914.4	1.2	0.0%	12,913.2	2.3	0.0%	12,913.2	2.3	0.0%
ME 1	48 59 42	2000	Above Normal	February	--	20,267.4	20,266.2	1.2	0.0%	20,266.2	1.2	0.0%	20,265.0	2.3	0.0%	20,265.0	2.3	0.0%	20,265.0	2.3	0.0%	20,265.0	2.3	0.0%
ME 1	48 59 42	2000	Above Normal	March	--	12,425.9	12,424.8	1.2	0.0%	12,424.8	1.2	0.0%	12,424.8	1.2	0.0%	12,424.8	1.2	0.0%	12,424.8	1.2	0.0%	12,424.8	1.2	0.0%
ME 1	48 59 42	2000	Above Normal	April	--	6,819.9	6,818.6	1.3	0.0%	6,818.5	1.4	0.0%	6,818.4	1.5	0.0%	6,818.3	1.6	0.0%	6,818.2	1.7	0.0%	6,818.1	1.9	0.0%
ME 1	48 59 42	2000	Above Normal	May	--	4,235.3	4,233.0	2.3	0.1%	4,232.8	2.5	0.1%	4,232.5	2.8	0.1%	4,232.3	3.0	0.1%	4,232.1	3.2	0.1%	4,231.8	3.5	0.1%
ME 1	48 59 42	2000	Above Normal	June	--	1,972.7	1,968.4	4.3	0.2%	1,967.9	4.7	0.2%	1,967.5	5.2	0.3%	1,967.0	5.7	0.3%	1,966.6	6.1	0.3%	1,966.2	6.5	0.3%
ME 1	48 59 42	2000	Above Normal	July	--	909.7	905.5	4.2	0.5%	905.1	4.6	0.5%	904.7	5.0	0.5%	904.2	5.4	0.6%	903.8	5.8	0.6%	903.4	6.2	0.7%
ME 1	48 59 42	2000	Above Normal	August	--	451.8	448.4	3.4	0.8%	448.0	3.8	0.8%	447.7	4.1	0.9%	447.3	4.5	1.0%	447.0	4.8	1.1%	446.6	5.2	1.1%
ME 1	48 59 42	2000	Above Normal	September	Used in Summary Table Analysis	233.5	230.7	2.8	1.2%	230.4	3.1	1.3%	230.2	3.4	1.4%	229.9	3.7	1.6%	229.6	3.9	1.7%	229.3	4.2	1.8%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 59 42	2001	Dry	October	Used in Summary Table Analysis	947.8	945.9	1.9	0.2%	945.7	2.1	0.2%	945.5	2.3	0.2%	945.3	2.5	0.3%	945.1	2.7	0.3%	944.9	2.9	0.3%
ME 1	48 59 42	2001	Dry	November	Used in Summary Table Analysis	2,655.2	2,653.8	1.4	0.1%	2,653.6	1.6	0.1%	2,653.5	1.7	0.1%	2,653.4	1.9	0.1%	2,653.1	2.1	0.1%	2,653.0	2.2	0.1%
ME 1	48 59 42	2001	Dry	December	--	3,750.0	3,748.7	1.3	0.0%	3,748.6	1.4	0.0%	3,748.5	1.5	0.0%	3,748.4	1.6	0.0%	3,748.1	1.9	0.0%	3,748.0	2.0	0.1%
ME 1	48 59 42	2001	Dry	January	--	5,975.1	5,973.8	1.3	0.0%	5,973.7	1.4	0.0%	5,973.6	1.5	0.0%	5,973.5	1.6	0.0%	5,973.4	1.7	0.0%	5,973.3	1.9	0.0%
ME 1	48 59 42	2001	Dry	February	--	8,662.7	8,661.6	1.2	0.0%	8,661.5	1.3	0.0%	8,661.3	1.4	0.0%	8,661.2	1.5	0.0%	8,661.1	1.6	0.0%	8,661.0	1.7	0.0%
ME 1	48 59 42	2001	Dry	March	--	7,035.8	7,034.6	1.2	0.0%	7,034.5	1.3	0.0%	7,034.4	1.4	0.0%	7,034.3	1.5	0.0%	7,034.1	1.6	0.0%	7,034.0	1.7	0.0%
ME 1	48 59 42	2001	Dry	April	--	5,758.9	5,756.8	2.1	0.0%	5,756.6	2.3	0.0%	5,756.4	2.5	0.0%	5,756.1	2.8	0.0%	5,755.9	3.0	0.1%	5,755.7	3.2	0.1%
ME 1	48 59 42	2001	Dry	May	--	2,029.2	2,026.0	3.1	0.2%	2,025.7	3.5	0.2%	2,025.5	3.7	0.2%	2,025.1	4.1	0.2%	2,024.8	4.4	0.2%	2,024.4	4.7	0.2%
ME 1	48 59 42	2001	Dry	June	--	1,247.6	1,242.7	4.9	0.4%	1,242.2	5.3	0.4%	1,241.8	5.8	0.5%	1,241.3	6.3	0.5%	1,240.9	6.7	0.5%	1,240.4	7.2	0.6%
ME 1	48 59 42	2001	Dry	July	--	647.4	642.7	4.7	0.7%	642.2	5.2	0.8%	641.7	5.6	0.9%	641.3	6.1	0.9%	640.8	6.6	1.0%	640.3	7.0	1.1%
ME 1	48 59 42	2001	Dry	August	--	109.5	105.5	4.0	3.6%	105.2	4.4	4.0%	104.8	4.8	4.3%	104.4	5.2	4.7%	104.0	5.6	5.1%	103.6	6.0	5.4%
ME 1	48 59 42	2001	Dry	September	Used in Summary Table Analysis	36.8	33.6	3.2	8.8%	33.2	3.6	9.7%	32.9	3.9	10.5%	32.6	4.2	11.4%	32.3	4.5	12.3%	32.0	4.8	13.1%
ME 1	48 59 42	2002	Below Normal	October	Used in Summary Table Analysis	116.0	113.7	2.3	2.0%	113.5	2.5	2.2%	113.3	2.8	2.4%	113.1	3.0	2.6%	112.8	3.2	2.8%	112.6	3.4	3.0%
ME 1	48 59 42	2002	Below Normal	November	Used in Summary Table Analysis	4,539.1	4,537.5	1.6	0.0%	4,537.3	1.9	0.0%	4,537.2	2.0	0.0%	4,537.0	2.1	0.0%	4,536.8	2.3	0.1%	4,536.7	2.4	0.1%
ME 1	48 59 42	2002	Below Normal	December	--	21,186.3	21,184.0	2.3	0.0%	21,184.0	2.3	0.0%	21,184.0	2.3	0.0%	21,184.0	2.3	0.0%	21,184.0	2.3	0.0%	21,184.0	2.3	0.0%
ME 1	48 59 42	2002	Below Normal	January	--	20,819.4	20,818.3	1.2	0.0%	20,818.3	1.2	0.0%	20,818.3	1.2	0.0%	20,818.3	1.2	0.0%	20,818.3	1.2	0.0%	20,818.3	1.2	0.0%
ME 1	48 59 42	2002	Below Normal	February	--	16,041.7	16,040.5	1.2	0.0%	16,039.4	2.3	0.0%	16,039.4	2.3	0.0%	16,039.4	2.3	0.0%	16,039.4	2.3	0.0%	16,039.4	2.3	0.0%
ME 1	48 59 42	2002	Below Normal	March	--	10,325.0	10,323.7	1.3	0.0%	10,323.5	1.5	0.0%	10,323.4	1.6	0.0%	10,323.3	1.7	0.0%	10,323.1	1.9	0.0%	10,322.9	2.1	0.0%
ME 1	48 59 42	2002	Below Normal	April	--	5,556.9	5,554.6	2.3	0.0%	5,554.4	2.5	0.0%	5,554.2	2.8	0.0%	5,553.9	3.0	0.1%	5,553.7	3.2	0.1%	5,553.5	3.5	0.1%
ME 1	48 59 42	2002	Below Normal	May	--	2,148.6	2,145.3	3.4	0.2%	2,145.0	3.6	0.2%	2,144.7	3.9	0.2%	2,144.3	4.3	0.2%	2,144.0	4.6	0.2%	2,143.6	5.0	0.2%
ME 1	48 59 42	2002	Below Normal	June	--	651.1	647.0	4.1	0.6%	646.6	4.5	0.7%	646.2	4.9	0.8%	645.8	5.3	0.8%	645.4	5.7	0.9%	645.0	6.1	0.9%
ME 1	48 59 42	2002	Below Normal	July	--	295.6	291.4	4.2	1.4%	291.0	4.7	1.6%	290.5	5.1	1.7%	290.1	5.5	1.9%	289.7	5.9	2.0%	289.3	6.4	2.1%
ME 1	48 59 42	2002	Below Normal	August	--	163.7	160.2	3.5	2.1%	159.9	3.8	2.3%	159.6	4.1	2.5%	159.2	4.5	2.7%	158.9	4.8	3.0%	158.5	5.2	3.2%
ME 1	48 59 42	2002	Below Normal	September	Used in Summary Table Analysis	105.1	101.9	3.2	3.0%	101.6	3.5	3.3%	101.3	3.8	3.6%	101.0	4.1	3.9%	100.7	4.4	4.2%	100.4	4.7	4.5%
ME 1	48 59 42	2003	Wet	October	Used in Summary Table Analysis	81.9	79.8	2.1	2.6%	79.6	2.3	2.8%	79.4	2.5	3.1%	79.2	2.7	3.4%	79.0	3.0	3.6%	78.8	3.2	3.9%
ME 1	48 59 42	2003	Wet	November	Used in Summary Table Analysis	258.7	257.2	1.6	0.6%	257.0	1.7	0.7%	256.9	1.9	0.7%	256.7	2.0	0.8%	256.6	2.2	0.8%	256.4	2.3	0.9%
ME 1	48 59 42	2003	Wet	December	--	25,631.9	25,629.6	2.3	0.0%	25,629.6	2.3	0.0%	25,629.6	2.3	0.0%	25,629.6	2.3	0.0%	25,629.6	2.3	0.0%	25,629.6	2.3	0.0%
ME 1	48 59 42	2003	Wet	January	--	23,622.7	23,620.4	2.3	0.0%	23,620.4	2.3	0.0%	23,620.4	2.3	0.0%	23,620.4	2.3	0.0%	23,620.4	2.3	0.0%	23,620.4	2.3	0.0%
ME 1	48 59 42	2003	Wet	February	--	14,653.9	14,652.8	1.2	0.0%	14,652.8	1.2	0.0%	14,652.8	1.2	0.0%	14,651.6	2.3	0.0%	14,651.6	2.3	0.0%	14,651.6	2.3	0.0%
ME 1	48 59 42	2003	Wet	March	--	12,693.3	12,692.1	1.2	0.0%	12,692.1	1.2	0.0%	12,691.0	2.3	0.0%	12,691.0	2.3	0.0%	12,691.0	2.3	0.0%	12,691.0	2.3	0.0%
ME 1	48 59 42	2003	Wet	April	--	20,488.4	20,487.3	1.2	0.0%	20,487.3	1.2	0.0%	20,487.3	1.2	0.0%	20,487.3	1.2	0.0%	20,487.3	1.2	0.0%	20,486.1	2.3	0.0%
ME 1	48 59 42	2003	Wet	May	--	10,054.3	10,052.0	2.3	0.0%	10,051.7	2.5	0.0%	10,051.5	2.8	0.0%	10,051.2	3.1	0.0%	10,050.9	3.4	0.0%	10,050.7	3.6	0.0%
ME 1	48 59 42	2003	Wet	June	--	3,072.5	3,067.9	4.5	0.1%	3,067.5	5.0	0.2%	3,067.0	5.4	0.2%	3,066.6	5.9	0.2%	3,066.1	6.4	0.2%	3,065.7	6.7	0.2%
ME 1	48 59 42	2003	Wet	July	--	1,393.8	1,389.5	4.3	0.3%	1,389.1	4.6	0.3%	1,388.7	5.1	0.4%	1,388.2	5.6	0.4%	1,387.8	5.9	0.4%	1,387.4	6.4	0.5%
ME 1	48 59 42	2003	Wet	August	--	679.4	675.9	3.5	0.5%	675.5	3.9	0.6%	675.2	4.2	0.6%	674.8	4.6	0.7%	674.5	4.9	0.7%	674.1	5.3	0.8%
ME 1	48 59 42	2003	Wet	September	Used in Summary Table Analysis	394.0	391.1	2.9	0.7%	390.9	3.1	0.8%	390.6	3.4	0.9%	390.3	3.7	0.9%	390.0	4.0	1.0%	389.7	4.3	1.1%
ME 1	48 59 42	2004	Wet	October	Used in Summary Table Analysis	274.1	272.0	2.0	0.7%	271.8	2.2	0.8%	271.6	2.4	0.9%	271.4	2.6	1.0%	271.2	2.8	1.0%	271.0	3.1	1.1%
ME 1	48 59 42	2004	Wet	November	Used in Summary Table Analysis	1,518.6	1,517.1	1.5	0.1%	1,516.9	1.7	0.1%	1,516.8	1.9	0.1%	1,516.7	2.0	0.1%	1,516.4	2.2	0.1%	1,516.3	2.3	0.2%
ME 1	48 59 42	2004	Wet	December	--	17,524.3	17,523.1	1.2	0.0%	17,523.1	1.2	0.0%	17,523.1	1.2	0.0%	17,523.1	1.2	0.0%	17,522.0	2.3	0.0%	17,522.0	2.3	0.0%
ME 1	48 59 42	2004	Wet	January	--	20,762.7	20,761.6	1.2	0.0%	20,761.6	1.2	0.0%	20,761.6	1.2	0.0%	20,760.4	2.3	0.0%	20,760.4	2.3	0.0%	20,760.4	2.3	0.0%
ME 1	48 59 42	2004	Wet	February	--	20,275.5	20,274.3	1.2	0.0%	20,274.3	1.2	0.0%	20,274.3	1.2	0.0%	20,274.3	1.2	0.0%	20,274.3	1.2	0.0%	20,274.3	1.2	0.0%
ME 1	48 59 42	2004	Wet	March	--	12,274.3	12,273.1	1.2	0.0%	12,273.1	1.2	0.0%	12,273.1	1.2	0.0%	12,273.1	1.2	0.0%	12,273.1	1.2	0.0%	12,273.1	1.2	0.0%
ME 1	48 59 42	2004	Wet	April	--	5,833.9	5,832.6	1.3	0.0%	5,832.5	1.4	0.0%	5,832.4	1.5	0.0%	5,832.3	1.6	0.0%	5,832.2	1.7	0.0%	5,832.1	1.9	0.0%
ME 1	48 59 42	2004	Wet	May	--	2,310.4	2,308.1	2.3	0.1%	2,307.9	2.5	0.1%	2,307.6	2.8	0.1%	2,307.4	3.0	0.1%	2,307.2	3.2	0.1%	2,306.9	3.5	0.2%
ME 1	48 59 42	2004	Wet	June	--	614.6	610.3	4.4	0.7%	609.8	4.8	0.8%	609.4	5.2	0.8%	609.0	5.7	0.9%	608.5	6.1	1.0%	608.1	6.5	1.1%
ME 1	48 59 42	2004	Wet	July	--	287.2	283.1	4.1	1.4%	282.7	4.6	1.6%	282.3	5.0	1.7%	281.9	5.4	1.9%	281.4	5.8	2.0%	281.0	6.2	2.2%
ME 1	48 59 42	2004	Wet	August	--	163.5	160.0	3.4	2.1%	159.7	3.8	2.3%	159.3	4.1	2.5%	159.0	4.5	2.7%	158.7	4.8	2.9%	158.3	5.2	3.2%
ME 1	48 59 42	2004	Wet	September	Used in Summary Table Analysis	107.6	104.8	2.8	2.6%	104.5	3.1	2.9%	104.2	3.4	3.1%	103.9	3.7	3.4%	103.7	4.0	3.7%	103.4	4.2	3.9%
ME 1	48 59 42	2005	Above Normal	October	Used in Summary Table Analysis	1,664.0	1,662.0	2.0	0.1%	1,661.8	2.2	0.1%	1,661.6	2.4	0.1%	1,661.3	2.7	0.2%	1,661.2	2.8	0.2%	1,661.0	3.0	0.2%
ME 1	48 59 42	2005	Above Normal	November	Used in Summary Table Analysis	1,265.3	1,263.8	1.5	0.1%	1,263.7	1.6	0.1%	1,263.5	1.7	0.1%	1,263.3	2.0	0.2%	1,263.2	2.1	0.2%	1,263.1	2.2	0.2%
ME 1	48 59 42	2005	Above Normal	December	--	8,586.8	8,585.4	1.4	0.0%	8,585.3	1.5	0.0%	8,585.2	1.6	0.0%	8,585.1	1.7	0.0%	8,585.0	1.9	0.0%	8,584.8	2.0	0.0%
ME 1	48 59 42	2005	Above Normal	January	--	13,535.9	13,534.7	1.2	0.0%	13,534.7	1.2	0.0%	13,534.7	1.2	0.0%	13,534.7	1.2	0.0%	13,534.7	1.2	0.0%	13,534.7	1.2	0.0%
ME 1	48 59 42	2005	Above Normal	February	--	9,280.3	9,279.1	1.3	0.0%	9,278.9	1.4	0.0%	9,278.8	1.5	0.0%	9,278.7	1.6	0.0%	9,278.6	1.7	0.0%	9,278.5	1.9	0.0%
ME 1	48 59 42	2005	Above Normal	March	--	13,944.4	13,943.3	1.2	0.0%	13,943.3	1.2	0.0%	13,943.3	1.2	0.0%	13,943.3	1.2	0.0%	13,943.3	1.2	0.0%	13,942.1	2.3	0.0%
ME 1	48 59 42	2005	Above Normal	April	--	11,990.7	11,989.6	1.2	0.0%	11,989.6	1.2	0.0%	11,989.6	1.2	0.0%	11,989.6	1.2	0.0%	11,989.6	1.2	0.0%	11,989.6	1.2	0.0%
ME 1	48 59 42	2005	Above Normal	May	--	10,761.3	10,758.9	2.4	0.0%	10,758.7	2.7	0.0%	10,758.4	2.9	0.0%	10,758.2	3.1	0.0%	10,758.0	3.4	0.0%	10,757.8	3.6	0.0%
ME 1	48 59 42	2005	Above Normal	June	--	9,164.4	9,159.8	4.5	0.0%	9,159.4	5.0	0.1%	9,159.0	5.3	0.1%	9,158.6	5.8	0.1%	9,158.1	6.3	0.1%	9,157.6	6.7	0.1%
ME 1	48 59 42	2005	Above Normal	July	--	2,770.5	2,766.3	4.2	0.2%	2,765.9	4.6	0.2%	2,765.4	5.1	0.2%	2,765.0	5.4	0.2%	2,764.6	5.9	0.2%	2,764.2	6.3	0.2%
ME 1	48 59 42	2005	Above Normal	August	--	901.6	898.1	3.5	0.4%	897.7	3.8	0.4%	897.4	4.2	0.5%	897.1	4.5	0.5%	896.7	4.8	0.5%	896.4	5.2	0.6%
ME 1	48 59 42	2005	Above Normal	September	Used in Summary Table Analysis	453.2	450.3	2.8	0.6%	450.1	3.1	0.7%	449.8	3.4	0.7%	449.5	3.7	0.8%	449.2	4.0	0.9%	448.9	4.2	0.9%
ME 1	48 59 42	2006	Wet	October	Used in Summary Table Analysis	365.9	364.0	1.9	0.5%	363.8	2.1	0.6%	363.6	2.3	0.6%	363.4	2.5	0.7%	363.2	2.7	0.7%	363.0	2.9	0.8%
ME 1	48 59 42	2006	Wet	November	Used in Summary Table Analysis	2,520.1	2,518.6	1.5	0.1%	2,518.5	1.6	0.1%	2,518.4	1.7	0.1%	2,518.2	2.0	0.1%	2,518.1	2.1	0.1%	2,517.9	2.2	0.1%
ME 1	48 59 42	2006	Wet	December	--	22,588.0	22,586.8	1.2	0.0%	22,586.8	1.2	0.0%	22,585.6	2.3	0.0%	22,585.6	2.3	0.0%	22,585.6	2.3	0.0%	22,585.6	2.3	0.0%
ME 1	48 59 42	2006	Wet	January	--	28,590.3	28,589.1	1.2	0.0%	28,589.1	1.2	0.0%	28,588.0	2.3	0.0%	28,588.0	2.3	0.0%	28,588.0	2.3	0.0%	28,588.0	2.3	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 59 42	2006	Wet	February	--	16,953.7	16,952.5	1.2	0.0%	16,952.5	1.2	0.0%	16,952.5	1.2	0.0%	16,952.5	1.2	0.0%	16,952.5	1.2	0.0%	16,952.5	1.2	0.0%
ME 1	48 59 42	2006	Wet	March	--	23,273.1	23,272.0	1.2	0.0%	23,272.0	1.2	0.0%	23,272.0	1.2	0.0%	23,272.0	1.2	0.0%	23,272.0	1.2	0.0%	23,272.0	1.2	0.0%
ME 1	48 59 42	2006	Wet	April	--	18,674.8	18,673.6	1.2	0.0%	18,673.6	1.2	0.0%	18,673.6	1.2	0.0%	18,673.6	1.2	0.0%	18,673.6	1.2	0.0%	18,673.6	1.2	0.0%
ME 1	48 59 42	2006	Wet	May	--	9,409.4	9,407.8	1.6	0.0%	9,407.6	1.7	0.0%	9,407.4	2.0	0.0%	9,407.3	2.1	0.0%	9,407.2	2.2	0.0%	9,406.9	2.4	0.0%
ME 1	48 59 42	2006	Wet	June	--	2,969.8	2,966.1	3.7	0.1%	2,965.7	4.1	0.1%	2,965.4	4.4	0.1%	2,965.0	4.7	0.2%	2,964.6	5.2	0.2%	2,964.2	5.6	0.2%
ME 1	48 59 42	2006	Wet	July	--	1,184.7	1,180.6	4.2	0.4%	1,180.1	4.6	0.4%	1,179.6	5.1	0.4%	1,179.3	5.4	0.5%	1,178.8	5.9	0.5%	1,178.4	6.4	0.5%
ME 1	48 59 42	2006	Wet	August	--	585.1	581.5	3.6	0.6%	581.1	4.0	0.7%	580.7	4.4	0.7%	580.4	4.7	0.8%	580.0	5.1	0.9%	579.7	5.5	0.9%
ME 1	48 59 42	2006	Wet	September	Used in Summary Table Analysis	355.3	352.4	2.9	0.8%	352.1	3.2	0.9%	351.8	3.5	1.0%	351.5	3.8	1.1%	351.2	4.1	1.2%	350.9	4.4	1.2%
ME 1	48 59 42	2007	Above Normal	October	Used in Summary Table Analysis	216.0	213.9	2.0	0.9%	213.7	2.2	1.0%	213.5	2.4	1.1%	213.3	2.6	1.2%	213.1	2.8	1.3%	212.9	3.1	1.4%
ME 1	48 59 42	2007	Above Normal	November	Used in Summary Table Analysis	2,527.9	2,526.4	1.5	0.1%	2,526.3	1.6	0.1%	2,526.2	1.7	0.1%	2,525.9	2.0	0.1%	2,525.8	2.1	0.1%	2,525.7	2.2	0.1%
ME 1	48 59 42	2007	Above Normal	December	--	9,032.8	9,031.4	1.4	0.0%	9,031.3	1.5	0.0%	9,031.1	1.6	0.0%	9,030.9	1.9	0.0%	9,030.8	2.0	0.0%	9,030.7	2.1	0.0%
ME 1	48 59 42	2007	Above Normal	January	--	7,656.0	7,654.7	1.3	0.0%	7,654.6	1.4	0.0%	7,654.5	1.5	0.0%	7,654.4	1.6	0.0%	7,654.3	1.7	0.0%	7,654.1	2.0	0.0%
ME 1	48 59 42	2007	Above Normal	February	--	12,370.4	12,369.2	1.2	0.0%	12,369.2	1.2	0.0%	12,369.2	1.2	0.0%	12,369.2	1.2	0.0%	12,369.2	1.2	0.0%	12,369.2	1.2	0.0%
ME 1	48 59 42	2007	Above Normal	March	--	7,943.5	7,942.2	1.3	0.0%	7,942.0	1.5	0.0%	7,941.9	1.6	0.0%	7,941.8	1.7	0.0%	7,941.7	1.9	0.0%	7,941.6	2.0	0.0%
ME 1	48 59 42	2007	Above Normal	April	--	4,932.3	4,930.0	2.3	0.0%	4,929.7	2.5	0.1%	4,929.5	2.8	0.1%	4,929.3	3.0	0.1%	4,929.1	3.2	0.1%	4,928.8	3.5	0.1%
ME 1	48 59 42	2007	Above Normal	May	--	2,825.6	2,822.2	3.4	0.1%	2,821.9	3.7	0.1%	2,821.6	3.9	0.1%	2,821.3	4.3	0.2%	2,820.9	4.6	0.2%	2,820.6	5.0	0.2%
ME 1	48 59 42	2007	Above Normal	June	--	1,014.2	1,010.1	4.1	0.4%	1,009.7	4.5	0.4%	1,009.3	4.9	0.5%	1,008.9	5.3	0.5%	1,008.5	5.7	0.6%	1,008.1	6.1	0.6%
ME 1	48 59 42	2007	Above Normal	July	--	379.3	375.0	4.2	1.1%	374.6	4.6	1.2%	374.2	5.1	1.3%	373.8	5.5	1.4%	373.3	5.9	1.6%	372.9	6.3	1.7%
ME 1	48 59 42	2007	Above Normal	August	--	156.8	153.4	3.4	2.2%	153.0	3.8	2.4%	152.7	4.1	2.6%	152.4	4.5	2.8%	152.0	4.8	3.1%	151.7	5.2	3.3%
ME 1	48 59 42	2007	Above Normal	September	Used in Summary Table Analysis	89.2	86.1	3.1	3.5%	85.8	3.4	3.9%	85.5	3.8	4.2%	85.1	4.1	4.6%	84.8	4.4	4.9%	84.5	4.7	5.3%
ME 1	48 59 42	2008	Dry	October	Used in Summary Table Analysis	427.2	425.1	2.1	0.5%	424.9	2.3	0.5%	424.7	2.5	0.6%	424.5	2.7	0.6%	424.3	2.9	0.7%	424.1	3.1	0.7%
ME 1	48 59 42	2008	Dry	November	Used in Summary Table Analysis	1,034.7	1,033.2	1.5	0.1%	1,033.0	1.7	0.2%	1,032.9	1.8	0.2%	1,032.7	2.0	0.2%	1,032.6	2.1	0.2%	1,032.4	2.3	0.2%
ME 1	48 59 42	2008	Dry	December	--	8,263.9	8,262.6	1.3	0.0%	8,262.5	1.4	0.0%	8,262.4	1.5	0.0%	8,262.3	1.6	0.0%	8,262.2	1.7	0.0%	8,262.0	1.9	0.0%
ME 1	48 59 42	2008	Dry	January	--	21,000.0	20,998.8	1.2	0.0%	20,998.8	1.2	0.0%	20,998.8	1.2	0.0%	20,997.7	2.3	0.0%	20,997.7	2.3	0.0%	20,997.7	2.3	0.0%
ME 1	48 59 42	2008	Dry	February	--	19,610.0	19,608.8	1.2	0.0%	19,608.8	1.2	0.0%	19,608.8	1.2	0.0%	19,608.8	1.2	0.0%	19,608.8	1.2	0.0%	19,608.8	1.2	0.0%
ME 1	48 59 42	2008	Dry	March	--	8,549.5	8,548.4	1.2	0.0%	8,548.3	1.3	0.0%	8,548.1	1.4	0.0%	8,548.0	1.5	0.0%	8,547.9	1.6	0.0%	8,547.8	1.7	0.0%
ME 1	48 59 42	2008	Dry	April	--	4,623.7	4,621.6	2.1	0.0%	4,621.4	2.3	0.1%	4,621.2	2.5	0.1%	4,621.1	2.7	0.1%	4,620.8	2.9	0.1%	4,620.6	3.1	0.1%
ME 1	48 59 42	2008	Dry	May	--	1,289.7	1,286.6	3.1	0.2%	1,286.2	3.5	0.3%	1,285.9	3.8	0.3%	1,285.5	4.2	0.3%	1,285.3	4.4	0.3%	1,285.0	4.7	0.4%
ME 1	48 59 42	2008	Dry	June	--	351.6	346.9	4.7	1.3%	346.5	5.1	1.5%	346.0	5.6	1.6%	345.5	6.1	1.7%	345.1	6.5	1.9%	344.6	7.0	2.0%
ME 1	48 59 42	2008	Dry	July	--	198.2	193.6	4.6	2.3%	193.2	5.0	2.5%	192.7	5.5	2.8%	192.3	5.9	3.0%	191.8	6.4	3.2%	191.4	6.8	3.5%
ME 1	48 59 42	2008	Dry	August	--	124.1	120.3	3.9	3.1%	119.9	4.3	3.4%	119.5	4.7	3.7%	119.1	5.0	4.1%	118.7	5.4	4.4%	118.3	5.8	4.7%
ME 1	48 59 42	2008	Dry	September	Used in Summary Table Analysis	97.1	93.9	3.2	3.3%	93.6	3.5	3.6%	93.3	3.8	3.9%	92.9	4.1	4.3%	92.6	4.4	4.6%	92.3	4.8	4.9%
ME 1	48 59 42	2009	Critical	October	Used in Summary Table Analysis	254.0	251.7	2.3	0.9%	251.5	2.5	1.0%	251.3	2.7	1.1%	251.1	2.9	1.2%	250.8	3.1	1.2%	250.6	3.4	1.3%
ME 1	48 59 42	2009	Critical	November	Used in Summary Table Analysis	1,477.0	1,475.3	1.6	0.1%	1,475.2	1.7	0.1%	1,475.0	2.0	0.1%	1,474.9	2.1	0.1%	1,474.8	2.2	0.1%	1,474.5	2.4	0.2%
ME 1	48 59 42	2009	Critical	December	--	4,650.5	4,649.1	1.4	0.0%	4,649.0	1.5	0.0%	4,648.8	1.6	0.0%	4,648.6	1.9	0.0%	4,648.5	2.0	0.0%	4,648.4	2.1	0.0%
ME 1	48 59 42	2009	Critical	January	--	4,262.2	4,260.8	1.4	0.0%	4,260.6	1.5	0.0%	4,260.5	1.6	0.0%	4,260.3	1.9	0.0%	4,260.2	2.0	0.0%	4,260.1	2.1	0.0%
ME 1	48 59 42	2009	Critical	February	--	8,764.1	8,763.0	1.2	0.0%	8,762.8	1.3	0.0%	8,762.7	1.4	0.0%	8,762.6	1.5	0.0%	8,762.5	1.6	0.0%	8,762.3	1.9	0.0%
ME 1	48 59 42	2009	Critical	March	--	9,882.4	9,881.3	1.2	0.0%	9,881.1	1.3	0.0%	9,881.0	1.4	0.0%	9,880.8	1.6	0.0%	9,880.7	1.7	0.0%	9,880.6	1.9	0.0%
ME 1	48 59 42	2009	Critical	April	--	5,261.8	5,259.7	2.1	0.0%	5,259.5	2.3	0.0%	5,259.3	2.5	0.0%	5,259.0	2.8	0.1%	5,258.8	3.0	0.1%	5,258.6	3.2	0.1%
ME 1	48 59 42	2009	Critical	May	--	5,086.0	5,082.8	3.2	0.1%	5,082.4	3.6	0.1%	5,082.1	3.9	0.1%	5,081.8	4.2	0.1%	5,081.5	4.5	0.1%	5,081.1	4.9	0.1%
ME 1	48 59 42	2009	Critical	June	--	2,809.6	2,804.9	4.7	0.2%	2,804.4	5.2	0.2%	2,803.9	5.7	0.2%	2,803.5	6.1	0.2%	2,803.0	6.6	0.2%	2,802.5	7.1	0.3%
ME 1	48 59 42	2009	Critical	July	--	1,181.8	1,177.2	4.6	0.4%	1,176.7	5.1	0.4%	1,176.3	5.6	0.5%	1,175.8	6.0	0.5%	1,175.3	6.5	0.5%	1,174.9	6.9	0.6%
ME 1	48 59 42	2009	Critical	August	--	600.9	597.0	3.9	0.6%	596.6	4.3	0.7%	596.2	4.7	0.8%	595.8	5.1	0.8%	595.4	5.5	0.9%	595.0	5.8	1.0%
ME 1	48 59 42	2009	Critical	September	Used in Summary Table Analysis	329.5	326.3	3.2	1.0%	326.0	3.5	1.1%	325.6	3.8	1.2%	325.3	4.2	1.3%	325.0	4.5	1.4%	324.7	4.8	1.5%
ME 1	48 59 42	2010	Below Normal	October	Used in Summary Table Analysis	973.2	970.9	2.3	0.2%	970.7	2.5	0.3%	970.5	2.8	0.3%	970.2	3.0	0.3%	970.0	3.2	0.3%	969.8	3.4	0.4%
ME 1	48 59 42	2010	Below Normal	November	Used in Summary Table Analysis	2,112.2	2,110.4	1.7	0.1%	2,110.3	1.9	0.1%	2,110.1	2.1	0.1%	2,110.0	2.2	0.1%	2,109.8	2.3	0.1%	2,109.6	2.5	0.1%
ME 1	48 59 42	2010	Below Normal	December	--	5,849.7	5,848.3	1.4	0.0%	5,848.1	1.5	0.0%	5,848.0	1.6	0.0%	5,847.8	1.9	0.0%	5,847.7	2.0	0.0%	5,847.6	2.1	0.0%
ME 1	48 59 42	2010	Below Normal	January	--	17,463.0	17,460.6	2.3	0.0%	17,460.6	2.3	0.0%	17,460.6	2.3	0.0%	17,460.6	2.3	0.0%	17,460.6	2.3	0.0%	17,460.6	2.3	0.0%
ME 1	48 59 42	2010	Below Normal	February	--	15,397.0	15,395.8	1.2	0.0%	15,395.8	1.2	0.0%	15,394.7	2.3	0.0%	15,394.7	2.3	0.0%	15,394.7	2.3	0.0%	15,394.7	2.3	0.0%
ME 1	48 59 42	2010	Below Normal	March	--	12,664.4	12,663.2	1.2	0.0%	12,662.0	2.3	0.0%	12,662.0	2.3	0.0%	12,662.0	2.3	0.0%	12,662.0	2.3	0.0%	12,662.0	2.3	0.0%
ME 1	48 59 42	2010	Below Normal	April	--	16,857.6	16,856.5	1.2	0.0%	16,856.5	1.2	0.0%	16,856.5	1.2	0.0%	16,855.3	2.3	0.0%	16,855.3	2.3	0.0%	16,855.3	2.3	0.0%
ME 1	48 59 42	2010	Below Normal	May	--	13,597.2	13,594.9	2.3	0.0%	13,594.9	2.3	0.0%	13,593.8	3.5	0.0%	13,593.8	3.5	0.0%	13,593.8	3.5	0.0%	13,593.8	3.5	0.0%
ME 1	48 59 42	2010	Below Normal	June	--	5,529.2	5,524.7	4.5	0.1%	5,524.2	5.0	0.1%	5,523.8	5.3	0.1%	5,523.4	5.8	0.1%	5,522.9	6.3	0.1%	5,522.5	6.7	0.1%
ME 1	48 59 42	2010	Below Normal	July	--	1,355.6	1,351.4	4.2	0.3%	1,350.9	4.6	0.3%	1,350.5	5.1	0.4%	1,350.1	5.4	0.4%	1,349.7	5.9	0.4%	1,349.3	6.3	0.5%
ME 1	48 59 42	2010	Below Normal	August	--	485.5	482.0	3.5	0.7%	481.6	3.9	0.8%	481.3	4.2	0.9%	480.9	4.6	0.9%	480.6	4.9	1.0%	480.2	5.3	1.1%
ME 1	48 59 42	2010	Below Normal	September	Used in Summary Table Analysis	312.0	309.2	2.9	0.9%	308.9	3.2	1.0%	308.6	3.4	1.1%	308.3	3.7	1.2%	308.0	4.0	1.3%	307.7	4.3	1.4%
ME 1	48 59 42	2011	Wet	October	Used in Summary Table Analysis	2,333.4	2,331.4	2.1	0.1%	2,331.3	2.2	0.1%	2,331.0	2.4	0.1%	2,330.8	2.7	0.1%	2,330.6	2.9	0.1%	2,330.4	3.0	0.1%
ME 1	48 59 42	2011	Wet	November	Used in Summary Table Analysis	7,879.3	7,877.8	1.5	0.0%	7,877.7	1.6	0.0%	7,877.4	1.9	0.0%	7,877.3	2.0	0.0%	7,877.2	2.1	0.0%	7,877.1	2.2	0.0%
ME 1	48 59 42	2011	Wet	December	--	15,506.9	15,505.8	1.2	0.0%	15,505.8	1.2	0.0%	15,505.8	1.2	0.0%	15,505.8	1.2	0.0%	15,505.8	1.2	0.0%	15,505.8	1.2	0.0%
ME 1	48 59 42	2011	Wet	January	--	10,557.5	10,556.3	1.3	0.0%	10,556.1	1.4	0.0%	10,556.0	1.5	0.0%	10,555.9	1.6	0.0%	10,555.8	1.7	0.0%	10,555.7	1.9	0.0%
ME 1	48 59 42	2011	Wet	February	--	9,919.1	9,917.8	1.3	0.0%	9,917.7	1.4	0.0%	9,917.6	1.5	0.0%	9,917.5	1.6	0.0%	9,917.4	1.7	0.0%	9,917.2	1.9	0.0%
ME 1	48 59 42	2011	Wet	March	--	22,855.3	22,854.2	1.2	0.0%	22,854.2	1.2	0.0%	22,854.2	1.2	0.0%	22,853.0	2.3	0.0%	22,853.0	2.3	0.0%	22,853.0	2.3	0.0%
ME 1	48 59 42	2011	Wet	April	--	13,566.0	13,564.8	1.2	0.0%	13,564.8	1.2	0.0%	13,564.8	1.2	0.0%	13,564.8	1.2	0.0%	13,564.8	1.2	0.0%	13,564.8	1.2	0.0%
ME 1	48 59 42	2011	Wet	May	--	6,486.5	6,484.0	2.4	0.0%	6,483.8	2.7	0.0%	6,483.6	2.9	0.0%	6,483.3	3.1	0.0%	6,483.0	3.5	0.1%	6,482.8	3.7	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 59 42	2011	Wet	June	--	3,838.4	3,833.9	4.5	0.1%	3,833.6	4.9	0.1%	3,833.1	5.3	0.1%	3,832.6	5.8	0.2%	3,832.2	6.3	0.2%	3,831.7	6.7	0.2%
ME 1	48 59 42	2011	Wet	July	--	1,607.1	1,602.9	4.2	0.3%	1,602.4	4.6	0.3%	1,602.0	5.1	0.3%	1,601.6	5.4	0.3%	1,601.2	5.9	0.4%	1,600.7	6.4	0.4%
ME 1	48 59 42	2011	Wet	August	--	697.9	694.3	3.5	0.5%	694.0	3.9	0.6%	693.6	4.2	0.6%	693.3	4.6	0.7%	692.9	5.0	0.7%	692.6	5.3	0.8%
ME 1	48 59 42	2011	Wet	September	Used in Summary Table Analysis	364.6	361.6	3.0	0.8%	361.3	3.3	0.9%	361.0	3.6	1.0%	360.7	3.9	1.1%	360.4	4.2	1.2%	360.1	4.5	1.2%
ME 1	48 59 42	2012	Below Normal	October	Used in Summary Table Analysis	937.1	935.0	2.1	0.2%	934.8	2.3	0.2%	934.6	2.5	0.3%	934.4	2.8	0.3%	934.1	3.0	0.3%	933.9	3.2	0.3%
ME 1	48 59 42	2012	Below Normal	November	Used in Summary Table Analysis	3,262.0	3,260.5	1.5	0.0%	3,260.3	1.7	0.1%	3,260.2	1.9	0.1%	3,260.0	2.1	0.1%	3,259.8	2.2	0.1%	3,259.7	2.3	0.1%
ME 1	48 59 42	2012	Below Normal	December	--	3,152.4	3,150.9	1.5	0.0%	3,150.8	1.6	0.1%	3,150.7	1.7	0.1%	3,150.6	1.9	0.1%	3,150.5	2.0	0.1%	3,150.2	2.2	0.1%
ME 1	48 59 42	2012	Below Normal	January	--	8,226.9	8,225.5	1.4	0.0%	8,225.3	1.5	0.0%	8,225.2	1.6	0.0%	8,225.1	1.7	0.0%	8,225.0	1.9	0.0%	8,224.8	2.1	0.0%
ME 1	48 59 42	2012	Below Normal	February	--	11,417.8	11,416.6	1.3	0.0%	11,416.3	1.5	0.0%	11,416.2	1.6	0.0%	11,416.1	1.7	0.0%	11,416.0	1.9	0.0%	11,415.9	2.0	0.0%
ME 1	48 59 42	2012	Below Normal	March	--	19,726.9	19,725.7	1.2	0.0%	19,725.7	1.2	0.0%	19,725.7	1.2	0.0%	19,725.7	1.2	0.0%	19,724.5	2.3	0.0%	19,724.5	2.3	0.0%
ME 1	48 59 42	2012	Below Normal	April	--	14,141.2	14,140.0	1.2	0.0%	14,140.0	1.2	0.0%	14,138.9	2.3	0.0%	14,138.9	2.3	0.0%	14,138.9	2.3	0.0%	14,138.9	2.3	0.0%
ME 1	48 59 42	2012	Below Normal	May	--	5,384.5	5,382.1	2.4	0.0%	5,381.8	2.7	0.0%	5,381.6	2.9	0.1%	5,381.4	3.1	0.1%	5,381.1	3.4	0.1%	5,380.9	3.6	0.1%
ME 1	48 59 42	2012	Below Normal	June	--	2,398.5	2,393.9	4.6	0.2%	2,393.4	5.1	0.2%	2,392.9	5.6	0.2%	2,392.5	6.0	0.3%	2,392.0	6.5	0.3%	2,391.6	6.9	0.3%
ME 1	48 59 42	2012	Below Normal	July	--	1,095.7	1,091.7	4.0	0.4%	1,091.3	4.4	0.4%	1,090.9	4.8	0.4%	1,090.5	5.2	0.5%	1,090.1	5.6	0.5%	1,089.7	6.0	0.5%
ME 1	48 59 42	2012	Below Normal	August	--	307.0	303.9	3.2	1.0%	303.6	3.5	1.1%	303.2	3.8	1.2%	302.9	4.1	1.3%	302.6	4.5	1.5%	302.3	4.8	1.6%
ME 1	48 59 42	2012	Below Normal	September	Used in Summary Table Analysis	177.2	174.6	2.6	1.5%	174.4	2.9	1.6%	174.1	3.1	1.8%	173.8	3.4	1.9%	173.6	3.7	2.1%	173.3	3.9	2.2%
ME 1	48 59 42	2013	Below Normal	October	Used in Summary Table Analysis	383.0	381.0	2.0	0.5%	380.8	2.2	0.6%	380.6	2.4	0.6%	380.4	2.6	0.7%	380.2	2.8	0.7%	380.0	3.0	0.8%
ME 1	48 59 42	2013	Below Normal	November	Used in Summary Table Analysis	4,894.1	4,892.7	1.4	0.0%	4,892.5	1.6	0.0%	4,892.4	1.7	0.0%	4,892.2	1.9	0.0%	4,892.0	2.1	0.0%	4,891.9	2.2	0.0%
ME 1	48 59 42	2013	Below Normal	December	--	27,238.4	27,237.3	1.2	0.0%	27,237.3	1.2	0.0%	27,237.3	1.2	0.0%	27,237.3	1.2	0.0%	27,236.1	2.3	0.0%	27,236.1	2.3	0.0%
ME 1	48 59 42	2013	Below Normal	January	--	17,191.0	17,189.8	1.2	0.0%	17,189.8	1.2	0.0%	17,189.8	1.2	0.0%	17,188.7	2.3	0.0%	17,188.7	2.3	0.0%	17,188.7	2.3	0.0%
ME 1	48 59 42	2013	Below Normal	February	--	5,690.4	5,689.0	1.4	0.0%	5,688.9	1.5	0.0%	5,688.8	1.6	0.0%	5,688.7	1.7	0.0%	5,688.5	1.9	0.0%	5,688.4	2.0	0.0%
ME 1	48 59 42	2013	Below Normal	March	--	4,554.6	4,553.2	1.4	0.0%	4,553.1	1.5	0.0%	4,553.0	1.6	0.0%	4,552.9	1.7	0.0%	4,552.8	1.9	0.0%	4,552.7	2.0	0.0%
ME 1	48 59 42	2013	Below Normal	April	--	3,843.3	3,841.0	2.3	0.1%	3,840.7	2.5	0.1%	3,840.5	2.8	0.1%	3,840.3	3.0	0.1%	3,840.2	3.1	0.1%	3,839.9	3.4	0.1%
ME 1	48 59 42	2013	Below Normal	May	--	2,103.9	2,100.6	3.4	0.2%	2,100.2	3.7	0.2%	2,100.0	3.9	0.2%	2,099.7	4.3	0.2%	2,099.3	4.6	0.2%	2,099.0	5.0	0.2%
ME 1	48 59 42	2013	Below Normal	June	--	1,083.1	1,079.1	4.1	0.4%	1,078.7	4.5	0.4%	1,078.3	4.9	0.4%	1,077.8	5.3	0.5%	1,077.4	5.7	0.5%	1,077.0	6.1	0.6%
ME 1	48 59 42	2013	Below Normal	July	--	643.4	639.2	4.2	0.7%	638.7	4.6	0.7%	638.3	5.0	0.8%	637.9	5.5	0.8%	637.5	5.9	0.9%	637.1	6.3	1.0%
ME 1	48 59 42	2013	Below Normal	August	--	274.0	270.5	3.4	1.3%	270.2	3.8	1.4%	269.8	4.1	1.5%	269.5	4.5	1.6%	269.2	4.8	1.8%	268.8	5.1	1.9%
ME 1	48 59 42	2013	Below Normal	September	Used in Summary Table Analysis	874.8	871.7	3.1	0.4%	871.3	3.5	0.4%	871.0	3.8	0.4%	870.7	4.1	0.5%	870.4	4.4	0.5%	870.1	4.7	0.5%
ME 1	48 59 42	2014	Critical	October	Used in Summary Table Analysis	191.3	189.3	2.0	1.1%	189.1	2.2	1.2%	188.9	2.4	1.3%	188.7	2.6	1.4%	188.4	2.8	1.5%	188.3	3.0	1.6%
ME 1	48 59 42	2014	Critical	November	Used in Summary Table Analysis	353.9	352.4	1.5	0.4%	352.2	1.7	0.5%	352.1	1.8	0.5%	351.9	2.0	0.6%	351.7	2.2	0.6%	351.6	2.3	0.7%
ME 1	48 59 42	2014	Critical	December	--	649.6	648.2	1.4	0.2%	648.1	1.5	0.2%	648.0	1.7	0.3%	647.8	1.8	0.3%	647.7	1.9	0.3%	647.5	2.1	0.3%
ME 1	48 59 42	2014	Critical	January	--	963.2	961.9	1.3	0.1%	961.7	1.4	0.1%	961.6	1.5	0.2%	961.5	1.7	0.2%	961.4	1.8	0.2%	961.2	1.9	0.2%
ME 1	48 59 42	2014	Critical	February	--	5,726.6	5,725.5	1.2	0.0%	5,725.3	1.3	0.0%	5,725.2	1.4	0.0%	5,725.1	1.5	0.0%	5,725.0	1.6	0.0%	5,724.9	1.7	0.0%
ME 1	48 59 42	2014	Critical	March	--	16,438.7	16,437.5	1.2	0.0%	16,437.5	1.2	0.0%	16,437.5	1.2	0.0%	16,437.5	1.2	0.0%	16,437.5	1.2	0.0%	16,437.5	1.2	0.0%
ME 1	48 59 42	2014	Critical	April	--	9,298.5	9,296.3	2.2	0.0%	9,296.1	2.4	0.0%	9,295.8	2.7	0.0%	9,295.7	2.8	0.0%	9,295.5	3.0	0.0%	9,295.3	3.2	0.0%
ME 1	48 59 42	2014	Critical	May	--	3,299.0	3,295.7	3.2	0.1%	3,295.4	3.6	0.1%	3,295.0	3.9	0.1%	3,294.7	4.3	0.1%	3,294.4	4.5	0.1%	3,294.1	4.9	0.1%
ME 1	48 59 42	2014	Critical	June	--	1,064.5	1,059.6	4.9	0.5%	1,059.1	5.4	0.5%	1,058.6	5.9	0.6%	1,058.1	6.4	0.6%	1,057.6	6.9	0.6%	1,057.1	7.4	0.7%
ME 1	48 59 42	2014	Critical	July	--	480.9	476.2	4.6	1.0%	475.8	5.1	1.1%	475.3	5.6	1.2%	474.8	6.0	1.3%	474.4	6.5	1.4%	473.9	7.0	1.4%
ME 1	48 59 42	2014	Critical	August	--	286.9	283.1	3.9	1.3%	282.7	4.2	1.5%	282.3	4.6	1.6%	281.9	5.0	1.7%	281.6	5.4	1.9%	281.2	5.8	2.0%
ME 1	48 59 42	2014	Critical	September	Used in Summary Table Analysis	437.7	434.6	3.1	0.7%	434.3	3.4	0.8%	434.0	3.8	0.9%	433.7	4.1	0.9%	433.3	4.4	1.0%	433.0	4.7	1.1%
ME 1	48 59 42	2015	Dry	October	Used in Summary Table Analysis	2,948.5	2,946.3	2.2	0.1%	2,946.1	2.4	0.1%	2,945.8	2.7	0.1%	2,945.6	2.9	0.1%	2,945.4	3.1	0.1%	2,945.1	3.4	0.1%
ME 1	48 59 42	2015	Dry	November	Used in Summary Table Analysis	4,721.2	4,719.6	1.6	0.0%	4,719.4	1.7	0.0%	4,719.3	1.9	0.0%	4,719.1	2.1	0.0%	4,719.0	2.2	0.0%	4,718.9	2.3	0.0%
ME 1	48 59 42	2015	Dry	December	--	16,760.4	16,759.3	1.2	0.0%	16,759.3	1.2	0.0%	16,759.3	1.2	0.0%	16,759.3	1.2	0.0%	16,759.3	1.2	0.0%	16,759.3	1.2	0.0%
ME 1	48 59 42	2015	Dry	January	--	12,089.1	12,088.0	1.2	0.0%	12,088.0	1.2	0.0%	12,086.8	2.3	0.0%	12,086.8	2.3	0.0%	12,086.8	2.3	0.0%	12,086.8	2.3	0.0%
ME 1	48 59 42	2015	Dry	February	--	11,914.4	11,913.2	1.2	0.0%	11,913.2	1.2	0.0%	11,913.2	1.2	0.0%	11,913.2	1.2	0.0%	11,913.2	1.2	0.0%	11,913.2	1.2	0.0%
ME 1	48 59 42	2015	Dry	March	--	7,366.3	7,365.2	1.2	0.0%	7,365.0	1.3	0.0%	7,364.9	1.4	0.0%	7,364.8	1.5	0.0%	7,364.7	1.6	0.0%	7,364.5	1.9	0.0%
ME 1	48 59 42	2015	Dry	April	--	3,743.2	3,741.1	2.1	0.1%	3,740.9	2.3	0.1%	3,740.6	2.5	0.1%	3,740.4	2.8	0.1%	3,740.2	3.0	0.1%	3,739.9	3.2	0.1%
ME 1	48 59 42	2015	Dry	May	--	1,363.3	1,360.1	3.2	0.2%	1,359.8	3.5	0.3%	1,359.5	3.8	0.3%	1,359.1	4.2	0.3%	1,358.8	4.5	0.3%	1,358.4	4.9	0.4%
ME 1	48 59 42	2015	Dry	June	--	470.7	466.0	4.7	1.0%	465.6	5.2	1.1%	465.1	5.6	1.2%	464.6	6.1	1.3%	464.1	6.6	1.4%	463.7	7.0	1.5%
ME 1	48 59 42	2015	Dry	July	--	208.0	203.4	4.6	2.2%	203.0	5.0	2.4%	202.5	5.5	2.6%	202.1	5.9	2.9%	201.6	6.4	3.1%	201.2	6.9	3.3%
ME 1	48 59 42	2015	Dry	August	--	108.6	104.8	3.9	3.6%	104.4	4.3	3.9%	104.0	4.7	4.3%	103.6	5.0	4.6%	103.2	5.4	5.0%	102.8	5.8	5.4%
ME 1	48 59 42	2015	Dry	September	Used in Summary Table Analysis	66.3	63.1	3.2	4.8%	62.8	3.5	5.3%	62.5	3.8	5.7%	62.2	4.1	6.2%	61.8	4.4	6.7%	61.5	4.8	7.2%
ME 1	48 59 42	2016	Above Normal	October	Used in Summary Table Analysis	40.4	38.2	2.2	5.5%	38.0	2.4	6.0%	37.7	2.6	6.5%	37.5	2.9	7.1%	37.3	3.1	7.6%	37.1	3.3	8.2%
ME 1	48 59 42	2016	Above Normal	November	Used in Summary Table Analysis	750.2	748.6	1.6	0.2%	748.5	1.8	0.2%	748.3	2.0	0.3%	748.1	2.1	0.3%	748.0	2.3	0.3%	747.8	2.4	0.3%
ME 1	48 59 42	2016	Above Normal	December	--	16,076.4	16,075.2	1.2	0.0%	16,075.2	1.2	0.0%	16,075.2	1.2	0.0%	16,075.2	1.2	0.0%	16,074.1	2.3	0.0%	16,074.1	2.3	0.0%
ME 1	48 59 42	2016	Above Normal	January	--	35,657.4	35,656.3	1.2	0.0%	35,656.3	1.2	0.0%	35,656.3	1.2	0.0%	35,655.1	2.3	0.0%	35,655.1	2.3	0.0%	35,655.1	2.3	0.0%
ME 1	48 59 42	2016	Above Normal	February	--	18,644.7	18,643.5	1.2	0.0%	18,642.4	2.3	0.0%	18,642.4	2.3	0.0%	18,642.4	2.3	0.0%	18,642.4	2.3	0.0%	18,642.4	2.3	0.0%
ME 1	48 59 42	2016	Above Normal	March	--	21,141.2	21,140.0	1.2	0.0%	21,140.0	1.2	0.0%	21,140.0	1.2	0.0%	21,140.0	1.2	0.0%	21,138.9	2.3	0.0%	21,138.9	2.3	0.0%
ME 1	48 59 42	2016	Above Normal	April	--	12,746.5	12,745.4	1.2	0.0%	12,745.4	1.2	0.0%	12,745.4	1.2	0.0%	12,745.4	1.2	0.0%	12,745.4	1.2	0.0%	12,745.4	1.2	0.0%
ME 1	48 59 42	2016	Above Normal	May	--	3,929.9	3,928.2	1.6	0.0%	3,928.0	1.9	0.0%	3,927.9	2.0	0.1%	3,927.7	2.2	0.1%	3,927.5	2.3	0.1%	3,927.4	2.4	0.1%
ME 1	48 59 42	2016	Above Normal	June	--	1,416.8	1,413.1	3.7	0.3%	1,412.6	4.2	0.3%	1,412.3	4.5	0.3%	1,411.9	4.9	0.3%	1,411.6	5.2	0.4%	1,411.2	5.6	0.4%
ME 1	48 59 42	2016	Above Normal	July	--	748.9	744.8	4.2	0.6%	744.4	4.6	0.6%	743.9	5.0	0.7%	743.5	5.4	0.7%	743.1	5.8	0.8%	742.7	6.2	0.8%
ME 1	48 59 42	2016	Above Normal	August	--	425.6	422.0	3.6	0.9%	421.6	4.0	0.9%	421.3	4.3	1.0%	420.9	4.7	1.1%	420.5	5.1	1.2%	420.2	5.4	1.3%
ME 1	48 59 42	2016	Above Normal	September	Used in Summary Table Analysis	266.6	263.6	3.0	1.1%	263.3	3.3	1.2%	263.0	3.6	1.3%	262.7	3.9	1.5%	262.4	4.2	1.6%	262.1	4.5	1.7%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 59 42	2017	Wet	October	Used in Summary Table Analysis	5,119.6	5,117.6	2.0	0.0%	5,117.5	2.1	0.0%	5,117.2	2.3	0.0%	5,117.0	2.5	0.0%	5,116.9	2.7	0.1%	5,116.7	2.9	0.1%
ME 1	48 59 42	2017	Wet	November	Used in Summary Table Analysis	11,107.6	11,106.3	1.4	0.0%	11,106.0	1.6	0.0%	11,105.9	1.7	0.0%	11,105.8	1.9	0.0%	11,105.7	2.0	0.0%	11,105.4	2.2	0.0%
ME 1	48 59 42	2017	Wet	December	--	14,188.7	14,187.5	1.2	0.0%	14,187.5	1.2	0.0%	14,187.5	1.2	0.0%	14,187.5	1.2	0.0%	14,186.3	2.3	0.0%	14,186.3	2.3	0.0%
ME 1	48 59 42	2017	Wet	January	--	70,483.8	70,482.6	1.2	0.0%	70,482.6	1.2	0.0%	70,482.6	1.2	0.0%	70,481.5	2.3	0.0%	70,481.5	2.3	0.0%	70,481.5	2.3	0.0%
ME 1	48 59 42	2017	Wet	February	--	47,223.4	47,222.2	1.2	0.0%	47,221.1	2.3	0.0%	47,221.1	2.3	0.0%	47,221.1	2.3	0.0%	47,221.1	2.3	0.0%	47,221.1	2.3	0.0%
ME 1	48 59 42	2017	Wet	March	--	20,575.2	20,574.1	1.2	0.0%	20,574.1	1.2	0.0%	20,574.1	1.2	0.0%	20,574.1	1.2	0.0%	20,574.1	1.2	0.0%	20,574.1	1.2	0.0%
ME 1	48 59 42	2017	Wet	April	--	14,496.5	14,494.2	2.3	0.0%	14,494.2	2.3	0.0%	14,494.2	2.3	0.0%	14,494.2	2.3	0.0%	14,494.2	2.3	0.0%	14,494.2	2.3	0.0%
ME 1	48 59 42	2017	Wet	May	--	6,069.6	6,067.8	1.7	0.0%	6,067.6	2.0	0.0%	6,067.5	2.1	0.0%	6,067.2	2.3	0.0%	6,067.0	2.5	0.0%	6,066.9	2.7	0.0%
ME 1	48 59 42	2017	Wet	June	--	1,903.5	1,899.8	3.7	0.2%	1,899.4	4.1	0.2%	1,899.1	4.4	0.2%	1,898.7	4.7	0.2%	1,898.4	5.1	0.3%	1,897.9	5.6	0.3%
ME 1	48 59 42	2017	Wet	July	--	859.1	854.9	4.3	0.5%	854.5	4.7	0.5%	854.0	5.1	0.6%	853.6	5.5	0.6%	853.2	6.0	0.7%	852.7	6.4	0.7%
ME 1	48 59 42	2017	Wet	August	--	436.1	432.5	3.7	0.8%	432.1	4.0	0.9%	431.7	4.4	1.0%	431.4	4.8	1.1%	431.0	5.1	1.2%	430.6	5.5	1.3%
ME 1	48 59 42	2017	Wet	September	Used in Summary Table Analysis	260.1	257.2	2.9	1.1%	257.0	3.2	1.2%	256.7	3.4	1.3%	256.4	3.7	1.4%	256.1	4.0	1.5%	255.8	4.3	1.7%
ME 1	48 59 42	2018	Above Normal	October	Used in Summary Table Analysis	204.5	202.4	2.1	1.0%	202.2	2.3	1.1%	202.0	2.5	1.2%	201.8	2.7	1.3%	201.6	2.9	1.4%	201.3	3.1	1.5%
ME 1	48 59 42	2018	Above Normal	November	Used in Summary Table Analysis	3,327.1	3,325.6	1.5	0.0%	3,325.5	1.6	0.0%	3,325.3	1.7	0.1%	3,325.1	2.0	0.1%	3,325.0	2.1	0.1%	3,324.9	2.2	0.1%
ME 1	48 59 42	2018	Above Normal	December	--	4,802.0	4,800.7	1.3	0.0%	4,800.6	1.4	0.0%	4,800.5	1.5	0.0%	4,800.3	1.6	0.0%	4,800.1	1.9	0.0%	4,800.0	2.0	0.0%
ME 1	48 59 42	2018	Above Normal	January	--	8,196.1	8,194.9	1.2	0.0%	8,194.8	1.3	0.0%	8,194.7	1.4	0.0%	8,194.4	1.6	0.0%	8,194.3	1.7	0.0%	8,194.2	1.9	0.0%
ME 1	48 59 42	2018	Above Normal	February	--	6,842.5	6,841.3	1.2	0.0%	6,841.2	1.3	0.0%	6,841.1	1.4	0.0%	6,841.0	1.5	0.0%	6,840.9	1.6	0.0%	6,840.7	1.7	0.0%
ME 1	48 59 42	2018	Above Normal	March	--	10,756.9	10,755.8	1.2	0.0%	10,755.7	1.3	0.0%	10,755.6	1.4	0.0%	10,755.4	1.5	0.0%	10,755.3	1.6	0.0%	10,755.2	1.7	0.0%
ME 1	48 59 42	2018	Above Normal	April	--	14,372.7	14,371.5	1.2	0.0%	14,371.5	1.2	0.0%	14,371.5	1.2	0.0%	14,371.5	1.2	0.0%	14,370.4	2.3	0.0%	14,370.4	2.3	0.0%
ME 1	48 59 42	2018	Above Normal	May	--	6,248.8	6,246.6	2.2	0.0%	6,246.4	2.4	0.0%	6,246.2	2.7	0.0%	6,245.9	2.9	0.0%	6,245.7	3.1	0.1%	6,245.6	3.2	0.1%
ME 1	48 59 42	2018	Above Normal	June	--	1,836.6	1,832.3	4.3	0.2%	1,831.8	4.7	0.3%	1,831.5	5.1	0.3%	1,831.0	5.6	0.3%	1,830.6	6.0	0.3%	1,830.1	6.5	0.4%
ME 1	48 59 42	2018	Above Normal	July	--	712.4	708.2	4.2	0.6%	707.8	4.6	0.6%	707.3	5.0	0.7%	706.9	5.4	0.8%	706.5	5.9	0.8%	706.1	6.3	0.9%
ME 1	48 59 42	2018	Above Normal	August	--	377.6	374.2	3.4	0.9%	373.8	3.8	1.0%	373.5	4.1	1.1%	373.1	4.4	1.2%	372.8	4.8	1.3%	372.5	5.1	1.4%
ME 1	48 59 42	2018	Above Normal	September	Used in Summary Table Analysis	242.6	239.7	2.9	1.2%	239.4	3.2	1.3%	239.1	3.4	1.4%	238.8	3.7	1.5%	238.6	4.0	1.7%	238.3	4.3	1.8%
ME 1	48 59 42	2019	Below Normal	October	Used in Summary Table Analysis	138.6	136.7	1.9	1.4%	136.5	2.1	1.5%	136.3	2.3	1.7%	136.1	2.5	1.8%	135.9	2.7	1.9%	135.7	2.9	2.1%
ME 1	48 59 42	2019	Below Normal	November	Used in Summary Table Analysis	1,844.0	1,842.5	1.5	0.1%	1,842.4	1.6	0.1%	1,842.2	1.7	0.1%	1,842.0	2.0	0.1%	1,841.9	2.1	0.1%	1,841.8	2.2	0.1%
ME 1	48 59 42	2019	Below Normal	December	--	7,209.6	7,208.3	1.3	0.0%	7,208.2	1.4	0.0%	7,208.1	1.5	0.0%	7,208.0	1.6	0.0%	7,207.9	1.7	0.0%	7,207.8	1.9	0.0%
ME 1	48 59 42	2019	Below Normal	January	--	18,292.8	18,291.7	1.2	0.0%	18,291.7	1.2	0.0%	18,291.7	1.2	0.0%	18,291.7	1.2	0.0%	18,291.7	1.2	0.0%	18,291.7	1.2	0.0%
ME 1	48 59 42	2019	Below Normal	February	--	96,401.6	96,400.5	1.2	0.0%	96,400.5	1.2	0.0%	96,400.5	1.2	0.0%	96,400.5	1.2	0.0%	96,400.5	1.2	0.0%	96,400.5	1.2	0.0%
ME 1	48 59 42	2019	Below Normal	March	--	31,516.2	31,515.0	1.2	0.0%	31,515.0	1.2	0.0%	31,515.0	1.2	0.0%	31,515.0	1.2	0.0%	31,515.0	1.2	0.0%	31,515.0	1.2	0.0%
ME 1	48 59 42	2019	Below Normal	April	--	11,655.1	11,653.9	1.2	0.0%	11,653.9	1.2	0.0%	11,653.9	1.2	0.0%	11,653.9	1.2	0.0%	11,652.8	2.3	0.0%	11,652.8	2.3	0.0%
ME 1	48 59 42	2019	Below Normal	May	--	9,765.9	9,763.4	2.4	0.0%	9,763.2	2.7	0.0%	9,762.8	3.0	0.0%	9,762.6	3.2	0.0%	9,762.4	3.5	0.0%	9,762.2	3.7	0.0%
ME 1	48 59 42	2019	Below Normal	June	--	4,163.0	4,158.6	4.4	0.1%	4,158.1	4.9	0.1%	4,157.6	5.3	0.1%	4,157.2	5.8	0.1%	4,156.7	6.3	0.2%	4,156.4	6.6	0.2%
ME 1	48 59 42	2019	Below Normal	July	--	1,277.9	1,273.7	4.2	0.3%	1,273.3	4.6	0.4%	1,272.8	5.1	0.4%	1,272.5	5.4	0.4%	1,272.0	5.9	0.5%	1,271.5	6.4	0.5%
ME 1	48 59 42	2019	Below Normal	August	--	524.3	520.8	3.6	0.7%	520.4	3.9	0.7%	520.1	4.3	0.8%	519.7	4.6	0.9%	519.4	5.0	0.9%	519.0	5.3	1.0%
ME 1	48 59 42	2019	Below Normal	September	Used in Summary Table Analysis	320.9	318.1	2.8	0.9%	317.8	3.1	1.0%	317.5	3.4	1.0%	317.2	3.6	1.1%	316.9	3.9	1.2%	316.7	4.2	1.3%
ME 1	48 59 42	2020	Dry	October	Used in Summary Table Analysis	185.8	184.0	1.9	1.0%	183.8	2.0	1.1%	183.6	2.2	1.2%	183.4	2.4	1.3%	183.2	2.6	1.4%	183.0	2.8	1.5%
ME 1	48 59 42	2020	Dry	November	Used in Summary Table Analysis	211.2	209.7	1.5	0.7%	209.6	1.6	0.8%	209.4	1.7	0.8%	209.3	1.9	0.9%	209.1	2.0	1.0%	209.0	2.2	1.0%
ME 1	48 59 42	2020	Dry	December	--	4,921.1	4,919.9	1.2	0.0%	4,919.8	1.3	0.0%	4,919.7	1.4	0.0%	4,919.4	1.6	0.0%	4,919.3	1.7	0.0%	4,919.2	1.9	0.0%
ME 1	48 59 42	2020	Dry	January	--	12,928.2	12,927.1	1.2	0.0%	12,927.1	1.2	0.0%	12,927.1	1.2	0.0%	12,927.1	1.2	0.0%	12,927.1	1.2	0.0%	12,927.1	1.2	0.0%
ME 1	48 59 42	2020	Dry	February	--	7,144.3	7,143.2	1.2	0.0%	7,143.1	1.3	0.0%	7,142.9	1.4	0.0%	7,142.8	1.5	0.0%	7,142.7	1.6	0.0%	7,142.6	1.7	0.0%
ME 1	48 59 42	2020	Dry	March	--	4,494.1	4,493.1	1.0	0.0%	4,492.9	1.2	0.0%	4,492.8	1.3	0.0%	4,492.7	1.4	0.0%	4,492.6	1.5	0.0%	4,492.5	1.6	0.0%
ME 1	48 59 42	2020	Dry	April	--	3,241.8	3,239.7	2.1	0.1%	3,239.5	2.3	0.1%	3,239.2	2.5	0.1%	3,239.0	2.8	0.1%	3,238.9	2.9	0.1%	3,238.7	3.1	0.1%
ME 1	48 59 42	2020	Dry	May	--	3,483.7	3,480.6	3.1	0.1%	3,480.3	3.4	0.1%	3,480.0	3.7	0.1%	3,479.6	4.1	0.1%	3,479.3	4.4	0.1%	3,479.1	4.6	0.1%
ME 1	48 59 42	2020	Dry	June	--	2,012.3	2,007.6	4.6	0.2%	2,007.2	5.1	0.3%	2,006.7	5.6	0.3%	2,006.3	6.0	0.3%	2,005.8	6.5	0.3%	2,005.3	6.9	0.3%
ME 1	48 59 42	2020	Dry	July	--	731.9	727.2	4.8	0.6%	726.7	5.2	0.7%	726.2	5.7	0.8%	725.8	6.2	0.8%	725.3	6.7	0.9%	724.8	7.1	1.0%
ME 1	48 59 42	2020	Dry	August	--	340.2	336.1	4.1	1.2%	335.6	4.5	1.3%	335.2	4.9	1.4%	334.8	5.3	1.6%	334.4	5.7	1.7%	334.0	6.1	1.8%
ME 1	48 59 42	2020	Dry	September	Used in Summary Table Analysis	192.0	188.6	3.3	1.7%	188.3	3.7	1.9%	188.0	4.0	2.1%	187.6	4.3	2.3%	187.3	4.7	2.4%	187.0	5.0	2.6%
ME 1	47 59 1	2000	Above Normal	October	Used in Summary Table Analysis	793.6	789.8	3.8	0.5%	789.4	4.2	0.5%	789.1	4.6	0.6%	788.7	5.0	0.6%	788.3	5.3	0.7%	787.9	5.7	0.7%
ME 1	47 59 1	2000	Above Normal	November	Used in Summary Table Analysis	11,782.4	11,778.9	3.5	0.0%	11,778.9	3.5	0.0%	11,777.8	4.6	0.0%	11,777.8	4.6	0.0%	11,777.8	4.6	0.0%	11,777.8	4.6	0.0%
ME 1	47 59 1	2000	Above Normal	December	--	10,629.5	10,627.2	2.3	0.0%	10,626.9	2.7	0.0%	10,626.6	2.9	0.0%	10,626.4	3.1	0.0%	10,626.2	3.4	0.0%	10,625.9	3.6	0.0%
ME 1	47 59 1	2000	Above Normal	January	--	28,012.7	28,010.4	2.3	0.0%	28,010.4	2.3	0.0%	28,010.4	2.3	0.0%	28,010.4	2.3	0.0%	28,010.4	2.3	0.0%	28,009.3	3.5	0.0%
ME 1	47 59 1	2000	Above Normal	February	--	36,671.3	36,669.0	2.3	0.0%	36,669.0	2.3	0.0%	36,669.0	2.3	0.0%	36,669.0	2.3	0.0%	36,669.0	2.3	0.0%	36,667.8	3.5	0.0%
ME 1	47 59 1	2000	Above Normal	March	--	18,199.1	18,196.8	2.3	0.0%	18,196.8	2.3	0.0%	18,196.8	2.3	0.0%	18,195.6	3.5	0.0%	18,195.6	3.5	0.0%	18,195.6	3.5	0.0%
ME 1	47 59 1	2000	Above Normal	April	--	12,224.5	12,222.2	2.3	0.0%	12,222.2	2.3	0.0%	12,222.2	2.3	0.0%	12,222.2	2.3	0.0%	12,221.1	3.5	0.0%	12,221.1	3.5	0.0%
ME 1	47 59 1	2000	Above Normal	May	--	7,019.1	7,014.0	5.1	0.1%	7,013.5	5.6	0.1%	7,013.0	6.1	0.1%	7,012.5	6.6	0.1%	7,011.9	7.2	0.1%	7,011.5	7.6	0.1%
ME 1	47 59 1	2000	Above Normal	June	--	2,579.7	2,571.8	8.0	0.3%	2,570.9	8.8	0.3%	2,570.1	9.6	0.4%	2,569.3	10.4	0.4%	2,568.5	11.2	0.4%	2,567.7	12.0	0.5%
ME 1	47 59 1	2000	Above Normal	July	--	975.2	968.8	6.3	0.6%	968.2	7.0	0.7%	967.6	7.6	0.8%	966.9	8.2	0.8%	966.3	8.9	0.9%	965.7	9.5	1.0%
ME 1	47 59 1	2000	Above Normal	August	--	504.5	499.0	5.5	1.1%	498.4	6.1	1.2%	497.9	6.6	1.3%	497.3	7.2	1.4%	496.8	7.7	1.5%	496.2	8.3	1.6%
ME 1	47 59 1	2000	Above Normal	September	Used in Summary Table Analysis	279.8	275.1	4.6	1.7%	274.7	5.1	1.8%	274.2	5.5	2.0%	273.8	6.0	2.1%	273.3	6.5	2.3%	272.8	6.9	2.5%
ME 1	47 59 1	2001	Dry	October	Used in Summary Table Analysis	3,734.6	3,730.9	3.7	0.1%	3,730.4	4.2	0.1%	3,730.1	4.5	0.1%	3,729.7	4.9	0.1%	3,729.4	5.2	0.1%	3,728.9	5.7	0.2%
ME 1	47 59 1	2001	Dry	November	Used in Summary Table Analysis	5,995.5	5,992.7	2.8	0.0%	5,992.4	3.1	0.1%	5,992.1	3.4	0.1%	5,991.8	3.7	0.1%	5,991.6	3.9	0.1%	5,991.2	4.3	0.1%
ME 1	47 59 1	2001	Dry	December	--	8,709.3	8,706.9	2.3	0.0%	8,706.7	2.5	0.0%	8,706.5	2.8	0.0%	8,706.3	3.0	0.0%	8,705.9	3.4	0.0%	8,705.7	3.6	0.0%
ME 1	47 59 1	2001	Dry	January	--	12,547.5	12,545.1	2.3	0.0%	12,545.1	2.3	0.0%	12,545.1	2.3	0.0%	12,545.1	2.3	0.0%	12,545.1	2.3	0.0%	12,544.0	3.5	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 59 1	2001	Dry	February	--	17,317.1	17,314.8	2.3	0.0%	17,314.8	2.3	0.0%	17,314.8	2.3	0.0%	17,313.7	3.5	0.0%	17,313.7	3.5	0.0%	17,313.7	3.5	0.0%
ME 1	47 59 1	2001	Dry	March	--	12,215.3	12,213.0	2.3	0.0%	12,213.0	2.3	0.0%	12,213.0	2.3	0.0%	12,213.0	2.3	0.0%	12,213.0	2.3	0.0%	12,213.0	2.3	0.0%
ME 1	47 59 1	2001	Dry	April	--	10,886.3	10,880.9	5.4	0.0%	10,880.4	5.9	0.1%	10,879.9	6.5	0.1%	10,879.4	6.9	0.1%	10,878.8	7.5	0.1%	10,878.2	8.1	0.1%
ME 1	47 59 1	2001	Dry	May	--	2,631.4	2,625.5	5.9	0.2%	2,624.8	6.6	0.3%	2,624.2	7.2	0.3%	2,623.6	7.8	0.3%	2,623.0	8.3	0.3%	2,622.5	8.9	0.3%
ME 1	47 59 1	2001	Dry	June	--	2,592.8	2,583.8	9.0	0.3%	2,583.0	9.8	0.4%	2,582.1	10.8	0.4%	2,581.1	11.7	0.5%	2,580.2	12.6	0.5%	2,579.4	13.4	0.5%
ME 1	47 59 1	2001	Dry	July	--	709.8	702.5	7.2	1.0%	701.8	8.0	1.1%	701.1	8.7	1.2%	700.4	9.4	1.3%	699.7	10.1	1.4%	699.0	10.8	1.5%
ME 1	47 59 1	2001	Dry	August	--	159.5	152.9	6.6	4.1%	152.2	7.2	4.5%	151.6	7.9	5.0%	150.9	8.6	5.4%	150.3	9.2	5.8%	149.6	9.9	6.2%
ME 1	47 59 1	2001	Dry	September	Used in Summary Table Analysis	81.6	76.0	5.6	6.9%	75.4	6.2	7.6%	74.8	6.7	8.2%	74.3	7.3	8.9%	73.7	7.8	9.6%	73.2	8.4	10.3%
ME 1	47 59 1	2002	Below Normal	October	Used in Summary Table Analysis	249.6	244.9	4.7	1.9%	244.4	5.2	2.1%	243.9	5.7	2.3%	243.5	6.1	2.5%	243.0	6.6	2.6%	242.5	7.1	2.8%
ME 1	47 59 1	2002	Below Normal	November	Used in Summary Table Analysis	11,855.3	11,851.9	3.5	0.0%	11,850.7	4.6	0.0%	11,850.7	4.6	0.0%	11,850.7	4.6	0.0%	11,849.5	5.8	0.0%	11,849.5	5.8	0.0%
ME 1	47 59 1	2002	Below Normal	December	--	35,173.6	35,170.1	3.5	0.0%	35,170.1	3.5	0.0%	35,170.1	3.5	0.0%	35,170.1	3.5	0.0%	35,169.0	4.6	0.0%	35,169.0	4.6	0.0%
ME 1	47 59 1	2002	Below Normal	January	--	30,553.2	30,550.9	2.3	0.0%	30,549.8	3.5	0.0%	30,549.8	3.5	0.0%	30,549.8	3.5	0.0%	30,549.8	3.5	0.0%	30,548.6	4.6	0.0%
ME 1	47 59 1	2002	Below Normal	February	--	24,481.5	24,479.2	2.3	0.0%	24,478.0	3.5	0.0%	24,478.0	3.5	0.0%	24,478.0	3.5	0.0%	24,478.0	3.5	0.0%	24,478.0	3.5	0.0%
ME 1	47 59 1	2002	Below Normal	March	--	17,626.2	17,623.8	2.3	0.0%	17,622.7	3.5	0.0%	17,622.7	3.5	0.0%	17,622.7	3.5	0.0%	17,622.7	3.5	0.0%	17,622.7	3.5	0.0%
ME 1	47 59 1	2002	Below Normal	April	--	9,863.8	9,858.4	5.3	0.1%	9,858.0	5.8	0.1%	9,857.4	6.4	0.1%	9,856.8	6.9	0.1%	9,856.4	7.4	0.1%	9,855.8	8.0	0.1%
ME 1	47 59 1	2002	Below Normal	May	--	3,295.0	3,289.2	5.8	0.2%	3,288.7	6.4	0.2%	3,288.1	6.9	0.2%	3,287.5	7.5	0.2%	3,286.9	8.1	0.2%	3,286.2	8.8	0.3%
ME 1	47 59 1	2002	Below Normal	June	--	840.9	833.8	7.1	0.8%	833.1	7.8	0.9%	832.4	8.6	1.0%	831.7	9.3	1.1%	831.0	10.0	1.2%	830.3	10.7	1.3%
ME 1	47 59 1	2002	Below Normal	July	--	349.0	342.4	6.6	1.9%	341.8	7.2	2.1%	341.1	7.9	2.3%	340.5	8.5	2.4%	339.8	9.2	2.6%	339.2	9.8	2.8%
ME 1	47 59 1	2002	Below Normal	August	--	211.5	205.8	5.7	2.7%	205.2	6.3	3.0%	204.6	6.9	3.2%	204.1	7.4	3.5%	203.5	8.0	3.8%	202.9	8.6	4.0%
ME 1	47 59 1	2002	Below Normal	September	Used in Summary Table Analysis	148.9	143.7	5.2	3.5%	143.2	5.7	3.8%	142.7	6.2	4.2%	142.2	6.7	4.5%	141.7	7.3	4.9%	141.2	7.8	5.2%
ME 1	47 59 1	2003	Wet	October	Used in Summary Table Analysis	114.2	110.1	4.1	3.6%	109.7	4.5	4.0%	109.2	4.9	4.3%	108.8	5.3	4.7%	108.4	5.8	5.0%	108.0	6.2	5.4%
ME 1	47 59 1	2003	Wet	November	Used in Summary Table Analysis	877.3	874.1	3.1	0.4%	873.8	3.5	0.4%	873.5	3.8	0.4%	873.2	4.1	0.5%	872.8	4.4	0.5%	872.5	4.7	0.5%
ME 1	47 59 1	2003	Wet	December	--	55,627.3	55,625.0	2.3	0.0%	55,625.0	2.3	0.0%	55,625.0	2.3	0.0%	55,623.8	3.5	0.0%	55,623.8	3.5	0.0%	55,623.8	3.5	0.0%
ME 1	47 59 1	2003	Wet	January	--	31,280.1	31,277.8	2.3	0.0%	31,277.8	2.3	0.0%	31,277.8	2.3	0.0%	31,277.8	2.3	0.0%	31,277.8	2.3	0.0%	31,276.6	3.5	0.0%
ME 1	47 59 1	2003	Wet	February	--	20,219.9	20,217.6	2.3	0.0%	20,217.6	2.3	0.0%	20,216.4	3.5	0.0%	20,216.4	3.5	0.0%	20,216.4	3.5	0.0%	20,216.4	3.5	0.0%
ME 1	47 59 1	2003	Wet	March	--	23,829.9	23,827.5	2.3	0.0%	23,827.5	2.3	0.0%	23,827.5	2.3	0.0%	23,827.5	2.3	0.0%	23,827.5	2.3	0.0%	23,827.5	2.3	0.0%
ME 1	47 59 1	2003	Wet	April	--	42,415.5	42,414.4	1.2	0.0%	42,414.4	1.2	0.0%	42,413.2	2.3	0.0%	42,413.2	2.3	0.0%	42,413.2	2.3	0.0%	42,413.2	2.3	0.0%
ME 1	47 59 1	2003	Wet	May	--	12,153.9	12,148.1	5.8	0.0%	12,147.0	6.9	0.1%	12,147.0	6.9	0.1%	12,145.8	8.1	0.1%	12,145.8	8.1	0.1%	12,145.8	8.1	0.1%
ME 1	47 59 1	2003	Wet	June	--	3,147.1	3,140.4	6.7	0.2%	3,139.8	7.3	0.2%	3,139.1	8.0	0.3%	3,138.5	8.6	0.3%	3,137.8	9.3	0.3%	3,137.3	9.8	0.3%
ME 1	47 59 1	2003	Wet	July	--	1,453.8	1,447.3	6.5	0.4%	1,446.8	7.1	0.5%	1,446.1	7.8	0.5%	1,445.4	8.4	0.6%	1,444.8	9.0	0.6%	1,444.1	9.7	0.7%
ME 1	47 59 1	2003	Wet	August	--	741.2	735.3	5.9	0.8%	734.7	6.5	0.9%	734.1	7.1	1.0%	733.5	7.7	1.0%	732.9	8.3	1.1%	732.3	8.9	1.2%
ME 1	47 59 1	2003	Wet	September	Used in Summary Table Analysis	440.5	435.8	4.7	1.1%	435.4	5.2	1.2%	434.9	5.6	1.3%	434.4	6.1	1.4%	434.0	6.6	1.5%	433.5	7.0	1.6%
ME 1	47 59 1	2004	Wet	October	Used in Summary Table Analysis	307.9	304.1	3.8	1.2%	303.8	4.2	1.3%	303.4	4.5	1.5%	303.0	4.9	1.6%	302.6	5.3	1.7%	302.2	5.7	1.8%
ME 1	47 59 1	2004	Wet	November	Used in Summary Table Analysis	5,665.9	5,663.0	2.9	0.1%	5,662.7	3.1	0.1%	5,662.4	3.5	0.1%	5,662.2	3.7	0.1%	5,661.8	4.1	0.1%	5,661.6	4.3	0.1%
ME 1	47 59 1	2004	Wet	December	--	35,709.5	35,707.2	2.3	0.0%	35,707.2	2.3	0.0%	35,707.2	2.3	0.0%	35,707.2	2.3	0.0%	35,706.0	3.5	0.0%	35,706.0	3.5	0.0%
ME 1	47 59 1	2004	Wet	January	--	31,063.7	31,061.3	2.3	0.0%	31,061.3	2.3	0.0%	31,061.3	2.3	0.0%	31,060.2	3.5	0.0%	31,060.2	3.5	0.0%	31,060.2	3.5	0.0%
ME 1	47 59 1	2004	Wet	February	--	37,842.6	37,840.3	2.3	0.0%	37,840.3	2.3	0.0%	37,839.1	3.5	0.0%	37,839.1	3.5	0.0%	37,839.1	3.5	0.0%	37,839.1	3.5	0.0%
ME 1	47 59 1	2004	Wet	March	--	16,450.2	16,447.9	2.3	0.0%	16,447.9	2.3	0.0%	16,447.9	2.3	0.0%	16,447.9	2.3	0.0%	16,447.9	2.3	0.0%	16,446.8	3.5	0.0%
ME 1	47 59 1	2004	Wet	April	--	9,395.1	9,393.4	1.7	0.0%	9,393.2	2.0	0.0%	9,393.1	2.1	0.0%	9,392.8	2.3	0.0%	9,392.7	2.4	0.0%	9,392.5	2.7	0.0%
ME 1	47 59 1	2004	Wet	May	--	3,375.2	3,370.0	5.2	0.2%	3,369.4	5.8	0.2%	3,369.0	6.3	0.2%	3,368.4	6.8	0.2%	3,367.9	7.3	0.2%	3,367.4	7.9	0.2%
ME 1	47 59 1	2004	Wet	June	--	679.7	673.5	6.1	0.9%	672.9	6.7	1.0%	672.3	7.4	1.1%	671.7	8.0	1.2%	671.1	8.6	1.3%	670.5	9.2	1.4%
ME 1	47 59 1	2004	Wet	July	--	340.2	333.9	6.4	1.9%	333.3	7.0	2.1%	332.6	7.6	2.2%	332.0	8.3	2.4%	331.4	8.9	2.6%	330.7	9.5	2.8%
ME 1	47 59 1	2004	Wet	August	--	210.1	204.6	5.5	2.6%	204.0	6.1	2.9%	203.5	6.6	3.1%	202.9	7.2	3.4%	202.3	7.7	3.7%	201.8	8.3	3.9%
ME 1	47 59 1	2004	Wet	September	Used in Summary Table Analysis	148.1	142.8	5.3	3.6%	142.3	5.9	4.0%	141.8	6.4	4.3%	141.2	6.9	4.7%	140.7	7.5	5.0%	140.2	8.0	5.4%
ME 1	47 59 1	2005	Above Normal	October	Used in Summary Table Analysis	7,505.3	7,501.4	3.9	0.1%	7,501.0	4.3	0.1%	7,500.6	4.7	0.1%	7,500.2	5.1	0.1%	7,499.9	5.4	0.1%	7,499.4	5.9	0.1%
ME 1	47 59 1	2005	Above Normal	November	Used in Summary Table Analysis	2,229.1	2,226.2	2.9	0.1%	2,225.8	3.2	0.1%	2,225.6	3.5	0.2%	2,225.2	3.8	0.2%	2,225.0	4.1	0.2%	2,224.7	4.4	0.2%
ME 1	47 59 1	2005	Above Normal	December	--	20,525.5	20,523.1	2.3	0.0%	20,522.0	3.5	0.0%	20,522.0	3.5	0.0%	20,522.0	3.5	0.0%	20,522.0	3.5	0.0%	20,522.0	3.5	0.0%
ME 1	47 59 1	2005	Above Normal	January	--	21,989.6	21,987.3	2.3	0.0%	21,987.3	2.3	0.0%	21,987.3	2.3	0.0%	21,986.1	3.5	0.0%	21,986.1	3.5	0.0%	21,986.1	3.5	0.0%
ME 1	47 59 1	2005	Above Normal	February	--	13,937.5	13,935.2	2.3	0.0%	13,935.2	2.3	0.0%	13,935.2	2.3	0.0%	13,935.2	2.3	0.0%	13,934.0	3.5	0.0%	13,934.0	3.5	0.0%
ME 1	47 59 1	2005	Above Normal	March	--	28,265.0	28,263.9	1.2	0.0%	28,263.9	1.2	0.0%	28,262.7	2.3	0.0%	28,262.7	2.3	0.0%	28,262.7	2.3	0.0%	28,262.7	2.3	0.0%
ME 1	47 59 1	2005	Above Normal	April	--	21,245.4	21,244.2	1.2	0.0%	21,243.1	2.3	0.0%	21,243.1	2.3	0.0%	21,243.1	2.3	0.0%	21,243.1	2.3	0.0%	21,243.1	2.3	0.0%
ME 1	47 59 1	2005	Above Normal	May	--	19,332.2	19,327.5	4.6	0.0%	19,326.4	5.8	0.0%	19,326.4	5.8	0.0%	19,325.2	6.9	0.0%	19,325.2	6.9	0.0%	19,324.1	8.1	0.0%
ME 1	47 59 1	2005	Above Normal	June	--	15,591.4	15,582.2	9.3	0.1%	15,582.2	9.3	0.1%	15,581.0	10.4	0.1%	15,579.9	11.6	0.1%	15,578.7	12.7	0.1%	15,578.7	12.7	0.1%
ME 1	47 59 1	2005	Above Normal	July	--	2,856.3	2,849.5	6.7	0.2%	2,848.8	7.4	0.3%	2,848.1	8.1	0.3%	2,847.5	8.8	0.3%	2,846.8	9.5	0.3%	2,846.1	10.2	0.4%
ME 1	47 59 1	2005	Above Normal	August	--	963.7	958.1	5.5	0.6%	957.6	6.1	0.6%	957.0	6.6	0.7%	956.5	7.2	0.7%	955.9	7.7	0.8%	955.4	8.3	0.9%
ME 1	47 59 1	2005	Above Normal	September	Used in Summary Table Analysis	505.8	501.2	4.6	0.9%	500.7	5.1	1.0%	500.2	5.6	1.1%	499.8	6.0	1.2%	499.3	6.5	1.3%	498.8	6.9	1.4%
ME 1	47 59 1	2006	Wet	October	Used in Summary Table Analysis	613.2	609.5	3.7	0.6%	609.1	4.1	0.7%	608.7	4.5	0.7%	608.4	4.8	0.8%	608.0	5.2	0.8%	607.6	5.6	0.9%
ME 1	47 59 1	2006	Wet	November	Used in Summary Table Analysis	9,074.4	9,071.6	2.8	0.0%	9,071.4	3.0	0.0%	9,071.1	3.4	0.0%	9,070.8	3.6	0.0%	9,070.6	3.8	0.0%	9,070.3	4.2	0.0%
ME 1	47 59 1	2006	Wet	December	--	42,744.2	42,741.9	2.3	0.0%	42,741.9	2.3	0.0%	42,741.9	2.3	0.0%	42,741.9	2.3	0.0%	42,740.7	3.5	0.0%	42,740.7	3.5	0.0%
ME 1	47 59 1	2006	Wet	January	--	45,614.6	45,612.3	2.3	0.0%	45,612.3	2.3	0.0%	45,612.3	2.3	0.0%	45,611.1	3.5	0.0%	45,611.1	3.5	0.0%	45,611.1	3.5	0.0%
ME 1	47 59 1	2006	Wet	February	--	26,324.1	26,321.8	2.3	0.0%	26,321.8	2.3	0.0%	26,321.8	2.3	0.0%	26,320.6	3.5	0.0%	26,320.6	3.5	0.0%	26,320.6	3.5	0.0%
ME 1	47 59 1	2006	Wet	March	--	46,618.1	46,616.9	1.2	0.0%	46,615.7	2.3	0.0%	46,615.7	2.3	0.0%	46,615.7	2.3	0.0%	46,615.7	2.3	0.0%	46,615.7	2.3	0.0%
ME 1	47 59 1	2006	Wet	April	--	30,211.8	30,209.5	2.3	0.0%	30,209.5	2.3	0.0%	30,209.5	2.3	0.0%	30,209.5	2.3	0.0%	30,209.5	2.3	0.0%	30,209.5	2.3	0.0%
ME 1	47 59 1	2006	Wet	May	--	14,079.9	14,076.4	3.5	0.0%	14,076.4	3.5	0.0%	14,076.4	3.5	0.0%	14,076.4	3.5	0.0%	14,076.4	3.5	0.0%	14,075.2	4.6	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 59 1	2006	Wet	June	--	3,529.6	3,522.7	6.9	0.2%	3,522.0	7.6	0.2%	3,521.3	8.3	0.2%	3,520.6	9.0	0.3%	3,519.8	9.8	0.3%	3,519.1	10.5	0.3%
ME 1	47 59 1	2006	Wet	July	--	1,256.9	1,250.6	6.4	0.5%	1,249.9	7.1	0.6%	1,249.3	7.6	0.6%	1,248.6	8.3	0.7%	1,248.0	8.9	0.7%	1,247.3	9.6	0.8%
ME 1	47 59 1	2006	Wet	August	--	643.6	637.9	5.7	0.9%	637.3	6.3	1.0%	636.7	6.9	1.1%	636.1	7.5	1.2%	635.5	8.1	1.3%	635.0	8.6	1.3%
ME 1	47 59 1	2006	Wet	September	Used in Summary Table Analysis	406.3	401.6	4.7	1.2%	401.1	5.2	1.3%	400.6	5.7	1.4%	400.2	6.2	1.5%	399.7	6.6	1.6%	399.2	7.1	1.7%
ME 1	47 59 1	2007	Above Normal	October	Used in Summary Table Analysis	257.4	253.6	3.8	1.5%	253.2	4.2	1.6%	252.8	4.5	1.8%	252.5	4.9	1.9%	252.1	5.3	2.1%	251.7	5.7	2.2%
ME 1	47 59 1	2007	Above Normal	November	Used in Summary Table Analysis	8,462.5	8,459.6	2.9	0.0%	8,459.3	3.2	0.0%	8,459.0	3.5	0.0%	8,458.7	3.8	0.0%	8,458.4	4.1	0.0%	8,458.1	4.4	0.1%
ME 1	47 59 1	2007	Above Normal	December	--	19,998.8	19,995.4	3.5	0.0%	19,995.4	3.5	0.0%	19,995.4	3.5	0.0%	19,995.4	3.5	0.0%	19,994.2	4.6	0.0%	19,994.2	4.6	0.0%
ME 1	47 59 1	2007	Above Normal	January	--	10,139.1	10,136.9	2.2	0.0%	10,136.7	2.4	0.0%	10,136.5	2.7	0.0%	10,136.2	2.9	0.0%	10,136.0	3.1	0.0%	10,135.8	3.4	0.0%
ME 1	47 59 1	2007	Above Normal	February	--	30,110.0	30,107.6	2.3	0.0%	30,107.6	2.3	0.0%	30,107.6	2.3	0.0%	30,107.6	2.3	0.0%	30,106.5	3.5	0.0%	30,106.5	3.5	0.0%
ME 1	47 59 1	2007	Above Normal	March	--	13,019.7	13,017.4	2.3	0.0%	13,017.4	2.3	0.0%	13,016.2	3.5	0.0%	13,016.2	3.5	0.0%	13,016.2	3.5	0.0%	13,016.2	3.5	0.0%
ME 1	47 59 1	2007	Above Normal	April	--	11,457.1	11,452.0	5.1	0.0%	11,451.5	5.6	0.0%	11,450.9	6.1	0.1%	11,450.5	6.6	0.1%	11,449.9	7.2	0.1%	11,449.4	7.6	0.1%
ME 1	47 59 1	2007	Above Normal	May	--	4,102.7	4,097.0	5.7	0.1%	4,096.4	6.3	0.2%	4,095.8	6.8	0.2%	4,095.3	7.4	0.2%	4,094.7	8.0	0.2%	4,094.1	8.6	0.2%
ME 1	47 59 1	2007	Above Normal	June	--	1,472.0	1,464.4	7.6	0.5%	1,463.5	8.4	0.6%	1,462.8	9.1	0.6%	1,462.0	10.0	0.7%	1,461.3	10.6	0.7%	1,460.5	11.5	0.8%
ME 1	47 59 1	2007	Above Normal	July	--	483.1	476.2	6.9	1.4%	475.5	7.6	1.6%	474.8	8.3	1.7%	474.1	9.0	1.9%	473.4	9.7	2.0%	472.7	10.4	2.2%
ME 1	47 59 1	2007	Above Normal	August	--	207.4	201.8	5.6	2.7%	201.2	6.2	3.0%	200.7	6.7	3.2%	200.1	7.3	3.5%	199.6	7.8	3.8%	199.0	8.4	4.1%
ME 1	47 59 1	2007	Above Normal	September	Used in Summary Table Analysis	135.1	130.0	5.1	3.8%	129.5	5.6	4.2%	129.0	6.1	4.5%	128.5	6.6	4.9%	128.0	7.1	5.3%	127.5	7.7	5.7%
ME 1	47 59 1	2008	Dry	October	Used in Summary Table Analysis	3,357.8	3,353.7	4.1	0.1%	3,353.2	4.5	0.1%	3,352.9	4.9	0.1%	3,352.5	5.2	0.2%	3,352.1	5.7	0.2%	3,351.7	6.0	0.2%
ME 1	47 59 1	2008	Dry	November	Used in Summary Table Analysis	3,202.0	3,199.1	2.9	0.1%	3,198.7	3.2	0.1%	3,198.4	3.6	0.1%	3,198.1	3.8	0.1%	3,197.8	4.2	0.1%	3,197.6	4.4	0.1%
ME 1	47 59 1	2008	Dry	December	--	22,591.4	22,588.0	3.5	0.0%	22,588.0	3.5	0.0%	22,588.0	3.5	0.0%	22,588.0	3.5	0.0%	22,586.8	4.6	0.0%	22,586.8	4.6	0.0%
ME 1	47 59 1	2008	Dry	January	--	37,017.4	37,015.0	2.3	0.0%	37,015.0	2.3	0.0%	37,015.0	2.3	0.0%	37,013.9	3.5	0.0%	37,013.9	3.5	0.0%	37,013.9	3.5	0.0%
ME 1	47 59 1	2008	Dry	February	--	26,142.4	26,140.0	2.3	0.0%	26,140.0	2.3	0.0%	26,140.0	2.3	0.0%	26,140.0	2.3	0.0%	26,140.0	2.3	0.0%	26,138.9	3.5	0.0%
ME 1	47 59 1	2008	Dry	March	--	11,732.6	11,731.5	1.2	0.0%	11,730.3	2.3	0.0%	11,730.3	2.3	0.0%	11,730.3	2.3	0.0%	11,730.3	2.3	0.0%	11,730.3	2.3	0.0%
ME 1	47 59 1	2008	Dry	April	--	8,967.2	8,961.9	5.3	0.1%	8,961.3	5.9	0.1%	8,960.8	6.5	0.1%	8,960.3	6.9	0.1%	8,959.7	7.5	0.1%	8,959.1	8.1	0.1%
ME 1	47 59 1	2008	Dry	May	--	1,359.6	1,354.6	5.0	0.4%	1,354.1	5.6	0.4%	1,353.6	6.0	0.4%	1,353.1	6.5	0.5%	1,352.5	7.1	0.5%	1,352.1	7.5	0.6%
ME 1	47 59 1	2008	Dry	June	--	424.0	415.6	8.4	2.0%	414.8	9.2	2.2%	414.0	10.0	2.4%	413.2	10.9	2.6%	412.3	11.7	2.8%	411.5	12.5	2.9%
ME 1	47 59 1	2008	Dry	July	--	243.1	235.7	7.3	3.0%	235.0	8.0	3.3%	234.3	8.8	3.6%	233.6	9.5	3.9%	232.8	10.2	4.2%	232.1	11.0	4.5%
ME 1	47 59 1	2008	Dry	August	--	165.8	159.2	6.6	4.0%	158.5	7.2	4.4%	157.8	7.9	4.8%	157.2	8.6	5.2%	156.5	9.2	5.6%	155.9	9.9	5.9%
ME 1	47 59 1	2008	Dry	September	Used in Summary Table Analysis	127.6	121.2	6.4	5.0%	120.5	7.1	5.6%	119.9	7.7	6.0%	119.2	8.4	6.6%	118.6	9.0	7.1%	118.0	9.6	7.6%
ME 1	47 59 1	2009	Critical	October	Used in Summary Table Analysis	905.3	900.6	4.7	0.5%	900.1	5.2	0.6%	899.6	5.7	0.6%	899.1	6.1	0.7%	898.7	6.6	0.7%	898.2	7.1	0.8%
ME 1	47 59 1	2009	Critical	November	Used in Summary Table Analysis	5,378.0	5,374.7	3.4	0.1%	5,374.3	3.7	0.1%	5,374.0	4.1	0.1%	5,373.6	4.4	0.1%	5,373.3	4.7	0.1%	5,372.9	5.1	0.1%
ME 1	47 59 1	2009	Critical	December	--	11,888.9	11,886.6	2.3	0.0%	11,885.4	3.5	0.0%	11,885.4	3.5	0.0%	11,885.4	3.5	0.0%	11,885.4	3.5	0.0%	11,884.3	4.6	0.0%
ME 1	47 59 1	2009	Critical	January	--	8,714.7	8,712.0	2.7	0.0%	8,711.8	2.9	0.0%	8,711.6	3.1	0.0%	8,711.3	3.4	0.0%	8,711.0	3.7	0.0%	8,710.8	3.9	0.0%
ME 1	47 59 1	2009	Critical	February	--	22,383.1	22,380.8	2.3	0.0%	22,380.8	2.3	0.0%	22,379.6	3.5	0.0%	22,379.6	3.5	0.0%	22,379.6	3.5	0.0%	22,379.6	3.5	0.0%
ME 1	47 59 1	2009	Critical	March	--	20,946.8	20,944.4	2.3	0.0%	20,944.4	2.3	0.0%	20,944.4	2.3	0.0%	20,944.4	2.3	0.0%	20,943.3	3.5	0.0%	20,943.3	3.5	0.0%
ME 1	47 59 1	2009	Critical	April	--	10,072.0	10,066.4	5.6	0.1%	10,065.9	6.1	0.1%	10,065.3	6.7	0.1%	10,064.8	7.2	0.1%	10,064.4	7.6	0.1%	10,063.8	8.2	0.1%
ME 1	47 59 1	2009	Critical	May	--	15,491.9	15,486.1	5.8	0.0%	15,485.0	6.9	0.0%	15,485.0	6.9	0.0%	15,483.8	8.1	0.1%	15,483.8	8.1	0.1%	15,482.6	9.3	0.1%
ME 1	47 59 1	2009	Critical	June	--	3,142.4	3,133.3	9.0	0.3%	3,132.5	9.8	0.3%	3,131.6	10.8	0.3%	3,130.7	11.7	0.4%	3,129.9	12.5	0.4%	3,128.9	13.4	0.4%
ME 1	47 59 1	2009	Critical	July	--	1,247.0	1,239.6	7.4	0.6%	1,238.8	8.2	0.7%	1,238.1	8.9	0.7%	1,237.4	9.6	0.8%	1,236.6	10.4	0.8%	1,235.9	11.1	0.9%
ME 1	47 59 1	2009	Critical	August	--	652.6	645.9	6.6	1.0%	645.3	7.3	1.1%	644.6	8.0	1.2%	644.0	8.6	1.3%	643.3	9.3	1.4%	642.7	9.9	1.5%
ME 1	47 59 1	2009	Critical	September	Used in Summary Table Analysis	375.1	369.5	5.6	1.5%	368.9	6.2	1.6%	368.4	6.7	1.8%	367.8	7.3	1.9%	367.3	7.8	2.1%	366.7	8.4	2.2%
ME 1	47 59 1	2010	Below Normal	October	Used in Summary Table Analysis	6,065.5	6,060.8	4.7	0.1%	6,060.3	5.2	0.1%	6,059.8	5.7	0.1%	6,059.4	6.1	0.1%	6,058.9	6.6	0.1%	6,058.4	7.1	0.1%
ME 1	47 59 1	2010	Below Normal	November	Used in Summary Table Analysis	8,198.1	8,194.7	3.5	0.0%	8,194.3	3.8	0.0%	8,194.0	4.2	0.1%	8,193.6	4.5	0.1%	8,193.3	4.9	0.1%	8,192.9	5.2	0.1%
ME 1	47 59 1	2010	Below Normal	December	--	12,172.5	12,170.1	2.3	0.0%	12,170.1	2.3	0.0%	12,169.0	3.5	0.0%	12,169.0	3.5	0.0%	12,169.0	3.5	0.0%	12,169.0	3.5	0.0%
ME 1	47 59 1	2010	Below Normal	January	--	35,635.4	35,633.1	2.3	0.0%	35,631.9	3.5	0.0%	35,631.9	3.5	0.0%	35,631.9	3.5	0.0%	35,631.9	3.5	0.0%	35,630.8	4.6	0.0%
ME 1	47 59 1	2010	Below Normal	February	--	27,071.8	27,069.4	2.3	0.0%	27,069.4	2.3	0.0%	27,069.4	2.3	0.0%	27,069.4	2.3	0.0%	27,069.4	2.3	0.0%	27,068.3	3.5	0.0%
ME 1	47 59 1	2010	Below Normal	March	--	28,687.5	28,685.2	2.3	0.0%	28,685.2	2.3	0.0%	28,684.0	3.5	0.0%	28,684.0	3.5	0.0%	28,684.0	3.5	0.0%	28,684.0	3.5	0.0%
ME 1	47 59 1	2010	Below Normal	April	--	39,739.6	39,737.3	2.3	0.0%	39,737.3	2.3	0.0%	39,737.3	2.3	0.0%	39,736.1	3.5	0.0%	39,736.1	3.5	0.0%	39,736.1	3.5	0.0%
ME 1	47 59 1	2010	Below Normal	May	--	20,054.4	20,049.8	4.6	0.0%	20,048.6	5.8	0.0%	20,048.6	5.8	0.0%	20,047.5	6.9	0.0%	20,047.5	6.9	0.0%	20,046.3	8.1	0.0%
ME 1	47 59 1	2010	Below Normal	June	--	9,180.8	9,172.2	8.6	0.1%	9,171.4	9.4	0.1%	9,170.5	10.3	0.1%	9,169.7	11.1	0.1%	9,168.9	11.9	0.1%	9,168.1	12.7	0.1%
ME 1	47 59 1	2010	Below Normal	July	--	1,439.2	1,432.4	6.8	0.5%	1,431.7	7.5	0.5%	1,431.0	8.2	0.6%	1,430.4	8.8	0.6%	1,429.7	9.5	0.7%	1,429.1	10.2	0.7%
ME 1	47 59 1	2010	Below Normal	August	--	549.2	543.5	5.7	1.0%	543.0	6.3	1.1%	542.4	6.9	1.3%	541.8	7.4	1.4%	541.3	7.9	1.4%	540.7	8.5	1.5%
ME 1	47 59 1	2010	Below Normal	September	Used in Summary Table Analysis	630.9	625.4	5.5	0.9%	624.8	6.1	1.0%	624.3	6.6	1.0%	623.7	7.2	1.1%	623.2	7.7	1.2%	622.6	8.3	1.3%
ME 1	47 59 1	2011	Wet	October	Used in Summary Table Analysis	9,501.4	9,497.6	3.8	0.0%	9,497.1	4.3	0.0%	9,496.8	4.6	0.0%	9,496.4	5.0	0.1%	9,495.9	5.4	0.1%	9,495.6	5.8	0.1%
ME 1	47 59 1	2011	Wet	November	Used in Summary Table Analysis	14,069.4	14,067.1	2.3	0.0%	14,067.1	2.3	0.0%	14,066.0	3.5	0.0%	14,066.0	3.5	0.0%	14,066.0	3.5	0.0%	14,066.0	3.5	0.0%
ME 1	47 59 1	2011	Wet	December	--	33,103.0	33,100.7	2.3	0.0%	33,100.7	2.3	0.0%	33,100.7	2.3	0.0%	33,100.7	2.3	0.0%	33,099.5	3.5	0.0%	33,099.5	3.5	0.0%
ME 1	47 59 1	2011	Wet	January	--	14,039.4	14,037.0	2.3	0.0%	14,037.0	2.3	0.0%	14,037.0	2.3	0.0%	14,035.9	3.5	0.0%	14,035.9	3.5	0.0%	14,035.9	3.5	0.0%
ME 1	47 59 1	2011	Wet	February	--	20,652.8	20,650.5	2.3	0.0%	20,650.5	2.3	0.0%	20,650.5	2.3	0.0%	20,650.5	2.3	0.0%	20,650.5	2.3	0.0%	20,649.3	3.5	0.0%
ME 1	47 59 1	2011	Wet	March	--	51,612.3	51,610.0	2.3	0.0%	51,610.0	2.3	0.0%	51,610.0	2.3	0.0%	51,610.0	2.3	0.0%	51,608.8	3.5	0.0%	51,608.8	3.5	0.0%
ME 1	47 59 1	2011	Wet	April	--	24,660.9	24,658.6	2.3	0.0%	24,658.6	2.3	0.0%	24,658.6	2.3	0.0%	24,658.6	2.3	0.0%	24,657.4	3.5	0.0%	24,657.4	3.5	0.0%
ME 1	47 59 1	2011	Wet	May	--	11,313.8	11,308.6	5.2	0.0%	11,308.1	5.7	0.1%	11,307.5	6.3	0.1%	11,307.1	6.7	0.1%	11,306.5	7.3	0.1%	11,305.9	7.9	0.1%
ME 1	47 59 1	2011	Wet	June	--	6,988.4	6,980.1	8.3	0.1%	6,979.2	9.3	0.1%	6,978.4	10.1	0.1%	6,977.5	10.9	0.2%	6,976.7	11.7	0.2%	6,975.9	12.5	0.2%
ME 1	47 59 1	2011	Wet	July	--	1,817.7	1,810.1	7.6	0.4%	1,809.3	8.4	0.5%	1,808.6	9.1	0.5%	1,807.8	10.0	0.5%	1,806.9	10.8	0.6%	1,806.3	11.5	0.6%
ME 1	47 59 1	2011	Wet	August	--	760.0	754.4	5.6	0.7%	753.9	6.2	0.8%	753.3	6.7	0.9%	752.8	7.3	1.0%	752.2	7.8	1.0%	751.6	8.4	1.1%
ME 1	47 59 1	2011	Wet	September	Used in Summary Table Analysis	416.8	412.0	4.8	1.2%	411.5	5.3	1.3%	411.0	5.8	1.4%	410.6	6.3	1.5%	410.1	6.8	1.6%	409.6	7.2	1.7%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 59 1	2012	Below Normal	October	Used in Summary Table Analysis	4,472.1	4,468.3	3.8	0.1%	4,467.8	4.3	0.1%	4,467.5	4.6	0.1%	4,467.1	5.0	0.1%	4,466.7	5.4	0.1%	4,466.3	5.8	0.1%
ME 1	47 59 1	2012	Below Normal	November	Used in Summary Table Analysis	8,100.0	8,097.1	2.9	0.0%	8,096.8	3.2	0.0%	8,096.4	3.6	0.0%	8,096.2	3.8	0.0%	8,095.8	4.2	0.1%	8,095.6	4.4	0.1%
ME 1	47 59 1	2012	Below Normal	December	--	5,120.1	5,117.7	2.4	0.0%	5,117.5	2.7	0.1%	5,117.1	3.0	0.1%	5,116.9	3.2	0.1%	5,116.7	3.5	0.1%	5,116.4	3.7	0.1%
ME 1	47 59 1	2012	Below Normal	January	--	19,726.9	19,724.5	2.3	0.0%	19,724.5	2.3	0.0%	19,724.5	2.3	0.0%	19,724.5	2.3	0.0%	19,723.4	3.5	0.0%	19,723.4	3.5	0.0%
ME 1	47 59 1	2012	Below Normal	February	--	18,097.2	18,096.1	1.2	0.0%	18,096.1	1.2	0.0%	18,094.9	2.3	0.0%	18,094.9	2.3	0.0%	18,094.9	2.3	0.0%	18,094.9	2.3	0.0%
ME 1	47 59 1	2012	Below Normal	March	--	44,967.6	44,965.3	2.3	0.0%	44,965.3	2.3	0.0%	44,965.3	2.3	0.0%	44,964.1	3.5	0.0%	44,964.1	3.5	0.0%	44,964.1	3.5	0.0%
ME 1	47 59 1	2012	Below Normal	April	--	26,689.8	26,687.5	2.3	0.0%	26,687.5	2.3	0.0%	26,687.5	2.3	0.0%	26,687.5	2.3	0.0%	26,687.5	2.3	0.0%	26,687.5	2.3	0.0%
ME 1	47 59 1	2012	Below Normal	May	--	7,438.3	7,433.0	5.3	0.1%	7,432.4	5.9	0.1%	7,431.8	6.5	0.1%	7,431.4	6.9	0.1%	7,430.9	7.4	0.1%	7,430.4	7.9	0.1%
ME 1	47 59 1	2012	Below Normal	June	--	5,448.8	5,440.3	8.6	0.2%	5,439.5	9.4	0.2%	5,438.7	10.2	0.2%	5,437.7	11.1	0.2%	5,436.9	11.9	0.2%	5,436.1	12.7	0.2%
ME 1	47 59 1	2012	Below Normal	July	--	2,181.0	2,173.5	7.5	0.3%	2,172.8	8.2	0.4%	2,172.0	9.0	0.4%	2,171.3	9.7	0.4%	2,170.5	10.5	0.5%	2,169.8	11.2	0.5%
ME 1	47 59 1	2012	Below Normal	August	--	375.4	370.1	5.3	1.4%	369.6	5.8	1.5%	369.1	6.3	1.7%	368.6	6.8	1.8%	368.1	7.3	1.9%	367.6	7.8	2.1%
ME 1	47 59 1	2012	Below Normal	September	Used in Summary Table Analysis	233.2	228.7	4.5	1.9%	228.3	4.9	2.1%	227.8	5.4	2.3%	227.3	5.8	2.5%	226.9	6.3	2.7%	226.5	6.7	2.9%
ME 1	47 59 1	2013	Below Normal	October	Used in Summary Table Analysis	1,865.0	1,861.2	3.8	0.2%	1,860.8	4.3	0.2%	1,860.4	4.6	0.2%	1,860.0	5.1	0.3%	1,859.6	5.4	0.3%	1,859.3	5.8	0.3%
ME 1	47 59 1	2013	Below Normal	November	Used in Summary Table Analysis	14,435.2	14,432.9	2.3	0.0%	14,431.7	3.5	0.0%	14,431.7	3.5	0.0%	14,431.7	3.5	0.0%	14,431.7	3.5	0.0%	14,430.6	4.6	0.0%
ME 1	47 59 1	2013	Below Normal	December	--	59,436.3	59,434.0	2.3	0.0%	59,434.0	2.3	0.0%	59,432.9	3.5	0.0%	59,432.9	3.5	0.0%	59,432.9	3.5	0.0%	59,432.9	3.5	0.0%
ME 1	47 59 1	2013	Below Normal	January	--	22,034.7	22,032.4	2.3	0.0%	22,032.4	2.3	0.0%	22,032.4	2.3	0.0%	22,032.4	2.3	0.0%	22,032.4	2.3	0.0%	22,031.3	3.5	0.0%
ME 1	47 59 1	2013	Below Normal	February	--	8,765.3	8,763.2	2.1	0.0%	8,763.1	2.2	0.0%	8,762.8	2.4	0.0%	8,762.6	2.7	0.0%	8,762.4	2.9	0.0%	8,762.2	3.1	0.0%
ME 1	47 59 1	2013	Below Normal	March	--	10,211.0	10,209.0	2.0	0.0%	10,208.8	2.2	0.0%	10,208.6	2.4	0.0%	10,208.4	2.5	0.0%	10,208.2	2.8	0.0%	10,208.0	3.0	0.0%
ME 1	47 59 1	2013	Below Normal	April	--	8,251.7	8,246.8	5.0	0.1%	8,246.3	5.4	0.1%	8,245.7	6.0	0.1%	8,245.3	6.5	0.1%	8,244.8	6.9	0.1%	8,244.2	7.5	0.1%
ME 1	47 59 1	2013	Below Normal	May	--	4,381.4	4,375.7	5.7	0.1%	4,375.1	6.3	0.1%	4,374.5	6.8	0.2%	4,374.0	7.4	0.2%	4,373.4	8.0	0.2%	4,372.8	8.6	0.2%
ME 1	47 59 1	2013	Below Normal	June	--	2,091.2	2,083.7	7.5	0.4%	2,082.9	8.3	0.4%	2,082.2	9.0	0.4%	2,081.4	9.8	0.5%	2,080.7	10.5	0.5%	2,079.9	11.3	0.5%
ME 1	47 59 1	2013	Below Normal	July	--	707.4	701.0	6.5	0.9%	700.3	7.1	1.0%	699.7	7.7	1.1%	699.0	8.4	1.2%	698.4	9.0	1.3%	697.8	9.7	1.4%
ME 1	47 59 1	2013	Below Normal	August	--	326.0	320.4	5.6	1.7%	319.9	6.2	1.9%	319.3	6.7	2.1%	318.8	7.3	2.2%	318.2	7.8	2.4%	317.7	8.4	2.6%
ME 1	47 59 1	2013	Below Normal	September	Used in Summary Table Analysis	4,714.8	4,708.8	6.0	0.1%	4,708.2	6.6	0.1%	4,707.5	7.3	0.2%	4,706.9	7.9	0.2%	4,706.4	8.4	0.2%	4,705.8	9.0	0.2%
ME 1	47 59 1	2014	Critical	October	Used in Summary Table Analysis	275.3	271.4	3.9	1.4%	271.0	4.3	1.6%	270.6	4.7	1.7%	270.2	5.1	1.8%	269.8	5.5	2.0%	269.4	5.8	2.1%
ME 1	47 59 1	2014	Critical	November	Used in Summary Table Analysis	1,498.4	1,495.4	3.0	0.2%	1,495.1	3.2	0.2%	1,494.8	3.6	0.2%	1,494.6	3.8	0.3%	1,494.2	4.2	0.3%	1,493.9	4.5	0.3%
ME 1	47 59 1	2014	Critical	December	--	1,564.7	1,562.2	2.5	0.2%	1,561.9	2.8	0.2%	1,561.7	3.0	0.2%	1,561.5	3.2	0.2%	1,561.1	3.6	0.2%	1,560.9	3.8	0.2%
ME 1	47 59 1	2014	Critical	January	--	2,780.2	2,778.0	2.2	0.1%	2,777.8	2.4	0.1%	2,777.5	2.7	0.1%	2,777.3	2.9	0.1%	2,777.1	3.1	0.1%	2,776.9	3.4	0.1%
ME 1	47 59 1	2014	Critical	February	--	15,637.7	15,635.4	2.3	0.0%	15,635.4	2.3	0.0%	15,635.4	2.3	0.0%	15,635.4	2.3	0.0%	15,635.4	2.3	0.0%	15,635.4	2.3	0.0%
ME 1	47 59 1	2014	Critical	March	--	31,338.0	31,335.6	2.3	0.0%	31,335.6	2.3	0.0%	31,335.6	2.3	0.0%	31,334.5	3.5	0.0%	31,334.5	3.5	0.0%	31,334.5	3.5	0.0%
ME 1	47 59 1	2014	Critical	April	--	12,936.3	12,930.6	5.8	0.0%	12,929.4	6.9	0.1%	12,929.4	6.9	0.1%	12,929.4	6.9	0.1%	12,928.2	8.1	0.1%	12,928.2	8.1	0.1%
ME 1	47 59 1	2014	Critical	May	--	5,153.1	5,147.0	6.1	0.1%	5,146.4	6.7	0.1%	5,145.8	7.3	0.1%	5,145.1	8.0	0.2%	5,144.6	8.6	0.2%	5,144.0	9.1	0.2%
ME 1	47 59 1	2014	Critical	June	--	1,181.7	1,172.6	9.1	0.8%	1,171.6	10.1	0.9%	1,170.7	11.0	0.9%	1,169.8	11.9	1.0%	1,168.9	12.8	1.1%	1,167.9	13.8	1.2%
ME 1	47 59 1	2014	Critical	July	--	534.5	527.1	7.3	1.4%	526.4	8.1	1.5%	525.7	8.8	1.6%	524.9	9.5	1.8%	524.2	10.3	1.9%	523.5	11.0	2.1%
ME 1	47 59 1	2014	Critical	August	--	333.8	327.3	6.5	2.0%	326.7	7.2	2.1%	326.0	7.8	2.3%	325.4	8.5	2.5%	324.7	9.1	2.7%	324.1	9.8	2.9%
ME 1	47 59 1	2014	Critical	September	Used in Summary Table Analysis	2,537.0	2,530.4	6.6	0.3%	2,529.9	7.2	0.3%	2,529.2	7.9	0.3%	2,528.5	8.6	0.3%	2,527.8	9.3	0.4%	2,527.2	9.8	0.4%
ME 1	47 59 1	2015	Dry	October	Used in Summary Table Analysis	11,234.4	11,229.6	4.7	0.0%	11,229.3	5.1	0.0%	11,228.8	5.6	0.0%	11,227.7	6.7	0.1%	11,227.2	7.2	0.1%	11,226.7	7.6	0.1%
ME 1	47 59 1	2015	Dry	November	Used in Summary Table Analysis	8,906.5	8,903.0	3.5	0.0%	8,902.7	3.8	0.0%	8,902.3	4.2	0.0%	8,902.0	4.5	0.1%	8,901.6	4.9	0.1%	8,901.3	5.2	0.1%
ME 1	47 59 1	2015	Dry	December	--	32,133.1	32,130.8	2.3	0.0%	32,130.8	2.3	0.0%	32,129.6	3.5	0.0%	32,129.6	3.5	0.0%	32,129.6	3.5	0.0%	32,129.6	3.5	0.0%
ME 1	47 59 1	2015	Dry	January	--	14,500.0	14,496.5	3.5	0.0%	14,496.5	3.5	0.0%	14,496.5	3.5	0.0%	14,496.5	3.5	0.0%	14,495.4	4.6	0.0%	14,495.4	4.6	0.0%
ME 1	47 59 1	2015	Dry	February	--	27,040.5	27,038.2	2.3	0.0%	27,038.2	2.3	0.0%	27,037.0	3.5	0.0%	27,037.0	3.5	0.0%	27,037.0	3.5	0.0%	27,037.0	3.5	0.0%
ME 1	47 59 1	2015	Dry	March	--	11,520.9	11,519.0	2.0	0.0%	11,518.8	2.2	0.0%	11,518.6	2.3	0.0%	11,518.4	2.5	0.0%	11,518.2	2.8	0.0%	11,517.9	3.0	0.0%
ME 1	47 59 1	2015	Dry	April	--	8,258.6	8,253.1	5.4	0.1%	8,252.7	5.9	0.1%	8,252.1	6.5	0.1%	8,251.5	7.1	0.1%	8,250.9	7.6	0.1%	8,250.5	8.1	0.1%
ME 1	47 59 1	2015	Dry	May	--	1,501.9	1,495.7	6.1	0.4%	1,495.1	6.7	0.4%	1,494.6	7.3	0.5%	1,493.9	8.0	0.5%	1,493.3	8.6	0.6%	1,492.7	9.1	0.6%
ME 1	47 59 1	2015	Dry	June	--	642.3	633.8	8.5	1.3%	633.0	9.3	1.5%	632.1	10.2	1.6%	631.3	11.0	1.7%	630.5	11.9	1.8%	629.6	12.7	2.0%
ME 1	47 59 1	2015	Dry	July	--	257.8	250.4	7.4	2.9%	249.7	8.1	3.1%	248.9	8.8	3.4%	248.2	9.6	3.7%	247.5	10.3	4.0%	246.7	11.0	4.3%
ME 1	47 59 1	2015	Dry	August	--	153.1	146.5	6.6	4.3%	145.8	7.3	4.7%	145.2	7.9	5.2%	144.5	8.6	5.6%	143.9	9.2	6.0%	143.2	9.9	6.5%
ME 1	47 59 1	2015	Dry	September	Used in Summary Table Analysis	109.1	103.4	5.7	5.2%	102.9	6.2	5.7%	102.3	6.8	6.2%	101.7	7.3	6.7%	101.2	7.9	7.3%	100.6	8.5	7.8%
ME 1	47 59 1	2016	Above Normal	October	Used in Summary Table Analysis	75.0	70.1	4.9	6.6%	69.6	5.5	7.3%	69.0	6.0	8.0%	69.1	5.9	7.9%	68.8	6.2	8.3%	68.0	7.1	9.4%
ME 1	47 59 1	2016	Above Normal	November	Used in Summary Table Analysis	3,750.6	3,747.1	3.5	0.1%	3,746.8	3.8	0.1%	3,746.4	4.2	0.1%	3,746.1	4.5	0.1%	3,745.7	4.9	0.1%	3,745.4	5.2	0.1%
ME 1	47 59 1	2016	Above Normal	December	--	36,049.8	36,047.5	2.3	0.0%	36,046.3	3.5	0.0%	36,046.3	3.5	0.0%	36,046.3	3.5	0.0%	36,046.3	3.5	0.0%	36,045.1	4.6	0.0%
ME 1	47 59 1	2016	Above Normal	January	--	56,723.4	56,719.9	3.5	0.0%	56,719.9	3.5	0.0%	56,719.9	3.5	0.0%	56,719.9	3.5	0.0%	56,718.8	4.6	0.0%	56,718.8	4.6	0.0%
ME 1	47 59 1	2016	Above Normal	February	--	24,166.7	24,164.4	2.3	0.0%	24,164.4	2.3	0.0%	24,164.4	2.3	0.0%	24,164.4	2.3	0.0%	24,163.2	3.5	0.0%	24,163.2	3.5	0.0%
ME 1	47 59 1	2016	Above Normal	March	--	41,497.7	41,495.4	2.3	0.0%	41,495.4	2.3	0.0%	41,494.2	3.5	0.0%	41,494.2	3.5	0.0%	41,494.2	3.5	0.0%	41,494.2	3.5	0.0%
ME 1	47 59 1	2016	Above Normal	April	--	18,454.9	18,452.5	2.3	0.0%	18,452.5	2.3	0.0%	18,452.5	2.3	0.0%	18,452.5	2.3	0.0%	18,452.5	2.3	0.0%	18,452.5	2.3	0.0%
ME 1	47 59 1	2016	Above Normal	May	--	5,183.2	5,180.6	2.7	0.1%	5,180.2	3.0	0.1%	5,180.0	3.2	0.1%	5,179.7	3.5	0.1%	5,179.4	3.8	0.1%	5,179.2	4.1	0.1%
ME 1	47 59 1	2016	Above Normal	June	--	1,493.6	1,487.2	6.5	0.4%	1,486.6	7.1	0.5%	1,485.9	7.8	0.5%	1,485.3	8.3	0.6%	1,484.6	9.0	0.6%	1,484.0	9.6	0.6%
ME 1	47 59 1	2016	Above Normal	July	--	806.3	799.9	6.4	0.8%	799.2	7.0	0.9%	798.6	7.6	0.9%	798.0	8.3	1.0%	797.3	8.9	1.1%	796.7	9.5	1.2%
ME 1	47 59 1	2016	Above Normal	August	--	474.4	468.6	5.8	1.2%	468.0	6.4	1.3%	467.4	6.9	1.5%	466.9	7.5	1.6%	466.3	8.1	1.7%	465.7	8.7	1.8%
ME 1	47 59 1	2016	Above Normal	September	Used in Summary Table Analysis	311.6	306.8	4.8	1.5%	306.3	5.3	1.7%	305.8	5.8	1.9%	305.3	6.3	2.0%	304.8	6.8	2.2%	304.4	7.3	2.3%
ME 1	47 59 1	2017	Wet	October	Used in Summary Table Analysis	18,057.9	18,054.4	3.5	0.0%	18,053.2	4.6	0.0%	18,053.2	4.6	0.0%	18,053.2	4.6	0.0%	18,052.1	5.8	0.0%	18,052.1	5.8	0.0%
ME 1	47 59 1	2017	Wet	November	Used in Summary Table Analysis	18,574.1	18,570.6	3.5	0.0%	18,570.6	3.5	0.0%	18,570.6	3.5	0.0%	18,569.4	4.6	0.0%	18,569.4	4.6	0.0%	18,569.4	4.6	0.0%
ME 1	47 59 1	2017	Wet	December	--	23,725.7	23,723.4	2.3	0.0%	23,722.2	3.5	0.0%	23,722.2	3.5	0.0%	23,722.2	3.5	0.0%	23,722.2	3.5	0.0%	23,722.2	3.5	0.0%
ME 1	47 59 1	2017	Wet	January	--	105,772.0	105,769.7	2.3	0.0%	105,769.7	2.3	0.0%	105,769.7	2.3	0.0%	105,768.5	3.5	0.0%	105,768.5	3.5	0.0%	105,768.5	3.5	0.0%

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							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 59 1	2017	Wet	February	--	81,173.6	81,171.3	2.3	0.0%	81,171.3	2.3	0.0%	81,171.3	2.3	0.0%	81,171.3	2.3	0.0%	81,171.3	2.3	0.0%	81,170.1	3.5	0.0%
ME 1	47 59 1	2017	Wet	March	--	27,061.3	27,060.2	1.2	0.0%	27,060.2	1.2	0.0%	27,059.0	2.3	0.0%	27,059.0	2.3	0.0%	27,059.0	2.3	0.0%	27,059.0	2.3	0.0%
ME 1	47 59 1	2017	Wet	April	--	22,710.6	22,709.5	1.2	0.0%	22,708.3	2.3	0.0%	22,708.3	2.3	0.0%	22,708.3	2.3	0.0%	22,708.3	2.3	0.0%	22,708.3	2.3	0.0%
ME 1	47 59 1	2017	Wet	May	--	6,260.2	6,257.4	2.8	0.0%	6,257.2	3.0	0.0%	6,256.8	3.4	0.1%	6,256.6	3.6	0.1%	6,256.3	3.9	0.1%	6,256.0	4.2	0.1%
ME 1	47 59 1	2017	Wet	June	--	2,083.7	2,076.9	6.8	0.3%	2,076.2	7.5	0.4%	2,075.5	8.2	0.4%	2,074.8	8.9	0.4%	2,074.2	9.5	0.5%	2,073.5	10.2	0.5%
ME 1	47 59 1	2017	Wet	July	--	912.9	906.5	6.4	0.7%	905.8	7.1	0.8%	905.2	7.7	0.8%	904.5	8.4	0.9%	903.9	9.0	1.0%	903.3	9.6	1.1%
ME 1	47 59 1	2017	Wet	August	--	485.4	479.6	5.8	1.2%	479.0	6.3	1.3%	478.5	6.9	1.4%	477.9	7.5	1.5%	477.3	8.1	1.7%	476.7	8.6	1.8%
ME 1	47 59 1	2017	Wet	September	Used in Summary Table Analysis	304.5	299.1	5.3	1.8%	298.6	5.9	1.9%	298.0	6.4	2.1%	297.5	6.9	2.3%	297.0	7.5	2.5%	296.4	8.0	2.6%
ME 1	47 59 1	2018	Above Normal	October	Used in Summary Table Analysis	257.4	254.3	3.1	1.2%	253.5	3.9	1.5%	253.0	4.4	1.7%	252.3	5.0	2.0%	251.8	5.6	2.2%	251.4	6.0	2.3%
ME 1	47 59 1	2018	Above Normal	November	Used in Summary Table Analysis	10,529.1	10,526.3	2.8	0.0%	10,525.9	3.1	0.0%	10,525.7	3.4	0.0%	10,525.3	3.7	0.0%	10,525.1	3.9	0.0%	10,524.8	4.3	0.0%
ME 1	47 59 1	2018	Above Normal	December	--	5,417.0	5,414.7	2.3	0.0%	5,414.5	2.5	0.0%	5,414.2	2.8	0.1%	5,414.0	3.0	0.1%	5,413.8	3.2	0.1%	5,413.5	3.5	0.1%
ME 1	47 59 1	2018	Above Normal	January	--	17,332.2	17,331.0	1.2	0.0%	17,329.9	2.3	0.0%	17,329.9	2.3	0.0%	17,329.9	2.3	0.0%	17,329.9	2.3	0.0%	17,329.9	2.3	0.0%
ME 1	47 59 1	2018	Above Normal	February	--	7,571.5	7,569.7	1.9	0.0%	7,569.6	2.0	0.0%	7,569.3	2.2	0.0%	7,569.1	2.4	0.0%	7,569.0	2.5	0.0%	7,568.8	2.8	0.0%
ME 1	47 59 1	2018	Above Normal	March	--	20,409.7	20,408.6	1.2	0.0%	20,407.4	2.3	0.0%	20,407.4	2.3	0.0%	20,407.4	2.3	0.0%	20,407.4	2.3	0.0%	20,407.4	2.3	0.0%
ME 1	47 59 1	2018	Above Normal	April	--	31,861.1	31,858.8	2.3	0.0%	31,858.8	2.3	0.0%	31,858.8	2.3	0.0%	31,858.8	2.3	0.0%	31,858.8	2.3	0.0%	31,857.6	3.5	0.0%
ME 1	47 59 1	2018	Above Normal	May	--	6,972.1	6,967.0	5.1	0.1%	6,966.6	5.6	0.1%	6,966.0	6.1	0.1%	6,965.5	6.6	0.1%	6,965.0	7.1	0.1%	6,964.5	7.6	0.1%
ME 1	47 59 1	2018	Above Normal	June	--	1,897.3	1,891.1	6.3	0.3%	1,890.5	6.8	0.4%	1,889.8	7.5	0.4%	1,889.2	8.1	0.4%	1,888.7	8.7	0.5%	1,888.0	9.4	0.5%
ME 1	47 59 1	2018	Above Normal	July	--	763.4	757.0	6.4	0.8%	756.3	7.0	0.9%	755.7	7.7	1.0%	755.0	8.3	1.1%	754.4	9.0	1.2%	753.8	9.6	1.3%
ME 1	47 59 1	2018	Above Normal	August	--	424.6	419.2	5.5	1.3%	418.6	6.0	1.4%	418.1	6.6	1.6%	417.5	7.1	1.7%	417.0	7.7	1.8%	416.4	8.2	1.9%
ME 1	47 59 1	2018	Above Normal	September	Used in Summary Table Analysis	283.2	277.9	5.3	1.9%	277.3	5.9	2.1%	276.8	6.4	2.3%	276.3	6.9	2.5%	275.7	7.5	2.6%	275.2	8.0	2.8%
ME 1	47 59 1	2019	Below Normal	October	Used in Summary Table Analysis	194.0	190.0	3.9	2.0%	189.6	4.4	2.3%	189.3	4.7	2.4%	188.8	5.2	2.7%	188.5	5.5	2.8%	188.1	5.9	3.0%
ME 1	47 59 1	2019	Below Normal	November	Used in Summary Table Analysis	6,449.5	6,446.6	2.9	0.0%	6,446.3	3.2	0.1%	6,446.1	3.5	0.1%	6,445.7	3.8	0.1%	6,445.5	4.1	0.1%	6,445.1	4.4	0.1%
ME 1	47 59 1	2019	Below Normal	December	--	14,372.7	14,370.4	2.3	0.0%	14,370.4	2.3	0.0%	14,370.4	2.3	0.0%	14,369.2	3.5	0.0%	14,369.2	3.5	0.0%	14,369.2	3.5	0.0%
ME 1	47 59 1	2019	Below Normal	January	--	34,631.9	34,629.6	2.3	0.0%	34,629.6	2.3	0.0%	34,628.5	3.5	0.0%	34,628.5	3.5	0.0%	34,628.5	3.5	0.0%	34,628.5	3.5	0.0%
ME 1	47 59 1	2019	Below Normal	February	--	141,296.3	141,284.7	11.6	0.0%	141,284.7	11.6	0.0%	141,284.7	11.6	0.0%	141,284.7	11.6	0.0%	141,284.7	11.6	0.0%	141,284.7	11.6	0.0%
ME 1	47 59 1	2019	Below Normal	March	--	41,994.2	41,991.9	2.3	0.0%	41,991.9	2.3	0.0%	41,991.9	2.3	0.0%	41,991.9	2.3	0.0%	41,991.9	2.3	0.0%	41,991.9	2.3	0.0%
ME 1	47 59 1	2019	Below Normal	April	--	15,179.4	15,177.1	2.3	0.0%	15,177.1	2.3	0.0%	15,177.1	2.3	0.0%	15,177.1	2.3	0.0%	15,175.9	3.5	0.0%	15,175.9	3.5	0.0%
ME 1	47 59 1	2019	Below Normal	May	--	16,493.1	16,487.3	5.8	0.0%	16,486.1	6.9	0.0%	16,486.1	6.9	0.0%	16,485.0	8.1	0.0%	16,485.0	8.1	0.0%	16,485.0	8.1	0.0%
ME 1	47 59 1	2019	Below Normal	June	--	4,238.2	4,231.3	6.9	0.2%	4,230.6	7.6	0.2%	4,229.9	8.3	0.2%	4,229.2	9.0	0.2%	4,228.5	9.7	0.2%	4,227.8	10.4	0.2%
ME 1	47 59 1	2019	Below Normal	July	--	1,339.5	1,333.1	6.4	0.5%	1,332.4	7.1	0.5%	1,331.8	7.6	0.6%	1,331.1	8.3	0.6%	1,330.6	8.9	0.7%	1,329.9	9.6	0.7%
ME 1	47 59 1	2019	Below Normal	August	--	576.2	570.5	5.6	1.0%	570.0	6.2	1.1%	569.4	6.7	1.2%	568.9	7.3	1.3%	568.3	7.9	1.4%	567.7	8.4	1.5%
ME 1	47 59 1	2019	Below Normal	September	Used in Summary Table Analysis	445.1	439.8	5.3	1.2%	439.3	5.8	1.3%	438.8	6.4	1.4%	438.2	6.9	1.5%	437.7	7.4	1.7%	437.2	7.9	1.8%
ME 1	47 59 1	2020	Dry	October	Used in Summary Table Analysis	342.0	338.4	3.6	1.1%	338.0	4.0	1.2%	337.7	4.3	1.3%	337.3	4.7	1.4%	336.9	5.1	1.5%	336.6	5.4	1.6%
ME 1	47 59 1	2020	Dry	November	Used in Summary Table Analysis	294.1	291.6	2.5	0.9%	291.3	2.8	0.9%	291.1	3.0	1.0%	290.8	3.3	1.1%	290.6	3.5	1.2%	290.3	3.8	1.3%
ME 1	47 59 1	2020	Dry	December	--	12,858.8	12,856.5	2.3	0.0%	12,856.5	2.3	0.0%	12,856.5	2.3	0.0%	12,856.5	2.3	0.0%	12,855.3	3.5	0.0%	12,855.3	3.5	0.0%
ME 1	47 59 1	2020	Dry	January	--	21,993.1	21,990.7	2.3	0.0%	21,990.7	2.3	0.0%	21,990.7	2.3	0.0%	21,990.7	2.3	0.0%	21,990.7	2.3	0.0%	21,989.6	3.5	0.0%
ME 1	47 59 1	2020	Dry	February	--	7,395.5	7,393.6	1.9	0.0%	7,393.5	2.0	0.0%	7,393.3	2.2	0.0%	7,393.1	2.4	0.0%	7,392.9	2.5	0.0%	7,392.7	2.8	0.0%
ME 1	47 59 1	2020	Dry	March	--	7,179.4	7,177.7	1.7	0.0%	7,177.4	2.0	0.0%	7,177.3	2.1	0.0%	7,177.1	2.3	0.0%	7,177.0	2.4	0.0%	7,176.7	2.7	0.0%
ME 1	47 59 1	2020	Dry	April	--	5,411.9	5,406.7	5.2	0.1%	5,406.1	5.8	0.1%	5,405.6	6.4	0.1%	5,405.1	6.8	0.1%	5,404.5	7.4	0.1%	5,404.1	7.9	0.1%
ME 1	47 59 1	2020	Dry	May	--	7,286.8	7,280.8	6.0	0.1%	7,280.2	6.6	0.1%	7,279.6	7.2	0.1%	7,279.1	7.8	0.1%	7,278.5	8.3	0.1%	7,277.9	8.9	0.1%
ME 1	47 59 1	2020	Dry	June	--	2,097.8	2,089.1	8.7	0.4%	2,088.2	9.6	0.5%	2,087.4	10.4	0.5%	2,086.5	11.3	0.5%	2,085.5	12.3	0.6%	2,084.7	13.1	0.6%
ME 1	47 59 1	2020	Dry	July	--	782.2	774.8	7.4	0.9%	774.1	8.1	1.0%	773.3	8.9	1.1%	772.6	9.6	1.2%	771.8	10.3	1.3%	771.1	11.1	1.4%
ME 1	47 59 1	2020	Dry	August	--	384.2	377.4	6.7	1.8%	376.7	7.4	1.9%	376.1	8.1	2.1%	375.4	8.8	2.3%	374.7	9.4	2.5%	374.1	10.1	2.6%
ME 1	47 59 1	2020	Dry	September	Used in Summary Table Analysis	234.0	228.2	5.8	2.5%	227.6	6.3	2.7%	227.1	6.9	2.9%	226.5	7.5	3.2%	225.9	8.0	3.4%	225.3	8.6	3.7%
ME 2	44 58 4	2000	Above Normal	October	Used in Summary Table Analysis	803.0	798.5	4.5	0.6%	798.0	5.0	0.6%	797.6	5.5	0.7%	797.1	5.9	0.7%	796.7	6.4	0.8%	796.2	6.8	0.8%
ME 2	44 58 4	2000	Above Normal	November	Used in Summary Table Analysis	11,866.9	11,863.4	3.5	0.0%	11,862.3	4.6	0.0%	11,862.3	4.6	0.0%	11,862.3	4.6	0.0%	11,862.3	4.6	0.0%	11,861.1	5.8	0.0%
ME 2	44 58 4	2000	Above Normal	December	--	10,676.9	10,674.0	2.9	0.0%	10,673.7	3.1	0.0%	10,673.4	3.5	0.0%	10,673.1	3.7	0.0%	10,672.9	3.9	0.0%	10,672.6	4.3	0.0%
ME 2	44 58 4	2000	Above Normal	January	--	28,152.8	28,149.3	3.5	0.0%	28,149.3	3.5	0.0%	28,149.3	3.5	0.0%	28,149.3	3.5	0.0%	28,148.1	4.6	0.0%	28,148.1	4.6	0.0%
ME 2	44 58 4	2000	Above Normal	February	--	36,763.9	36,761.6	2.3	0.0%	36,761.6	2.3	0.0%	36,761.6	2.3	0.0%	36,761.6	2.3	0.0%	36,760.4	3.5	0.0%	36,760.4	3.5	0.0%
ME 2	44 58 4	2000	Above Normal	March	--	18,230.3	18,228.0	2.3	0.0%	18,228.0	2.3	0.0%	18,228.0	2.3	0.0%	18,228.0	2.3	0.0%	18,228.0	2.3	0.0%	18,226.9	3.5	0.0%
ME 2	44 58 4	2000	Above Normal	April	--	12,250.0	12,247.7	2.3	0.0%	12,247.7	2.3	0.0%	12,247.7	2.3	0.0%	12,247.7	2.3	0.0%	12,246.5	3.5	0.0%	12,246.5	3.5	0.0%
ME 2	44 58 4	2000	Above Normal	May	--	7,041.3	7,035.6	5.7	0.1%	7,035.1	6.3	0.1%	7,034.5	6.8	0.1%	7,033.9	7.4	0.1%	7,033.3	8.0	0.1%	7,032.8	8.6	0.1%
ME 2	44 58 4	2000	Above Normal	June	--	2,591.3	2,582.3	9.0	0.3%	2,581.4	10.0	0.4%	2,580.4	10.9	0.4%	2,579.6	11.7	0.5%	2,578.7	12.6	0.5%	2,577.8	13.5	0.5%
ME 2	44 58 4	2000	Above Normal	July	--	983.1	975.8	7.3	0.7%	975.0	8.1	0.8%	974.3	8.8	0.9%	973.6	9.5	1.0%	972.8	10.3	1.0%	972.1	11.0	1.1%
ME 2	44 58 4	2000	Above Normal	August	--	512.6	506.1	6.6	1.3%	505.4	7.2	1.4%	504.8	7.8	1.5%	504.1	8.5	1.7%	503.5	9.2	1.8%	502.8	9.8	1.9%
ME 2	44 58 4	2000	Above Normal	September	Used in Summary Table Analysis	287.4	281.9	5.6	1.9%	281.3	6.1	2.1%	280.7	6.7	2.3%	280.2	7.2	2.5%	279.6	7.8	2.7%	279.1	8.3	2.9%
ME 2	44 58 4	2001	Dry	October	Used in Summary Table Analysis	3,758.0	3,753.5	4.5	0.1%	3,753.0	5.0	0.1%	3,752.7	5.3	0.1%	3,752.2	5.8	0.2%	3,751.7	6.3	0.2%	3,751.3	6.7	0.2%
ME 2	44 58 4	2001	Dry	November	Used in Summary Table Analysis	6,030.4	6,027.0	3.5	0.1%	6,026.7	3.7	0.1%	6,026.4	4.1	0.1%	6,026.0	4.4	0.1%	6,025.7	4.7	0.1%	6,025.3	5.1	0.1%
ME 2	44 58 4	2001	Dry	December	--	8,744.2	8,741.4	2.8	0.0%	8,741.1	3.1	0.0%	8,740.9	3.4	0.0%	8,740.5	3.7	0.0%	8,740.3	3.9	0.0%	8,740.0	4.2	0.0%
ME 2	44 58 4	2001	Dry	January	--	12,610.0	12,607.6	2.3	0.0%	12,607.6	2.3	0.0%	12,606.5	3.5	0.0%	12,606.5	3.5	0.0%	12,606.5	3.5	0.0%	12,606.5	3.5	0.0%
ME 2	44 58 4	2001	Dry	February	--	17,357.6	17,355.3	2.3	0.0%	17,355.3	2.3	0.0%	17,355.3	2.3	0.0%	17,355.3	2.3	0.0%	17,354.2	3.5	0.0%	17,354.2	3.5	0.0%
ME 2	44 58 4	2001	Dry	March	--	12,238.4	12,236.1	2.3	0.0%	12,236.1	2.3	0.0%	12,236.1	2.3	0.0%	12,236.1	2.3	0.0%	12,236.1	2.3	0.0%	12,235.0	3.5	0.0%
ME 2	44 58 4	2001	Dry	April	--	10,910.9	10,904.9	6.0	0.1%	10,904.3	6.6	0.1%	10,903.7	7.2	0.1%	10,903.1	7.8	0.1%	10,902.4	8.4	0.1%	10,901.9	9.0	0.1%
ME 2	44 58 4	2001	Dry	May	--	2,636.5	2,629.5	6.9	0.3%	2,628.8	7.6	0.3%	2,628.1	8.3	0.3%	2,627.5	8.9	0.3%	2,626.9	9.6	0.4%	2,626.2	10.3	0.4%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	44 58 4	2001	Dry	June	--	2,610.1	2,600.0	10.1	0.4%	2,599.0	11.1	0.4%	2,598.0	12.0	0.5%	2,597.0	13.1	0.5%	2,595.9	14.1	0.5%	2,595.0	15.0	0.6%
ME 2	44 58 4	2001	Dry	July	--	715.8	707.3	8.4	1.2%	706.5	9.3	1.3%	705.6	10.1	1.4%	704.8	10.9	1.5%	704.0	11.8	1.6%	703.1	12.6	1.8%
ME 2	44 58 4	2001	Dry	August	--	166.5	158.6	7.9	4.7%	157.8	8.7	5.2%	157.0	9.5	5.7%	156.2	10.3	6.2%	155.4	11.0	6.6%	154.6	11.8	7.1%
ME 2	44 58 4	2001	Dry	September	Used in Summary Table Analysis	88.8	81.9	6.8	7.7%	81.3	7.5	8.4%	80.6	8.2	9.2%	79.9	8.9	10.0%	79.2	9.5	10.7%	78.5	10.2	11.5%
ME 2	44 58 4	2002	Below Normal	October	Used in Summary Table Analysis	257.2	251.6	5.6	2.2%	251.0	6.2	2.4%	250.4	6.8	2.6%	249.9	7.3	2.9%	249.3	7.9	3.1%	248.7	8.5	3.3%
ME 2	44 58 4	2002	Below Normal	November	Used in Summary Table Analysis	11,900.5	11,895.8	4.6	0.0%	11,895.8	4.6	0.0%	11,894.7	5.8	0.0%	11,894.7	5.8	0.0%	11,894.7	5.8	0.0%	11,893.5	6.9	0.1%
ME 2	44 58 4	2002	Below Normal	December	--	35,300.9	35,296.3	4.6	0.0%	35,296.3	4.6	0.0%	35,296.3	4.6	0.0%	35,295.1	5.8	0.0%	35,295.1	5.8	0.0%	35,295.1	5.8	0.0%
ME 2	44 58 4	2002	Below Normal	January	--	30,635.4	30,631.9	3.5	0.0%	30,631.9	3.5	0.0%	30,630.8	4.6	0.0%	30,630.8	4.6	0.0%	30,630.8	4.6	0.0%	30,629.6	5.8	0.0%
ME 2	44 58 4	2002	Below Normal	February	--	24,532.4	24,528.9	3.5	0.0%	24,528.9	3.5	0.0%	24,528.9	3.5	0.0%	24,528.9	3.5	0.0%	24,527.8	4.6	0.0%	24,527.8	4.6	0.0%
ME 2	44 58 4	2002	Below Normal	March	--	17,666.7	17,664.4	2.3	0.0%	17,663.2	3.5	0.0%	17,663.2	3.5	0.0%	17,663.2	3.5	0.0%	17,663.2	3.5	0.0%	17,662.0	4.6	0.0%
ME 2	44 58 4	2002	Below Normal	April	--	9,882.3	9,876.5	5.8	0.1%	9,875.9	6.4	0.1%	9,875.3	6.9	0.1%	9,874.7	7.6	0.1%	9,874.1	8.2	0.1%	9,873.5	8.8	0.1%
ME 2	44 58 4	2002	Below Normal	May	--	3,304.7	3,298.1	6.6	0.2%	3,297.5	7.3	0.2%	3,296.8	8.0	0.2%	3,296.1	8.7	0.3%	3,295.4	9.4	0.3%	3,294.7	10.1	0.3%
ME 2	44 58 4	2002	Below Normal	June	--	848.0	839.9	8.1	1.0%	839.1	8.9	1.0%	838.3	9.7	1.1%	837.5	10.5	1.2%	836.7	11.3	1.3%	835.9	12.1	1.4%
ME 2	44 58 4	2002	Below Normal	July	--	356.2	348.6	7.6	2.1%	347.8	8.4	2.4%	347.1	9.1	2.6%	346.3	9.9	2.8%	345.5	10.6	3.0%	344.8	11.4	3.2%
ME 2	44 58 4	2002	Below Normal	August	--	219.2	212.4	6.8	3.1%	211.7	7.5	3.4%	211.0	8.2	3.7%	210.3	8.9	4.1%	209.6	9.6	4.4%	208.9	10.3	4.7%
ME 2	44 58 4	2002	Below Normal	September	Used in Summary Table Analysis	156.5	150.3	6.2	4.0%	149.6	6.8	4.4%	149.0	7.5	4.8%	148.4	8.1	5.2%	147.8	8.7	5.6%	147.2	9.3	6.0%
ME 2	44 58 4	2003	Wet	October	Used in Summary Table Analysis	121.7	116.7	4.9	4.0%	116.3	5.4	4.4%	115.8	5.9	4.8%	115.3	6.4	5.3%	114.8	6.9	5.7%	114.3	7.4	6.1%
ME 2	44 58 4	2003	Wet	November	Used in Summary Table Analysis	885.8	882.0	3.8	0.4%	881.6	4.1	0.5%	881.3	4.5	0.5%	880.9	4.9	0.6%	880.5	5.3	0.6%	880.1	5.6	0.6%
ME 2	44 58 4	2003	Wet	December	--	55,917.8	55,915.5	2.3	0.0%	55,915.5	2.3	0.0%	55,914.4	3.5	0.0%	55,914.4	3.5	0.0%	55,914.4	3.5	0.0%	55,913.2	4.6	0.0%
ME 2	44 58 4	2003	Wet	January	--	31,344.9	31,341.4	3.5	0.0%	31,341.4	3.5	0.0%	31,341.4	3.5	0.0%	31,340.3	4.6	0.0%	31,340.3	4.6	0.0%	31,340.3	4.6	0.0%
ME 2	44 58 4	2003	Wet	February	--	20,255.8	20,253.5	2.3	0.0%	20,252.3	3.5	0.0%	20,252.3	3.5	0.0%	20,252.3	3.5	0.0%	20,252.3	3.5	0.0%	20,252.3	3.5	0.0%
ME 2	44 58 4	2003	Wet	March	--	23,883.1	23,880.8	2.3	0.0%	23,880.8	2.3	0.0%	23,880.8	2.3	0.0%	23,879.6	3.5	0.0%	23,879.6	3.5	0.0%	23,879.6	3.5	0.0%
ME 2	44 58 4	2003	Wet	April	--	42,539.4	42,537.0	2.3	0.0%	42,537.0	2.3	0.0%	42,537.0	2.3	0.0%	42,537.0	2.3	0.0%	42,535.9	3.5	0.0%	42,535.9	3.5	0.0%
ME 2	44 58 4	2003	Wet	May	--	12,173.6	12,167.8	5.8	0.0%	12,167.8	5.8	0.0%	12,166.7	6.9	0.1%	12,166.7	6.9	0.1%	12,165.5	8.1	0.1%	12,165.5	8.1	0.1%
ME 2	44 58 4	2003	Wet	June	--	3,155.8	3,148.1	7.6	0.2%	3,147.5	8.3	0.3%	3,146.6	9.1	0.3%	3,145.9	9.8	0.3%	3,145.1	10.6	0.3%	3,144.4	11.3	0.4%
ME 2	44 58 4	2003	Wet	July	--	1,462.8	1,455.3	7.5	0.5%	1,454.5	8.3	0.6%	1,453.8	9.0	0.6%	1,453.0	9.8	0.7%	1,452.3	10.5	0.7%	1,451.5	11.3	0.8%
ME 2	44 58 4	2003	Wet	August	--	749.9	742.9	7.0	0.9%	742.2	7.7	1.0%	741.5	8.4	1.1%	740.8	9.1	1.2%	740.1	9.8	1.3%	739.3	10.5	1.4%
ME 2	44 58 4	2003	Wet	September	Used in Summary Table Analysis	448.8	443.1	5.6	1.3%	442.6	6.2	1.4%	442.0	6.8	1.5%	441.4	7.3	1.6%	440.9	7.9	1.8%	440.3	8.5	1.9%
ME 2	44 58 4	2004	Wet	October	Used in Summary Table Analysis	316.0	311.5	4.5	1.4%	311.1	5.0	1.6%	310.6	5.4	1.7%	310.1	5.9	1.9%	309.7	6.3	2.0%	309.2	6.8	2.1%
ME 2	44 58 4	2004	Wet	November	Used in Summary Table Analysis	5,703.2	5,699.8	3.5	0.1%	5,699.4	3.8	0.1%	5,699.1	4.2	0.1%	5,698.7	4.5	0.1%	5,698.4	4.9	0.1%	5,698.0	5.2	0.1%
ME 2	44 58 4	2004	Wet	December	--	35,861.1	35,857.6	3.5	0.0%	35,857.6	3.5	0.0%	35,856.5	4.6	0.0%	35,856.5	4.6	0.0%	35,856.5	4.6	0.0%	35,856.5	4.6	0.0%
ME 2	44 58 4	2004	Wet	January	--	31,166.7	31,164.4	2.3	0.0%	31,164.4	2.3	0.0%	31,164.4	2.3	0.0%	31,163.2	3.5	0.0%	31,163.2	3.5	0.0%	31,163.2	3.5	0.0%
ME 2	44 58 4	2004	Wet	February	--	37,942.1	37,939.8	2.3	0.0%	37,938.7	3.5	0.0%	37,938.7	3.5	0.0%	37,938.7	3.5	0.0%	37,938.7	3.5	0.0%	37,938.7	3.5	0.0%
ME 2	44 58 4	2004	Wet	March	--	16,472.2	16,469.9	2.3	0.0%	16,469.9	2.3	0.0%	16,468.8	3.5	0.0%	16,468.8	3.5	0.0%	16,468.8	3.5	0.0%	16,468.8	3.5	0.0%
ME 2	44 58 4	2004	Wet	April	--	9,412.6	9,410.6	2.0	0.0%	9,410.4	2.2	0.0%	9,410.2	2.4	0.0%	9,410.1	2.5	0.0%	9,409.8	2.8	0.0%	9,409.6	3.0	0.0%
ME 2	44 58 4	2004	Wet	May	--	3,390.0	3,384.3	5.8	0.2%	3,383.7	6.4	0.2%	3,383.1	6.9	0.2%	3,382.5	7.5	0.2%	3,381.9	8.1	0.2%	3,381.4	8.7	0.3%
ME 2	44 58 4	2004	Wet	June	--	686.6	679.5	7.1	1.0%	678.8	7.8	1.1%	678.1	8.5	1.2%	677.4	9.2	1.3%	676.7	9.9	1.4%	676.0	10.6	1.5%
ME 2	44 58 4	2004	Wet	July	--	348.1	340.7	7.4	2.1%	340.0	8.1	2.3%	339.2	8.8	2.5%	338.5	9.6	2.7%	337.8	10.3	3.0%	337.0	11.0	3.2%
ME 2	44 58 4	2004	Wet	August	--	217.7	211.2	6.6	3.0%	210.5	7.2	3.3%	209.8	7.9	3.6%	209.2	8.5	3.9%	208.5	9.2	4.2%	207.9	9.8	4.5%
ME 2	44 58 4	2004	Wet	September	Used in Summary Table Analysis	155.5	149.2	6.3	4.0%	148.6	6.9	4.4%	148.0	7.5	4.8%	147.4	8.1	5.2%	146.7	8.8	5.6%	146.1	9.4	6.1%
ME 2	44 58 4	2005	Above Normal	October	Used in Summary Table Analysis	7,552.3	7,547.7	4.6	0.1%	7,547.2	5.1	0.1%	7,546.8	5.6	0.1%	7,546.3	6.0	0.1%	7,545.8	6.5	0.1%	7,545.4	6.9	0.1%
ME 2	44 58 4	2005	Above Normal	November	Used in Summary Table Analysis	2,239.5	2,236.0	3.5	0.2%	2,235.6	3.8	0.2%	2,235.3	4.2	0.2%	2,235.0	4.5	0.2%	2,234.6	4.9	0.2%	2,234.3	5.2	0.2%
ME 2	44 58 4	2005	Above Normal	December	--	20,651.6	20,648.1	3.5	0.0%	20,648.1	3.5	0.0%	20,648.1	3.5	0.0%	20,648.1	3.5	0.0%	20,647.0	4.6	0.0%	20,647.0	4.6	0.0%
ME 2	44 58 4	2005	Above Normal	January	--	22,089.1	22,086.8	2.3	0.0%	22,086.8	2.3	0.0%	22,086.8	2.3	0.0%	22,086.8	2.3	0.0%	22,085.6	3.5	0.0%	22,085.6	3.5	0.0%
ME 2	44 58 4	2005	Above Normal	February	--	13,959.5	13,957.2	2.3	0.0%	13,957.2	2.3	0.0%	13,956.0	3.5	0.0%	13,956.0	3.5	0.0%	13,956.0	3.5	0.0%	13,956.0	3.5	0.0%
ME 2	44 58 4	2005	Above Normal	March	--	28,343.8	28,341.4	2.3	0.0%	28,341.4	2.3	0.0%	28,340.3	3.5	0.0%	28,340.3	3.5	0.0%	28,340.3	3.5	0.0%	28,340.3	3.5	0.0%
ME 2	44 58 4	2005	Above Normal	April	--	21,297.5	21,296.3	1.2	0.0%	21,296.3	1.2	0.0%	21,295.1	2.3	0.0%	21,295.1	2.3	0.0%	21,295.1	2.3	0.0%	21,295.1	2.3	0.0%
ME 2	44 58 4	2005	Above Normal	May	--	19,394.7	19,388.9	5.8	0.0%	19,387.7	6.9	0.0%	19,387.7	6.9	0.0%	19,386.6	8.1	0.0%	19,386.6	8.1	0.0%	19,385.4	9.3	0.0%
ME 2	44 58 4	2005	Above Normal	June	--	15,663.2	15,653.9	9.3	0.1%	15,652.8	10.4	0.1%	15,651.6	11.6	0.1%	15,651.6	11.6	0.1%	15,650.5	12.7	0.1%	15,649.3	13.9	0.1%
ME 2	44 58 4	2005	Above Normal	July	--	2,862.0	2,854.2	7.9	0.3%	2,853.5	8.6	0.3%	2,852.7	9.4	0.3%	2,851.9	10.2	0.4%	2,851.0	11.0	0.4%	2,850.3	11.7	0.4%
ME 2	44 58 4	2005	Above Normal	August	--	972.3	965.8	6.6	0.7%	965.1	7.2	0.7%	964.4	7.9	0.8%	963.8	8.5	0.9%	963.1	9.2	0.9%	962.5	9.8	1.0%
ME 2	44 58 4	2005	Above Normal	September	Used in Summary Table Analysis	514.3	508.8	5.6	1.1%	508.2	6.1	1.2%	507.7	6.7	1.3%	507.1	7.2	1.4%	506.5	7.8	1.5%	506.0	8.4	1.6%
ME 2	44 58 4	2006	Wet	October	Used in Summary Table Analysis	622.3	617.9	4.4	0.7%	617.4	4.9	0.8%	617.0	5.3	0.9%	616.6	5.7	0.9%	616.1	6.2	1.0%	615.7	6.6	1.1%
ME 2	44 58 4	2006	Wet	November	Used in Summary Table Analysis	9,134.8	9,131.6	3.2	0.0%	9,131.3	3.6	0.0%	9,130.9	3.9	0.0%	9,130.6	4.3	0.0%	9,130.2	4.6	0.1%	9,129.9	5.0	0.1%
ME 2	44 58 4	2006	Wet	December	--	42,932.9	42,929.4	3.5	0.0%	42,929.4	3.5	0.0%	42,929.4	3.5	0.0%	42,929.4	3.5	0.0%	42,928.2	4.6	0.0%	42,928.2	4.6	0.0%
ME 2	44 58 4	2006	Wet	January	--	45,784.7	45,782.4	2.3	0.0%	45,782.4	2.3	0.0%	45,781.3	3.5	0.0%	45,781.3	3.5	0.0%	45,781.3	3.5	0.0%	45,781.3	3.5	0.0%
ME 2	44 58 4	2006	Wet	February	--	26,399.3	26,397.0	2.3	0.0%	26,397.0	2.3	0.0%	26,397.0	2.3	0.0%	26,395.8	3.5	0.0%	26,395.8	3.5	0.0%	26,395.8	3.5	0.0%
ME 2	44 58 4	2006	Wet	March	--	46,754.6	46,752.3	2.3	0.0%	46,752.3	2.3	0.0%	46,751.2	3.5	0.0%	46,751.2	3.5	0.0%	46,751.2	3.5	0.0%	46,751.2	3.5	0.0%
ME 2	44 58 4	2006	Wet	April	--	30,268.5	30,266.2	2.3	0.0%	30,266.2	2.3	0.0%	30,266.2	2.3	0.0%	30,266.2	2.3	0.0%	30,266.2	2.3	0.0%	30,266.2	2.3	0.0%
ME 2	44 58 4	2006	Wet	May	--	14,114.6	14,112.3	2.3	0.0%	14,111.1	3.5	0.0%	14,111.1	3.5	0.0%	14,111.1	3.5	0.0%	14,111.1	3.5	0.0%	14,110.0	4.6	0.0%
ME 2	44 58 4	2006	Wet	June	--	3,538.1	3,530.4	7.6	0.2%	3,529.6	8.4	0.2%	3,528.8	9.3	0.3%	3,528.1	10.0	0.3%	3,527.3	10.8	0.3%	3,526.5	11.6	0.3%
ME 2	44 58 4	2006	Wet	July	--	1,266.4	1,259.0	7.4	0.6%	1,258.3	8.1	0.6%	1,257.6	8.8	0.7%	1,256.8	9.6	0.8%	1,256.1	10.3	0.8%	1,255.4	11.0	0.9%
ME 2	44 58 4	2006	Wet	August	--	653.0	646.2	6.8	1.0%	645.5	7.5	1.1%	644.8	8.1	1.2%	644.1	8.9	1.4%	643.4	9.6	1.5%	642.7	10.2	1.6%
ME 2	44 58 4	2006	Wet	September	Used in Summary Table Analysis	415.2	409.5	5.7	1.4%	409.0	6.2	1.5%	408.4	6.8	1.6%	407.8	7.4	1.8%	407.3	8.0	1.9%	406.7	8.5	2.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	44 58 4	2007	Above Normal	October	Used in Summary Table Analysis	265.5	261.0	4.5	1.7%	260.6	5.0	1.9%	260.1	5.4	2.0%	259.7	5.9	2.2%	259.2	6.3	2.4%	258.8	6.8	2.5%
ME 2	44 58 4	2007	Above Normal	November	Used in Summary Table Analysis	8,516.3	8,512.8	3.5	0.0%	8,512.5	3.8	0.0%	8,512.2	4.2	0.0%	8,511.8	4.5	0.1%	8,511.5	4.9	0.1%	8,511.1	5.2	0.1%
ME 2	44 58 4	2007	Above Normal	December	--	20,103.0	20,099.5	3.5	0.0%	20,099.5	3.5	0.0%	20,099.5	3.5	0.0%	20,098.4	4.6	0.0%	20,098.4	4.6	0.0%	20,098.4	4.6	0.0%
ME 2	44 58 4	2007	Above Normal	January	--	10,170.1	10,167.6	2.5	0.0%	10,167.4	2.8	0.0%	10,167.0	3.1	0.0%	10,166.8	3.4	0.0%	10,166.6	3.6	0.0%	10,166.3	3.8	0.0%
ME 2	44 58 4	2007	Above Normal	February	--	30,226.9	30,224.5	2.3	0.0%	30,223.4	3.5	0.0%	30,223.4	3.5	0.0%	30,223.4	3.5	0.0%	30,223.4	3.5	0.0%	30,222.2	4.6	0.0%
ME 2	44 58 4	2007	Above Normal	March	--	13,042.8	13,040.5	2.3	0.0%	13,040.5	2.3	0.0%	13,040.5	2.3	0.0%	13,039.4	3.5	0.0%	13,039.4	3.5	0.0%	13,039.4	3.5	0.0%
ME 2	44 58 4	2007	Above Normal	April	--	11,479.9	11,474.2	5.7	0.0%	11,473.6	6.3	0.1%	11,473.0	6.8	0.1%	11,472.5	7.4	0.1%	11,471.9	8.0	0.1%	11,471.4	8.4	0.1%
ME 2	44 58 4	2007	Above Normal	May	--	4,115.5	4,109.0	6.5	0.2%	4,108.4	7.1	0.2%	4,107.8	7.8	0.2%	4,107.2	8.3	0.2%	4,106.5	9.0	0.2%	4,105.8	9.7	0.2%
ME 2	44 58 4	2007	Above Normal	June	--	1,482.4	1,473.8	8.6	0.6%	1,473.0	9.4	0.6%	1,472.1	10.3	0.7%	1,471.3	11.1	0.7%	1,470.5	11.9	0.8%	1,469.6	12.8	0.9%
ME 2	44 58 4	2007	Above Normal	July	--	490.2	482.2	8.0	1.6%	481.4	8.8	1.8%	480.6	9.6	2.0%	479.9	10.3	2.1%	479.1	11.1	2.3%	478.3	11.9	2.4%
ME 2	44 58 4	2007	Above Normal	August	--	215.1	208.4	6.7	3.1%	207.7	7.4	3.4%	207.1	8.1	3.7%	206.4	8.7	4.1%	205.7	9.4	4.4%	205.1	10.1	4.7%
ME 2	44 58 4	2007	Above Normal	September	Used in Summary Table Analysis	142.8	136.7	6.1	4.3%	136.1	6.7	4.7%	135.5	7.3	5.1%	134.9	7.9	5.6%	134.3	8.6	6.0%	133.6	9.2	6.4%
ME 2	44 58 4	2008	Dry	October	Used in Summary Table Analysis	3,380.1	3,375.2	4.9	0.1%	3,374.8	5.3	0.2%	3,374.3	5.8	0.2%	3,373.8	6.3	0.2%	3,373.4	6.7	0.2%	3,372.9	7.2	0.2%
ME 2	44 58 4	2008	Dry	November	Used in Summary Table Analysis	3,223.5	3,219.9	3.6	0.1%	3,219.6	3.9	0.1%	3,219.2	4.3	0.1%	3,218.9	4.6	0.1%	3,218.5	5.0	0.2%	3,218.2	5.3	0.2%
ME 2	44 58 4	2008	Dry	December	--	22,725.7	22,722.2	3.5	0.0%	22,722.2	3.5	0.0%	22,722.2	3.5	0.0%	22,721.1	4.6	0.0%	22,721.1	4.6	0.0%	22,721.1	4.6	0.0%
ME 2	44 58 4	2008	Dry	January	--	37,147.0	37,143.5	3.5	0.0%	37,143.5	3.5	0.0%	37,143.5	3.5	0.0%	37,143.5	3.5	0.0%	37,142.4	4.6	0.0%	37,142.4	4.6	0.0%
ME 2	44 58 4	2008	Dry	February	--	26,178.2	26,174.8	3.5	0.0%	26,174.8	3.5	0.0%	26,174.8	3.5	0.0%	26,174.8	3.5	0.0%	26,174.8	3.5	0.0%	26,173.6	4.6	0.0%
ME 2	44 58 4	2008	Dry	March	--	11,752.3	11,750.0	2.3	0.0%	11,750.0	2.3	0.0%	11,748.8	3.5	0.0%	11,748.8	3.5	0.0%	11,748.8	3.5	0.0%	11,748.8	3.5	0.0%
ME 2	44 58 4	2008	Dry	April	--	8,983.3	8,977.4	5.9	0.1%	8,976.9	6.5	0.1%	8,976.2	7.2	0.1%	8,975.6	7.8	0.1%	8,975.0	8.3	0.1%	8,974.4	8.9	0.1%
ME 2	44 58 4	2008	Dry	May	--	1,363.4	1,357.5	5.9	0.4%	1,356.9	6.5	0.5%	1,356.4	7.1	0.5%	1,355.8	7.6	0.6%	1,355.2	8.2	0.6%	1,354.6	8.8	0.6%
ME 2	44 58 4	2008	Dry	June	--	431.4	421.9	9.4	2.2%	421.0	10.4	2.4%	420.0	11.3	2.6%	419.1	12.3	2.8%	418.2	13.2	3.1%	417.3	14.1	3.3%
ME 2	44 58 4	2008	Dry	July	--	250.2	241.7	8.5	3.4%	240.8	9.4	3.8%	240.0	10.2	4.1%	239.1	11.1	4.4%	238.3	11.9	4.8%	237.4	12.8	5.1%
ME 2	44 58 4	2008	Dry	August	--	173.1	165.2	7.9	4.6%	164.4	8.7	5.0%	163.6	9.5	5.5%	162.8	10.3	5.9%	162.0	11.1	6.4%	161.2	11.8	6.8%
ME 2	44 58 4	2008	Dry	September	Used in Summary Table Analysis	134.8	127.2	7.7	5.7%	126.4	8.4	6.2%	125.7	9.2	6.8%	124.9	9.9	7.4%	124.1	10.7	7.9%	123.4	11.5	8.5%
ME 2	44 58 4	2009	Critical	October	Used in Summary Table Analysis	913.8	908.2	5.6	0.6%	907.6	6.2	0.7%	907.0	6.8	0.7%	906.4	7.4	0.8%	905.9	7.9	0.9%	905.3	8.5	0.9%
ME 2	44 58 4	2009	Critical	November	Used in Summary Table Analysis	5,414.5	5,410.4	4.1	0.1%	5,410.0	4.5	0.1%	5,409.6	4.9	0.1%	5,409.1	5.3	0.1%	5,408.7	5.8	0.1%	5,408.3	6.1	0.1%
ME 2	44 58 4	2009	Critical	December	--	11,960.6	11,957.2	3.5	0.0%	11,957.2	3.5	0.0%	11,956.0	4.6	0.0%	11,956.0	4.6	0.0%	11,956.0	4.6	0.0%	11,954.9	5.8	0.0%
ME 2	44 58 4	2009	Critical	January	--	8,738.3	8,735.3	3.0	0.0%	8,735.0	3.4	0.0%	8,734.6	3.7	0.0%	8,734.3	4.1	0.0%	8,734.0	4.3	0.0%	8,733.7	4.6	0.1%
ME 2	44 58 4	2009	Critical	February	--	22,443.3	22,441.0	2.3	0.0%	22,439.8	3.5	0.0%	22,439.8	3.5	0.0%	22,439.8	3.5	0.0%	22,439.8	3.5	0.0%	22,439.8	3.5	0.0%
ME 2	44 58 4	2009	Critical	March	--	20,993.1	20,990.7	2.3	0.0%	20,990.7	2.3	0.0%	20,990.7	2.3	0.0%	20,989.6	3.5	0.0%	20,989.6	3.5	0.0%	20,989.6	3.5	0.0%
ME 2	44 58 4	2009	Critical	April	--	10,081.7	10,075.6	6.1	0.1%	10,074.9	6.8	0.1%	10,074.3	7.4	0.1%	10,073.8	7.9	0.1%	10,073.1	8.6	0.1%	10,072.6	9.1	0.1%
ME 2	44 58 4	2009	Critical	May	--	15,518.5	15,511.6	6.9	0.0%	15,510.4	8.1	0.1%	15,509.3	9.3	0.1%	15,509.3	9.3	0.1%	15,508.1	10.4	0.1%	15,506.9	11.6	0.1%
ME 2	44 58 4	2009	Critical	June	--	3,150.5	3,140.5	10.0	0.3%	3,139.5	11.0	0.3%	3,138.4	12.0	0.4%	3,137.4	13.1	0.4%	3,136.5	14.0	0.4%	3,135.4	15.0	0.5%
ME 2	44 58 4	2009	Critical	July	--	1,254.9	1,246.2	8.7	0.7%	1,245.4	9.5	0.8%	1,244.4	10.4	0.8%	1,243.6	11.2	0.9%	1,242.7	12.2	1.0%	1,241.9	13.0	1.0%
ME 2	44 58 4	2009	Critical	August	--	660.6	652.6	8.0	1.2%	651.8	8.8	1.3%	651.0	9.6	1.4%	650.2	10.4	1.6%	649.4	11.1	1.7%	648.6	11.9	1.8%
ME 2	44 58 4	2009	Critical	September	Used in Summary Table Analysis	382.7	375.9	6.9	1.8%	375.2	7.5	2.0%	374.5	8.2	2.2%	373.8	8.9	2.3%	373.2	9.6	2.5%	372.5	10.3	2.7%
ME 2	44 58 4	2010	Below Normal	October	Used in Summary Table Analysis	6,075.0	6,069.4	5.6	0.1%	6,068.9	6.1	0.1%	6,068.3	6.7	0.1%	6,067.7	7.3	0.1%	6,067.1	7.9	0.1%	6,066.6	8.4	0.1%
ME 2	44 58 4	2010	Below Normal	November	Used in Summary Table Analysis	8,224.4	8,220.3	4.2	0.1%	8,219.8	4.6	0.1%	8,219.3	5.1	0.1%	8,219.0	5.4	0.1%	8,218.5	5.9	0.1%	8,218.1	6.4	0.1%
ME 2	44 58 4	2010	Below Normal	December	--	12,222.2	12,218.8	3.5	0.0%	12,217.6	4.6	0.0%	12,217.6	4.6	0.0%	12,217.6	4.6	0.0%	12,216.4	5.8	0.0%	12,216.4	5.8	0.0%
ME 2	44 58 4	2010	Below Normal	January	--	35,787.0	35,784.7	2.3	0.0%	35,783.6	3.5	0.0%	35,783.6	3.5	0.0%	35,783.6	3.5	0.0%	35,783.6	3.5	0.0%	35,782.4	4.6	0.0%
ME 2	44 58 4	2010	Below Normal	February	--	27,118.1	27,115.7	2.3	0.0%	27,115.7	2.3	0.0%	27,115.7	2.3	0.0%	27,114.6	3.5	0.0%	27,114.6	3.5	0.0%	27,114.6	3.5	0.0%
ME 2	44 58 4	2010	Below Normal	March	--	28,728.0	28,725.7	2.3	0.0%	28,725.7	2.3	0.0%	28,725.7	2.3	0.0%	28,724.5	3.5	0.0%	28,724.5	3.5	0.0%	28,724.5	3.5	0.0%
ME 2	44 58 4	2010	Below Normal	April	--	39,811.3	39,809.0	2.3	0.0%	39,809.0	2.3	0.0%	39,809.0	2.3	0.0%	39,807.9	3.5	0.0%	39,807.9	3.5	0.0%	39,807.9	3.5	0.0%
ME 2	44 58 4	2010	Below Normal	May	--	20,112.3	20,105.3	6.9	0.0%	20,105.3	6.9	0.0%	20,104.2	8.1	0.0%	20,104.2	8.1	0.0%	20,103.0	9.3	0.0%	20,103.0	9.3	0.0%
ME 2	44 58 4	2010	Below Normal	June	--	9,227.0	9,217.4	9.6	0.1%	9,216.4	10.5	0.1%	9,215.4	11.6	0.1%	9,214.6	12.4	0.1%	9,213.5	13.4	0.1%	9,212.6	14.4	0.2%
ME 2	44 58 4	2010	Below Normal	July	--	1,447.0	1,439.1	7.9	0.5%	1,438.3	8.7	0.6%	1,437.5	9.5	0.7%	1,436.8	10.2	0.7%	1,436.0	11.0	0.8%	1,435.2	11.8	0.8%
ME 2	44 58 4	2010	Below Normal	August	--	558.2	551.3	6.8	1.2%	550.7	7.5	1.3%	550.0	8.2	1.5%	549.3	8.8	1.6%	548.7	9.4	1.7%	548.0	10.1	1.8%
ME 2	44 58 4	2010	Below Normal	September	Used in Summary Table Analysis	639.9	633.4	6.5	1.0%	632.8	7.1	1.1%	632.1	7.8	1.2%	631.5	8.4	1.3%	630.8	9.1	1.4%	630.2	9.7	1.5%
ME 2	44 58 4	2011	Wet	October	Used in Summary Table Analysis	9,538.7	9,534.0	4.6	0.0%	9,533.6	5.1	0.1%	9,533.1	5.6	0.1%	9,532.6	6.0	0.1%	9,532.2	6.5	0.1%	9,531.8	6.8	0.1%
ME 2	44 58 4	2011	Wet	November	Used in Summary Table Analysis	14,111.1	14,107.6	3.5	0.0%	14,107.6	3.5	0.0%	14,107.6	3.5	0.0%	14,107.6	3.5	0.0%	14,106.5	4.6	0.0%	14,106.5	4.6	0.0%
ME 2	44 58 4	2011	Wet	December	--	33,258.1	33,254.6	3.5	0.0%	33,254.6	3.5	0.0%	33,254.6	3.5	0.0%	33,253.5	4.6	0.0%	33,253.5	4.6	0.0%	33,253.5	4.6	0.0%
ME 2	44 58 4	2011	Wet	January	--	14,071.8	14,069.4	2.3	0.0%	14,069.4	2.3	0.0%	14,069.4	2.3	0.0%	14,069.4	2.3	0.0%	14,068.3	3.5	0.0%	14,068.3	3.5	0.0%
ME 2	44 58 4	2011	Wet	February	--	20,686.3	20,684.0	2.3	0.0%	20,682.9	3.5	0.0%	20,682.9	3.5	0.0%	20,682.9	3.5	0.0%	20,682.9	3.5	0.0%	20,682.9	3.5	0.0%
ME 2	44 58 4	2011	Wet	March	--	51,715.3	51,713.0	2.3	0.0%	51,713.0	2.3	0.0%	51,713.0	2.3	0.0%	51,711.8	3.5	0.0%	51,711.8	3.5	0.0%	51,711.8	3.5	0.0%
ME 2	44 58 4	2011	Wet	April	--	24,699.1	24,696.8	2.3	0.0%	24,696.8	2.3	0.0%	24,696.8	2.3	0.0%	24,696.8	2.3	0.0%	24,696.8	2.3	0.0%	24,696.8	2.3	0.0%
ME 2	44 58 4	2011	Wet	May	--	11,335.2	11,329.5	5.7	0.1%	11,328.8	6.4	0.1%	11,328.2	6.9	0.1%	11,327.7	7.5	0.1%	11,327.1	8.1	0.1%	11,326.5	8.7	0.1%
ME 2	44 58 4	2011	Wet	June	--	7,009.7	7,000.3	9.4	0.1%	6,999.4	10.3	0.1%	6,998.5	11.2	0.2%	6,997.6	12.2	0.2%	6,996.6	13.1	0.2%	6,995.7	14.0	0.2%
ME 2	44 58 4	2011	Wet	July	--	1,824.5	1,815.9	8.7	0.5%	1,814.9	9.6	0.5%	1,814.1	10.4	0.6%	1,813.2	11.3	0.6%	1,812.4	12.2	0.7%	1,811.5	13.1	0.7%
ME 2	44 58 4	2011	Wet	August	--	768.3	761.6	6.6	0.9%	760.9	7.3	1.0%	760.3	8.0	1.0%	759.6	8.6	1.1%	759.0	9.3	1.2%	758.3	10.0	1.3%
ME 2	44 58 4	2011	Wet	September	Used in Summary Table Analysis	425.0	419.2	5.8	1.4%	418.6	6.3	1.5%	418.0	6.9	1.6%	417.5	7.5	1.8%	416.9	8.1	1.9%	416.3	8.6	2.0%
ME 2	44 58 4	2012	Below Normal	October	Used in Summary Table Analysis	4,493.5	4,489.0	4.5	0.1%	4,488.5	5.0	0.1%	4,488.1	5.4	0.1%	4,487.6	5.9	0.1%	4,487.2	6.4	0.1%	4,486.7	6.8	0.2%
ME 2	44 58 4	2012	Below Normal	November	Used in Summary Table Analysis	8,138.7	8,135.2	3.5	0.0%	8,134.8	3.8	0.0%	8,134.5	4.2	0.1%	8,134.1	4.5	0.1%	8,133.8	4.9	0.1%	8,133.4	5.2	0.1%
ME 2	44 58 4	2012	Below Normal	December	--	5,139.9	5,136.9	3.0	0.1%	5,136.7	3.2	0.1%	5,136.3	3.6	0.1%	5,136.1	3.8	0.1%	5,135.8	4.2	0.1%	5,135.5	4.4	0.1%
ME 2	44 58 4	2012	Below Normal	January	--	19,828.7	19,826.4	2.3	0.0%	19,826.4	2.3	0.0%	19,825.2	3.5	0.0%	19,825.2	3.5	0.0%	19,825.2	3.5	0.0%	19,825.2	3.5	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	44 58 4	2012	Below Normal	February	--	18,130.8	18,128.5	2.3	0.0%	18,128.5	2.3	0.0%	18,127.3	3.5	0.0%	18,127.3	3.5	0.0%	18,127.3	3.5	0.0%	18,127.3	3.5	0.0%
ME 2	44 58 4	2012	Below Normal	March	--	45,086.8	45,084.5	2.3	0.0%	45,084.5	2.3	0.0%	45,083.3	3.5	0.0%	45,083.3	3.5	0.0%	45,083.3	3.5	0.0%	45,083.3	3.5	0.0%
ME 2	44 58 4	2012	Below Normal	April	--	26,736.1	26,733.8	2.3	0.0%	26,733.8	2.3	0.0%	26,733.8	2.3	0.0%	26,733.8	2.3	0.0%	26,733.8	2.3	0.0%	26,732.6	3.5	0.0%
ME 2	44 58 4	2012	Below Normal	May	--	7,453.4	7,447.5	5.9	0.1%	7,446.9	6.5	0.1%	7,446.3	7.1	0.1%	7,445.6	7.8	0.1%	7,445.1	8.2	0.1%	7,444.7	8.7	0.1%
ME 2	44 58 4	2012	Below Normal	June	--	5,469.8	5,460.3	9.5	0.2%	5,459.3	10.5	0.2%	5,458.3	11.5	0.2%	5,457.4	12.4	0.2%	5,456.5	13.3	0.2%	5,455.6	14.2	0.3%
ME 2	44 58 4	2012	Below Normal	July	--	2,195.8	2,187.3	8.6	0.4%	2,186.3	9.5	0.4%	2,185.5	10.3	0.5%	2,184.6	11.2	0.5%	2,183.8	12.0	0.5%	2,183.0	12.8	0.6%
ME 2	44 58 4	2012	Below Normal	August	--	382.6	376.2	6.3	1.7%	375.6	6.9	1.8%	375.0	7.5	2.0%	374.4	8.1	2.1%	373.8	8.8	2.3%	373.2	9.4	2.4%
ME 2	44 58 4	2012	Below Normal	September	Used in Summary Table Analysis	241.1	235.7	5.4	2.2%	235.1	5.9	2.5%	234.6	6.5	2.7%	234.0	7.0	2.9%	233.5	7.6	3.1%	233.0	8.1	3.4%
ME 2	44 58 4	2013	Below Normal	October	Used in Summary Table Analysis	1,880.8	1,876.3	4.5	0.2%	1,875.8	5.0	0.3%	1,875.3	5.4	0.3%	1,874.9	5.9	0.3%	1,874.4	6.4	0.3%	1,874.0	6.8	0.4%
ME 2	44 58 4	2013	Below Normal	November	Used in Summary Table Analysis	14,502.3	14,498.8	3.5	0.0%	14,498.8	3.5	0.0%	14,497.7	4.6	0.0%	14,497.7	4.6	0.0%	14,497.7	4.6	0.0%	14,496.5	5.8	0.0%
ME 2	44 58 4	2013	Below Normal	December	--	59,579.9	59,576.4	3.5	0.0%	59,576.4	3.5	0.0%	59,576.4	3.5	0.0%	59,576.4	3.5	0.0%	59,575.2	4.6	0.0%	59,575.2	4.6	0.0%
ME 2	44 58 4	2013	Below Normal	January	--	22,079.9	22,077.5	2.3	0.0%	22,077.5	2.3	0.0%	22,077.5	2.3	0.0%	22,077.5	2.3	0.0%	22,076.4	3.5	0.0%	22,076.4	3.5	0.0%
ME 2	44 58 4	2013	Below Normal	February	--	8,789.5	8,787.0	2.4	0.0%	8,786.8	2.7	0.0%	8,786.6	2.9	0.0%	8,786.3	3.1	0.0%	8,786.1	3.4	0.0%	8,785.8	3.7	0.0%
ME 2	44 58 4	2013	Below Normal	March	--	10,245.0	10,242.7	2.3	0.0%	10,242.5	2.5	0.0%	10,242.2	2.8	0.0%	10,242.0	3.0	0.0%	10,241.8	3.2	0.0%	10,241.7	3.4	0.0%
ME 2	44 58 4	2013	Below Normal	April	--	8,265.6	8,260.1	5.6	0.1%	8,259.6	6.0	0.1%	8,259.0	6.6	0.1%	8,258.4	7.2	0.1%	8,257.9	7.8	0.1%	8,257.3	8.3	0.1%
ME 2	44 58 4	2013	Below Normal	May	--	4,397.8	4,391.3	6.5	0.1%	4,390.6	7.2	0.2%	4,389.9	7.9	0.2%	4,389.4	8.4	0.2%	4,388.7	9.1	0.2%	4,388.1	9.7	0.2%
ME 2	44 58 4	2013	Below Normal	June	--	2,100.0	2,091.4	8.6	0.4%	2,090.6	9.4	0.4%	2,089.8	10.2	0.5%	2,089.0	11.0	0.5%	2,088.1	11.9	0.6%	2,087.3	12.7	0.6%
ME 2	44 58 4	2013	Below Normal	July	--	714.1	706.6	7.5	1.0%	705.9	8.2	1.2%	705.1	9.0	1.3%	704.4	9.7	1.4%	703.6	10.5	1.5%	702.9	11.2	1.6%
ME 2	44 58 4	2013	Below Normal	August	--	333.5	326.8	6.7	2.0%	326.1	7.4	2.2%	325.5	8.0	2.4%	324.8	8.7	2.6%	324.1	9.4	2.8%	323.5	10.0	3.0%
ME 2	44 58 4	2013	Below Normal	September	Used in Summary Table Analysis	4,736.7	4,729.6	7.1	0.1%	4,728.9	7.8	0.2%	4,728.2	8.4	0.2%	4,727.5	9.1	0.2%	4,726.9	9.8	0.2%	4,726.2	10.5	0.2%
ME 2	44 58 4	2014	Critical	October	Used in Summary Table Analysis	280.3	275.6	4.7	1.7%	275.1	5.2	1.8%	274.7	5.6	2.0%	274.2	6.1	2.2%	273.7	6.5	2.3%	273.3	7.0	2.5%
ME 2	44 58 4	2014	Critical	November	Used in Summary Table Analysis	1,512.3	1,508.7	3.6	0.2%	1,508.3	3.9	0.3%	1,507.9	4.4	0.3%	1,507.5	4.7	0.3%	1,507.2	5.1	0.3%	1,506.8	5.4	0.4%
ME 2	44 58 4	2014	Critical	December	--	1,574.9	1,571.9	3.0	0.2%	1,571.5	3.4	0.2%	1,571.3	3.6	0.2%	1,570.9	3.9	0.2%	1,570.6	4.3	0.3%	1,570.4	4.5	0.3%
ME 2	44 58 4	2014	Critical	January	--	2,794.4	2,791.8	2.7	0.1%	2,791.6	2.9	0.1%	2,791.3	3.1	0.1%	2,791.1	3.4	0.1%	2,790.7	3.7	0.1%	2,790.5	3.9	0.1%
ME 2	44 58 4	2014	Critical	February	--	15,671.3	15,669.0	2.3	0.0%	15,667.8	3.5	0.0%	15,667.8	3.5	0.0%	15,667.8	3.5	0.0%	15,667.8	3.5	0.0%	15,667.8	3.5	0.0%
ME 2	44 58 4	2014	Critical	March	--	31,378.5	31,376.2	2.3	0.0%	31,376.2	2.3	0.0%	31,376.2	2.3	0.0%	31,376.2	2.3	0.0%	31,376.2	2.3	0.0%	31,376.2	2.3	0.0%
ME 2	44 58 4	2014	Critical	April	--	12,953.7	12,946.8	6.9	0.1%	12,946.8	6.9	0.1%	12,945.6	8.1	0.1%	12,945.6	8.1	0.1%	12,944.4	9.3	0.1%	12,944.4	9.3	0.1%
ME 2	44 58 4	2014	Critical	May	--	5,165.7	5,158.7	7.1	0.1%	5,158.0	7.8	0.2%	5,157.3	8.4	0.2%	5,156.6	9.1	0.2%	5,155.9	9.8	0.2%	5,155.1	10.6	0.2%
ME 2	44 58 4	2014	Critical	June	--	1,189.6	1,179.4	10.2	0.9%	1,178.4	11.2	0.9%	1,177.3	12.3	1.0%	1,176.3	13.3	1.1%	1,175.2	14.4	1.2%	1,174.3	15.3	1.3%
ME 2	44 58 4	2014	Critical	July	--	541.3	532.7	8.6	1.6%	531.9	9.4	1.7%	531.0	10.3	1.9%	530.2	11.1	2.1%	529.3	12.0	2.2%	528.5	12.8	2.4%
ME 2	44 58 4	2014	Critical	August	--	341.3	333.5	7.8	2.3%	332.7	8.6	2.5%	331.9	9.4	2.8%	331.1	10.2	3.0%	330.4	11.0	3.2%	329.6	11.7	3.4%
ME 2	44 58 4	2014	Critical	September	Used in Summary Table Analysis	2,550.2	2,542.4	7.9	0.3%	2,541.6	8.7	0.3%	2,540.9	9.4	0.4%	2,540.0	10.2	0.4%	2,539.2	11.0	0.4%	2,538.4	11.8	0.5%
ME 2	44 58 4	2015	Dry	October	Used in Summary Table Analysis	11,270.4	11,264.7	5.7	0.1%	11,264.1	6.3	0.1%	11,263.7	6.7	0.1%	11,262.4	8.0	0.1%	11,261.8	8.6	0.1%	11,261.2	9.1	0.1%
ME 2	44 58 4	2015	Dry	November	Used in Summary Table Analysis	8,943.8	8,939.7	4.1	0.0%	8,939.2	4.5	0.1%	8,938.8	5.0	0.1%	8,938.4	5.3	0.1%	8,938.0	5.8	0.1%	8,937.6	6.1	0.1%
ME 2	44 58 4	2015	Dry	December	--	32,260.4	32,256.9	3.5	0.0%	32,256.9	3.5	0.0%	32,255.8	4.6	0.0%	32,255.8	4.6	0.0%	32,255.8	4.6	0.0%	32,254.6	5.8	0.0%
ME 2	44 58 4	2015	Dry	January	--	14,523.1	14,519.7	3.5	0.0%	14,519.7	3.5	0.0%	14,519.7	3.5	0.0%	14,519.7	3.5	0.0%	14,518.5	4.6	0.0%	14,518.5	4.6	0.0%
ME 2	44 58 4	2015	Dry	February	--	27,093.8	27,091.4	2.3	0.0%	27,090.3	3.5	0.0%	27,090.3	3.5	0.0%	27,090.3	3.5	0.0%	27,090.3	3.5	0.0%	27,089.1	4.6	0.0%
ME 2	44 58 4	2015	Dry	March	--	11,537.5	11,535.2	2.3	0.0%	11,535.0	2.5	0.0%	11,534.7	2.8	0.0%	11,534.5	3.0	0.0%	11,534.3	3.2	0.0%	11,534.0	3.5	0.0%
ME 2	44 58 4	2015	Dry	April	--	8,295.0	8,288.9	6.1	0.1%	8,288.3	6.7	0.1%	8,287.7	7.3	0.1%	8,287.2	7.9	0.1%	8,286.5	8.6	0.1%	8,285.9	9.1	0.1%
ME 2	44 58 4	2015	Dry	May	--	1,507.6	1,500.6	7.1	0.5%	1,499.9	7.8	0.5%	1,499.2	8.4	0.6%	1,498.5	9.1	0.6%	1,497.7	10.0	0.7%	1,497.0	10.6	0.7%
ME 2	44 58 4	2015	Dry	June	--	649.0	639.4	9.6	1.5%	638.4	10.5	1.6%	637.5	11.5	1.8%	636.5	12.5	1.9%	635.6	13.4	2.1%	634.6	14.4	2.2%
ME 2	44 58 4	2015	Dry	July	--	264.6	256.0	8.6	3.3%	255.1	9.5	3.6%	254.2	10.3	3.9%	253.4	11.2	4.2%	252.5	12.0	4.6%	251.7	12.9	4.9%
ME 2	44 58 4	2015	Dry	August	--	160.4	152.5	7.9	4.9%	151.7	8.7	5.4%	150.9	9.5	5.9%	150.1	10.3	6.4%	149.3	11.1	6.9%	148.5	11.9	7.4%
ME 2	44 58 4	2015	Dry	September	Used in Summary Table Analysis	116.0	109.1	6.9	5.9%	108.4	7.6	6.5%	107.7	8.3	7.1%	107.0	8.9	7.7%	106.3	9.6	8.3%	105.7	10.3	8.9%
ME 2	44 58 4	2016	Above Normal	October	Used in Summary Table Analysis	81.7	75.9	5.9	7.2%	75.2	6.5	8.0%	74.6	7.1	8.7%	74.6	7.1	8.7%	74.2	7.5	9.2%	73.3	8.5	10.4%
ME 2	44 58 4	2016	Above Normal	November	Used in Summary Table Analysis	3,783.7	3,779.5	4.2	0.1%	3,779.1	4.6	0.1%	3,778.7	5.0	0.1%	3,778.2	5.4	0.1%	3,777.8	5.9	0.2%	3,777.4	6.3	0.2%
ME 2	44 58 4	2016	Above Normal	December	--	36,199.1	36,195.6	3.5	0.0%	36,194.4	4.6	0.0%	36,194.4	4.6	0.0%	36,194.4	4.6	0.0%	36,193.3	5.8	0.0%	36,193.3	5.8	0.0%
ME 2	44 58 4	2016	Above Normal	January	--	56,877.3	56,873.8	3.5	0.0%	56,873.8	3.5	0.0%	56,873.8	3.5	0.0%	56,872.7	4.6	0.0%	56,872.7	4.6	0.0%	56,872.7	4.6	0.0%
ME 2	44 58 4	2016	Above Normal	February	--	24,196.8	24,194.4	2.3	0.0%	24,193.3	3.5	0.0%	24,193.3	3.5	0.0%	24,193.3	3.5	0.0%	24,193.3	3.5	0.0%	24,192.1	4.6	0.0%
ME 2	44 58 4	2016	Above Normal	March	--	41,572.9	41,570.6	2.3	0.0%	41,570.6	2.3	0.0%	41,569.4	3.5	0.0%	41,569.4	3.5	0.0%	41,569.4	3.5	0.0%	41,569.4	3.5	0.0%
ME 2	44 58 4	2016	Above Normal	April	--	18,480.3	18,478.0	2.3	0.0%	18,478.0	2.3	0.0%	18,476.9	3.5	0.0%	18,476.9	3.5	0.0%	18,476.9	3.5	0.0%	18,476.9	3.5	0.0%
ME 2	44 58 4	2016	Above Normal	May	--	5,195.6	5,192.6	3.0	0.1%	5,192.2	3.4	0.1%	5,191.9	3.7	0.1%	5,191.7	3.9	0.1%	5,191.3	4.3	0.1%	5,191.0	4.6	0.1%
ME 2	44 58 4	2016	Above Normal	June	--	1,501.9	1,494.7	7.2	0.5%	1,494.0	7.9	0.5%	1,493.3	8.6	0.6%	1,492.5	9.4	0.6%	1,491.8	10.1	0.7%	1,491.1	10.8	0.7%
ME 2	44 58 4	2016	Above Normal	July	--	814.7	807.2	7.4	0.9%	806.5	8.2	1.0%	805.8	8.9	1.1%	805.0	9.6	1.2%	804.3	10.4	1.3%	803.6	11.1	1.4%
ME 2	44 58 4	2016	Above Normal	August	--	482.8	475.9	6.9	1.4%	475.3	7.6	1.6%	474.6	8.2	1.7%	473.9	8.9	1.9%	473.2	9.6	2.0%	472.5	10.3	2.1%
ME 2	44 58 4	2016	Above Normal	September	Used in Summary Table Analysis	319.8	314.0	5.8	1.8%	313.4	6.4	2.0%	312.8	7.0	2.2%	312.2	7.5	2.4%	311.7	8.1	2.5%	311.1	8.7	2.7%
ME 2	44 58 4	2017	Wet	October	Used in Summary Table Analysis	18,119.2	18,114.6	4.6	0.0%	18,114.6	4.6	0.0%	18,113.4	5.8	0.0%	18,113.4	5.8	0.0%	18,112.3	6.9	0.0%	18,112.3	6.9	0.0%
ME 2	44 58 4	2017	Wet	November	Used in Summary Table Analysis	18,641.2	18,637.7	3.5	0.0%	18,636.6	4.6	0.0%	18,636.6	4.6	0.0%	18,636.6	4.6	0.0%	18,635.4	5.8	0.0%	18,635.4	5.8	0.0%
ME 2	44 58 4	2017	Wet	December	--	23,827.5	23,824.1	3.5	0.0%	23,824.1	3.5	0.0%	23,824.1	3.5	0.0%	23,822.9	4.6	0.0%	23,822.9	4.6	0.0%	23,822.9	4.6	0.0%
ME 2	44 58 4	2017	Wet	January	--	106,061.3	106,059.0	2.3	0.0%	106,057.9	3.5	0.0%	106,057.9	3.5	0.0%	106,057.9	3.5	0.0%	106,057.9	3.5	0.0%	106,057.9	3.5	0.0%
ME 2	44 58 4	2017	Wet	February	--	81,344.9	81,342.6	2.3	0.0%	81,342.6	2.3	0.0%	81,342.6	2.3	0.0%	81,341.4	3.5	0.0%	81,341.4	3.5	0.0%	81,341.4	3.5	0.0%
ME 2	44 58 4	2017	Wet	March	--	27,119.2	27,116.9	2.3	0.0%	27,116.9	2.3	0.0%	27,116.9	2.3	0.0%	27,116.9	2.3	0.0%	27,116.9	2.3	0.0%	27,115.7	3.5	0.0%
ME 2	44 58 4	2017	Wet	April	--	22,772.0	22,769.7	2.3	0.0%	22,769.7	2.3	0.0%	22,769.7	2.3	0.0%	22,769.7	2.3	0.0%	22,769.7	2.3	0.0%	22,769.7	2.3	0.0%
ME 2	44 58 4	2017	Wet	May	--	6,267.7	6,264.7	3.0	0.0%	6,264.4	3.4	0.1%	6,264.0	3.7	0.1%	6,263.7	4.1	0.1%	6,263.4	4.3	0.1%	6,263.1	4.6	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	44 58 4	2017	Wet	June	--	2,096.2	2,088.7	7.5	0.4%	2,088.0	8.2	0.4%	2,087.3	8.9	0.4%	2,086.5	9.7	0.5%	2,085.6	10.5	0.5%	2,085.0	11.2	0.5%
ME 2	44 58 4	2017	Wet	July	--	922.5	915.0	7.5	0.8%	914.3	8.2	0.9%	913.5	8.9	1.0%	912.8	9.7	1.1%	912.0	10.4	1.1%	911.3	11.2	1.2%
ME 2	44 58 4	2017	Wet	August	--	494.8	488.0	6.8	1.4%	487.3	7.5	1.5%	486.6	8.2	1.7%	485.9	8.9	1.8%	485.2	9.6	1.9%	484.5	10.3	2.1%
ME 2	44 58 4	2017	Wet	September	Used in Summary Table Analysis	313.1	306.8	6.3	2.0%	306.1	6.9	2.2%	305.5	7.6	2.4%	304.9	8.2	2.6%	304.3	8.8	2.8%	303.6	9.4	3.0%
ME 2	44 58 4	2018	Above Normal	October	Used in Summary Table Analysis	265.9	262.1	3.8	1.4%	261.2	4.7	1.8%	260.6	5.3	2.0%	259.9	6.0	2.3%	259.3	6.6	2.5%	258.8	7.0	2.7%
ME 2	44 58 4	2018	Above Normal	November	Used in Summary Table Analysis	10,598.6	10,595.1	3.5	0.0%	10,594.8	3.8	0.0%	10,594.4	4.2	0.0%	10,594.1	4.5	0.0%	10,593.9	4.7	0.0%	10,593.5	5.1	0.0%
ME 2	44 58 4	2018	Above Normal	December	--	5,428.2	5,425.3	2.9	0.1%	5,425.1	3.1	0.1%	5,424.9	3.4	0.1%	5,424.5	3.7	0.1%	5,424.3	3.9	0.1%	5,424.0	4.3	0.1%
ME 2	44 58 4	2018	Above Normal	January	--	17,447.9	17,445.6	2.3	0.0%	17,445.6	2.3	0.0%	17,445.6	2.3	0.0%	17,444.4	3.5	0.0%	17,444.4	3.5	0.0%	17,444.4	3.5	0.0%
ME 2	44 58 4	2018	Above Normal	February	--	7,581.8	7,579.7	2.1	0.0%	7,579.5	2.3	0.0%	7,579.3	2.5	0.0%	7,579.1	2.8	0.0%	7,578.8	3.0	0.0%	7,578.6	3.2	0.0%
ME 2	44 58 4	2018	Above Normal	March	--	20,486.1	20,483.8	2.3	0.0%	20,483.8	2.3	0.0%	20,483.8	2.3	0.0%	20,483.8	2.3	0.0%	20,483.8	2.3	0.0%	20,482.6	3.5	0.0%
ME 2	44 58 4	2018	Above Normal	April	--	31,949.1	31,946.8	2.3	0.0%	31,946.8	2.3	0.0%	31,946.8	2.3	0.0%	31,946.8	2.3	0.0%	31,946.8	2.3	0.0%	31,946.8	2.3	0.0%
ME 2	44 58 4	2018	Above Normal	May	--	6,980.0	6,974.3	5.7	0.1%	6,973.7	6.3	0.1%	6,973.1	6.8	0.1%	6,972.7	7.3	0.1%	6,972.1	7.9	0.1%	6,971.4	8.6	0.1%
ME 2	44 58 4	2018	Above Normal	June	--	1,905.4	1,898.3	7.2	0.4%	1,897.6	7.9	0.4%	1,896.9	8.6	0.4%	1,896.1	9.4	0.5%	1,895.4	10.1	0.5%	1,894.7	10.8	0.6%
ME 2	44 58 4	2018	Above Normal	July	--	771.9	764.4	7.4	1.0%	763.7	8.2	1.1%	763.0	8.9	1.2%	762.2	9.6	1.2%	761.5	10.4	1.3%	760.7	11.1	1.4%
ME 2	44 58 4	2018	Above Normal	August	--	433.1	426.6	6.5	1.5%	425.9	7.2	1.7%	425.3	7.8	1.8%	424.6	8.5	2.0%	424.0	9.1	2.1%	423.3	9.8	2.3%
ME 2	44 58 4	2018	Above Normal	September	Used in Summary Table Analysis	291.4	285.1	6.3	2.2%	284.5	6.9	2.4%	283.9	7.5	2.6%	283.2	8.2	2.8%	282.6	8.8	3.0%	282.0	9.4	3.2%
ME 2	44 58 4	2019	Below Normal	October	Used in Summary Table Analysis	201.4	196.7	4.7	2.3%	196.2	5.2	2.6%	195.8	5.6	2.8%	195.3	6.1	3.0%	194.9	6.5	3.2%	194.5	6.9	3.4%
ME 2	44 58 4	2019	Below Normal	November	Used in Summary Table Analysis	6,497.0	6,493.5	3.5	0.1%	6,493.2	3.8	0.1%	6,492.8	4.2	0.1%	6,492.5	4.5	0.1%	6,492.1	4.9	0.1%	6,491.8	5.2	0.1%
ME 2	44 58 4	2019	Below Normal	December	--	14,450.2	14,446.8	3.5	0.0%	14,446.8	3.5	0.0%	14,446.8	3.5	0.0%	14,445.6	4.6	0.0%	14,445.6	4.6	0.0%	14,445.6	4.6	0.0%
ME 2	44 58 4	2019	Below Normal	January	--	34,782.4	34,778.9	3.5	0.0%	34,778.9	3.5	0.0%	34,778.9	3.5	0.0%	34,778.9	3.5	0.0%	34,777.8	4.6	0.0%	34,777.8	4.6	0.0%
ME 2	44 58 4	2019	Below Normal	February	--	141,458.3	141,446.8	11.6	0.0%	141,446.8	11.6	0.0%	141,446.8	11.6	0.0%	141,446.8	11.6	0.0%	141,446.8	11.6	0.0%	141,446.8	11.6	0.0%
ME 2	44 58 4	2019	Below Normal	March	--	42,078.7	42,076.4	2.3	0.0%	42,076.4	2.3	0.0%	42,076.4	2.3	0.0%	42,076.4	2.3	0.0%	42,075.2	3.5	0.0%	42,075.2	3.5	0.0%
ME 2	44 58 4	2019	Below Normal	April	--	15,206.0	15,204.9	1.2	0.0%	15,203.7	2.3	0.0%	15,203.7	2.3	0.0%	15,203.7	2.3	0.0%	15,203.7	2.3	0.0%	15,203.7	2.3	0.0%
ME 2	44 58 4	2019	Below Normal	May	--	16,608.8	16,601.9	6.9	0.0%	16,601.9	6.9	0.0%	16,600.7	8.1	0.0%	16,600.7	8.1	0.0%	16,599.5	9.3	0.1%	16,599.5	9.3	0.1%
ME 2	44 58 4	2019	Below Normal	June	--	4,243.5	4,235.6	7.9	0.2%	4,234.8	8.7	0.2%	4,234.0	9.5	0.2%	4,233.2	10.3	0.2%	4,232.4	11.1	0.3%	4,231.6	11.9	0.3%
ME 2	44 58 4	2019	Below Normal	July	--	1,349.0	1,341.4	7.5	0.6%	1,340.7	8.2	0.6%	1,340.0	8.9	0.7%	1,339.2	9.7	0.7%	1,338.5	10.4	0.8%	1,337.7	11.2	0.8%
ME 2	44 58 4	2019	Below Normal	August	--	585.3	578.6	6.7	1.1%	578.0	7.3	1.2%	577.3	8.0	1.4%	576.6	8.7	1.5%	575.9	9.3	1.6%	575.3	10.0	1.7%
ME 2	44 58 4	2019	Below Normal	September	Used in Summary Table Analysis	453.5	447.3	6.2	1.4%	446.7	6.9	1.5%	446.0	7.5	1.7%	445.4	8.1	1.8%	444.8	8.7	1.9%	444.2	9.4	2.1%
ME 2	44 58 4	2020	Dry	October	Used in Summary Table Analysis	349.4	345.1	4.3	1.2%	344.7	4.7	1.4%	344.3	5.2	1.5%	343.8	5.6	1.6%	343.4	6.1	1.7%	343.0	6.5	1.9%
ME 2	44 58 4	2020	Dry	November	Used in Summary Table Analysis	304.4	301.3	3.0	1.0%	301.0	3.4	1.1%	300.7	3.7	1.2%	300.4	4.0	1.3%	300.1	4.3	1.4%	299.7	4.6	1.5%
ME 2	44 58 4	2020	Dry	December	--	12,968.8	12,966.4	2.3	0.0%	12,966.4	2.3	0.0%	12,965.3	3.5	0.0%	12,965.3	3.5	0.0%	12,965.3	3.5	0.0%	12,965.3	3.5	0.0%
ME 2	44 58 4	2020	Dry	January	--	22,081.0	22,078.7	2.3	0.0%	22,078.7	2.3	0.0%	22,077.5	3.5	0.0%	22,077.5	3.5	0.0%	22,077.5	3.5	0.0%	22,077.5	3.5	0.0%
ME 2	44 58 4	2020	Dry	February	--	7,403.9	7,401.9	2.1	0.0%	7,401.6	2.3	0.0%	7,401.4	2.5	0.0%	7,401.2	2.8	0.0%	7,400.9	3.0	0.0%	7,400.7	3.2	0.0%
ME 2	44 58 4	2020	Dry	March	--	7,199.5	7,197.5	2.1	0.0%	7,197.3	2.2	0.0%	7,197.1	2.4	0.0%	7,196.9	2.7	0.0%	7,196.6	2.9	0.0%	7,196.4	3.1	0.0%
ME 2	44 58 4	2020	Dry	April	--	5,433.6	5,427.7	5.9	0.1%	5,427.1	6.5	0.1%	5,426.5	7.1	0.1%	5,425.9	7.6	0.1%	5,425.3	8.2	0.2%	5,424.8	8.8	0.2%
ME 2	44 58 4	2020	Dry	May	--	7,313.2	7,306.4	6.8	0.1%	7,305.7	7.5	0.1%	7,305.0	8.2	0.1%	7,304.3	8.9	0.1%	7,303.6	9.6	0.1%	7,302.9	10.3	0.1%
ME 2	44 58 4	2020	Dry	June	--	2,103.4	2,093.5	9.8	0.5%	2,092.6	10.8	0.5%	2,091.6	11.8	0.6%	2,090.6	12.7	0.6%	2,089.7	13.7	0.6%	2,088.7	14.7	0.7%
ME 2	44 58 4	2020	Dry	July	--	789.6	781.0	8.6	1.1%	780.2	9.5	1.2%	779.3	10.3	1.3%	778.4	11.2	1.4%	777.6	12.0	1.5%	776.7	12.9	1.6%
ME 2	44 58 4	2020	Dry	August	--	391.8	383.8	8.1	2.1%	382.9	8.9	2.3%	382.1	9.7	2.5%	381.3	10.5	2.7%	380.5	11.3	2.9%	379.7	12.1	3.1%
ME 2	44 58 4	2020	Dry	September	Used in Summary Table Analysis	241.5	234.5	7.0	2.9%	233.8	7.7	3.2%	233.2	8.4	3.5%	232.5	9.1	3.8%	231.8	9.8	4.0%	231.1	10.5	4.3%
ME 2	43 58 5	2000	Above Normal	October	Used in Summary Table Analysis	805.3	800.5	4.8	0.6%	800.1	5.3	0.7%	799.6	5.8	0.7%	799.1	6.2	0.8%	798.6	6.7	0.8%	798.2	7.2	0.9%
ME 2	43 58 5	2000	Above Normal	November	Used in Summary Table Analysis	11,893.5	11,888.9	4.6	0.0%	11,888.9	4.6	0.0%	11,888.9	4.6	0.0%	11,887.7	5.8	0.0%	11,887.7	5.8	0.0%	11,887.7	5.8	0.0%
ME 2	43 58 5	2000	Above Normal	December	--	10,691.1	10,688.2	2.9	0.0%	10,687.8	3.2	0.0%	10,687.6	3.5	0.0%	10,687.3	3.8	0.0%	10,686.9	4.2	0.0%	10,686.7	4.4	0.0%
ME 2	43 58 5	2000	Above Normal	January	--	28,195.6	28,193.3	2.3	0.0%	28,192.1	3.5	0.0%	28,192.1	3.5	0.0%	28,192.1	3.5	0.0%	28,192.1	3.5	0.0%	28,191.0	4.6	0.0%
ME 2	43 58 5	2000	Above Normal	February	--	36,792.8	36,790.5	2.3	0.0%	36,790.5	2.3	0.0%	36,789.4	3.5	0.0%	36,789.4	3.5	0.0%	36,789.4	3.5	0.0%	36,789.4	3.5	0.0%
ME 2	43 58 5	2000	Above Normal	March	--	18,239.6	18,237.3	2.3	0.0%	18,237.3	2.3	0.0%	18,237.3	2.3	0.0%	18,237.3	2.3	0.0%	18,237.3	2.3	0.0%	18,236.1	3.5	0.0%
ME 2	43 58 5	2000	Above Normal	April	--	12,256.9	12,255.8	1.2	0.0%	12,254.6	2.3	0.0%	12,254.6	2.3	0.0%	12,254.6	2.3	0.0%	12,254.6	2.3	0.0%	12,254.6	2.3	0.0%
ME 2	43 58 5	2000	Above Normal	May	--	7,047.6	7,041.7	5.9	0.1%	7,041.1	6.5	0.1%	7,040.5	7.1	0.1%	7,039.9	7.6	0.1%	7,039.2	8.3	0.1%	7,038.7	8.9	0.1%
ME 2	43 58 5	2000	Above Normal	June	--	2,594.3	2,585.0	9.4	0.4%	2,584.0	10.3	0.4%	2,583.0	11.3	0.4%	2,582.2	12.2	0.5%	2,581.3	13.1	0.5%	2,580.2	14.1	0.5%
ME 2	43 58 5	2000	Above Normal	July	--	984.9	977.2	7.7	0.8%	976.5	8.4	0.9%	975.7	9.2	0.9%	974.9	10.0	1.0%	974.2	10.7	1.1%	973.4	11.5	1.2%
ME 2	43 58 5	2000	Above Normal	August	--	514.5	507.6	6.9	1.3%	506.9	7.6	1.5%	506.2	8.3	1.6%	505.5	8.9	1.7%	504.8	9.6	1.9%	504.2	10.3	2.0%
ME 2	43 58 5	2000	Above Normal	September	Used in Summary Table Analysis	289.1	283.3	5.9	2.0%	282.7	6.5	2.2%	282.1	7.0	2.4%	281.5	7.6	2.6%	280.9	8.2	2.8%	280.3	8.8	3.0%
ME 2	43 58 5	2001	Dry	October	Used in Summary Table Analysis	3,764.7	3,760.1	4.6	0.1%	3,759.6	5.1	0.1%	3,759.1	5.6	0.1%	3,758.6	6.1	0.2%	3,758.1	6.6	0.2%	3,757.6	7.1	0.2%
ME 2	43 58 5	2001	Dry	November	Used in Summary Table Analysis	6,040.9	6,037.3	3.6	0.1%	6,036.9	3.9	0.1%	6,036.5	4.4	0.1%	6,036.1	4.7	0.1%	6,035.8	5.1	0.1%	6,035.4	5.4	0.1%
ME 2	43 58 5	2001	Dry	December	--	8,754.7	8,751.7	3.0	0.0%	8,751.4	3.4	0.0%	8,751.2	3.6	0.0%	8,750.8	3.9	0.0%	8,750.6	4.2	0.0%	8,750.2	4.5	0.1%
ME 2	43 58 5	2001	Dry	January	--	12,629.6	12,626.2	3.5	0.0%	12,626.2	3.5	0.0%	12,626.2	3.5	0.0%	12,626.2	3.5	0.0%	12,625.0	4.6	0.0%	12,625.0	4.6	0.0%
ME 2	43 58 5	2001	Dry	February	--	17,370.4	17,368.1	2.3	0.0%	17,368.1	2.3	0.0%	17,368.1	2.3	0.0%	17,366.9	3.5	0.0%	17,366.9	3.5	0.0%	17,366.9	3.5	0.0%
ME 2	43 58 5	2001	Dry	March	--	12,245.4	12,243.1	2.3	0.0%	12,243.1	2.3	0.0%	12,243.1	2.3	0.0%	12,243.1	2.3	0.0%	12,241.9	3.5	0.0%	12,241.9	3.5	0.0%
ME 2	43 58 5	2001	Dry	April	--	10,917.9	10,911.7	6.3	0.1%	10,911.1	6.8	0.1%	10,910.5	7.4	0.1%	10,910.0	8.0	0.1%	10,909.3	8.7	0.1%	10,908.7	9.3	0.1%
ME 2	43 58 5	2001	Dry	May	--	2,637.4	2,630.2	7.2	0.3%	2,629.5	7.9	0.3%	2,628.7	8.7	0.3%	2,628.1	9.3	0.4%	2,627.3	10.1	0.4%	2,626.6	10.8	0.4%
ME 2	43 58 5	2001	Dry	June	--	2,614.8	2,604.4	10.4	0.4%	2,603.4	11.5	0.4%	2,602.3	12.5	0.5%	2,601.3	13.5	0.5%	2,600.2	14.6	0.6%	2,599.2	15.6	0.6%
ME 2	43 58 5	2001	Dry	July	--	717.0	708.1	8.8	1.2%	707.2	9.7	1.4%	706.4	10.6	1.5%	705.5	11.5	1.6%	704.6	12.4	1.7%	703.7	13.2	1.8%
ME 2	43 58 5	2001	Dry	August	--	168.0	159.7	8.3	5.0%	158.8	9.2	5.5%	158.0	10.0	5.9%	157.2	10.8	6.4%	156.3	11.6	6.9%	155.5	12.5	7.4%
ME 2	43 58 5	2001	Dry	September	Used in Summary Table Analysis	90.3	83.1	7.2	8.0%	82.4	7.9	8.8%	81.7	8.7	9.6%	81.0	9.4	10.4%	80.2	10.1	11.2%	79.5	10.8	12.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	43 58 5	2002	Below Normal	October	Used in Summary Table Analysis	258.9	253.0	6.0	2.3%	252.4	6.6	2.5%	251.8	7.2	2.8%	251.2	7.8	3.0%	250.6	8.4	3.2%	250.0	9.0	3.5%
ME 2	43 58 5	2002	Below Normal	November	Used in Summary Table Analysis	11,914.4	11,909.7	4.6	0.0%	11,909.7	4.6	0.0%	11,908.6	5.8	0.0%	11,908.6	5.8	0.0%	11,907.4	6.9	0.1%	11,907.4	6.9	0.1%
ME 2	43 58 5	2002	Below Normal	December	--	35,339.1	35,335.6	3.5	0.0%	35,335.6	3.5	0.0%	35,334.5	4.6	0.0%	35,334.5	4.6	0.0%	35,334.5	4.6	0.0%	35,333.3	5.8	0.0%
ME 2	43 58 5	2002	Below Normal	January	--	30,659.7	30,656.3	3.5	0.0%	30,656.3	3.5	0.0%	30,656.3	3.5	0.0%	30,655.1	4.6	0.0%	30,655.1	4.6	0.0%	30,655.1	4.6	0.0%
ME 2	43 58 5	2002	Below Normal	February	--	24,547.5	24,544.0	3.5	0.0%	24,544.0	3.5	0.0%	24,544.0	3.5	0.0%	24,544.0	3.5	0.0%	24,542.8	4.6	0.0%	24,542.8	4.6	0.0%
ME 2	43 58 5	2002	Below Normal	March	--	17,678.2	17,675.9	2.3	0.0%	17,675.9	2.3	0.0%	17,674.8	3.5	0.0%	17,674.8	3.5	0.0%	17,674.8	3.5	0.0%	17,674.8	3.5	0.0%
ME 2	43 58 5	2002	Below Normal	April	--	9,887.5	9,881.5	6.0	0.1%	9,880.8	6.7	0.1%	9,880.2	7.3	0.1%	9,879.6	7.9	0.1%	9,878.9	8.6	0.1%	9,878.4	9.1	0.1%
ME 2	43 58 5	2002	Below Normal	May	--	3,307.2	3,300.2	6.9	0.2%	3,299.5	7.6	0.2%	3,298.8	8.3	0.3%	3,298.1	9.0	0.3%	3,297.3	9.8	0.3%	3,296.6	10.5	0.3%
ME 2	43 58 5	2002	Below Normal	June	--	849.5	841.1	8.4	1.0%	840.3	9.2	1.1%	839.4	10.1	1.2%	838.6	10.9	1.3%	837.8	11.7	1.4%	836.9	12.6	1.5%
ME 2	43 58 5	2002	Below Normal	July	--	357.8	349.8	8.0	2.2%	349.0	8.8	2.4%	348.2	9.5	2.7%	347.4	10.3	2.9%	346.6	11.1	3.1%	345.8	11.9	3.3%
ME 2	43 58 5	2002	Below Normal	August	--	220.9	213.7	7.2	3.3%	213.0	7.9	3.6%	212.3	8.7	3.9%	211.6	9.4	4.2%	210.8	10.1	4.6%	210.1	10.8	4.9%
ME 2	43 58 5	2002	Below Normal	September	Used in Summary Table Analysis	158.2	151.6	6.6	4.2%	150.9	7.2	4.6%	150.3	7.9	5.0%	149.6	8.5	5.4%	149.0	9.2	5.8%	148.3	9.8	6.2%
ME 2	43 58 5	2003	Wet	October	Used in Summary Table Analysis	123.3	118.1	5.2	4.2%	117.6	5.7	4.6%	117.1	6.2	5.0%	116.6	6.7	5.5%	116.1	7.3	5.9%	115.5	7.8	6.3%
ME 2	43 58 5	2003	Wet	November	Used in Summary Table Analysis	887.8	883.8	4.0	0.4%	883.4	4.4	0.5%	883.0	4.8	0.5%	882.6	5.2	0.6%	882.2	5.6	0.6%	881.8	6.0	0.7%
ME 2	43 58 5	2003	Wet	December	--	56,009.3	56,005.8	3.5	0.0%	56,004.6	4.6	0.0%	56,004.6	4.6	0.0%	56,004.6	4.6	0.0%	56,004.6	4.6	0.0%	56,003.5	5.8	0.0%
ME 2	43 58 5	2003	Wet	January	--	31,363.4	31,361.1	2.3	0.0%	31,360.0	3.5	0.0%	31,360.0	3.5	0.0%	31,360.0	3.5	0.0%	31,360.0	3.5	0.0%	31,358.8	4.6	0.0%
ME 2	43 58 5	2003	Wet	February	--	20,266.2	20,263.9	2.3	0.0%	20,263.9	2.3	0.0%	20,262.7	3.5	0.0%	20,262.7	3.5	0.0%	20,262.7	3.5	0.0%	20,262.7	3.5	0.0%
ME 2	43 58 5	2003	Wet	March	--	23,899.3	23,897.0	2.3	0.0%	23,897.0	2.3	0.0%	23,895.8	3.5	0.0%	23,895.8	3.5	0.0%	23,895.8	3.5	0.0%	23,895.8	3.5	0.0%
ME 2	43 58 5	2003	Wet	April	--	42,577.5	42,575.2	2.3	0.0%	42,575.2	2.3	0.0%	42,575.2	2.3	0.0%	42,575.2	2.3	0.0%	42,574.1	3.5	0.0%	42,574.1	3.5	0.0%
ME 2	43 58 5	2003	Wet	May	--	12,179.4	12,173.6	5.8	0.0%	12,172.5	6.9	0.1%	12,172.5	6.9	0.1%	12,171.3	8.1	0.1%	12,171.3	8.1	0.1%	12,170.1	9.3	0.1%
ME 2	43 58 5	2003	Wet	June	--	3,157.8	3,149.8	8.0	0.3%	3,149.0	8.8	0.3%	3,148.1	9.6	0.3%	3,147.5	10.3	0.3%	3,146.6	11.1	0.4%	3,145.9	11.8	0.4%
ME 2	43 58 5	2003	Wet	July	--	1,464.9	1,457.1	7.9	0.5%	1,456.3	8.7	0.6%	1,455.4	9.5	0.6%	1,454.6	10.3	0.7%	1,453.9	11.0	0.8%	1,453.1	11.8	0.8%
ME 2	43 58 5	2003	Wet	August	--	751.9	744.5	7.4	1.0%	743.8	8.1	1.1%	743.1	8.8	1.2%	742.3	9.6	1.3%	741.6	10.3	1.4%	740.8	11.1	1.5%
ME 2	43 58 5	2003	Wet	September	Used in Summary Table Analysis	450.7	444.7	6.0	1.3%	444.1	6.6	1.5%	443.5	7.2	1.6%	442.9	7.8	1.7%	442.3	8.3	1.9%	441.7	8.9	2.0%
ME 2	43 58 5	2004	Wet	October	Used in Summary Table Analysis	317.9	313.1	4.8	1.5%	312.6	5.2	1.6%	312.1	5.7	1.8%	311.7	6.2	2.0%	311.2	6.7	2.1%	310.7	7.2	2.3%
ME 2	43 58 5	2004	Wet	November	Used in Summary Table Analysis	5,714.4	5,710.8	3.6	0.1%	5,710.4	3.9	0.1%	5,710.0	4.4	0.1%	5,709.6	4.7	0.1%	5,709.3	5.1	0.1%	5,708.9	5.4	0.1%
ME 2	43 58 5	2004	Wet	December	--	35,907.4	35,903.9	3.5	0.0%	35,903.9	3.5	0.0%	35,903.9	3.5	0.0%	35,902.8	4.6	0.0%	35,902.8	4.6	0.0%	35,902.8	4.6	0.0%
ME 2	43 58 5	2004	Wet	January	--	31,199.1	31,195.6	3.5	0.0%	31,195.6	3.5	0.0%	31,195.6	3.5	0.0%	31,195.6	3.5	0.0%	31,194.4	4.6	0.0%	31,194.4	4.6	0.0%
ME 2	43 58 5	2004	Wet	February	--	37,972.2	37,969.9	2.3	0.0%	37,969.9	2.3	0.0%	37,969.9	2.3	0.0%	37,969.9	2.3	0.0%	37,968.8	3.5	0.0%	37,968.8	3.5	0.0%
ME 2	43 58 5	2004	Wet	March	--	16,478.0	16,475.7	2.3	0.0%	16,475.7	2.3	0.0%	16,474.5	3.5	0.0%	16,474.5	3.5	0.0%	16,474.5	3.5	0.0%	16,474.5	3.5	0.0%
ME 2	43 58 5	2004	Wet	April	--	9,417.4	9,415.4	2.0	0.0%	9,415.2	2.2	0.0%	9,414.9	2.4	0.0%	9,414.7	2.7	0.0%	9,414.5	2.9	0.0%	9,414.2	3.1	0.0%
ME 2	43 58 5	2004	Wet	May	--	3,394.0	3,388.0	6.0	0.2%	3,387.4	6.6	0.2%	3,386.8	7.2	0.2%	3,386.1	7.9	0.2%	3,385.5	8.4	0.2%	3,385.0	9.0	0.3%
ME 2	43 58 5	2004	Wet	June	--	688.1	680.6	7.4	1.1%	679.9	8.2	1.2%	679.2	8.9	1.3%	678.4	9.6	1.4%	677.7	10.4	1.5%	677.0	11.1	1.6%
ME 2	43 58 5	2004	Wet	July	--	349.8	342.2	7.7	2.2%	341.4	8.5	2.4%	340.6	9.2	2.6%	339.8	10.0	2.9%	339.1	10.8	3.1%	338.3	11.5	3.3%
ME 2	43 58 5	2004	Wet	August	--	219.4	212.5	6.9	3.1%	211.8	7.6	3.5%	211.1	8.3	3.8%	210.5	9.0	4.1%	209.8	9.7	4.4%	209.1	10.3	4.7%
ME 2	43 58 5	2004	Wet	September	Used in Summary Table Analysis	157.1	150.5	6.6	4.2%	149.9	7.2	4.6%	149.2	7.9	5.0%	148.6	8.6	5.4%	147.9	9.2	5.9%	147.3	9.9	6.3%
ME 2	43 58 5	2005	Above Normal	October	Used in Summary Table Analysis	7,566.6	7,561.7	4.9	0.1%	7,561.2	5.3	0.1%	7,560.6	5.9	0.1%	7,560.2	6.4	0.1%	7,559.7	6.8	0.1%	7,559.3	7.3	0.1%
ME 2	43 58 5	2005	Above Normal	November	Used in Summary Table Analysis	2,242.1	2,238.5	3.6	0.2%	2,238.2	3.9	0.2%	2,237.7	4.4	0.2%	2,237.4	4.7	0.2%	2,237.0	5.1	0.2%	2,236.7	5.4	0.2%
ME 2	43 58 5	2005	Above Normal	December	--	20,691.0	20,687.5	3.5	0.0%	20,687.5	3.5	0.0%	20,686.3	4.6	0.0%	20,686.3	4.6	0.0%	20,686.3	4.6	0.0%	20,686.3	4.6	0.0%
ME 2	43 58 5	2005	Above Normal	January	--	22,120.4	22,118.1	2.3	0.0%	22,116.9	3.5	0.0%	22,116.9	3.5	0.0%	22,116.9	3.5	0.0%	22,116.9	3.5	0.0%	22,115.7	4.6	0.0%
ME 2	43 58 5	2005	Above Normal	February	--	13,965.3	13,963.0	2.3	0.0%	13,963.0	2.3	0.0%	13,963.0	2.3	0.0%	13,961.8	3.5	0.0%	13,961.8	3.5	0.0%	13,961.8	3.5	0.0%
ME 2	43 58 5	2005	Above Normal	March	--	28,366.9	28,364.6	2.3	0.0%	28,364.6	2.3	0.0%	28,364.6	2.3	0.0%	28,364.6	2.3	0.0%	28,364.6	2.3	0.0%	28,363.4	3.5	0.0%
ME 2	43 58 5	2005	Above Normal	April	--	21,313.7	21,311.3	2.3	0.0%	21,311.3	2.3	0.0%	21,311.3	2.3	0.0%	21,311.3	2.3	0.0%	21,311.3	2.3	0.0%	21,310.2	3.5	0.0%
ME 2	43 58 5	2005	Above Normal	May	--	19,413.2	19,407.4	5.8	0.0%	19,406.3	6.9	0.0%	19,406.3	6.9	0.0%	19,405.1	8.1	0.0%	19,405.1	8.1	0.0%	19,403.9	9.3	0.0%
ME 2	43 58 5	2005	Above Normal	June	--	15,685.2	15,675.9	9.3	0.1%	15,674.8	10.4	0.1%	15,673.6	11.6	0.1%	15,672.5	12.7	0.1%	15,671.3	13.9	0.1%	15,671.3	13.9	0.1%
ME 2	43 58 5	2005	Above Normal	July	--	2,863.1	2,855.0	8.1	0.3%	2,854.2	8.9	0.3%	2,853.4	9.7	0.3%	2,852.5	10.5	0.4%	2,851.6	11.5	0.4%	2,850.8	12.3	0.4%
ME 2	43 58 5	2005	Above Normal	August	--	974.3	967.4	6.9	0.7%	966.7	7.6	0.8%	966.0	8.3	0.9%	965.3	9.0	0.9%	964.7	9.7	1.0%	964.0	10.3	1.1%
ME 2	43 58 5	2005	Above Normal	September	Used in Summary Table Analysis	516.3	510.4	5.9	1.1%	509.8	6.5	1.3%	509.3	7.0	1.4%	508.7	7.6	1.5%	508.1	8.2	1.6%	507.5	8.8	1.7%
ME 2	43 58 5	2006	Wet	October	Used in Summary Table Analysis	624.5	619.8	4.7	0.7%	619.3	5.1	0.8%	618.9	5.6	0.9%	618.4	6.1	1.0%	617.9	6.5	1.0%	617.5	7.0	1.1%
ME 2	43 58 5	2006	Wet	November	Used in Summary Table Analysis	9,153.2	9,149.8	3.5	0.0%	9,149.4	3.8	0.0%	9,149.1	4.2	0.0%	9,148.7	4.5	0.0%	9,148.4	4.9	0.1%	9,148.0	5.2	0.1%
ME 2	43 58 5	2006	Wet	December	--	42,990.7	42,988.4	2.3	0.0%	42,988.4	2.3	0.0%	42,987.3	3.5	0.0%	42,987.3	3.5	0.0%	42,987.3	3.5	0.0%	42,986.1	4.6	0.0%
ME 2	43 58 5	2006	Wet	January	--	45,838.0	45,834.5	3.5	0.0%	45,834.5	3.5	0.0%	45,834.5	3.5	0.0%	45,834.5	3.5	0.0%	45,833.3	4.6	0.0%	45,833.3	4.6	0.0%
ME 2	43 58 5	2006	Wet	February	--	26,422.5	26,420.1	2.3	0.0%	26,420.1	2.3	0.0%	26,419.0	3.5	0.0%	26,419.0	3.5	0.0%	26,419.0	3.5	0.0%	26,419.0	3.5	0.0%
ME 2	43 58 5	2006	Wet	March	--	46,796.3	46,794.0	2.3	0.0%	46,794.0	2.3	0.0%	46,794.0	2.3	0.0%	46,792.8	3.5	0.0%	46,792.8	3.5	0.0%	46,792.8	3.5	0.0%
ME 2	43 58 5	2006	Wet	April	--	30,285.9	30,283.6	2.3	0.0%	30,283.6	2.3	0.0%	30,283.6	2.3	0.0%	30,283.6	2.3	0.0%	30,282.4	3.5	0.0%	30,282.4	3.5	0.0%
ME 2	43 58 5	2006	Wet	May	--	14,125.0	14,121.5	3.5	0.0%	14,121.5	3.5	0.0%	14,121.5	3.5	0.0%	14,121.5	3.5	0.0%	14,120.4	4.6	0.0%	14,120.4	4.6	0.0%
ME 2	43 58 5	2006	Wet	June	--	3,539.9	3,532.1	7.9	0.2%	3,531.3	8.7	0.2%	3,530.4	9.5	0.3%	3,529.6	10.3	0.3%	3,528.9	11.0	0.3%	3,528.1	11.8	0.3%
ME 2	43 58 5	2006	Wet	July	--	1,268.8	1,261.0	7.8	0.6%	1,260.2	8.6	0.7%	1,259.5	9.3	0.7%	1,258.7	10.1	0.8%	1,257.9	10.9	0.9%	1,257.2	11.6	0.9%
ME 2	43 58 5	2006	Wet	August	--	655.2	648.0	7.1	1.1%	647.3	7.9	1.2%	646.6	8.6	1.3%	645.8	9.3	1.4%	645.1	10.1	1.5%	644.4	10.8	1.6%
ME 2	43 58 5	2006	Wet	September	Used in Summary Table Analysis	417.3	411.3	6.0	1.4%	410.7	6.6	1.6%	410.1	7.2	1.7%	409.5	7.8	1.9%	408.9	8.4	2.0%	408.3	9.0	2.2%
ME 2	43 58 5	2007	Above Normal	October	Used in Summary Table Analysis	267.4	262.6	4.8	1.8%	262.2	5.2	2.0%	261.7	5.7	2.1%	261.2	6.2	2.3%	260.8	6.6	2.5%	260.3	7.1	2.7%
ME 2	43 58 5	2007	Above Normal	November	Used in Summary Table Analysis	8,532.6	8,528.9	3.7	0.0%	8,528.6	4.1	0.0%	8,528.2	4.4	0.1%	8,527.9	4.7	0.1%	8,527.5	5.1	0.1%	8,527.2	5.4	0.1%
ME 2	43 58 5	2007	Above Normal	December	--	20,135.4	20,131.9	3.5	0.0%	20,131.9	3.5	0.0%	20,130.8	4.6	0.0%	20,130.8	4.6	0.0%	20,130.8	4.6	0.0%	20,130.8	4.6	0.0%
ME 2	43 58 5	2007	Above Normal	January	--	10,179.3	10,176.5	2.8	0.0%	10,176.3	3.0	0.0%	10,176.0	3.2	0.0%	10,175.7	3.6	0.0%	10,175.5	3.8	0.0%	10,175.1	4.2	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	43 58 5	2007	Above Normal	February	--	30,262.7	30,260.4	2.3	0.0%	30,260.4	2.3	0.0%	30,259.3	3.5	0.0%	30,259.3	3.5	0.0%	30,259.3	3.5	0.0%	30,259.3	3.5	0.0%
ME 2	43 58 5	2007	Above Normal	March	--	13,049.8	13,047.5	2.3	0.0%	13,047.5	2.3	0.0%	13,046.3	3.5	0.0%	13,046.3	3.5	0.0%	13,046.3	3.5	0.0%	13,046.3	3.5	0.0%
ME 2	43 58 5	2007	Above Normal	April	--	11,486.5	11,480.7	5.8	0.1%	11,480.1	6.4	0.1%	11,479.5	6.9	0.1%	11,478.9	7.5	0.1%	11,478.2	8.2	0.1%	11,477.7	8.8	0.1%
ME 2	43 58 5	2007	Above Normal	May	--	4,118.9	4,112.2	6.7	0.2%	4,111.5	7.4	0.2%	4,110.9	8.0	0.2%	4,110.2	8.7	0.2%	4,109.5	9.4	0.2%	4,108.8	10.1	0.2%
ME 2	43 58 5	2007	Above Normal	June	--	1,485.0	1,476.2	8.8	0.6%	1,475.2	9.7	0.7%	1,474.3	10.6	0.7%	1,473.5	11.5	0.8%	1,472.6	12.4	0.8%	1,471.8	13.2	0.9%
ME 2	43 58 5	2007	Above Normal	July	--	491.7	483.4	8.3	1.7%	482.6	9.1	1.9%	481.8	10.0	2.0%	481.0	10.8	2.2%	480.1	11.6	2.4%	479.3	12.4	2.5%
ME 2	43 58 5	2007	Above Normal	August	--	216.9	209.8	7.1	3.3%	209.1	7.8	3.6%	208.4	8.5	3.9%	207.7	9.2	4.2%	207.0	9.9	4.6%	206.3	10.6	4.9%
ME 2	43 58 5	2007	Above Normal	September	Used in Summary Table Analysis	144.5	138.1	6.4	4.5%	137.5	7.1	4.9%	136.8	7.7	5.4%	136.2	8.4	5.8%	135.5	9.0	6.2%	134.9	9.7	6.7%
ME 2	43 58 5	2008	Dry	October	Used in Summary Table Analysis	3,386.6	3,381.5	5.1	0.2%	3,381.0	5.6	0.2%	3,380.4	6.1	0.2%	3,380.0	6.6	0.2%	3,379.5	7.1	0.2%	3,378.9	7.6	0.2%
ME 2	43 58 5	2008	Dry	November	Used in Summary Table Analysis	3,229.7	3,225.9	3.8	0.1%	3,225.6	4.2	0.1%	3,225.2	4.5	0.1%	3,224.8	5.0	0.2%	3,224.4	5.3	0.2%	3,224.1	5.7	0.2%
ME 2	43 58 5	2008	Dry	December	--	22,767.4	22,763.9	3.5	0.0%	22,763.9	3.5	0.0%	22,763.9	3.5	0.0%	22,762.7	4.6	0.0%	22,762.7	4.6	0.0%	22,762.7	4.6	0.0%
ME 2	43 58 5	2008	Dry	January	--	37,186.3	37,184.0	2.3	0.0%	37,184.0	2.3	0.0%	37,182.9	3.5	0.0%	37,182.9	3.5	0.0%	37,182.9	3.5	0.0%	37,182.9	3.5	0.0%
ME 2	43 58 5	2008	Dry	February	--	26,187.5	26,185.2	2.3	0.0%	26,185.2	2.3	0.0%	26,185.2	2.3	0.0%	26,185.2	2.3	0.0%	26,184.0	3.5	0.0%	26,184.0	3.5	0.0%
ME 2	43 58 5	2008	Dry	March	--	11,756.9	11,754.6	2.3	0.0%	11,754.6	2.3	0.0%	11,754.6	2.3	0.0%	11,754.6	2.3	0.0%	11,753.5	3.5	0.0%	11,753.5	3.5	0.0%
ME 2	43 58 5	2008	Dry	April	--	8,987.8	8,981.6	6.3	0.1%	8,981.0	6.8	0.1%	8,980.4	7.4	0.1%	8,979.7	8.1	0.1%	8,979.2	8.7	0.1%	8,978.6	9.3	0.1%
ME 2	43 58 5	2008	Dry	May	--	1,364.0	1,357.8	6.3	0.5%	1,357.2	6.8	0.5%	1,356.5	7.5	0.6%	1,355.9	8.1	0.6%	1,355.2	8.8	0.6%	1,354.6	9.4	0.7%
ME 2	43 58 5	2008	Dry	June	--	433.0	423.2	9.8	2.3%	422.2	10.8	2.5%	421.2	11.7	2.7%	420.3	12.7	2.9%	419.3	13.7	3.2%	418.3	14.6	3.4%
ME 2	43 58 5	2008	Dry	July	--	251.8	242.8	8.9	3.5%	241.9	9.8	3.9%	241.0	10.7	4.3%	240.2	11.6	4.6%	239.3	12.5	5.0%	238.4	13.4	5.3%
ME 2	43 58 5	2008	Dry	August	--	174.7	166.3	8.3	4.8%	165.5	9.2	5.2%	164.7	10.0	5.7%	163.8	10.8	6.2%	163.0	11.7	6.7%	162.2	12.5	7.2%
ME 2	43 58 5	2008	Dry	September	Used in Summary Table Analysis	136.4	128.4	8.1	5.9%	127.6	8.9	6.5%	126.7	9.7	7.1%	125.9	10.5	7.7%	125.2	11.3	8.3%	124.4	12.1	8.8%
ME 2	43 58 5	2009	Critical	October	Used in Summary Table Analysis	915.8	909.9	6.0	0.7%	909.3	6.6	0.7%	908.7	7.2	0.8%	908.1	7.8	0.8%	907.5	8.4	0.9%	906.9	9.0	1.0%
ME 2	43 58 5	2009	Critical	November	Used in Summary Table Analysis	5,425.5	5,421.1	4.4	0.1%	5,420.6	4.9	0.1%	5,420.1	5.3	0.1%	5,419.8	5.7	0.1%	5,419.3	6.1	0.1%	5,418.9	6.6	0.1%
ME 2	43 58 5	2009	Critical	December	--	11,982.6	11,979.2	3.5	0.0%	11,978.0	4.6	0.0%	11,978.0	4.6	0.0%	11,978.0	4.6	0.0%	11,976.9	5.8	0.0%	11,976.9	5.8	0.0%
ME 2	43 58 5	2009	Critical	January	--	8,745.3	8,742.0	3.2	0.0%	8,741.7	3.6	0.0%	8,741.3	3.9	0.0%	8,741.0	4.3	0.0%	8,740.7	4.5	0.1%	8,740.4	4.9	0.1%
ME 2	43 58 5	2009	Critical	February	--	22,461.8	22,459.5	2.3	0.0%	22,458.3	3.5	0.0%	22,458.3	3.5	0.0%	22,458.3	3.5	0.0%	22,458.3	3.5	0.0%	22,457.2	4.6	0.0%
ME 2	43 58 5	2009	Critical	March	--	21,006.9	21,004.6	2.3	0.0%	21,004.6	2.3	0.0%	21,004.6	2.3	0.0%	21,003.5	3.5	0.0%	21,003.5	3.5	0.0%	21,003.5	3.5	0.0%
ME 2	43 58 5	2009	Critical	April	--	10,084.3	10,077.8	6.5	0.1%	10,077.1	7.2	0.1%	10,076.5	7.8	0.1%	10,075.9	8.3	0.1%	10,075.3	8.9	0.1%	10,074.7	9.6	0.1%
ME 2	43 58 5	2009	Critical	May	--	15,526.6	15,518.5	8.1	0.1%	15,518.5	8.1	0.1%	15,517.4	9.3	0.1%	15,516.2	10.4	0.1%	15,516.2	10.4	0.1%	15,515.0	11.6	0.1%
ME 2	43 58 5	2009	Critical	June	--	3,152.3	3,141.9	10.4	0.3%	3,140.9	11.5	0.4%	3,139.8	12.5	0.4%	3,138.8	13.5	0.4%	3,137.7	14.6	0.5%	3,136.7	15.6	0.5%
ME 2	43 58 5	2009	Critical	July	--	1,256.6	1,247.6	9.0	0.7%	1,246.6	10.0	0.8%	1,245.7	10.9	0.9%	1,244.8	11.8	0.9%	1,244.0	12.6	1.0%	1,243.1	13.5	1.1%
ME 2	43 58 5	2009	Critical	August	--	662.4	653.9	8.4	1.3%	653.1	9.3	1.4%	652.3	10.1	1.5%	651.4	10.9	1.7%	650.6	11.8	1.8%	649.8	12.6	1.9%
ME 2	43 58 5	2009	Critical	September	Used in Summary Table Analysis	384.4	377.2	7.3	1.9%	376.4	8.0	2.1%	375.7	8.7	2.3%	375.0	9.5	2.5%	374.3	10.2	2.6%	373.6	10.9	2.8%
ME 2	43 58 5	2010	Below Normal	October	Used in Summary Table Analysis	6,077.7	6,071.6	6.0	0.1%	6,071.1	6.6	0.1%	6,070.5	7.2	0.1%	6,069.9	7.8	0.1%	6,069.2	8.4	0.1%	6,068.6	9.0	0.1%
ME 2	43 58 5	2010	Below Normal	November	Used in Summary Table Analysis	8,232.3	8,227.8	4.5	0.1%	8,227.4	4.9	0.1%	8,227.0	5.3	0.1%	8,226.5	5.8	0.1%	8,226.0	6.3	0.1%	8,225.6	6.7	0.1%
ME 2	43 58 5	2010	Below Normal	December	--	12,236.1	12,232.6	3.5	0.0%	12,232.6	3.5	0.0%	12,232.6	3.5	0.0%	12,231.5	4.6	0.0%	12,231.5	4.6	0.0%	12,231.5	4.6	0.0%
ME 2	43 58 5	2010	Below Normal	January	--	35,834.5	35,831.0	3.5	0.0%	35,831.0	3.5	0.0%	35,831.0	3.5	0.0%	35,829.9	4.6	0.0%	35,829.9	4.6	0.0%	35,829.9	4.6	0.0%
ME 2	43 58 5	2010	Below Normal	February	--	27,133.1	27,129.6	3.5	0.0%	27,129.6	3.5	0.0%	27,129.6	3.5	0.0%	27,128.5	4.6	0.0%	27,128.5	4.6	0.0%	27,128.5	4.6	0.0%
ME 2	43 58 5	2010	Below Normal	March	--	28,740.7	28,738.4	2.3	0.0%	28,737.3	3.5	0.0%	28,737.3	3.5	0.0%	28,737.3	3.5	0.0%	28,737.3	3.5	0.0%	28,737.3	3.5	0.0%
ME 2	43 58 5	2010	Below Normal	April	--	39,833.3	39,831.0	2.3	0.0%	39,831.0	2.3	0.0%	39,831.0	2.3	0.0%	39,831.0	2.3	0.0%	39,829.9	3.5	0.0%	39,829.9	3.5	0.0%
ME 2	43 58 5	2010	Below Normal	May	--	20,129.6	20,122.7	6.9	0.0%	20,121.5	8.1	0.0%	20,121.5	8.1	0.0%	20,120.4	9.3	0.0%	20,120.4	9.3	0.0%	20,119.2	10.4	0.1%
ME 2	43 58 5	2010	Below Normal	June	--	9,240.6	9,230.7	10.0	0.1%	9,229.7	10.9	0.1%	9,228.7	11.9	0.1%	9,227.8	12.8	0.1%	9,226.9	13.8	0.1%	9,225.8	14.8	0.2%
ME 2	43 58 5	2010	Below Normal	July	--	1,448.6	1,440.4	8.2	0.6%	1,439.6	9.0	0.6%	1,438.8	9.8	0.7%	1,438.0	10.6	0.7%	1,437.2	11.5	0.8%	1,436.3	12.3	0.8%
ME 2	43 58 5	2010	Below Normal	August	--	560.2	553.0	7.2	1.3%	552.3	7.9	1.4%	551.6	8.6	1.5%	550.9	9.3	1.7%	550.3	9.9	1.8%	549.5	10.7	1.9%
ME 2	43 58 5	2010	Below Normal	September	Used in Summary Table Analysis	642.0	635.2	6.8	1.1%	634.5	7.5	1.2%	633.9	8.2	1.3%	633.2	8.9	1.4%	632.5	9.5	1.5%	631.8	10.2	1.6%
ME 2	43 58 5	2011	Wet	October	Used in Summary Table Analysis	9,549.9	9,545.0	4.9	0.1%	9,544.6	5.3	0.1%	9,544.1	5.8	0.1%	9,543.6	6.3	0.1%	9,543.2	6.7	0.1%	9,542.7	7.2	0.1%
ME 2	43 58 5	2011	Wet	November	Used in Summary Table Analysis	14,123.8	14,120.4	3.5	0.0%	14,120.4	3.5	0.0%	14,120.4	3.5	0.0%	14,119.2	4.6	0.0%	14,119.2	4.6	0.0%	14,119.2	4.6	0.0%
ME 2	43 58 5	2011	Wet	December	--	33,305.6	33,302.1	3.5	0.0%	33,302.1	3.5	0.0%	33,302.1	3.5	0.0%	33,302.1	3.5	0.0%	33,300.9	4.6	0.0%	33,300.9	4.6	0.0%
ME 2	43 58 5	2011	Wet	January	--	14,082.2	14,079.9	2.3	0.0%	14,078.7	3.5	0.0%	14,078.7	3.5	0.0%	14,078.7	3.5	0.0%	14,078.7	3.5	0.0%	14,077.5	4.6	0.0%
ME 2	43 58 5	2011	Wet	February	--	20,695.6	20,693.3	2.3	0.0%	20,693.3	2.3	0.0%	20,693.3	2.3	0.0%	20,692.1	3.5	0.0%	20,692.1	3.5	0.0%	20,692.1	3.5	0.0%
ME 2	43 58 5	2011	Wet	March	--	51,747.7	51,745.4	2.3	0.0%	51,744.2	3.5	0.0%	51,744.2	3.5	0.0%	51,744.2	3.5	0.0%	51,744.2	3.5	0.0%	51,744.2	3.5	0.0%
ME 2	43 58 5	2011	Wet	April	--	24,710.6	24,708.3	2.3	0.0%	24,708.3	2.3	0.0%	24,708.3	2.3	0.0%	24,708.3	2.3	0.0%	24,708.3	2.3	0.0%	24,707.2	3.5	0.0%
ME 2	43 58 5	2011	Wet	May	--	11,341.2	11,335.3	5.9	0.1%	11,334.7	6.5	0.1%	11,334.0	7.2	0.1%	11,333.4	7.8	0.1%	11,332.8	8.4	0.1%	11,332.2	9.0	0.1%
ME 2	43 58 5	2011	Wet	June	--	7,015.7	7,006.0	9.7	0.1%	7,005.1	10.6	0.2%	7,004.1	11.7	0.2%	7,003.1	12.6	0.2%	7,002.2	13.5	0.2%	7,001.3	14.5	0.2%
ME 2	43 58 5	2011	Wet	July	--	1,825.9	1,816.9	9.0	0.5%	1,816.0	10.0	0.5%	1,815.0	10.9	0.6%	1,814.2	11.7	0.6%	1,813.3	12.6	0.7%	1,812.4	13.5	0.7%
ME 2	43 58 5	2011	Wet	August	--	770.1	763.1	7.0	0.9%	762.4	7.7	1.0%	761.7	8.4	1.1%	761.0	9.1	1.2%	760.3	9.8	1.3%	759.6	10.5	1.4%
ME 2	43 58 5	2011	Wet	September	Used in Summary Table Analysis	426.8	420.7	6.1	1.4%	420.1	6.7	1.6%	419.5	7.3	1.7%	418.9	7.9	1.8%	418.3	8.5	2.0%	417.7	9.1	2.1%
ME 2	43 58 5	2012	Below Normal	October	Used in Summary Table Analysis	4,499.8	4,494.9	4.9	0.1%	4,494.4	5.3	0.1%	4,494.0	5.8	0.1%	4,493.5	6.3	0.1%	4,493.1	6.7	0.1%	4,492.6	7.2	0.2%
ME 2	43 58 5	2012	Below Normal	November	Used in Summary Table Analysis	8,150.3	8,146.6	3.7	0.0%	8,146.3	4.1	0.0%	8,145.8	4.5	0.1%	8,145.5	4.9	0.1%	8,145.1	5.2	0.1%	8,144.8	5.6	0.1%
ME 2	43 58 5	2012	Below Normal	December	--	5,145.5	5,142.4	3.1	0.1%	5,142.1	3.4	0.1%	5,141.8	3.7	0.1%	5,141.4	4.1	0.1%	5,141.2	4.3	0.1%	5,140.9	4.6	0.1%
ME 2	43 58 5	2012	Below Normal	January	--	19,860.0	19,857.6	2.3	0.0%	19,857.6	2.3	0.0%	19,857.6	2.3	0.0%	19,856.5	3.5	0.0%	19,856.5	3.5	0.0%	19,856.5	3.5	0.0%
ME 2	43 58 5	2012	Below Normal	February	--	18,140.0	18,137.7	2.3	0.0%	18,137.7	2.3	0.0%	18,137.7	2.3	0.0%	18,137.7	2.3	0.0%	18,136.6	3.5	0.0%	18,136.6	3.5	0.0%
ME 2	43 58 5	2012	Below Normal	March	--	45,123.8	45,121.5	2.3	0.0%	45,121.5	2.3	0.0%	45,120.4	3.5	0.0%	45,120.4	3.5	0.0%	45,120.4	3.5	0.0%	45,120.4	3.5	0.0%
ME 2	43 58 5	2012	Below Normal	April	--	26,750.0	26,747.7	2.3	0.0%	26,747.7	2.3	0.0%	26,747.7	2.3	0.0%	26,747.7	2.3	0.0%	26,747.7	2.3	0.0%	26,746.5	3.5	0.0%
ME 2	43 58 5	2012	Below Normal	May	--	7,457.3	7,451.3	6.0	0.1%	7,450.6	6.7	0.1%	7,450.0	7.3	0.1%	7,449.3	8.0	0.1%	7,448.8	8.4	0.1%	7,448.3	9.0	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	43 58 5	2012	Below Normal	June	--	5,475.7	5,465.9	9.8	0.2%	5,464.8	10.9	0.2%	5,463.9	11.8	0.2%	5,463.0	12.7	0.2%	5,461.9	13.8	0.3%	5,461.0	14.7	0.3%
ME 2	43 58 5	2012	Below Normal	July	--	2,199.8	2,190.9	8.9	0.4%	2,189.9	9.8	0.4%	2,189.1	10.6	0.5%	2,188.2	11.6	0.5%	2,187.3	12.5	0.6%	2,186.5	13.3	0.6%
ME 2	43 58 5	2012	Below Normal	August	--	384.1	377.5	6.7	1.7%	376.8	7.3	1.9%	376.2	7.9	2.1%	375.5	8.6	2.2%	374.9	9.2	2.4%	374.2	9.9	2.6%
ME 2	43 58 5	2012	Below Normal	September	Used in Summary Table Analysis	242.8	237.1	5.7	2.3%	236.6	6.3	2.6%	236.0	6.9	2.8%	235.4	7.4	3.1%	234.9	8.0	3.3%	234.3	8.6	3.5%
ME 2	43 58 5	2013	Below Normal	October	Used in Summary Table Analysis	1,885.2	1,880.3	4.9	0.3%	1,879.9	5.3	0.3%	1,879.4	5.8	0.3%	1,878.8	6.4	0.3%	1,878.4	6.8	0.4%	1,877.9	7.3	0.4%
ME 2	43 58 5	2013	Below Normal	November	Used in Summary Table Analysis	14,523.1	14,519.7	3.5	0.0%	14,518.5	4.6	0.0%	14,518.5	4.6	0.0%	14,518.5	4.6	0.0%	14,517.4	5.8	0.0%	14,517.4	5.8	0.0%
ME 2	43 58 5	2013	Below Normal	December	--	59,625.0	59,621.5	3.5	0.0%	59,621.5	3.5	0.0%	59,620.4	4.6	0.0%	59,620.4	4.6	0.0%	59,620.4	4.6	0.0%	59,620.4	4.6	0.0%
ME 2	43 58 5	2013	Below Normal	January	--	22,093.8	22,091.4	2.3	0.0%	22,091.4	2.3	0.0%	22,090.3	3.5	0.0%	22,090.3	3.5	0.0%	22,090.3	3.5	0.0%	22,090.3	3.5	0.0%
ME 2	43 58 5	2013	Below Normal	February	--	8,796.3	8,793.8	2.5	0.0%	8,793.5	2.8	0.0%	8,793.3	3.0	0.0%	8,792.9	3.4	0.0%	8,792.7	3.6	0.0%	8,792.5	3.8	0.0%
ME 2	43 58 5	2013	Below Normal	March	--	10,255.1	10,252.8	2.3	0.0%	10,252.5	2.5	0.0%	10,252.3	2.8	0.0%	10,252.1	3.0	0.0%	10,251.9	3.2	0.0%	10,251.5	3.6	0.0%
ME 2	43 58 5	2013	Below Normal	April	--	8,269.4	8,263.7	5.8	0.1%	8,263.1	6.4	0.1%	8,262.5	6.9	0.1%	8,261.9	7.5	0.1%	8,261.3	8.1	0.1%	8,260.9	8.6	0.1%
ME 2	43 58 5	2013	Below Normal	May	--	4,402.3	4,395.5	6.8	0.2%	4,394.8	7.5	0.2%	4,394.1	8.2	0.2%	4,393.5	8.8	0.2%	4,392.8	9.5	0.2%	4,392.1	10.2	0.2%
ME 2	43 58 5	2013	Below Normal	June	--	2,102.1	2,093.3	8.8	0.4%	2,092.5	9.6	0.5%	2,091.6	10.5	0.5%	2,090.6	11.5	0.5%	2,089.8	12.3	0.6%	2,088.9	13.2	0.6%
ME 2	43 58 5	2013	Below Normal	July	--	715.5	707.7	7.8	1.1%	706.9	8.6	1.2%	706.1	9.4	1.3%	705.3	10.2	1.4%	704.5	10.9	1.5%	703.8	11.7	1.6%
ME 2	43 58 5	2013	Below Normal	August	--	335.2	328.1	7.1	2.1%	327.4	7.8	2.3%	326.7	8.5	2.5%	326.0	9.2	2.7%	325.3	9.9	2.9%	324.6	10.6	3.2%
ME 2	43 58 5	2013	Below Normal	September	Used in Summary Table Analysis	4,743.1	4,735.6	7.4	0.2%	4,735.0	8.1	0.2%	4,734.1	8.9	0.2%	4,733.4	9.6	0.2%	4,732.8	10.3	0.2%	4,731.9	11.1	0.2%
ME 2	43 58 5	2014	Critical	October	Used in Summary Table Analysis	281.3	276.3	5.0	1.8%	275.8	5.4	1.9%	275.3	5.9	2.1%	274.8	6.4	2.3%	274.3	6.9	2.5%	273.9	7.4	2.6%
ME 2	43 58 5	2014	Critical	November	Used in Summary Table Analysis	1,516.0	1,512.2	3.8	0.3%	1,511.8	4.2	0.3%	1,511.5	4.5	0.3%	1,511.0	5.0	0.3%	1,510.6	5.3	0.4%	1,510.3	5.7	0.4%
ME 2	43 58 5	2014	Critical	December	--	1,577.4	1,574.3	3.1	0.2%	1,574.0	3.5	0.2%	1,573.6	3.8	0.2%	1,573.3	4.2	0.3%	1,573.0	4.4	0.3%	1,572.7	4.7	0.3%
ME 2	43 58 5	2014	Critical	January	--	2,798.4	2,795.6	2.8	0.1%	2,795.4	3.0	0.1%	2,795.0	3.4	0.1%	2,794.8	3.6	0.1%	2,794.4	3.9	0.1%	2,794.2	4.2	0.1%
ME 2	43 58 5	2014	Critical	February	--	15,680.6	15,678.2	2.3	0.0%	15,678.2	2.3	0.0%	15,678.2	2.3	0.0%	15,678.2	2.3	0.0%	15,677.1	3.5	0.0%	15,677.1	3.5	0.0%
ME 2	43 58 5	2014	Critical	March	--	31,391.2	31,388.9	2.3	0.0%	31,388.9	2.3	0.0%	31,388.9	2.3	0.0%	31,388.9	2.3	0.0%	31,388.9	2.3	0.0%	31,387.7	3.5	0.0%
ME 2	43 58 5	2014	Critical	April	--	12,958.3	12,951.4	6.9	0.1%	12,951.4	6.9	0.1%	12,950.2	8.1	0.1%	12,950.2	8.1	0.1%	12,949.1	9.3	0.1%	12,949.1	9.3	0.1%
ME 2	43 58 5	2014	Critical	May	--	5,169.0	5,161.7	7.3	0.1%	5,160.9	8.1	0.2%	5,160.2	8.8	0.2%	5,159.5	9.5	0.2%	5,158.7	10.3	0.2%	5,158.0	11.0	0.2%
ME 2	43 58 5	2014	Critical	June	--	1,191.4	1,180.8	10.6	0.9%	1,179.7	11.7	1.0%	1,178.7	12.7	1.1%	1,177.7	13.8	1.2%	1,176.6	14.8	1.2%	1,175.6	15.9	1.3%
ME 2	43 58 5	2014	Critical	July	--	542.7	533.8	9.0	1.7%	532.9	9.9	1.8%	532.0	10.8	2.0%	531.1	11.6	2.1%	530.2	12.5	2.3%	529.3	13.4	2.5%
ME 2	43 58 5	2014	Critical	August	--	343.0	334.7	8.3	2.4%	333.9	9.1	2.7%	333.1	9.9	2.9%	332.2	10.8	3.1%	331.4	11.6	3.4%	330.6	12.4	3.6%
ME 2	43 58 5	2014	Critical	September	Used in Summary Table Analysis	2,553.7	2,545.5	8.2	0.3%	2,544.7	9.0	0.4%	2,543.9	9.8	0.4%	2,543.1	10.6	0.4%	2,542.1	11.6	0.5%	2,541.3	12.4	0.5%
ME 2	43 58 5	2015	Dry	October	Used in Summary Table Analysis	11,281.3	11,275.3	5.9	0.1%	11,274.8	6.5	0.1%	11,274.2	7.1	0.1%	11,272.9	8.3	0.1%	11,272.3	8.9	0.1%	11,271.8	9.5	0.1%
ME 2	43 58 5	2015	Dry	November	Used in Summary Table Analysis	8,955.0	8,950.6	4.4	0.0%	8,950.1	4.9	0.1%	8,949.7	5.3	0.1%	8,949.3	5.7	0.1%	8,948.8	6.1	0.1%	8,948.4	6.6	0.1%
ME 2	43 58 5	2015	Dry	December	--	32,299.8	32,296.3	3.5	0.0%	32,295.1	4.6	0.0%	32,295.1	4.6	0.0%	32,295.1	4.6	0.0%	32,294.0	5.8	0.0%	32,294.0	5.8	0.0%
ME 2	43 58 5	2015	Dry	January	--	14,530.1	14,526.6	3.5	0.0%	14,526.6	3.5	0.0%	14,525.5	4.6	0.0%	14,525.5	4.6	0.0%	14,525.5	4.6	0.0%	14,525.5	4.6	0.0%
ME 2	43 58 5	2015	Dry	February	--	27,110.0	27,107.6	2.3	0.0%	27,106.5	3.5	0.0%	27,106.5	3.5	0.0%	27,106.5	3.5	0.0%	27,106.5	3.5	0.0%	27,105.3	4.6	0.0%
ME 2	43 58 5	2015	Dry	March	--	11,542.0	11,539.6	2.4	0.0%	11,539.4	2.7	0.0%	11,539.1	2.9	0.0%	11,538.9	3.1	0.0%	11,538.7	3.4	0.0%	11,538.3	3.7	0.0%
ME 2	43 58 5	2015	Dry	April	--	8,305.8	8,299.4	6.4	0.1%	8,298.8	6.9	0.1%	8,298.3	7.5	0.1%	8,297.6	8.2	0.1%	8,297.0	8.8	0.1%	8,296.3	9.5	0.1%
ME 2	43 58 5	2015	Dry	May	--	1,508.7	1,501.4	7.3	0.5%	1,500.6	8.1	0.5%	1,499.9	8.8	0.6%	1,499.2	9.5	0.6%	1,498.4	10.3	0.7%	1,497.7	11.0	0.7%
ME 2	43 58 5	2015	Dry	June	--	650.3	640.4	9.9	1.5%	639.4	10.9	1.7%	638.4	11.9	1.8%	637.4	12.9	2.0%	636.4	13.9	2.1%	635.5	14.9	2.3%
ME 2	43 58 5	2015	Dry	July	--	266.0	257.0	9.0	3.4%	256.1	9.9	3.7%	255.2	10.8	4.1%	254.3	11.7	4.4%	253.4	12.6	4.7%	252.5	13.5	5.1%
ME 2	43 58 5	2015	Dry	August	--	162.0	153.7	8.4	5.2%	152.8	9.2	5.7%	152.0	10.0	6.2%	151.2	10.9	6.7%	150.3	11.7	7.2%	149.5	12.5	7.7%
ME 2	43 58 5	2015	Dry	September	Used in Summary Table Analysis	117.5	110.1	7.3	6.2%	109.4	8.0	6.8%	108.7	8.7	7.4%	108.0	9.5	8.1%	107.2	10.2	8.7%	106.5	10.9	9.3%
ME 2	43 58 5	2016	Above Normal	October	Used in Summary Table Analysis	83.2	77.0	6.2	7.5%	76.3	6.9	8.3%	75.7	7.5	9.0%	75.6	7.5	9.0%	75.2	8.0	9.6%	74.2	9.0	10.8%
ME 2	43 58 5	2016	Above Normal	November	Used in Summary Table Analysis	3,793.5	3,789.1	4.4	0.1%	3,788.7	4.9	0.1%	3,788.2	5.3	0.1%	3,787.7	5.8	0.2%	3,787.3	6.3	0.2%	3,786.9	6.6	0.2%
ME 2	43 58 5	2016	Above Normal	December	--	36,245.4	36,240.7	4.6	0.0%	36,240.7	4.6	0.0%	36,240.7	4.6	0.0%	36,239.6	5.8	0.0%	36,239.6	5.8	0.0%	36,239.6	5.8	0.0%
ME 2	43 58 5	2016	Above Normal	January	--	56,924.8	56,922.5	2.3	0.0%	56,921.3	3.5	0.0%	56,921.3	3.5	0.0%	56,921.3	3.5	0.0%	56,920.1	4.6	0.0%	56,920.1	4.6	0.0%
ME 2	43 58 5	2016	Above Normal	February	--	24,204.9	24,202.5	2.3	0.0%	24,201.4	3.5	0.0%	24,201.4	3.5	0.0%	24,201.4	3.5	0.0%	24,201.4	3.5	0.0%	24,201.4	3.5	0.0%
ME 2	43 58 5	2016	Above Normal	March	--	41,596.1	41,593.8	2.3	0.0%	41,593.8	2.3	0.0%	41,592.6	3.5	0.0%	41,592.6	3.5	0.0%	41,592.6	3.5	0.0%	41,592.6	3.5	0.0%
ME 2	43 58 5	2016	Above Normal	April	--	18,487.3	18,485.0	2.3	0.0%	18,485.0	2.3	0.0%	18,483.8	3.5	0.0%	18,483.8	3.5	0.0%	18,483.8	3.5	0.0%	18,483.8	3.5	0.0%
ME 2	43 58 5	2016	Above Normal	May	--	5,198.7	5,195.6	3.1	0.1%	5,195.3	3.5	0.1%	5,194.9	3.8	0.1%	5,194.6	4.2	0.1%	5,194.2	4.5	0.1%	5,193.9	4.9	0.1%
ME 2	43 58 5	2016	Above Normal	June	--	1,503.7	1,496.2	7.5	0.5%	1,495.5	8.2	0.5%	1,494.8	8.9	0.6%	1,494.0	9.7	0.6%	1,493.3	10.4	0.7%	1,492.6	11.1	0.7%
ME 2	43 58 5	2016	Above Normal	July	--	816.6	808.8	7.8	1.0%	808.0	8.5	1.0%	807.3	9.3	1.1%	806.5	10.1	1.2%	805.7	10.9	1.3%	804.9	11.6	1.4%
ME 2	43 58 5	2016	Above Normal	August	--	484.8	477.5	7.2	1.5%	476.8	8.0	1.6%	476.1	8.7	1.8%	475.4	9.4	1.9%	474.6	10.1	2.1%	473.9	10.8	2.2%
ME 2	43 58 5	2016	Above Normal	September	Used in Summary Table Analysis	321.6	315.5	6.1	1.9%	314.9	6.7	2.1%	314.3	7.3	2.3%	313.7	8.0	2.5%	313.1	8.6	2.7%	312.5	9.2	2.9%
ME 2	43 58 5	2017	Wet	October	Used in Summary Table Analysis	18,137.7	18,133.1	4.6	0.0%	18,133.1	4.6	0.0%	18,131.9	5.8	0.0%	18,131.9	5.8	0.0%	18,130.8	6.9	0.0%	18,130.8	6.9	0.0%
ME 2	43 58 5	2017	Wet	November	Used in Summary Table Analysis	18,660.9	18,657.4	3.5	0.0%	18,657.4	3.5	0.0%	18,657.4	3.5	0.0%	18,656.3	4.6	0.0%	18,656.3	4.6	0.0%	18,656.3	4.6	0.0%
ME 2	43 58 5	2017	Wet	December	--	23,858.8	23,855.3	3.5	0.0%	23,855.3	3.5	0.0%	23,854.2	4.6	0.0%	23,854.2	4.6	0.0%	23,854.2	4.6	0.0%	23,854.2	4.6	0.0%
ME 2	43 58 5	2017	Wet	January	--	106,151.6	106,149.3	2.3	0.0%	106,148.1	3.5	0.0%	106,148.1	3.5	0.0%	106,148.1	3.5	0.0%	106,148.1	3.5	0.0%	106,147.0	4.6	0.0%
ME 2	43 58 5	2017	Wet	February	--	81,398.1	81,395.8	2.3	0.0%	81,394.7	3.5	0.0%	81,394.7	3.5	0.0%	81,394.7	3.5	0.0%	81,394.7	3.5	0.0%	81,393.5	4.6	0.0%
ME 2	43 58 5	2017	Wet	March	--	27,136.6	27,134.3	2.3	0.0%	27,134.3	2.3	0.0%	27,134.3	2.3	0.0%	27,134.3	2.3	0.0%	27,133.1	3.5	0.0%	27,133.1	3.5	0.0%
ME 2	43 58 5	2017	Wet	April	--	22,790.5	22,788.2	2.3	0.0%	22,788.2	2.3	0.0%	22,788.2	2.3	0.0%	22,788.2	2.3	0.0%	22,788.2	2.3	0.0%	22,787.0	3.5	0.0%
ME 2	43 58 5	2017	Wet	May	--	6,269.3	6,266.1	3.2	0.1%	6,265.7	3.6	0.1%	6,265.4	3.9	0.1%	6,265.0	4.3	0.1%	6,264.7	4.6	0.1%	6,264.5	4.9	0.1%
ME 2	43 58 5	2017	Wet	June	--	2,099.4	2,091.7	7.8	0.4%	2,090.9	8.6	0.4%	2,090.0	9.4	0.4%	2,089.4	10.1	0.5%	2,088.5	10.9	0.5%	2,087.7	11.7	0.6%
ME 2	43 58 5	2017	Wet	July	--	924.7	916.9	7.8	0.8%	916.2	8.6	0.9%	915.4	9.4	1.0%	914.6	10.1	1.1%	913.8	10.9	1.2%	913.1	11.7	1.3%
ME 2	43 58 5	2017	Wet	August	--	497.0	489.8	7.2	1.5%	489.1	7.9	1.6%	488.4	8.6	1.7%	487.7	9.4	1.9%	487.0	10.1	2.0%	486.3	10.8	2.2%
ME 2	43 58 5	2017	Wet	September	Used in Summary Table Analysis	315.1	308.5	6.6	2.1%	307.8	7.3	2.3%	307.2	8.0	2.5%	306.5	8.6	2.7%	305.8	9.3	2.9%	305.2	9.9	3.2%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	43 58 5	2018	Above Normal	October	Used in Summary Table Analysis	267.9	263.8	4.1	1.5%	263.0	4.9	1.8%	262.3	5.6	2.1%	261.6	6.3	2.4%	261.0	6.9	2.6%	260.5	7.4	2.8%
ME 2	43 58 5	2018	Above Normal	November	Used in Summary Table Analysis	10,619.9	10,616.3	3.6	0.0%	10,616.0	3.9	0.0%	10,615.6	4.3	0.0%	10,615.3	4.6	0.0%	10,614.8	5.1	0.0%	10,614.5	5.4	0.1%
ME 2	43 58 5	2018	Above Normal	December	--	5,431.1	5,428.1	3.0	0.1%	5,427.8	3.4	0.1%	5,427.5	3.6	0.1%	5,427.2	3.9	0.1%	5,427.0	4.2	0.1%	5,426.6	4.5	0.1%
ME 2	43 58 5	2018	Above Normal	January	--	17,483.8	17,481.5	2.3	0.0%	17,481.5	2.3	0.0%	17,480.3	3.5	0.0%	17,480.3	3.5	0.0%	17,480.3	3.5	0.0%	17,480.3	3.5	0.0%
ME 2	43 58 5	2018	Above Normal	February	--	7,584.4	7,582.2	2.2	0.0%	7,581.9	2.4	0.0%	7,581.7	2.7	0.0%	7,581.5	2.9	0.0%	7,581.3	3.1	0.0%	7,581.0	3.4	0.0%
ME 2	43 58 5	2018	Above Normal	March	--	20,509.3	20,508.1	1.2	0.0%	20,506.9	2.3	0.0%	20,506.9	2.3	0.0%	20,506.9	2.3	0.0%	20,506.9	2.3	0.0%	20,506.9	2.3	0.0%
ME 2	43 58 5	2018	Above Normal	April	--	31,976.9	31,974.5	2.3	0.0%	31,974.5	2.3	0.0%	31,974.5	2.3	0.0%	31,973.4	3.5	0.0%	31,973.4	3.5	0.0%	31,973.4	3.5	0.0%
ME 2	43 58 5	2018	Above Normal	May	--	6,981.7	6,975.8	5.9	0.1%	6,975.2	6.5	0.1%	6,974.7	7.1	0.1%	6,974.1	7.6	0.1%	6,973.5	8.2	0.1%	6,972.9	8.8	0.1%
ME 2	43 58 5	2018	Above Normal	June	--	1,907.3	1,899.8	7.5	0.4%	1,899.0	8.3	0.4%	1,898.3	9.0	0.5%	1,897.6	9.7	0.5%	1,896.8	10.5	0.6%	1,896.1	11.2	0.6%
ME 2	43 58 5	2018	Above Normal	July	--	773.8	766.0	7.8	1.0%	765.3	8.5	1.1%	764.5	9.3	1.2%	763.7	10.1	1.3%	762.9	10.9	1.4%	762.2	11.6	1.5%
ME 2	43 58 5	2018	Above Normal	August	--	435.1	428.2	6.9	1.6%	427.5	7.5	1.7%	426.9	8.2	1.9%	426.2	8.9	2.1%	425.5	9.6	2.2%	424.8	10.3	2.4%
ME 2	43 58 5	2018	Above Normal	September	Used in Summary Table Analysis	293.3	286.7	6.6	2.2%	286.0	7.3	2.5%	285.3	7.9	2.7%	284.7	8.6	2.9%	284.0	9.2	3.2%	283.4	9.9	3.4%
ME 2	43 58 5	2019	Below Normal	October	Used in Summary Table Analysis	203.1	198.1	4.9	2.4%	197.6	5.4	2.7%	197.2	5.9	2.9%	196.6	6.4	3.2%	196.2	6.8	3.4%	195.8	7.3	3.6%
ME 2	43 58 5	2019	Below Normal	November	Used in Summary Table Analysis	6,511.2	6,507.6	3.6	0.1%	6,507.3	3.9	0.1%	6,506.8	4.4	0.1%	6,506.5	4.7	0.1%	6,506.1	5.1	0.1%	6,505.8	5.4	0.1%
ME 2	43 58 5	2019	Below Normal	December	--	14,473.4	14,469.9	3.5	0.0%	14,469.9	3.5	0.0%	14,469.9	3.5	0.0%	14,469.9	3.5	0.0%	14,468.8	4.6	0.0%	14,468.8	4.6	0.0%
ME 2	43 58 5	2019	Below Normal	January	--	34,828.7	34,826.4	2.3	0.0%	34,825.2	3.5	0.0%	34,825.2	3.5	0.0%	34,825.2	3.5	0.0%	34,825.2	3.5	0.0%	34,824.1	4.6	0.0%
ME 2	43 58 5	2019	Below Normal	February	--	141,504.6	141,504.6	0.0	0.0%	141,504.6	0.0	0.0%	141,504.6	0.0	0.0%	141,504.6	0.0	0.0%	141,504.6	0.0	0.0%	141,504.6	0.0	0.0%
ME 2	43 58 5	2019	Below Normal	March	--	42,105.3	42,103.0	2.3	0.0%	42,101.9	3.5	0.0%	42,101.9	3.5	0.0%	42,101.9	3.5	0.0%	42,101.9	3.5	0.0%	42,101.9	3.5	0.0%
ME 2	43 58 5	2019	Below Normal	April	--	15,214.1	15,211.8	2.3	0.0%	15,211.8	2.3	0.0%	15,211.8	2.3	0.0%	15,211.8	2.3	0.0%	15,211.8	2.3	0.0%	15,210.6	3.5	0.0%
ME 2	43 58 5	2019	Below Normal	May	--	16,643.5	16,637.7	5.8	0.0%	16,636.6	6.9	0.0%	16,636.6	6.9	0.0%	16,635.4	8.1	0.0%	16,635.4	8.1	0.0%	16,634.3	9.3	0.1%
ME 2	43 58 5	2019	Below Normal	June	--	4,244.3	4,236.2	8.1	0.2%	4,235.3	9.0	0.2%	4,234.5	9.8	0.2%	4,233.7	10.6	0.3%	4,232.9	11.5	0.3%	4,232.1	12.3	0.3%
ME 2	43 58 5	2019	Below Normal	July	--	1,351.2	1,343.4	7.8	0.6%	1,342.6	8.6	0.6%	1,341.8	9.4	0.7%	1,341.1	10.1	0.7%	1,340.3	10.9	0.8%	1,339.5	11.7	0.9%
ME 2	43 58 5	2019	Below Normal	August	--	587.4	580.4	7.0	1.2%	579.7	7.7	1.3%	579.0	8.4	1.4%	578.3	9.1	1.6%	577.6	9.8	1.7%	576.9	10.5	1.8%
ME 2	43 58 5	2019	Below Normal	September	Used in Summary Table Analysis	455.5	448.9	6.6	1.4%	448.3	7.2	1.6%	447.6	7.9	1.7%	447.0	8.5	1.9%	446.3	9.2	2.0%	445.7	9.8	2.2%
ME 2	43 58 5	2020	Dry	October	Used in Summary Table Analysis	351.1	346.6	4.6	1.3%	346.1	5.0	1.4%	345.6	5.5	1.6%	345.2	5.9	1.7%	344.7	6.4	1.8%	344.2	6.9	2.0%
ME 2	43 58 5	2020	Dry	November	Used in Summary Table Analysis	306.9	303.7	3.2	1.1%	303.3	3.6	1.2%	303.0	3.9	1.3%	302.7	4.2	1.4%	302.3	4.6	1.5%	302.0	4.9	1.6%
ME 2	43 58 5	2020	Dry	December	--	13,003.5	13,000.0	3.5	0.0%	13,000.0	3.5	0.0%	13,000.0	3.5	0.0%	12,998.8	4.6	0.0%	12,998.8	4.6	0.0%	12,998.8	4.6	0.0%
ME 2	43 58 5	2020	Dry	January	--	22,107.6	22,105.3	2.3	0.0%	22,105.3	2.3	0.0%	22,105.3	2.3	0.0%	22,104.2	3.5	0.0%	22,104.2	3.5	0.0%	22,104.2	3.5	0.0%
ME 2	43 58 5	2020	Dry	February	--	7,405.9	7,403.7	2.2	0.0%	7,403.4	2.5	0.0%	7,403.1	2.8	0.0%	7,402.9	3.0	0.0%	7,402.7	3.2	0.0%	7,402.4	3.5	0.0%
ME 2	43 58 5	2020	Dry	March	--	7,205.2	7,203.0	2.2	0.0%	7,202.9	2.3	0.0%	7,202.7	2.5	0.0%	7,202.4	2.8	0.0%	7,202.2	3.0	0.0%	7,202.0	3.2	0.0%
ME 2	43 58 5	2020	Dry	April	--	5,439.7	5,433.6	6.1	0.1%	5,433.0	6.7	0.1%	5,432.4	7.3	0.1%	5,431.8	7.9	0.1%	5,431.1	8.6	0.2%	5,430.6	9.1	0.2%
ME 2	43 58 5	2020	Dry	May	--	7,320.9	7,313.8	7.2	0.1%	7,313.0	8.0	0.1%	7,312.3	8.7	0.1%	7,311.6	9.4	0.1%	7,310.8	10.2	0.1%	7,310.1	10.9	0.1%
ME 2	43 58 5	2020	Dry	June	--	2,104.4	2,094.2	10.2	0.5%	2,093.3	11.1	0.5%	2,092.2	12.2	0.6%	2,091.2	13.2	0.6%	2,090.2	14.2	0.7%	2,089.2	15.2	0.7%
ME 2	43 58 5	2020	Dry	July	--	791.3	782.3	9.0	1.1%	781.4	9.9	1.3%	780.5	10.8	1.4%	779.6	11.7	1.5%	778.7	12.6	1.6%	777.8	13.5	1.7%
ME 2	43 58 5	2020	Dry	August	--	393.5	385.0	8.5	2.2%	384.2	9.4	2.4%	383.3	10.2	2.6%	382.5	11.1	2.8%	381.6	11.9	3.0%	380.8	12.7	3.2%
ME 2	43 58 5	2020	Dry	September	Used in Summary Table Analysis	243.2	235.8	7.4	3.0%	235.1	8.1	3.3%	234.4	8.9	3.6%	233.6	9.6	3.9%	232.9	10.3	4.2%	232.1	11.1	4.5%
ME 2	42 59 6	2000	Above Normal	October	Used in Summary Table Analysis	808.1	803.1	5.0	0.6%	802.6	5.5	0.7%	802.1	6.0	0.7%	801.6	6.5	0.8%	801.1	7.0	0.9%	800.6	7.5	0.9%
ME 2	42 59 6	2000	Above Normal	November	Used in Summary Table Analysis	11,921.3	11,917.8	3.5	0.0%	11,916.7	4.6	0.0%	11,916.7	4.6	0.0%	11,915.5	5.8	0.0%	11,915.5	5.8	0.0%	11,915.5	5.8	0.0%
ME 2	42 59 6	2000	Above Normal	December	--	10,706.8	10,703.7	3.1	0.0%	10,703.4	3.5	0.0%	10,703.0	3.8	0.0%	10,702.8	4.1	0.0%	10,702.4	4.4	0.0%	10,702.1	4.7	0.0%
ME 2	42 59 6	2000	Above Normal	January	--	28,241.9	28,239.6	2.3	0.0%	28,238.4	3.5	0.0%	28,238.4	3.5	0.0%	28,238.4	3.5	0.0%	28,238.4	3.5	0.0%	28,237.3	4.6	0.0%
ME 2	42 59 6	2000	Above Normal	February	--	36,822.9	36,820.6	2.3	0.0%	36,820.6	2.3	0.0%	36,820.6	2.3	0.0%	36,820.6	2.3	0.0%	36,819.4	3.5	0.0%	36,819.4	3.5	0.0%
ME 2	42 59 6	2000	Above Normal	March	--	18,250.0	18,247.7	2.3	0.0%	18,247.7	2.3	0.0%	18,247.7	2.3	0.0%	18,247.7	2.3	0.0%	18,246.5	3.5	0.0%	18,246.5	3.5	0.0%
ME 2	42 59 6	2000	Above Normal	April	--	12,265.0	12,263.9	1.2	0.0%	12,262.7	2.3	0.0%	12,262.7	2.3	0.0%	12,262.7	2.3	0.0%	12,262.7	2.3	0.0%	12,262.7	2.3	0.0%
ME 2	42 59 6	2000	Above Normal	May	--	7,054.6	7,048.4	6.3	0.1%	7,047.8	6.8	0.1%	7,047.2	7.4	0.1%	7,046.5	8.1	0.1%	7,045.9	8.7	0.1%	7,045.4	9.3	0.1%
ME 2	42 59 6	2000	Above Normal	June	--	2,597.7	2,588.0	9.7	0.4%	2,587.0	10.6	0.4%	2,586.0	11.7	0.5%	2,585.1	12.6	0.5%	2,584.1	13.5	0.5%	2,583.1	14.6	0.6%
ME 2	42 59 6	2000	Above Normal	July	--	987.2	979.1	8.1	0.8%	978.3	8.9	0.9%	977.5	9.7	1.0%	976.7	10.5	1.1%	975.9	11.3	1.1%	975.1	12.1	1.2%
ME 2	42 59 6	2000	Above Normal	August	--	516.8	509.5	7.3	1.4%	508.8	8.0	1.5%	508.1	8.7	1.7%	507.3	9.4	1.8%	506.6	10.1	2.0%	505.9	10.9	2.1%
ME 2	42 59 6	2000	Above Normal	September	Used in Summary Table Analysis	291.3	285.1	6.2	2.1%	284.5	6.8	2.3%	283.9	7.4	2.6%	283.2	8.1	2.8%	282.6	8.7	3.0%	282.0	9.3	3.2%
ME 2	42 59 6	2001	Dry	October	Used in Summary Table Analysis	3,772.2	3,767.4	4.9	0.1%	3,766.8	5.4	0.1%	3,766.3	5.9	0.2%	3,765.9	6.4	0.2%	3,765.4	6.8	0.2%	3,764.8	7.4	0.2%
ME 2	42 59 6	2001	Dry	November	Used in Summary Table Analysis	6,052.2	6,048.5	3.7	0.1%	6,048.1	4.1	0.1%	6,047.7	4.5	0.1%	6,047.3	4.9	0.1%	6,047.0	5.2	0.1%	6,046.5	5.7	0.1%
ME 2	42 59 6	2001	Dry	December	--	8,766.2	8,763.1	3.1	0.0%	8,762.7	3.5	0.0%	8,762.5	3.7	0.0%	8,762.2	4.1	0.0%	8,761.8	4.4	0.1%	8,761.5	4.7	0.1%
ME 2	42 59 6	2001	Dry	January	--	12,649.3	12,647.0	2.3	0.0%	12,647.0	2.3	0.0%	12,647.0	2.3	0.0%	12,645.8	3.5	0.0%	12,645.8	3.5	0.0%	12,645.8	3.5	0.0%
ME 2	42 59 6	2001	Dry	February	--	17,384.3	17,381.9	2.3	0.0%	17,380.8	3.5	0.0%	17,380.8	3.5	0.0%	17,380.8	3.5	0.0%	17,380.8	3.5	0.0%	17,379.6	4.6	0.0%
ME 2	42 59 6	2001	Dry	March	--	12,253.5	12,251.2	2.3	0.0%	12,250.0	3.5	0.0%	12,250.0	3.5	0.0%	12,250.0	3.5	0.0%	12,250.0	3.5	0.0%	12,250.0	3.5	0.0%
ME 2	42 59 6	2001	Dry	April	--	10,925.8	10,919.3	6.5	0.1%	10,918.8	7.1	0.1%	10,918.1	7.8	0.1%	10,917.5	8.3	0.1%	10,916.8	9.0	0.1%	10,916.2	9.6	0.1%
ME 2	42 59 6	2001	Dry	May	--	2,638.8	2,631.1	7.6	0.3%	2,630.4	8.3	0.3%	2,629.6	9.1	0.3%	2,628.9	9.8	0.4%	2,628.1	10.6	0.4%	2,627.4	11.3	0.4%
ME 2	42 59 6	2001	Dry	June	--	2,620.3	2,609.4	10.9	0.4%	2,608.3	11.9	0.5%	2,607.3	13.0	0.5%	2,606.1	14.1	0.5%	2,605.1	15.2	0.6%	2,604.1	16.2	0.6%
ME 2	42 59 6	2001	Dry	July	--	718.6	709.3	9.3	1.3%	708.4	10.2	1.4%	707.4	11.2	1.6%	706.5	12.1	1.7%	705.6	13.0	1.8%	704.7	13.9	1.9%
ME 2	42 59 6	2001	Dry	August	--	170.0	161.1	8.8	5.2%	160.3	9.7	5.7%	159.4	10.6	6.2%	158.5	11.4	6.7%	157.6	12.3	7.2%	156.8	13.2	7.8%
ME 2	42 59 6	2001	Dry	September	Used in Summary Table Analysis	92.4	84.8	7.6	8.3%	84.0	8.4	9.1%	83.2	9.2	9.9%	82.5	9.9	10.8%	81.7	10.7	11.6%	80.9	11.5	12.4%
ME 2	42 59 6	2002	Below Normal	October	Used in Summary Table Analysis	261.2	254.9	6.3	2.4%	254.3	6.9	2.6%	253.6	7.5	2.9%	253.0	8.2	3.1%	252.4	8.8	3.4%	251.7	9.4	3.6%
ME 2	42 59 6	2002	Below Normal	November	Used in Summary Table Analysis	11,929.4	11,924.8	4.6	0.0%	11,923.6	5.8	0.0%	11,923.6	5.8	0.0%	11,922.5	6.9	0.1%	11,922.5	6.9	0.1%	11,922.5	6.9	0.1%
ME 2	42 59 6	2002	Below Normal	December	--	35,381.9	35,377.3	4.6	0.0%	35,377.3	4.6	0.0%	35,377.3	4.6	0.0%	35,376.2	5.8	0.0%	35,376.2	5.8	0.0%	35,376.2	5.8	0.0%
ME 2	42 59 6	2002	Below Normal	January	--	30,687.5	30,684.0	3.5	0.0%	30,682.9	4.6	0.0%	30,682.9	4.6	0.0%	30,682.9	4.6	0.0%	30,681.7	5.8	0.0%	30,681.7	5.8	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	42 59 6	2002	Below Normal	February	--	24,563.7	24,561.3	2.3	0.0%	24,560.2	3.5	0.0%	24,560.2	3.5	0.0%	24,560.2	3.5	0.0%	24,560.2	3.5	0.0%	24,559.0	4.6	0.0%
ME 2	42 59 6	2002	Below Normal	March	--	17,692.1	17,688.7	3.5	0.0%	17,688.7	3.5	0.0%	17,688.7	3.5	0.0%	17,688.7	3.5	0.0%	17,687.5	4.6	0.0%	17,687.5	4.6	0.0%
ME 2	42 59 6	2002	Below Normal	April	--	9,893.3	9,887.0	6.3	0.1%	9,886.3	6.9	0.1%	9,885.8	7.5	0.1%	9,885.1	8.2	0.1%	9,884.5	8.8	0.1%	9,883.9	9.4	0.1%
ME 2	42 59 6	2002	Below Normal	May	--	3,310.0	3,302.7	7.3	0.2%	3,302.0	8.0	0.2%	3,301.3	8.7	0.3%	3,300.5	9.5	0.3%	3,299.8	10.2	0.3%	3,299.0	11.0	0.3%
ME 2	42 59 6	2002	Below Normal	June	--	851.4	842.7	8.8	1.0%	841.8	9.6	1.1%	840.9	10.5	1.2%	840.1	11.4	1.3%	839.2	12.3	1.4%	838.3	13.1	1.5%
ME 2	42 59 6	2002	Below Normal	July	--	359.8	351.4	8.4	2.3%	350.6	9.2	2.6%	349.7	10.0	2.8%	348.9	10.9	3.0%	348.1	11.7	3.2%	347.2	12.5	3.5%
ME 2	42 59 6	2002	Below Normal	August	--	223.1	215.5	7.6	3.4%	214.8	8.4	3.8%	214.0	9.2	4.1%	213.2	9.9	4.5%	212.5	10.7	4.8%	211.7	11.4	5.1%
ME 2	42 59 6	2002	Below Normal	September	Used in Summary Table Analysis	160.3	153.4	6.9	4.3%	152.7	7.6	4.8%	152.0	8.3	5.2%	151.3	9.0	5.6%	150.6	9.7	6.1%	149.9	10.4	6.5%
ME 2	42 59 6	2003	Wet	October	Used in Summary Table Analysis	125.5	120.0	5.5	4.3%	119.5	6.0	4.8%	118.9	6.6	5.2%	118.4	7.1	5.7%	117.8	7.7	6.1%	117.3	8.2	6.5%
ME 2	42 59 6	2003	Wet	November	Used in Summary Table Analysis	890.4	886.2	4.2	0.5%	885.8	4.6	0.5%	885.3	5.0	0.6%	884.9	5.5	0.6%	884.5	5.9	0.7%	884.1	6.3	0.7%
ME 2	42 59 6	2003	Wet	December	--	56,106.5	56,103.0	3.5	0.0%	56,103.0	3.5	0.0%	56,101.9	4.6	0.0%	56,101.9	4.6	0.0%	56,101.9	4.6	0.0%	56,100.7	5.8	0.0%
ME 2	42 59 6	2003	Wet	January	--	31,384.3	31,381.9	2.3	0.0%	31,380.8	3.5	0.0%	31,380.8	3.5	0.0%	31,380.8	3.5	0.0%	31,380.8	3.5	0.0%	31,379.6	4.6	0.0%
ME 2	42 59 6	2003	Wet	February	--	20,277.8	20,275.5	2.3	0.0%	20,274.3	3.5	0.0%	20,274.3	3.5	0.0%	20,274.3	3.5	0.0%	20,274.3	3.5	0.0%	20,273.1	4.6	0.0%
ME 2	42 59 6	2003	Wet	March	--	23,916.7	23,914.4	2.3	0.0%	23,914.4	2.3	0.0%	23,913.2	3.5	0.0%	23,913.2	3.5	0.0%	23,913.2	3.5	0.0%	23,913.2	3.5	0.0%
ME 2	42 59 6	2003	Wet	April	--	42,619.2	42,616.9	2.3	0.0%	42,615.7	3.5	0.0%	42,615.7	3.5	0.0%	42,615.7	3.5	0.0%	42,615.7	3.5	0.0%	42,615.7	3.5	0.0%
ME 2	42 59 6	2003	Wet	May	--	12,186.3	12,179.4	6.9	0.1%	12,179.4	6.9	0.1%	12,178.2	8.1	0.1%	12,177.1	9.3	0.1%	12,177.1	9.3	0.1%	12,175.9	10.4	0.1%
ME 2	42 59 6	2003	Wet	June	--	3,160.1	3,151.7	8.3	0.3%	3,150.9	9.1	0.3%	3,150.1	10.0	0.3%	3,149.3	10.8	0.3%	3,148.5	11.6	0.4%	3,147.7	12.4	0.4%
ME 2	42 59 6	2003	Wet	July	--	1,467.5	1,459.1	8.3	0.6%	1,458.3	9.1	0.6%	1,457.5	10.0	0.7%	1,456.7	10.8	0.7%	1,455.8	11.7	0.8%	1,455.0	12.5	0.9%
ME 2	42 59 6	2003	Wet	August	--	754.3	746.6	7.8	1.0%	745.8	8.5	1.1%	745.0	9.3	1.2%	744.2	10.1	1.3%	743.4	10.9	1.4%	742.7	11.7	1.5%
ME 2	42 59 6	2003	Wet	September	Used in Summary Table Analysis	453.0	446.7	6.3	1.4%	446.1	6.9	1.5%	445.4	7.6	1.7%	444.8	8.2	1.8%	444.2	8.8	1.9%	443.6	9.5	2.1%
ME 2	42 59 6	2004	Wet	October	Used in Summary Table Analysis	320.2	315.2	5.0	1.6%	314.7	5.5	1.7%	314.2	6.0	1.9%	313.7	6.5	2.0%	313.2	7.0	2.2%	312.7	7.5	2.4%
ME 2	42 59 6	2004	Wet	November	Used in Summary Table Analysis	5,726.6	5,722.8	3.8	0.1%	5,722.3	4.3	0.1%	5,722.0	4.6	0.1%	5,721.6	5.0	0.1%	5,721.2	5.4	0.1%	5,720.8	5.8	0.1%
ME 2	42 59 6	2004	Wet	December	--	35,957.2	35,953.7	3.5	0.0%	35,953.7	3.5	0.0%	35,953.7	3.5	0.0%	35,953.7	3.5	0.0%	35,952.5	4.6	0.0%	35,952.5	4.6	0.0%
ME 2	42 59 6	2004	Wet	January	--	31,232.6	31,230.3	2.3	0.0%	31,230.3	2.3	0.0%	31,229.2	3.5	0.0%	31,229.2	3.5	0.0%	31,229.2	3.5	0.0%	31,229.2	3.5	0.0%
ME 2	42 59 6	2004	Wet	February	--	38,005.8	38,003.5	2.3	0.0%	38,002.3	3.5	0.0%	38,002.3	3.5	0.0%	38,002.3	3.5	0.0%	38,002.3	3.5	0.0%	38,001.2	4.6	0.0%
ME 2	42 59 6	2004	Wet	March	--	16,485.0	16,482.6	2.3	0.0%	16,481.5	3.5	0.0%	16,481.5	3.5	0.0%	16,481.5	3.5	0.0%	16,481.5	3.5	0.0%	16,481.5	3.5	0.0%
ME 2	42 59 6	2004	Wet	April	--	9,422.8	9,420.6	2.2	0.0%	9,420.4	2.4	0.0%	9,420.1	2.7	0.0%	9,419.9	2.9	0.0%	9,419.7	3.1	0.0%	9,419.4	3.4	0.0%
ME 2	42 59 6	2004	Wet	May	--	3,398.4	3,392.2	6.1	0.2%	3,391.6	6.8	0.2%	3,391.0	7.4	0.2%	3,390.3	8.1	0.2%	3,389.7	8.7	0.3%	3,389.1	9.3	0.3%
ME 2	42 59 6	2004	Wet	June	--	689.9	682.1	7.8	1.1%	681.4	8.6	1.2%	680.6	9.4	1.4%	679.8	10.1	1.5%	679.0	10.9	1.6%	678.3	11.7	1.7%
ME 2	42 59 6	2004	Wet	July	--	352.0	344.0	8.1	2.3%	343.2	8.9	2.5%	342.4	9.7	2.8%	341.6	10.5	3.0%	340.8	11.3	3.2%	339.9	12.1	3.4%
ME 2	42 59 6	2004	Wet	August	--	221.6	214.3	7.3	3.3%	213.6	8.0	3.6%	212.8	8.7	3.9%	212.1	9.5	4.3%	211.4	10.2	4.6%	210.7	10.9	4.9%
ME 2	42 59 6	2004	Wet	September	Used in Summary Table Analysis	159.2	152.3	6.9	4.3%	151.6	7.6	4.8%	150.9	8.3	5.2%	150.2	9.0	5.6%	149.5	9.7	6.1%	148.8	10.4	6.5%
ME 2	42 59 6	2005	Above Normal	October	Used in Summary Table Analysis	7,582.1	7,577.0	5.1	0.1%	7,576.4	5.7	0.1%	7,575.9	6.1	0.1%	7,575.3	6.7	0.1%	7,574.9	7.2	0.1%	7,574.3	7.8	0.1%
ME 2	42 59 6	2005	Above Normal	November	Used in Summary Table Analysis	2,245.5	2,241.7	3.8	0.2%	2,241.2	4.3	0.2%	2,240.9	4.6	0.2%	2,240.5	5.0	0.2%	2,240.0	5.4	0.2%	2,239.7	5.8	0.3%
ME 2	42 59 6	2005	Above Normal	December	--	20,732.6	20,729.2	3.5	0.0%	20,729.2	3.5	0.0%	20,729.2	3.5	0.0%	20,728.0	4.6	0.0%	20,728.0	4.6	0.0%	20,728.0	4.6	0.0%
ME 2	42 59 6	2005	Above Normal	January	--	22,153.9	22,150.5	3.5	0.0%	22,150.5	3.5	0.0%	22,150.5	3.5	0.0%	22,149.3	4.6	0.0%	22,149.3	4.6	0.0%	22,149.3	4.6	0.0%
ME 2	42 59 6	2005	Above Normal	February	--	13,972.2	13,969.9	2.3	0.0%	13,969.9	2.3	0.0%	13,969.9	2.3	0.0%	13,968.8	3.5	0.0%	13,968.8	3.5	0.0%	13,968.8	3.5	0.0%
ME 2	42 59 6	2005	Above Normal	March	--	28,392.4	28,390.0	2.3	0.0%	28,390.0	2.3	0.0%	28,390.0	2.3	0.0%	28,390.0	2.3	0.0%	28,390.0	2.3	0.0%	28,388.9	3.5	0.0%
ME 2	42 59 6	2005	Above Normal	April	--	21,331.0	21,328.7	2.3	0.0%	21,328.7	2.3	0.0%	21,328.7	2.3	0.0%	21,328.7	2.3	0.0%	21,327.5	3.5	0.0%	21,327.5	3.5	0.0%
ME 2	42 59 6	2005	Above Normal	May	--	19,434.0	19,427.1	6.9	0.0%	19,427.1	6.9	0.0%	19,425.9	8.1	0.0%	19,424.8	9.3	0.0%	19,424.8	9.3	0.0%	19,423.6	10.4	0.1%
ME 2	42 59 6	2005	Above Normal	June	--	15,709.5	15,699.1	10.4	0.1%	15,697.9	11.6	0.1%	15,696.8	12.7	0.1%	15,695.6	13.9	0.1%	15,695.6	13.9	0.1%	15,694.4	15.0	0.1%
ME 2	42 59 6	2005	Above Normal	July	--	2,864.6	2,856.0	8.6	0.3%	2,855.2	9.4	0.3%	2,854.3	10.3	0.4%	2,853.5	11.1	0.4%	2,852.7	11.9	0.4%	2,851.7	12.8	0.4%
ME 2	42 59 6	2005	Above Normal	August	--	976.7	969.5	7.3	0.7%	968.7	8.0	0.8%	968.0	8.8	0.9%	967.3	9.5	1.0%	966.6	10.2	1.0%	965.8	10.9	1.1%
ME 2	42 59 6	2005	Above Normal	September	Used in Summary Table Analysis	518.7	512.5	6.2	1.2%	511.9	6.8	1.3%	511.3	7.5	1.4%	510.7	8.1	1.6%	510.0	8.7	1.7%	509.4	9.3	1.8%
ME 2	42 59 6	2006	Wet	October	Used in Summary Table Analysis	627.1	622.2	4.9	0.8%	621.7	5.4	0.9%	621.2	5.9	0.9%	620.8	6.4	1.0%	620.3	6.9	1.1%	619.8	7.4	1.2%
ME 2	42 59 6	2006	Wet	November	Used in Summary Table Analysis	9,173.3	9,169.6	3.7	0.0%	9,169.2	4.1	0.0%	9,168.9	4.4	0.0%	9,168.5	4.7	0.1%	9,168.2	5.1	0.1%	9,167.8	5.4	0.1%
ME 2	42 59 6	2006	Wet	December	--	43,054.4	43,050.9	3.5	0.0%	43,049.8	4.6	0.0%	43,049.8	4.6	0.0%	43,049.8	4.6	0.0%	43,049.8	4.6	0.0%	43,048.6	5.8	0.0%
ME 2	42 59 6	2006	Wet	January	--	45,894.7	45,891.2	3.5	0.0%	45,891.2	3.5	0.0%	45,891.2	3.5	0.0%	45,890.0	4.6	0.0%	45,890.0	4.6	0.0%	45,890.0	4.6	0.0%
ME 2	42 59 6	2006	Wet	February	--	26,446.8	26,444.4	2.3	0.0%	26,444.4	2.3	0.0%	26,444.4	2.3	0.0%	26,443.3	3.5	0.0%	26,443.3	3.5	0.0%	26,443.3	3.5	0.0%
ME 2	42 59 6	2006	Wet	March	--	46,841.4	46,839.1	2.3	0.0%	46,839.1	2.3	0.0%	46,839.1	2.3	0.0%	46,838.0	3.5	0.0%	46,838.0	3.5	0.0%	46,838.0	3.5	0.0%
ME 2	42 59 6	2006	Wet	April	--	30,304.4	30,302.1	2.3	0.0%	30,302.1	2.3	0.0%	30,302.1	2.3	0.0%	30,300.9	3.5	0.0%	30,300.9	3.5	0.0%	30,300.9	3.5	0.0%
ME 2	42 59 6	2006	Wet	May	--	14,136.6	14,133.1	3.5	0.0%	14,133.1	3.5	0.0%	14,131.9	4.6	0.0%	14,131.9	4.6	0.0%	14,131.9	4.6	0.0%	14,130.8	5.8	0.0%
ME 2	42 59 6	2006	Wet	June	--	3,542.2	3,534.0	8.2	0.2%	3,533.2	9.0	0.3%	3,532.4	9.8	0.3%	3,531.6	10.6	0.3%	3,530.7	11.6	0.3%	3,529.9	12.4	0.3%
ME 2	42 59 6	2006	Wet	July	--	1,271.4	1,263.2	8.2	0.6%	1,262.4	9.0	0.7%	1,261.6	9.8	0.8%	1,260.8	10.6	0.8%	1,260.0	11.5	0.9%	1,259.1	12.3	1.0%
ME 2	42 59 6	2006	Wet	August	--	657.8	650.3	7.5	1.1%	649.5	8.3	1.3%	648.8	9.1	1.4%	648.0	9.9	1.5%	647.2	10.6	1.6%	646.5	11.4	1.7%
ME 2	42 59 6	2006	Wet	September	Used in Summary Table Analysis	419.8	413.5	6.3	1.5%	412.9	6.9	1.7%	412.2	7.6	1.8%	411.6	8.2	2.0%	411.0	8.9	2.1%	410.3	9.5	2.3%
ME 2	42 59 6	2007	Above Normal	October	Used in Summary Table Analysis	269.7	264.7	5.0	1.8%	264.2	5.5	2.0%	263.7	6.0	2.2%	263.2	6.5	2.4%	262.7	7.0	2.6%	262.2	7.5	2.8%
ME 2	42 59 6	2007	Above Normal	November	Used in Summary Table Analysis	8,550.3	8,546.5	3.8	0.0%	8,546.2	4.2	0.0%	8,545.7	4.6	0.1%	8,545.4	5.0	0.1%	8,545.0	5.3	0.1%	8,544.6	5.8	0.1%
ME 2	42 59 6	2007	Above Normal	December	--	20,170.1	20,166.7	3.5	0.0%	20,166.7	3.5	0.0%	20,165.5	4.6	0.0%	20,165.5	4.6	0.0%	20,165.5	4.6	0.0%	20,164.4	5.8	0.0%
ME 2	42 59 6	2007	Above Normal	January	--	10,189.4	10,186.5	2.9	0.0%	10,186.2	3.1	0.0%	10,185.9	3.5	0.0%	10,185.6	3.7	0.0%	10,185.3	4.1	0.0%	10,185.1	4.3	0.0%
ME 2	42 59 6	2007	Above Normal	February	--	30,300.9	30,298.6	2.3	0.0%	30,298.6	2.3	0.0%	30,298.6	2.3	0.0%	30,297.5	3.5	0.0%	30,297.5	3.5	0.0%	30,297.5	3.5	0.0%
ME 2	42 59 6	2007	Above Normal	March	--	13,056.7	13,054.4	2.3	0.0%	13,054.4	2.3	0.0%	13,054.4	2.3	0.0%	13,054.4	2.3	0.0%	13,053.2	3.5	0.0%	13,053.2	3.5	0.0%
ME 2	42 59 6	2007	Above Normal	April	--	11,493.8	11,487.7	6.0	0.1%	11,487.2	6.6	0.1%	11,486.5	7.3	0.1%	11,485.9	7.9	0.1%	11,485.3	8.4	0.1%	11,484.7	9.0	0.1%
ME 2	42 59 6	2007	Above Normal	May	--	4,122.8	4,115.7	7.1	0.2%	4,115.0	7.8	0.2%	4,114.4	8.4	0.2%	4,113.7	9.1	0.2%	4,113.0	9.8	0.2%	4,112.3	10.5	0.3%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	42 59 6	2007	Above Normal	June	--	1,488.0	1,478.8	9.1	0.6%	1,477.9	10.1	0.7%	1,477.0	11.0	0.7%	1,476.0	11.9	0.8%	1,475.1	12.8	0.9%	1,474.3	13.7	0.9%
ME 2	42 59 6	2007	Above Normal	July	--	493.7	485.0	8.7	1.8%	484.2	9.5	1.9%	483.3	10.4	2.1%	482.4	11.3	2.3%	481.6	12.2	2.5%	480.7	13.0	2.6%
ME 2	42 59 6	2007	Above Normal	August	--	219.1	211.6	7.5	3.4%	210.8	8.3	3.8%	210.1	9.0	4.1%	209.4	9.7	4.4%	208.6	10.5	4.8%	207.9	11.2	5.1%
ME 2	42 59 6	2007	Above Normal	September	Used in Summary Table Analysis	146.8	140.0	6.8	4.6%	139.3	7.5	5.1%	138.6	8.2	5.6%	137.9	8.9	6.0%	137.2	9.5	6.5%	136.6	10.2	7.0%
ME 2	42 59 6	2008	Dry	October	Used in Summary Table Analysis	3,393.9	3,388.5	5.3	0.2%	3,388.0	5.9	0.2%	3,387.4	6.5	0.2%	3,386.9	6.9	0.2%	3,386.3	7.5	0.2%	3,385.8	8.1	0.2%
ME 2	42 59 6	2008	Dry	November	Used in Summary Table Analysis	3,236.7	3,232.8	3.9	0.1%	3,232.3	4.4	0.1%	3,231.9	4.7	0.1%	3,231.6	5.1	0.2%	3,231.1	5.6	0.2%	3,230.8	5.9	0.2%
ME 2	42 59 6	2008	Dry	December	--	22,812.5	22,809.0	3.5	0.0%	22,807.9	4.6	0.0%	22,807.9	4.6	0.0%	22,807.9	4.6	0.0%	22,807.9	4.6	0.0%	22,806.7	5.8	0.0%
ME 2	42 59 6	2008	Dry	January	--	37,230.3	37,226.9	3.5	0.0%	37,226.9	3.5	0.0%	37,225.7	4.6	0.0%	37,225.7	4.6	0.0%	37,225.7	4.6	0.0%	37,225.7	4.6	0.0%
ME 2	42 59 6	2008	Dry	February	--	26,199.1	26,196.8	2.3	0.0%	26,196.8	2.3	0.0%	26,195.6	3.5	0.0%	26,195.6	3.5	0.0%	26,195.6	3.5	0.0%	26,195.6	3.5	0.0%
ME 2	42 59 6	2008	Dry	March	--	11,762.7	11,760.4	2.3	0.0%	11,760.4	2.3	0.0%	11,760.4	2.3	0.0%	11,759.3	3.5	0.0%	11,759.3	3.5	0.0%	11,759.3	3.5	0.0%
ME 2	42 59 6	2008	Dry	April	--	8,992.8	8,986.3	6.5	0.1%	8,985.8	7.1	0.1%	8,985.1	7.8	0.1%	8,984.5	8.3	0.1%	8,983.8	9.0	0.1%	8,983.2	9.6	0.1%
ME 2	42 59 6	2008	Dry	May	--	1,364.8	1,358.2	6.6	0.5%	1,357.6	7.2	0.5%	1,356.9	7.9	0.6%	1,356.3	8.6	0.6%	1,355.7	9.1	0.7%	1,355.0	9.8	0.7%
ME 2	42 59 6	2008	Dry	June	--	435.0	424.8	10.2	2.3%	423.8	11.2	2.6%	422.8	12.2	2.8%	421.8	13.2	3.0%	420.7	14.3	3.3%	419.8	15.2	3.5%
ME 2	42 59 6	2008	Dry	July	--	253.8	244.4	9.4	3.7%	243.4	10.3	4.1%	242.5	11.3	4.4%	241.5	12.2	4.8%	240.6	13.1	5.2%	239.7	14.1	5.5%
ME 2	42 59 6	2008	Dry	August	--	176.7	167.9	8.8	5.0%	167.0	9.7	5.5%	166.1	10.6	6.0%	165.3	11.5	6.5%	164.4	12.3	7.0%	163.5	13.2	7.5%
ME 2	42 59 6	2008	Dry	September	Used in Summary Table Analysis	138.5	130.0	8.5	6.1%	129.1	9.3	6.7%	128.3	10.2	7.4%	127.5	11.0	8.0%	126.6	11.9	8.6%	125.8	12.7	9.2%
ME 2	42 59 6	2009	Critical	October	Used in Summary Table Analysis	918.4	912.1	6.3	0.7%	911.5	6.9	0.8%	910.8	7.5	0.8%	910.2	8.2	0.9%	909.6	8.8	1.0%	909.0	9.4	1.0%
ME 2	42 59 6	2009	Critical	November	Used in Summary Table Analysis	5,437.4	5,432.8	4.6	0.1%	5,432.4	5.0	0.1%	5,431.8	5.6	0.1%	5,431.5	5.9	0.1%	5,431.0	6.4	0.1%	5,430.6	6.8	0.1%
ME 2	42 59 6	2009	Critical	December	--	12,005.8	12,002.3	3.5	0.0%	12,002.3	3.5	0.0%	12,001.2	4.6	0.0%	12,001.2	4.6	0.0%	12,001.2	4.6	0.0%	12,000.0	5.8	0.0%
ME 2	42 59 6	2009	Critical	January	--	8,753.0	8,749.7	3.4	0.0%	8,749.3	3.7	0.0%	8,749.0	4.1	0.0%	8,748.6	4.4	0.1%	8,748.3	4.7	0.1%	8,747.9	5.1	0.1%
ME 2	42 59 6	2009	Critical	February	--	22,482.6	22,479.2	3.5	0.0%	22,479.2	3.5	0.0%	22,479.2	3.5	0.0%	22,478.0	4.6	0.0%	22,478.0	4.6	0.0%	22,478.0	4.6	0.0%
ME 2	42 59 6	2009	Critical	March	--	21,023.1	21,019.7	3.5	0.0%	21,019.7	3.5	0.0%	21,019.7	3.5	0.0%	21,019.7	3.5	0.0%	21,018.5	4.6	0.0%	21,018.5	4.6	0.0%
ME 2	42 59 6	2009	Critical	April	--	10,087.2	10,080.4	6.7	0.1%	10,079.7	7.4	0.1%	10,079.1	8.1	0.1%	10,078.6	8.6	0.1%	10,077.9	9.3	0.1%	10,077.2	10.0	0.1%
ME 2	42 59 6	2009	Critical	May	--	15,534.7	15,526.6	8.1	0.1%	15,526.6	8.1	0.1%	15,525.5	9.3	0.1%	15,524.3	10.4	0.1%	15,523.1	11.6	0.1%	15,523.1	11.6	0.1%
ME 2	42 59 6	2009	Critical	June	--	3,154.7	3,143.9	10.9	0.3%	3,142.8	11.9	0.4%	3,141.7	13.1	0.4%	3,140.5	14.2	0.5%	3,139.5	15.3	0.5%	3,138.4	16.3	0.5%
ME 2	42 59 6	2009	Critical	July	--	1,258.8	1,249.2	9.6	0.8%	1,248.3	10.5	0.8%	1,247.3	11.5	0.9%	1,246.4	12.4	1.0%	1,245.5	13.3	1.1%	1,244.6	14.2	1.1%
ME 2	42 59 6	2009	Critical	August	--	664.6	655.7	8.9	1.3%	654.8	9.8	1.5%	653.9	10.7	1.6%	653.0	11.6	1.7%	652.2	12.4	1.9%	651.3	13.3	2.0%
ME 2	42 59 6	2009	Critical	September	Used in Summary Table Analysis	386.6	378.9	7.7	2.0%	378.1	8.5	2.2%	377.4	9.2	2.4%	376.6	10.0	2.6%	375.8	10.8	2.8%	375.1	11.5	3.0%
ME 2	42 59 6	2010	Below Normal	October	Used in Summary Table Analysis	6,080.7	6,074.3	6.4	0.1%	6,073.7	6.9	0.1%	6,073.0	7.6	0.1%	6,072.5	8.2	0.1%	6,071.9	8.8	0.1%	6,071.2	9.5	0.2%
ME 2	42 59 6	2010	Below Normal	November	Used in Summary Table Analysis	8,241.0	8,236.2	4.7	0.1%	8,235.8	5.2	0.1%	8,235.3	5.7	0.1%	8,234.8	6.1	0.1%	8,234.4	6.6	0.1%	8,233.9	7.1	0.1%
ME 2	42 59 6	2010	Below Normal	December	--	12,252.3	12,248.8	3.5	0.0%	12,248.8	3.5	0.0%	12,247.7	4.6	0.0%	12,247.7	4.6	0.0%	12,247.7	4.6	0.0%	12,246.5	5.8	0.0%
ME 2	42 59 6	2010	Below Normal	January	--	35,885.4	35,881.9	3.5	0.0%	35,881.9	3.5	0.0%	35,880.8	4.6	0.0%	35,880.8	4.6	0.0%	35,880.8	4.6	0.0%	35,880.8	4.6	0.0%
ME 2	42 59 6	2010	Below Normal	February	--	27,148.1	27,144.7	3.5	0.0%	27,144.7	3.5	0.0%	27,144.7	3.5	0.0%	27,143.5	4.6	0.0%	27,143.5	4.6	0.0%	27,143.5	4.6	0.0%
ME 2	42 59 6	2010	Below Normal	March	--	28,754.6	28,751.2	3.5	0.0%	28,751.2	3.5	0.0%	28,751.2	3.5	0.0%	28,750.0	4.6	0.0%	28,750.0	4.6	0.0%	28,750.0	4.6	0.0%
ME 2	42 59 6	2010	Below Normal	April	--	39,857.6	39,855.3	2.3	0.0%	39,855.3	2.3	0.0%	39,854.2	3.5	0.0%	39,854.2	3.5	0.0%	39,854.2	3.5	0.0%	39,854.2	3.5	0.0%
ME 2	42 59 6	2010	Below Normal	May	--	20,148.1	20,141.2	6.9	0.0%	20,140.0	8.1	0.0%	20,140.0	8.1	0.0%	20,138.9	9.3	0.0%	20,138.9	9.3	0.0%	20,137.7	10.4	0.1%
ME 2	42 59 6	2010	Below Normal	June	--	9,255.6	9,245.3	10.3	0.1%	9,244.2	11.3	0.1%	9,243.2	12.4	0.1%	9,242.2	13.3	0.1%	9,241.2	14.4	0.2%	9,240.2	15.4	0.2%
ME 2	42 59 6	2010	Below Normal	July	--	1,450.7	1,442.1	8.6	0.6%	1,441.2	9.5	0.7%	1,440.4	10.3	0.7%	1,439.6	11.1	0.8%	1,438.7	12.0	0.8%	1,437.8	12.8	0.9%
ME 2	42 59 6	2010	Below Normal	August	--	562.7	555.1	7.6	1.3%	554.4	8.3	1.5%	553.6	9.1	1.6%	552.9	9.8	1.7%	552.2	10.5	1.9%	551.4	11.3	2.0%
ME 2	42 59 6	2010	Below Normal	September	Used in Summary Table Analysis	644.6	637.5	7.1	1.1%	636.7	7.8	1.2%	636.0	8.6	1.3%	635.3	9.3	1.4%	634.6	10.0	1.6%	633.9	10.7	1.7%
ME 2	42 59 6	2011	Wet	October	Used in Summary Table Analysis	9,562.2	9,557.1	5.1	0.1%	9,556.6	5.6	0.1%	9,556.0	6.1	0.1%	9,555.6	6.6	0.1%	9,555.0	7.2	0.1%	9,554.5	7.6	0.1%
ME 2	42 59 6	2011	Wet	November	Used in Summary Table Analysis	14,137.7	14,134.3	3.5	0.0%	14,133.1	4.6	0.0%	14,133.1	4.6	0.0%	14,133.1	4.6	0.0%	14,131.9	5.8	0.0%	14,131.9	5.8	0.0%
ME 2	42 59 6	2011	Wet	December	--	33,356.5	33,354.2	2.3	0.0%	33,353.0	3.5	0.0%	33,353.0	3.5	0.0%	33,353.0	3.5	0.0%	33,353.0	3.5	0.0%	33,351.9	4.6	0.0%
ME 2	42 59 6	2011	Wet	January	--	14,092.6	14,090.3	2.3	0.0%	14,089.1	3.5	0.0%	14,089.1	3.5	0.0%	14,089.1	3.5	0.0%	14,089.1	3.5	0.0%	14,088.0	4.6	0.0%
ME 2	42 59 6	2011	Wet	February	--	20,706.0	20,703.7	2.3	0.0%	20,703.7	2.3	0.0%	20,703.7	2.3	0.0%	20,702.5	3.5	0.0%	20,702.5	3.5	0.0%	20,702.5	3.5	0.0%
ME 2	42 59 6	2011	Wet	March	--	51,782.4	51,778.9	3.5	0.0%	51,778.9	3.5	0.0%	51,778.9	3.5	0.0%	51,778.9	3.5	0.0%	51,778.9	3.5	0.0%	51,777.8	4.6	0.0%
ME 2	42 59 6	2011	Wet	April	--	24,723.4	24,721.1	2.3	0.0%	24,721.1	2.3	0.0%	24,721.1	2.3	0.0%	24,719.9	3.5	0.0%	24,719.9	3.5	0.0%	24,719.9	3.5	0.0%
ME 2	42 59 6	2011	Wet	May	--	11,347.9	11,341.8	6.1	0.1%	11,341.1	6.8	0.1%	11,340.4	7.5	0.1%	11,339.8	8.1	0.1%	11,339.1	8.8	0.1%	11,338.5	9.4	0.1%
ME 2	42 59 6	2011	Wet	June	--	7,022.3	7,012.3	10.1	0.1%	7,011.3	11.0	0.2%	7,010.3	12.0	0.2%	7,009.3	13.1	0.2%	7,008.3	14.0	0.2%	7,007.3	15.0	0.2%
ME 2	42 59 6	2011	Wet	July	--	1,827.8	1,818.3	9.5	0.5%	1,817.4	10.4	0.6%	1,816.4	11.3	0.6%	1,815.5	12.3	0.7%	1,814.5	13.3	0.7%	1,813.5	14.2	0.8%
ME 2	42 59 6	2011	Wet	August	--	772.4	765.0	7.4	1.0%	764.3	8.1	1.0%	763.5	8.8	1.1%	762.8	9.6	1.2%	762.1	10.3	1.3%	761.3	11.0	1.4%
ME 2	42 59 6	2011	Wet	September	Used in Summary Table Analysis	429.1	422.7	6.4	1.5%	422.0	7.0	1.6%	421.4	7.7	1.8%	420.8	8.3	1.9%	420.1	9.0	2.1%	419.5	9.6	2.2%
ME 2	42 59 6	2012	Below Normal	October	Used in Summary Table Analysis	4,506.6	4,501.6	5.0	0.1%	4,501.0	5.6	0.1%	4,500.6	6.0	0.1%	4,500.1	6.5	0.1%	4,499.5	7.1	0.2%	4,499.1	7.5	0.2%
ME 2	42 59 6	2012	Below Normal	November	Used in Summary Table Analysis	8,163.0	8,159.1	3.8	0.0%	8,158.7	4.3	0.1%	8,158.3	4.6	0.1%	8,158.0	5.0	0.1%	8,157.5	5.4	0.1%	8,157.2	5.8	0.1%
ME 2	42 59 6	2012	Below Normal	December	--	5,151.7	5,148.5	3.2	0.1%	5,148.3	3.5	0.1%	5,147.9	3.8	0.1%	5,147.6	4.2	0.1%	5,147.2	4.5	0.1%	5,146.9	4.9	0.1%
ME 2	42 59 6	2012	Below Normal	January	--	19,894.7	19,891.2	3.5	0.0%	19,891.2	3.5	0.0%	19,891.2	3.5	0.0%	19,890.0	4.6	0.0%	19,890.0	4.6	0.0%	19,890.0	4.6	0.0%
ME 2	42 59 6	2012	Below Normal	February	--	18,151.6	18,148.1	3.5	0.0%	18,148.1	3.5	0.0%	18,148.1	3.5	0.0%	18,148.1	3.5	0.0%	18,147.0	4.6	0.0%	18,147.0	4.6	0.0%
ME 2	42 59 6	2012	Below Normal	March	--	45,163.2	45,160.9	2.3	0.0%	45,160.9	2.3	0.0%	45,160.9	2.3	0.0%	45,159.7	3.5	0.0%	45,159.7	3.5	0.0%	45,159.7	3.5	0.0%
ME 2	42 59 6	2012	Below Normal	April	--	26,765.0	26,762.7	2.3	0.0%	26,762.7	2.3	0.0%	26,762.7	2.3	0.0%	26,762.7	2.3	0.0%	26,762.7	2.3	0.0%	26,761.6	3.5	0.0%
ME 2	42 59 6	2012	Below Normal	May	--	7,461.9	7,455.6	6.4	0.1%	7,454.9	7.1	0.1%	7,454.2	7.8	0.1%	7,453.6	8.3	0.1%	7,453.0	8.9	0.1%	7,452.4	9.5	0.1%
ME 2	42 59 6	2012	Below Normal	June	--	5,482.2	5,472.0	10.2	0.2%	5,470.9	11.2	0.2%	5,470.0	12.2	0.2%	5,469.0	13.2	0.2%	5,467.9	14.2	0.3%	5,466.9	15.3	0.3%
ME 2	42 59 6	2012	Below Normal	July	--	2,204.3	2,195.0	9.3	0.4%	2,194.1	10.2	0.5%	2,193.2	11.1	0.5%	2,192.2	12.0	0.5%	2,191.3	13.0	0.6%	2,190.4	13.9	0.6%
ME 2	42 59 6	2012	Below Normal	August	--	386.1	379.1	7.0	1.8%	378.4	7.7	2.0%	377.7	8.4	2.2%	377.0	9.1	2.4%	376.3	9.8	2.5%	375.7	10.4	2.7%
ME 2	42 59 6	2012	Below Normal	September	Used in Summary Table Analysis	245.1	239.1	6.0	2.5%	238.5	6.6	2.7%	237.8	7.2	3.0%	237.2	7.8	3.2%	236.6	8.4	3.4%	236.0	9.1	3.7%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	42 59 6	2013	Below Normal	October	Used in Summary Table Analysis	1,890.0	1,885.1	5.0	0.3%	1,884.5	5.6	0.3%	1,884.0	6.0	0.3%	1,883.4	6.6	0.3%	1,883.0	7.1	0.4%	1,882.4	7.6	0.4%
ME 2	42 59 6	2013	Below Normal	November	Used in Summary Table Analysis	14,545.1	14,541.7	3.5	0.0%	14,540.5	4.6	0.0%	14,540.5	4.6	0.0%	14,540.5	4.6	0.0%	14,539.4	5.8	0.0%	14,539.4	5.8	0.0%
ME 2	42 59 6	2013	Below Normal	December	--	59,673.6	59,670.1	3.5	0.0%	59,669.0	4.6	0.0%	59,669.0	4.6	0.0%	59,669.0	4.6	0.0%	59,667.8	5.8	0.0%	59,667.8	5.8	0.0%
ME 2	42 59 6	2013	Below Normal	January	--	22,108.8	22,105.3	3.5	0.0%	22,105.3	3.5	0.0%	22,105.3	3.5	0.0%	22,105.3	3.5	0.0%	22,104.2	4.6	0.0%	22,104.2	4.6	0.0%
ME 2	42 59 6	2013	Below Normal	February	--	8,803.8	8,801.2	2.7	0.0%	8,800.9	2.9	0.0%	8,800.7	3.1	0.0%	8,800.3	3.5	0.0%	8,800.1	3.7	0.0%	8,799.9	3.9	0.0%
ME 2	42 59 6	2013	Below Normal	March	--	10,266.1	10,263.7	2.4	0.0%	10,263.4	2.7	0.0%	10,263.1	3.0	0.0%	10,262.8	3.2	0.0%	10,262.6	3.5	0.0%	10,262.4	3.7	0.0%
ME 2	42 59 6	2013	Below Normal	April	--	8,273.6	8,267.7	5.9	0.1%	8,267.1	6.5	0.1%	8,266.6	7.1	0.1%	8,266.0	7.6	0.1%	8,265.4	8.2	0.1%	8,264.8	8.8	0.1%
ME 2	42 59 6	2013	Below Normal	May	--	4,407.4	4,400.2	7.2	0.2%	4,399.5	7.9	0.2%	4,398.8	8.6	0.2%	4,398.1	9.3	0.2%	4,397.5	10.0	0.2%	4,396.8	10.6	0.2%
ME 2	42 59 6	2013	Below Normal	June	--	2,104.6	2,095.5	9.1	0.4%	2,094.6	10.1	0.5%	2,093.8	10.9	0.5%	2,092.8	11.8	0.6%	2,091.9	12.7	0.6%	2,091.0	13.7	0.6%
ME 2	42 59 6	2013	Below Normal	July	--	717.3	709.1	8.2	1.1%	708.3	9.0	1.3%	707.5	9.8	1.4%	706.7	10.6	1.5%	705.8	11.5	1.6%	705.0	12.3	1.7%
ME 2	42 59 6	2013	Below Normal	August	--	337.3	329.8	7.5	2.2%	329.1	8.2	2.4%	328.3	9.0	2.7%	327.6	9.7	2.9%	326.8	10.4	3.1%	326.1	11.2	3.3%
ME 2	42 59 6	2013	Below Normal	September	Used in Summary Table Analysis	4,750.1	4,742.4	7.8	0.2%	4,741.6	8.6	0.2%	4,740.9	9.3	0.2%	4,740.0	10.1	0.2%	4,739.2	10.9	0.2%	4,738.5	11.6	0.2%
ME 2	42 59 6	2014	Critical	October	Used in Summary Table Analysis	282.7	277.5	5.2	1.8%	277.0	5.7	2.0%	276.5	6.2	2.2%	276.0	6.7	2.4%	275.5	7.3	2.6%	275.0	7.8	2.7%
ME 2	42 59 6	2014	Critical	November	Used in Summary Table Analysis	1,520.3	1,516.3	3.9	0.3%	1,516.0	4.3	0.3%	1,515.5	4.7	0.3%	1,515.2	5.1	0.3%	1,514.7	5.6	0.4%	1,514.4	5.9	0.4%
ME 2	42 59 6	2014	Critical	December	--	1,580.6	1,577.2	3.4	0.2%	1,576.9	3.7	0.2%	1,576.5	4.1	0.3%	1,576.3	4.3	0.3%	1,575.9	4.6	0.3%	1,575.6	5.0	0.3%
ME 2	42 59 6	2014	Critical	January	--	2,802.8	2,800.0	2.8	0.1%	2,799.7	3.1	0.1%	2,799.4	3.4	0.1%	2,799.1	3.7	0.1%	2,798.8	3.9	0.1%	2,798.5	4.3	0.2%
ME 2	42 59 6	2014	Critical	February	--	15,692.1	15,689.8	2.3	0.0%	15,688.7	3.5	0.0%	15,688.7	3.5	0.0%	15,688.7	3.5	0.0%	15,688.7	3.5	0.0%	15,687.5	4.6	0.0%
ME 2	42 59 6	2014	Critical	March	--	31,405.1	31,402.8	2.3	0.0%	31,402.8	2.3	0.0%	31,402.8	2.3	0.0%	31,402.8	2.3	0.0%	31,401.6	3.5	0.0%	31,401.6	3.5	0.0%
ME 2	42 59 6	2014	Critical	April	--	12,963.0	12,957.2	5.8	0.0%	12,956.0	6.9	0.1%	12,956.0	6.9	0.1%	12,954.9	8.1	0.1%	12,954.9	8.1	0.1%	12,953.7	9.3	0.1%
ME 2	42 59 6	2014	Critical	May	--	5,172.8	5,165.2	7.6	0.1%	5,164.4	8.4	0.2%	5,163.5	9.3	0.2%	5,162.8	10.0	0.2%	5,162.0	10.8	0.2%	5,161.2	11.6	0.2%
ME 2	42 59 6	2014	Critical	June	--	1,193.6	1,182.6	11.0	0.9%	1,181.6	12.0	1.0%	1,180.4	13.2	1.1%	1,179.4	14.2	1.2%	1,178.2	15.4	1.3%	1,177.2	16.4	1.4%
ME 2	42 59 6	2014	Critical	July	--	544.6	535.2	9.4	1.7%	534.3	10.4	1.9%	533.3	11.3	2.1%	532.4	12.2	2.2%	531.5	13.1	2.4%	530.5	14.1	2.6%
ME 2	42 59 6	2014	Critical	August	--	345.1	336.4	8.8	2.5%	335.5	9.6	2.8%	334.6	10.5	3.0%	333.7	11.4	3.3%	332.9	12.3	3.6%	332.0	13.1	3.8%
ME 2	42 59 6	2014	Critical	September	Used in Summary Table Analysis	2,557.9	2,549.2	8.7	0.3%	2,548.3	9.6	0.4%	2,547.5	10.4	0.4%	2,546.5	11.3	0.4%	2,545.7	12.2	0.5%	2,544.8	13.1	0.5%
ME 2	42 59 6	2015	Dry	October	Used in Summary Table Analysis	11,293.3	11,286.9	6.4	0.1%	11,286.3	6.9	0.1%	11,285.8	7.5	0.1%	11,284.5	8.8	0.1%	11,283.8	9.5	0.1%	11,283.2	10.1	0.1%
ME 2	42 59 6	2015	Dry	November	Used in Summary Table Analysis	8,967.2	8,962.6	4.6	0.1%	8,962.2	5.1	0.1%	8,961.7	5.6	0.1%	8,961.2	6.0	0.1%	8,960.8	6.5	0.1%	8,960.3	6.9	0.1%
ME 2	42 59 6	2015	Dry	December	--	32,341.4	32,338.0	3.5	0.0%	32,338.0	3.5	0.0%	32,336.8	4.6	0.0%	32,336.8	4.6	0.0%	32,336.8	4.6	0.0%	32,335.6	5.8	0.0%
ME 2	42 59 6	2015	Dry	January	--	14,537.0	14,533.6	3.5	0.0%	14,533.6	3.5	0.0%	14,533.6	3.5	0.0%	14,532.4	4.6	0.0%	14,532.4	4.6	0.0%	14,532.4	4.6	0.0%
ME 2	42 59 6	2015	Dry	February	--	27,127.3	27,125.0	2.3	0.0%	27,123.8	3.5	0.0%	27,123.8	3.5	0.0%	27,123.8	3.5	0.0%	27,123.8	3.5	0.0%	27,122.7	4.6	0.0%
ME 2	42 59 6	2015	Dry	March	--	11,547.1	11,544.6	2.5	0.0%	11,544.3	2.8	0.0%	11,544.1	3.0	0.0%	11,543.8	3.4	0.0%	11,543.5	3.6	0.0%	11,543.3	3.8	0.0%
ME 2	42 59 6	2015	Dry	April	--	8,317.6	8,311.0	6.6	0.1%	8,310.4	7.2	0.1%	8,309.7	7.9	0.1%	8,309.0	8.6	0.1%	8,308.3	9.3	0.1%	8,307.8	9.8	0.1%
ME 2	42 59 6	2015	Dry	May	--	1,510.2	1,502.5	7.6	0.5%	1,501.7	8.4	0.6%	1,500.9	9.3	0.6%	1,500.2	10.0	0.7%	1,499.4	10.8	0.7%	1,498.6	11.6	0.8%
ME 2	42 59 6	2015	Dry	June	--	652.1	641.8	10.4	1.6%	640.8	11.4	1.7%	639.7	12.4	1.9%	638.7	13.5	2.1%	637.7	14.5	2.2%	636.6	15.5	2.4%
ME 2	42 59 6	2015	Dry	July	--	267.9	258.4	9.5	3.5%	257.5	10.4	3.9%	256.5	11.4	4.2%	255.6	12.3	4.6%	254.6	13.3	5.0%	253.7	14.2	5.3%
ME 2	42 59 6	2015	Dry	August	--	164.1	155.3	8.9	5.4%	154.4	9.8	5.9%	153.5	10.6	6.5%	152.6	11.5	7.0%	151.7	12.4	7.6%	150.8	13.3	8.1%
ME 2	42 59 6	2015	Dry	September	Used in Summary Table Analysis	119.4	111.7	7.7	6.5%	110.9	8.5	7.1%	110.1	9.3	7.8%	109.4	10.0	8.4%	108.6	10.8	9.1%	107.8	11.6	9.7%
ME 2	42 59 6	2016	Above Normal	October	Used in Summary Table Analysis	85.1	78.6	6.5	7.6%	77.9	7.2	8.5%	77.2	7.9	9.2%	77.2	7.9	9.3%	76.7	8.4	9.9%	75.7	9.4	11.1%
ME 2	42 59 6	2016	Above Normal	November	Used in Summary Table Analysis	3,804.3	3,799.7	4.6	0.1%	3,799.2	5.1	0.1%	3,798.7	5.6	0.1%	3,798.3	6.0	0.2%	3,797.8	6.5	0.2%	3,797.3	6.9	0.2%
ME 2	42 59 6	2016	Above Normal	December	--	36,294.0	36,290.5	3.5	0.0%	36,290.5	3.5	0.0%	36,289.4	4.6	0.0%	36,289.4	4.6	0.0%	36,289.4	4.6	0.0%	36,288.2	5.8	0.0%
ME 2	42 59 6	2016	Above Normal	January	--	56,976.9	56,973.4	3.5	0.0%	56,973.4	3.5	0.0%	56,972.2	4.6	0.0%	56,972.2	4.6	0.0%	56,972.2	4.6	0.0%	56,971.1	5.8	0.0%
ME 2	42 59 6	2016	Above Normal	February	--	24,214.1	24,211.8	2.3	0.0%	24,210.6	3.5	0.0%	24,210.6	3.5	0.0%	24,210.6	3.5	0.0%	24,210.6	3.5	0.0%	24,209.5	4.6	0.0%
ME 2	42 59 6	2016	Above Normal	March	--	41,621.5	41,618.1	3.5	0.0%	41,618.1	3.5	0.0%	41,618.1	3.5	0.0%	41,616.9	4.6	0.0%	41,616.9	4.6	0.0%	41,616.9	4.6	0.0%
ME 2	42 59 6	2016	Above Normal	April	--	18,495.4	18,491.9	3.5	0.0%	18,491.9	3.5	0.0%	18,491.9	3.5	0.0%	18,491.9	3.5	0.0%	18,491.9	3.5	0.0%	18,490.7	4.6	0.0%
ME 2	42 59 6	2016	Above Normal	May	--	5,202.3	5,199.0	3.4	0.1%	5,198.6	3.7	0.1%	5,198.3	4.1	0.1%	5,197.9	4.4	0.1%	5,197.6	4.7	0.1%	5,197.2	5.1	0.1%
ME 2	42 59 6	2016	Above Normal	June	--	1,505.9	1,498.1	7.8	0.5%	1,497.3	8.6	0.6%	1,496.6	9.3	0.6%	1,495.8	10.1	0.7%	1,495.0	10.9	0.7%	1,494.3	11.6	0.8%
ME 2	42 59 6	2016	Above Normal	July	--	818.9	810.7	8.2	1.0%	809.9	9.0	1.1%	809.1	9.8	1.2%	808.3	10.6	1.3%	807.5	11.4	1.4%	806.6	12.2	1.5%
ME 2	42 59 6	2016	Above Normal	August	--	487.2	479.5	7.6	1.6%	478.8	8.4	1.7%	478.0	9.2	1.9%	477.2	9.9	2.0%	476.5	10.7	2.2%	475.7	11.4	2.3%
ME 2	42 59 6	2016	Above Normal	September	Used in Summary Table Analysis	324.0	317.5	6.5	2.0%	316.9	7.1	2.2%	316.2	7.8	2.4%	315.6	8.4	2.6%	314.9	9.1	2.8%	314.3	9.7	3.0%
ME 2	42 59 6	2017	Wet	October	Used in Summary Table Analysis	18,158.6	18,153.9	4.6	0.0%	18,152.8	5.8	0.0%	18,152.8	5.8	0.0%	18,151.6	6.9	0.0%	18,151.6	6.9	0.0%	18,150.5	8.1	0.0%
ME 2	42 59 6	2017	Wet	November	Used in Summary Table Analysis	18,684.0	18,679.4	4.6	0.0%	18,679.4	4.6	0.0%	18,679.4	4.6	0.0%	18,678.2	5.8	0.0%	18,678.2	5.8	0.0%	18,678.2	5.8	0.0%
ME 2	42 59 6	2017	Wet	December	--	23,892.4	23,888.9	3.5	0.0%	23,888.9	3.5	0.0%	23,887.7	4.6	0.0%	23,887.7	4.6	0.0%	23,887.7	4.6	0.0%	23,887.7	4.6	0.0%
ME 2	42 59 6	2017	Wet	January	--	106,248.8	106,245.4	3.5	0.0%	106,245.4	3.5	0.0%	106,244.2	4.6	0.0%	106,244.2	4.6	0.0%	106,244.2	4.6	0.0%	106,244.2	4.6	0.0%
ME 2	42 59 6	2017	Wet	February	--	81,454.9	81,451.4	3.5	0.0%	81,451.4	3.5	0.0%	81,451.4	3.5	0.0%	81,450.2	4.6	0.0%	81,450.2	4.6	0.0%	81,450.2	4.6	0.0%
ME 2	42 59 6	2017	Wet	March	--	27,155.1	27,152.8	2.3	0.0%	27,152.8	2.3	0.0%	27,152.8	2.3	0.0%	27,151.6	3.5	0.0%	27,151.6	3.5	0.0%	27,151.6	3.5	0.0%
ME 2	42 59 6	2017	Wet	April	--	22,810.2	22,807.9	2.3	0.0%	22,807.9	2.3	0.0%	22,807.9	2.3	0.0%	22,807.9	2.3	0.0%	22,807.9	2.3	0.0%	22,806.7	3.5	0.0%
ME 2	42 59 6	2017	Wet	May	--	6,271.2	6,267.8	3.4	0.1%	6,267.5	3.7	0.1%	6,267.1	4.1	0.1%	6,266.8	4.4	0.1%	6,266.4	4.7	0.1%	6,266.1	5.1	0.1%
ME 2	42 59 6	2017	Wet	June	--	2,103.0	2,094.9	8.1	0.4%	2,094.1	8.9	0.4%	2,093.3	9.7	0.5%	2,092.5	10.5	0.5%	2,091.7	11.3	0.5%	2,090.9	12.2	0.6%
ME 2	42 59 6	2017	Wet	July	--	927.4	919.2	8.2	0.9%	918.4	9.0	1.0%	917.6	9.8	1.1%	916.8	10.7	1.1%	915.9	11.5	1.2%	915.1	12.3	1.3%
ME 2	42 59 6	2017	Wet	August	--	499.7	492.1	7.6	1.5%	491.4	8.4	1.7%	490.6	9.1	1.8%	489.8	9.9	2.0%	489.1	10.6	2.1%	488.3	11.4	2.3%
ME 2	42 59 6	2017	Wet	September	Used in Summary Table Analysis	317.6	310.6	7.0	2.2%	309.9	7.7	2.4%	309.2	8.4	2.6%	308.5	9.1	2.9%	307.8	9.7	3.1%	307.1	10.4	3.3%
ME 2	42 59 6	2018	Above Normal	October	Used in Summary Table Analysis	270.4	266.0	4.3	1.6%	265.1	5.2	1.9%	264.5	5.9	2.2%	263.7	6.6	2.5%	263.1	7.3	2.7%	262.6	7.8	2.9%
ME 2	42 59 6	2018	Above Normal	November	Used in Summary Table Analysis	10,642.9	10,639.1	3.8	0.0%	10,638.8	4.2	0.0%	10,638.3	4.6	0.0%	10,638.0	5.0	0.0%	10,637.6	5.3	0.1%	10,637.3	5.7	0.1%
ME 2	42 59 6	2018	Above Normal	December	--	5,434.5	5,431.5	3.0	0.1%	5,431.1	3.4	0.1%	5,430.8	3.7	0.1%	5,430.4	4.1	0.1%	5,430.2	4.3	0.1%	5,429.9	4.6	0.1%
ME 2	42 59 6	2018	Above Normal	January	--	17,522.0	17,519.7	2.3	0.0%	17,519.7	2.3	0.0%	17,518.5	3.5	0.0%	17,518.5	3.5	0.0%	17,518.5	3.5	0.0%	17,518.5	3.5	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	42 59 6	2018	Above Normal	February	--	7,587.5	7,585.1	2.4	0.0%	7,584.8	2.7	0.0%	7,584.6	2.9	0.0%	7,584.4	3.1	0.0%	7,584.1	3.4	0.0%	7,583.9	3.6	0.0%
ME 2	42 59 6	2018	Above Normal	March	--	20,534.7	20,532.4	2.3	0.0%	20,532.4	2.3	0.0%	20,532.4	2.3	0.0%	20,532.4	2.3	0.0%	20,531.3	3.5	0.0%	20,531.3	3.5	0.0%
ME 2	42 59 6	2018	Above Normal	April	--	32,005.8	32,003.5	2.3	0.0%	32,003.5	2.3	0.0%	32,003.5	2.3	0.0%	32,003.5	2.3	0.0%	32,003.5	2.3	0.0%	32,002.3	3.5	0.0%
ME 2	42 59 6	2018	Above Normal	May	--	6,983.9	6,977.8	6.1	0.1%	6,977.2	6.7	0.1%	6,976.6	7.3	0.1%	6,975.9	8.0	0.1%	6,975.3	8.6	0.1%	6,974.8	9.1	0.1%
ME 2	42 59 6	2018	Above Normal	June	--	1,909.5	1,901.6	7.9	0.4%	1,900.8	8.7	0.5%	1,900.0	9.5	0.5%	1,899.3	10.2	0.5%	1,898.5	11.0	0.6%	1,897.7	11.8	0.6%
ME 2	42 59 6	2018	Above Normal	July	--	776.2	768.1	8.1	1.0%	767.2	9.0	1.2%	766.4	9.8	1.3%	765.6	10.6	1.4%	764.8	11.4	1.5%	764.0	12.2	1.6%
ME 2	42 59 6	2018	Above Normal	August	--	437.5	430.3	7.2	1.7%	429.5	8.0	1.8%	428.8	8.7	2.0%	428.1	9.4	2.2%	427.4	10.1	2.3%	426.6	10.9	2.5%
ME 2	42 59 6	2018	Above Normal	September	Used in Summary Table Analysis	295.6	288.7	6.9	2.3%	288.0	7.6	2.6%	287.3	8.3	2.8%	286.6	9.0	3.0%	285.9	9.7	3.3%	285.2	10.4	3.5%
ME 2	42 59 6	2019	Below Normal	October	Used in Summary Table Analysis	205.2	200.0	5.2	2.5%	199.5	5.7	2.8%	199.0	6.2	3.0%	198.5	6.7	3.3%	198.0	7.2	3.5%	197.5	7.7	3.7%
ME 2	42 59 6	2019	Below Normal	November	Used in Summary Table Analysis	6,526.9	6,523.0	3.8	0.1%	6,522.6	4.3	0.1%	6,522.2	4.6	0.1%	6,521.9	5.0	0.1%	6,521.5	5.3	0.1%	6,521.1	5.8	0.1%
ME 2	42 59 6	2019	Below Normal	December	--	14,498.8	14,495.4	3.5	0.0%	14,495.4	3.5	0.0%	14,495.4	3.5	0.0%	14,494.2	4.6	0.0%	14,494.2	4.6	0.0%	14,494.2	4.6	0.0%
ME 2	42 59 6	2019	Below Normal	January	--	34,878.5	34,876.2	2.3	0.0%	34,876.2	2.3	0.0%	34,875.0	3.5	0.0%	34,875.0	3.5	0.0%	34,875.0	3.5	0.0%	34,875.0	3.5	0.0%
ME 2	42 59 6	2019	Below Normal	February	--	141,562.5	141,550.9	11.6	0.0%	141,550.9	11.6	0.0%	141,550.9	11.6	0.0%	141,550.9	11.6	0.0%	141,550.9	11.6	0.0%	141,550.9	11.6	0.0%
ME 2	42 59 6	2019	Below Normal	March	--	42,131.9	42,129.6	2.3	0.0%	42,129.6	2.3	0.0%	42,129.6	2.3	0.0%	42,129.6	2.3	0.0%	42,128.5	3.5	0.0%	42,128.5	3.5	0.0%
ME 2	42 59 6	2019	Below Normal	April	--	15,222.2	15,221.1	1.2	0.0%	15,219.9	2.3	0.0%	15,219.9	2.3	0.0%	15,219.9	2.3	0.0%	15,219.9	2.3	0.0%	15,219.9	2.3	0.0%
ME 2	42 59 6	2019	Below Normal	May	--	16,681.7	16,675.9	5.8	0.0%	16,674.8	6.9	0.0%	16,674.8	6.9	0.0%	16,673.6	8.1	0.0%	16,673.6	8.1	0.0%	16,672.5	9.3	0.1%
ME 2	42 59 6	2019	Below Normal	June	--	4,245.6	4,237.0	8.6	0.2%	4,236.2	9.4	0.2%	4,235.3	10.3	0.2%	4,234.5	11.1	0.3%	4,233.6	12.0	0.3%	4,232.8	12.8	0.3%
ME 2	42 59 6	2019	Below Normal	July	--	1,353.8	1,345.6	8.2	0.6%	1,344.8	9.0	0.7%	1,344.0	9.8	0.7%	1,343.2	10.6	0.8%	1,342.4	11.5	0.8%	1,341.6	12.3	0.9%
ME 2	42 59 6	2019	Below Normal	August	--	590.0	582.6	7.4	1.3%	581.9	8.1	1.4%	581.1	8.9	1.5%	580.4	9.6	1.6%	579.6	10.3	1.8%	578.9	11.1	1.9%
ME 2	42 59 6	2019	Below Normal	September	Used in Summary Table Analysis	457.9	451.0	6.9	1.5%	450.3	7.6	1.7%	449.6	8.3	1.8%	448.9	8.9	2.0%	448.2	9.7	2.1%	447.5	10.3	2.3%
ME 2	42 59 6	2020	Dry	October	Used in Summary Table Analysis	353.2	348.4	4.8	1.4%	347.9	5.3	1.5%	347.4	5.8	1.6%	347.0	6.3	1.8%	346.5	6.7	1.9%	346.0	7.2	2.0%
ME 2	42 59 6	2020	Dry	November	Used in Summary Table Analysis	310.0	306.6	3.4	1.1%	306.2	3.8	1.2%	305.8	4.1	1.3%	305.5	4.5	1.4%	305.2	4.8	1.6%	304.8	5.2	1.7%
ME 2	42 59 6	2020	Dry	December	--	13,039.4	13,037.0	2.3	0.0%	13,035.9	3.5	0.0%	13,035.9	3.5	0.0%	13,035.9	3.5	0.0%	13,035.9	3.5	0.0%	13,034.7	4.6	0.0%
ME 2	42 59 6	2020	Dry	January	--	22,136.6	22,134.3	2.3	0.0%	22,134.3	2.3	0.0%	22,134.3	2.3	0.0%	22,133.1	3.5	0.0%	22,133.1	3.5	0.0%	22,133.1	3.5	0.0%
ME 2	42 59 6	2020	Dry	February	--	7,408.3	7,406.0	2.3	0.0%	7,405.7	2.7	0.0%	7,405.4	2.9	0.0%	7,405.2	3.1	0.0%	7,405.0	3.4	0.0%	7,404.7	3.6	0.0%
ME 2	42 59 6	2020	Dry	March	--	7,211.5	7,209.3	2.2	0.0%	7,209.0	2.4	0.0%	7,208.8	2.7	0.0%	7,208.6	2.9	0.0%	7,208.3	3.1	0.0%	7,208.2	3.2	0.0%
ME 2	42 59 6	2020	Dry	April	--	5,446.5	5,440.3	6.3	0.1%	5,439.6	6.9	0.1%	5,439.0	7.5	0.1%	5,438.3	8.2	0.2%	5,437.7	8.8	0.2%	5,437.0	9.5	0.2%
ME 2	42 59 6	2020	Dry	May	--	7,329.5	7,321.9	7.6	0.1%	7,321.1	8.4	0.1%	7,320.4	9.1	0.1%	7,319.6	10.0	0.1%	7,318.9	10.6	0.1%	7,318.1	11.5	0.2%
ME 2	42 59 6	2020	Dry	June	--	2,105.9	2,095.4	10.5	0.5%	2,094.3	11.6	0.5%	2,093.3	12.6	0.6%	2,092.2	13.7	0.6%	2,091.2	14.7	0.7%	2,090.2	15.7	0.7%
ME 2	42 59 6	2020	Dry	July	--	793.4	783.9	9.5	1.2%	783.0	10.4	1.3%	782.0	11.4	1.4%	781.1	12.3	1.6%	780.1	13.3	1.7%	779.2	14.2	1.8%
ME 2	42 59 6	2020	Dry	August	--	395.7	386.7	9.0	2.3%	385.8	9.9	2.5%	384.9	10.8	2.7%	384.0	11.7	3.0%	383.1	12.6	3.2%	382.2	13.5	3.4%
ME 2	42 59 6	2020	Dry	September	Used in Summary Table Analysis	245.4	237.6	7.8	3.2%	236.8	8.6	3.5%	236.0	9.4	3.8%	235.2	10.2	4.1%	234.5	10.9	4.5%	233.7	11.7	4.8%
ME 2	41 58 8	2000	Above Normal	October	Used in Summary Table Analysis	801.8	796.2	5.6	0.7%	795.7	6.1	0.8%	795.1	6.7	0.8%	794.6	7.2	0.9%	794.0	7.8	1.0%	793.5	8.3	1.0%
ME 2	41 58 8	2000	Above Normal	November	Used in Summary Table Analysis	11,943.3	11,938.7	4.6	0.0%	11,938.7	4.6	0.0%	11,937.5	5.8	0.0%	11,937.5	5.8	0.0%	11,937.5	5.8	0.0%	11,936.3	6.9	0.1%
ME 2	41 58 8	2000	Above Normal	December	--	10,715.0	10,711.5	3.6	0.0%	10,711.1	3.9	0.0%	10,710.8	4.3	0.0%	10,710.4	4.6	0.0%	10,710.1	5.0	0.0%	10,709.7	5.3	0.0%
ME 2	41 58 8	2000	Above Normal	January	--	28,284.7	28,281.3	3.5	0.0%	28,281.3	3.5	0.0%	28,281.3	3.5	0.0%	28,281.3	3.5	0.0%	28,280.1	4.6	0.0%	28,280.1	4.6	0.0%
ME 2	41 58 8	2000	Above Normal	February	--	36,849.5	36,846.1	3.5	0.0%	36,846.1	3.5	0.0%	36,846.1	3.5	0.0%	36,846.1	3.5	0.0%	36,844.9	4.6	0.0%	36,844.9	4.6	0.0%
ME 2	41 58 8	2000	Above Normal	March	--	18,253.5	18,251.2	2.3	0.0%	18,251.2	2.3	0.0%	18,251.2	2.3	0.0%	18,250.0	3.5	0.0%	18,250.0	3.5	0.0%	18,250.0	3.5	0.0%
ME 2	41 58 8	2000	Above Normal	April	--	12,266.2	12,263.9	2.3	0.0%	12,262.7	3.5	0.0%	12,262.7	3.5	0.0%	12,262.7	3.5	0.0%	12,262.7	3.5	0.0%	12,261.6	4.6	0.0%
ME 2	41 58 8	2000	Above Normal	May	--	7,053.6	7,046.8	6.8	0.1%	7,046.1	7.5	0.1%	7,045.4	8.2	0.1%	7,044.7	8.9	0.1%	7,044.0	9.6	0.1%	7,043.4	10.2	0.1%
ME 2	41 58 8	2000	Above Normal	June	--	2,592.6	2,582.2	10.4	0.4%	2,581.1	11.5	0.4%	2,580.0	12.6	0.5%	2,579.1	13.5	0.5%	2,578.0	14.6	0.6%	2,576.9	15.7	0.6%
ME 2	41 58 8	2000	Above Normal	July	--	980.6	971.8	8.8	0.9%	970.9	9.7	1.0%	970.0	10.5	1.1%	969.2	11.4	1.2%	968.3	12.3	1.3%	967.4	13.2	1.3%
ME 2	41 58 8	2000	Above Normal	August	--	510.2	502.2	8.0	1.6%	501.4	8.8	1.7%	500.6	9.6	1.9%	499.8	10.4	2.0%	499.0	11.2	2.2%	498.2	12.0	2.3%
ME 2	41 58 8	2000	Above Normal	September	Used in Summary Table Analysis	284.5	277.6	6.9	2.4%	276.9	7.5	2.7%	276.3	8.2	2.9%	275.6	8.9	3.1%	274.9	9.6	3.4%	274.2	10.3	3.6%
ME 2	41 58 8	2001	Dry	October	Used in Summary Table Analysis	3,771.1	3,765.6	5.4	0.1%	3,765.0	6.0	0.2%	3,764.5	6.6	0.2%	3,764.0	7.1	0.2%	3,763.4	7.6	0.2%	3,762.8	8.2	0.2%
ME 2	41 58 8	2001	Dry	November	Used in Summary Table Analysis	6,055.6	6,051.3	4.3	0.1%	6,050.9	4.6	0.1%	6,050.5	5.1	0.1%	6,050.0	5.6	0.1%	6,049.7	5.9	0.1%	6,049.2	6.4	0.1%
ME 2	41 58 8	2001	Dry	December	--	8,769.6	8,766.0	3.6	0.0%	8,765.6	3.9	0.0%	8,765.3	4.3	0.0%	8,764.9	4.6	0.1%	8,764.6	5.0	0.1%	8,764.1	5.4	0.1%
ME 2	41 58 8	2001	Dry	January	--	12,663.2	12,660.9	2.3	0.0%	12,659.7	3.5	0.0%	12,659.7	3.5	0.0%	12,659.7	3.5	0.0%	12,659.7	3.5	0.0%	12,658.6	4.6	0.0%
ME 2	41 58 8	2001	Dry	February	--	17,390.0	17,386.6	3.5	0.0%	17,386.6	3.5	0.0%	17,386.6	3.5	0.0%	17,385.4	4.6	0.0%	17,385.4	4.6	0.0%	17,385.4	4.6	0.0%
ME 2	41 58 8	2001	Dry	March	--	12,252.3	12,250.0	2.3	0.0%	12,250.0	2.3	0.0%	12,248.8	3.5	0.0%	12,248.8	3.5	0.0%	12,248.8	3.5	0.0%	12,248.8	3.5	0.0%
ME 2	41 58 8	2001	Dry	April	--	10,925.5	10,918.4	7.1	0.1%	10,917.7	7.8	0.1%	10,916.9	8.6	0.1%	10,916.2	9.3	0.1%	10,915.5	10.0	0.1%	10,914.8	10.6	0.1%
ME 2	41 58 8	2001	Dry	May	--	2,631.4	2,623.0	8.3	0.3%	2,622.2	9.1	0.3%	2,621.4	10.0	0.4%	2,620.6	10.8	0.4%	2,619.8	11.6	0.4%	2,619.0	12.4	0.5%
ME 2	41 58 8	2001	Dry	June	--	2,617.1	2,605.6	11.6	0.4%	2,604.4	12.7	0.5%	2,603.2	13.9	0.5%	2,602.1	15.0	0.6%	2,600.9	16.2	0.6%	2,599.8	17.4	0.7%
ME 2	41 58 8	2001	Dry	July	--	711.3	701.2	10.1	1.4%	700.2	11.1	1.6%	699.1	12.1	1.7%	698.1	13.1	1.8%	697.1	14.2	2.0%	696.1	15.2	2.1%
ME 2	41 58 8	2001	Dry	August	--	163.0	153.4	9.7	5.9%	152.4	10.6	6.5%	151.4	11.6	7.1%	150.5	12.5	7.7%	149.5	13.5	8.3%	148.6	14.5	8.9%
ME 2	41 58 8	2001	Dry	September	Used in Summary Table Analysis	85.4	77.1	8.4	9.8%	76.2	9.2	10.8%	75.4	10.1	11.8%	74.5	10.9	12.8%	73.7	11.7	13.7%	72.9	12.6	14.7%
ME 2	41 58 8	2002	Below Normal	October	Used in Summary Table Analysis	254.2	247.4	6.8	2.7%	246.7	7.5	3.0%	246.0	8.2	3.2%	245.3	8.9	3.5%	244.7	9.6	3.8%	244.0	10.3	4.0%
ME 2	41 58 8	2002	Below Normal	November	Used in Summary Table Analysis	11,935.2	11,930.6	4.6	0.0%	11,929.4	5.8	0.0%	11,929.4	5.8	0.0%	11,929.4	5.8	0.0%	11,928.2	6.9	0.1%	11,928.2	6.9	0.1%
ME 2	41 58 8	2002	Below Normal	December	--	35,419.0	35,414.4	4.6	0.0%	35,414.4	4.6	0.0%	35,414.4	4.6	0.0%	35,413.2	5.8	0.0%	35,413.2	5.8	0.0%	35,412.0	6.9	0.0%
ME 2	41 58 8	2002	Below Normal	January	--	30,708.3	30,704.9	3.5	0.0%	30,704.9	3.5	0.0%	30,703.7	4.6	0.0%	30,703.7	4.6	0.0%	30,703.7	4.6	0.0%	30,702.5	5.8	0.0%
ME 2	41 58 8	2002	Below Normal	February	--	24,574.1	24,570.6	3.5	0.0%	24,570.6	3.5	0.0%	24,570.6	3.5	0.0%	24,569.4	4.6	0.0%	24,569.4	4.6	0.0%	24,569.4	4.6	0.0%
ME 2	41 58 8	2002	Below Normal	March	--	17,697.9	17,694.4	3.5	0.0%	17,694.4	3.5	0.0%	17,694.4	3.5	0.0%	17,693.3	4.6	0.0%	17,693.3	4.6	0.0%	17,693.3	4.6	0.0%
ME 2	41 58 8	2002	Below Normal	April	--	9,891.1	9,884.1	6.9	0.1%	9,883.4	7.6	0.1%	9,882.8	8.3	0.1%	9,881.9	9.1	0.1%	9,881.3	9.8	0.1%	9,880.6	10.5	0.1%
ME 2	41 58 8	2002	Below Normal	May	--	3,304.4	3,296.3	8.1	0.2%	3,295.5	8.9	0.3%	3,294.7	9.7	0.3%	3,293.9	10.5	0.3%	3,293.1	11.3	0.3%	3,292.2	12.2	0.4%

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Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	41 58 8	2002	Below Normal	June	--	844.7	835.2	9.4	1.1%	834.3	10.4	1.2%	833.3	11.3	1.3%	832.4	12.3	1.5%	831.5	13.2	1.6%	830.5	14.1	1.7%
ME 2	41 58 8	2002	Below Normal	July	--	352.9	343.8	9.1	2.6%	342.9	10.0	2.8%	342.0	10.9	3.1%	341.1	11.8	3.3%	340.2	12.7	3.6%	339.3	13.6	3.9%
ME 2	41 58 8	2002	Below Normal	August	--	216.4	208.0	8.3	3.9%	207.2	9.2	4.2%	206.4	10.0	4.6%	205.5	10.9	5.0%	204.7	11.7	5.4%	203.9	12.5	5.8%
ME 2	41 58 8	2002	Below Normal	September	Used in Summary Table Analysis	153.5	145.8	7.6	5.0%	145.1	8.4	5.5%	144.3	9.2	6.0%	143.6	9.9	6.5%	142.8	10.7	7.0%	142.0	11.4	7.5%
ME 2	41 58 8	2003	Wet	October	Used in Summary Table Analysis	118.6	112.6	6.0	5.1%	112.0	6.6	5.6%	111.4	7.2	6.1%	110.7	7.8	6.6%	110.1	8.4	7.1%	109.5	9.0	7.6%
ME 2	41 58 8	2003	Wet	November	Used in Summary Table Analysis	883.7	879.0	4.6	0.5%	878.6	5.1	0.6%	878.1	5.6	0.6%	877.6	6.1	0.7%	877.1	6.5	0.7%	876.7	7.0	0.8%
ME 2	41 58 8	2003	Wet	December	--	56,204.9	56,201.4	3.5	0.0%	56,201.4	3.5	0.0%	56,200.2	4.6	0.0%	56,200.2	4.6	0.0%	56,200.2	4.6	0.0%	56,199.1	5.8	0.0%
ME 2	41 58 8	2003	Wet	January	--	31,400.5	31,397.0	3.5	0.0%	31,397.0	3.5	0.0%	31,395.8	4.6	0.0%	31,395.8	4.6	0.0%	31,395.8	4.6	0.0%	31,394.7	5.8	0.0%
ME 2	41 58 8	2003	Wet	February	--	20,282.4	20,278.9	3.5	0.0%	20,278.9	3.5	0.0%	20,278.9	3.5	0.0%	20,278.9	3.5	0.0%	20,277.8	4.6	0.0%	20,277.8	4.6	0.0%
ME 2	41 58 8	2003	Wet	March	--	23,927.1	23,923.6	3.5	0.0%	23,923.6	3.5	0.0%	23,923.6	3.5	0.0%	23,923.6	3.5	0.0%	23,922.5	4.6	0.0%	23,922.5	4.6	0.0%
ME 2	41 58 8	2003	Wet	April	--	42,656.3	42,652.8	3.5	0.0%	42,652.8	3.5	0.0%	42,652.8	3.5	0.0%	42,651.6	4.6	0.0%	42,651.6	4.6	0.0%	42,651.6	4.6	0.0%
ME 2	41 58 8	2003	Wet	May	--	12,185.2	12,178.2	6.9	0.1%	12,178.2	6.9	0.1%	12,177.1	8.1	0.1%	12,175.9	9.3	0.1%	12,175.9	9.3	0.1%	12,174.8	10.4	0.1%
ME 2	41 58 8	2003	Wet	June	--	3,154.3	3,145.1	9.1	0.3%	3,144.3	10.0	0.3%	3,143.4	10.9	0.3%	3,142.5	11.8	0.4%	3,141.7	12.6	0.4%	3,140.7	13.5	0.4%
ME 2	41 58 8	2003	Wet	July	--	1,461.3	1,452.3	9.0	0.6%	1,451.4	10.0	0.7%	1,450.5	10.9	0.7%	1,449.7	11.7	0.8%	1,448.7	12.6	0.9%	1,447.8	13.5	0.9%
ME 2	41 58 8	2003	Wet	August	--	747.9	739.4	8.5	1.1%	738.6	9.3	1.2%	737.8	10.2	1.4%	736.9	11.0	1.5%	736.0	11.9	1.6%	735.2	12.8	1.7%
ME 2	41 58 8	2003	Wet	September	Used in Summary Table Analysis	446.4	439.5	7.0	1.6%	438.8	7.7	1.7%	438.1	8.4	1.9%	437.4	9.0	2.0%	436.7	9.7	2.2%	436.0	10.4	2.3%
ME 2	41 58 8	2004	Wet	October	Used in Summary Table Analysis	313.5	308.0	5.6	1.8%	307.4	6.1	1.9%	306.8	6.7	2.1%	306.3	7.2	2.3%	305.7	7.8	2.5%	305.2	8.3	2.7%
ME 2	41 58 8	2004	Wet	November	Used in Summary Table Analysis	5,730.7	5,726.4	4.3	0.1%	5,725.9	4.7	0.1%	5,725.5	5.2	0.1%	5,725.1	5.6	0.1%	5,724.7	6.0	0.1%	5,724.2	6.5	0.1%
ME 2	41 58 8	2004	Wet	December	--	36,003.5	36,000.0	3.5	0.0%	35,998.8	4.6	0.0%	35,998.8	4.6	0.0%	35,998.8	4.6	0.0%	35,998.8	4.6	0.0%	35,997.7	5.8	0.0%
ME 2	41 58 8	2004	Wet	January	--	31,263.9	31,260.4	3.5	0.0%	31,260.4	3.5	0.0%	31,259.3	4.6	0.0%	31,259.3	4.6	0.0%	31,259.3	4.6	0.0%	31,258.1	5.8	0.0%
ME 2	41 58 8	2004	Wet	February	--	38,033.6	38,031.3	2.3	0.0%	38,031.3	2.3	0.0%	38,030.1	3.5	0.0%	38,030.1	3.5	0.0%	38,030.1	3.5	0.0%	38,030.1	3.5	0.0%
ME 2	41 58 8	2004	Wet	March	--	16,483.8	16,481.5	2.3	0.0%	16,481.5	2.3	0.0%	16,480.3	3.5	0.0%	16,480.3	3.5	0.0%	16,480.3	3.5	0.0%	16,480.3	3.5	0.0%
ME 2	41 58 8	2004	Wet	April	--	9,420.0	9,417.5	2.5	0.0%	9,417.2	2.8	0.0%	9,417.0	3.0	0.0%	9,416.8	3.2	0.0%	9,416.4	3.6	0.0%	9,416.2	3.8	0.0%
ME 2	41 58 8	2004	Wet	May	--	3,394.7	3,387.8	6.8	0.2%	3,387.2	7.5	0.2%	3,386.5	8.2	0.2%	3,385.8	8.9	0.3%	3,385.1	9.6	0.3%	3,384.4	10.3	0.3%
ME 2	41 58 8	2004	Wet	June	--	683.1	674.5	8.6	1.3%	673.6	9.4	1.4%	672.8	10.3	1.5%	671.9	11.1	1.6%	671.1	12.0	1.8%	670.2	12.8	1.9%
ME 2	41 58 8	2004	Wet	July	--	345.4	336.6	8.8	2.6%	335.7	9.7	2.8%	334.8	10.6	3.1%	333.9	11.4	3.3%	333.0	12.3	3.6%	332.2	13.2	3.8%
ME 2	41 58 8	2004	Wet	August	--	214.7	206.7	8.0	3.7%	205.9	8.8	4.1%	205.1	9.6	4.5%	204.3	10.4	4.9%	203.5	11.2	5.2%	202.7	12.0	5.6%
ME 2	41 58 8	2004	Wet	September	Used in Summary Table Analysis	152.3	144.7	7.6	5.0%	143.9	8.3	5.5%	143.2	9.1	6.0%	142.4	9.8	6.5%	141.7	10.6	7.0%	140.9	11.4	7.5%
ME 2	41 58 8	2005	Above Normal	October	Used in Summary Table Analysis	7,589.7	7,584.0	5.7	0.1%	7,583.6	6.1	0.1%	7,583.0	6.7	0.1%	7,582.4	7.3	0.1%	7,581.8	7.9	0.1%	7,581.3	8.4	0.1%
ME 2	41 58 8	2005	Above Normal	November	Used in Summary Table Analysis	2,239.7	2,235.4	4.3	0.2%	2,235.1	4.6	0.2%	2,234.6	5.1	0.2%	2,234.1	5.6	0.2%	2,233.7	6.0	0.3%	2,233.3	6.4	0.3%
ME 2	41 58 8	2005	Above Normal	December	--	20,770.8	20,767.4	3.5	0.0%	20,766.2	4.6	0.0%	20,766.2	4.6	0.0%	20,766.2	4.6	0.0%	20,765.0	5.8	0.0%	20,765.0	5.8	0.0%
ME 2	41 58 8	2005	Above Normal	January	--	22,181.7	22,179.4	2.3	0.0%	22,178.2	3.5	0.0%	22,178.2	3.5	0.0%	22,178.2	3.5	0.0%	22,178.2	3.5	0.0%	22,177.1	4.6	0.0%
ME 2	41 58 8	2005	Above Normal	February	--	13,971.1	13,968.8	2.3	0.0%	13,968.8	2.3	0.0%	13,967.6	3.5	0.0%	13,967.6	3.5	0.0%	13,967.6	3.5	0.0%	13,967.6	3.5	0.0%
ME 2	41 58 8	2005	Above Normal	March	--	28,412.0	28,409.7	2.3	0.0%	28,409.7	2.3	0.0%	28,408.6	3.5	0.0%	28,408.6	3.5	0.0%	28,408.6	3.5	0.0%	28,408.6	3.5	0.0%
ME 2	41 58 8	2005	Above Normal	April	--	21,341.4	21,339.1	2.3	0.0%	21,339.1	2.3	0.0%	21,339.1	2.3	0.0%	21,338.0	3.5	0.0%	21,338.0	3.5	0.0%	21,338.0	3.5	0.0%
ME 2	41 58 8	2005	Above Normal	May	--	19,447.9	19,441.0	6.9	0.0%	19,439.8	8.1	0.0%	19,438.7	9.3	0.0%	19,438.7	9.3	0.0%	19,437.5	10.4	0.1%	19,437.5	10.4	0.1%
ME 2	41 58 8	2005	Above Normal	June	--	15,728.0	15,716.4	11.6	0.1%	15,715.3	12.7	0.1%	15,714.1	13.9	0.1%	15,713.0	15.0	0.1%	15,711.8	16.2	0.1%	15,711.8	16.2	0.1%
ME 2	41 58 8	2005	Above Normal	July	--	2,857.5	2,848.3	9.3	0.3%	2,847.3	10.2	0.4%	2,846.4	11.1	0.4%	2,845.5	12.0	0.4%	2,844.6	13.0	0.5%	2,843.6	13.9	0.5%
ME 2	41 58 8	2005	Above Normal	August	--	970.5	962.5	8.0	0.8%	961.7	8.8	0.9%	960.9	9.6	1.0%	960.1	10.4	1.1%	959.3	11.2	1.2%	958.5	12.0	1.2%
ME 2	41 58 8	2005	Above Normal	September	Used in Summary Table Analysis	512.3	505.4	6.9	1.3%	504.7	7.6	1.5%	504.1	8.2	1.6%	503.4	8.9	1.7%	502.7	9.6	1.9%	502.0	10.3	2.0%
ME 2	41 58 8	2006	Wet	October	Used in Summary Table Analysis	620.8	615.4	5.4	0.9%	614.8	6.0	1.0%	614.3	6.5	1.0%	613.8	7.0	1.1%	613.2	7.6	1.2%	612.7	8.1	1.3%
ME 2	41 58 8	2006	Wet	November	Used in Summary Table Analysis	9,186.0	9,181.9	4.1	0.0%	9,181.6	4.4	0.0%	9,181.1	4.9	0.1%	9,180.8	5.2	0.1%	9,180.3	5.7	0.1%	9,179.9	6.1	0.1%
ME 2	41 58 8	2006	Wet	December	--	43,114.6	43,111.1	3.5	0.0%	43,110.0	4.6	0.0%	43,110.0	4.6	0.0%	43,110.0	4.6	0.0%	43,108.8	5.8	0.0%	43,108.8	5.8	0.0%
ME 2	41 58 8	2006	Wet	January	--	45,950.2	45,946.8	3.5	0.0%	45,946.8	3.5	0.0%	45,946.8	3.5	0.0%	45,946.8	3.5	0.0%	45,945.6	4.6	0.0%	45,945.6	4.6	0.0%
ME 2	41 58 8	2006	Wet	February	--	26,467.6	26,465.3	2.3	0.0%	26,464.1	3.5	0.0%	26,464.1	3.5	0.0%	26,464.1	3.5	0.0%	26,464.1	3.5	0.0%	26,463.0	4.6	0.0%
ME 2	41 58 8	2006	Wet	March	--	46,883.1	46,880.8	2.3	0.0%	46,880.8	2.3	0.0%	46,879.6	3.5	0.0%	46,879.6	3.5	0.0%	46,879.6	3.5	0.0%	46,879.6	3.5	0.0%
ME 2	41 58 8	2006	Wet	April	--	30,317.1	30,314.8	2.3	0.0%	30,314.8	2.3	0.0%	30,313.7	3.5	0.0%	30,313.7	3.5	0.0%	30,313.7	3.5	0.0%	30,313.7	3.5	0.0%
ME 2	41 58 8	2006	Wet	May	--	14,141.2	14,137.7	3.5	0.0%	14,136.6	4.6	0.0%	14,136.6	4.6	0.0%	14,136.6	4.6	0.0%	14,135.4	5.8	0.0%	14,135.4	5.8	0.0%
ME 2	41 58 8	2006	Wet	June	--	3,536.2	3,527.4	8.8	0.2%	3,526.6	9.6	0.3%	3,525.7	10.5	0.3%	3,524.9	11.3	0.3%	3,524.0	12.3	0.3%	3,523.0	13.2	0.4%
ME 2	41 58 8	2006	Wet	July	--	1,265.5	1,256.6	8.9	0.7%	1,255.8	9.7	0.8%	1,254.9	10.6	0.8%	1,254.1	11.5	0.9%	1,253.1	12.4	1.0%	1,252.2	13.3	1.1%
ME 2	41 58 8	2006	Wet	August	--	651.7	643.4	8.3	1.3%	642.6	9.1	1.4%	641.8	9.9	1.5%	640.9	10.8	1.7%	640.1	11.6	1.8%	639.3	12.4	1.9%
ME 2	41 58 8	2006	Wet	September	Used in Summary Table Analysis	413.4	406.5	7.0	1.7%	405.8	7.7	1.9%	405.1	8.4	2.0%	404.4	9.1	2.2%	403.7	9.8	2.4%	403.0	10.5	2.5%
ME 2	41 58 8	2007	Above Normal	October	Used in Summary Table Analysis	263.0	257.5	5.5	2.1%	257.0	6.1	2.3%	256.4	6.6	2.5%	255.9	7.2	2.7%	255.3	7.7	2.9%	254.8	8.3	3.1%
ME 2	41 58 8	2007	Above Normal	November	Used in Summary Table Analysis	8,560.5	8,556.4	4.2	0.0%	8,555.9	4.6	0.1%	8,555.4	5.1	0.1%	8,555.0	5.6	0.1%	8,554.6	5.9	0.1%	8,554.2	6.4	0.1%
ME 2	41 58 8	2007	Above Normal	December	--	20,199.1	20,195.6	3.5	0.0%	20,195.6	3.5	0.0%	20,194.4	4.6	0.0%	20,194.4	4.6	0.0%	20,194.4	4.6	0.0%	20,193.3	5.8	0.0%
ME 2	41 58 8	2007	Above Normal	January	--	10,191.9	10,188.7	3.2	0.0%	10,188.3	3.6	0.0%	10,188.0	3.9	0.0%	10,187.7	4.2	0.0%	10,187.4	4.5	0.0%	10,187.0	4.9	0.0%
ME 2	41 58 8	2007	Above Normal	February	--	30,335.6	30,332.2	3.5	0.0%	30,332.2	3.5	0.0%	30,332.2	3.5	0.0%	30,332.2	3.5	0.0%	30,331.0	4.6	0.0%	30,331.0	4.6	0.0%
ME 2	41 58 8	2007	Above Normal	March	--	13,057.9	13,054.4	3.5	0.0%	13,054.4	3.5	0.0%	13,054.4	3.5	0.0%	13,053.2	4.6	0.0%	13,053.2	4.6	0.0%	13,053.2	4.6	0.0%
ME 2	41 58 8	2007	Above Normal	April	--	11,492.8	11,486.1	6.7	0.1%	11,485.4	7.4	0.1%	11,484.8	8.0	0.1%	11,484.1	8.7	0.1%	11,483.4	9.4	0.1%	11,482.8	10.1	0.1%
ME 2	41 58 8	2007	Above Normal	May	--	4,118.4	4,110.6	7.8	0.2%	4,109.8	8.6	0.2%	4,109.0	9.4	0.2%	4,108.2	10.2	0.2%	4,107.4	11.0	0.3%	4,106.7	11.7	0.3%
ME 2	41 58 8	2007	Above Normal	June	--	1,482.5	1,472.7	9.8	0.7%	1,471.6	10.9	0.7%	1,470.6	11.9	0.8%	1,469.7	12.8	0.9%	1,468.8	13.8	0.9%	1,467.7	14.8	1.0%
ME 2	41 58 8	2007	Above Normal	July	--	486.8	477.4	9.4	1.9%	476.4	10.3	2.1%	475.5	11.3	2.3%	474.6	12.2	2.5%	473.6	13.2	2.7%	472.7	14.1	2.9%
ME 2	41 58 8	2007	Above Normal	August	--	212.3	204.1	8.2	3.9%	203.3	9.0	4.3%	202.5	9.8	4.6%	201.7	10.6	5.0%	200.9	11.5	5.4%	200.1	12.3	5.8%
ME 2	41 58 8	2007	Above Normal	September	Used in Summary Table Analysis	140.0	132.5	7.5	5.4%	131.7	8.2	5.9%	131.0	9.0	6.4%	130.2	9.7	7.0%	129.5	10.5	7.5%	128.7	11.2	8.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	41 58 8	2008	Dry	October	Used in Summary Table Analysis	3,392.4	3,386.5	5.9	0.2%	3,385.9	6.5	0.2%	3,385.3	7.1	0.2%	3,384.7	7.6	0.2%	3,384.1	8.2	0.2%	3,383.6	8.8	0.3%
ME 2	41 58 8	2008	Dry	November	Used in Summary Table Analysis	3,235.1	3,230.7	4.4	0.1%	3,230.2	4.9	0.2%	3,229.7	5.3	0.2%	3,229.4	5.7	0.2%	3,228.9	6.1	0.2%	3,228.5	6.6	0.2%
ME 2	41 58 8	2008	Dry	December	--	22,853.0	22,849.5	3.5	0.0%	22,848.4	4.6	0.0%	22,848.4	4.6	0.0%	22,848.4	4.6	0.0%	22,847.2	5.8	0.0%	22,847.2	5.8	0.0%
ME 2	41 58 8	2008	Dry	January	--	37,268.5	37,265.0	3.5	0.0%	37,265.0	3.5	0.0%	37,265.0	3.5	0.0%	37,263.9	4.6	0.0%	37,263.9	4.6	0.0%	37,263.9	4.6	0.0%
ME 2	41 58 8	2008	Dry	February	--	26,203.7	26,200.2	3.5	0.0%	26,200.2	3.5	0.0%	26,200.2	3.5	0.0%	26,200.2	3.5	0.0%	26,199.1	4.6	0.0%	26,199.1	4.6	0.0%
ME 2	41 58 8	2008	Dry	March	--	11,761.6	11,758.1	3.5	0.0%	11,758.1	3.5	0.0%	11,758.1	3.5	0.0%	11,758.1	3.5	0.0%	11,756.9	4.6	0.0%	11,756.9	4.6	0.0%
ME 2	41 58 8	2008	Dry	April	--	8,989.4	8,982.2	7.2	0.1%	8,981.5	7.9	0.1%	8,980.8	8.6	0.1%	8,980.1	9.3	0.1%	8,979.4	10.0	0.1%	8,978.7	10.6	0.1%
ME 2	41 58 8	2008	Dry	May	--	1,357.1	1,349.8	7.3	0.5%	1,349.1	8.0	0.6%	1,348.3	8.8	0.6%	1,347.6	9.5	0.7%	1,346.9	10.2	0.8%	1,346.2	10.9	0.8%
ME 2	41 58 8	2008	Dry	June	--	428.2	417.3	10.9	2.5%	416.3	12.0	2.8%	415.2	13.0	3.0%	414.1	14.1	3.3%	413.0	15.2	3.5%	412.0	16.3	3.8%
ME 2	41 58 8	2008	Dry	July	--	246.8	236.6	10.1	4.1%	235.6	11.1	4.5%	234.6	12.2	4.9%	233.6	13.2	5.3%	232.6	14.2	5.7%	231.6	15.2	6.1%
ME 2	41 58 8	2008	Dry	August	--	169.8	160.2	9.6	5.6%	159.2	10.5	6.2%	158.3	11.5	6.8%	157.3	12.5	7.3%	156.4	13.4	7.9%	155.4	14.4	8.5%
ME 2	41 58 8	2008	Dry	September	Used in Summary Table Analysis	131.5	122.3	9.2	7.0%	121.4	10.1	7.7%	120.5	11.0	8.4%	119.6	11.9	9.1%	118.6	12.8	9.8%	117.7	13.7	10.4%
ME 2	41 58 8	2009	Critical	October	Used in Summary Table Analysis	911.7	904.9	6.8	0.7%	904.2	7.5	0.8%	903.5	8.2	0.9%	902.8	8.9	1.0%	902.2	9.6	1.0%	901.5	10.2	1.1%
ME 2	41 58 8	2009	Critical	November	Used in Summary Table Analysis	5,441.3	5,436.2	5.1	0.1%	5,435.6	5.7	0.1%	5,435.2	6.1	0.1%	5,434.7	6.6	0.1%	5,434.1	7.2	0.1%	5,433.7	7.6	0.1%
ME 2	41 58 8	2009	Critical	December	--	12,023.1	12,018.5	4.6	0.0%	12,018.5	4.6	0.0%	12,018.5	4.6	0.0%	12,017.4	5.8	0.0%	12,017.4	5.8	0.0%	12,017.4	5.8	0.0%
ME 2	41 58 8	2009	Critical	January	--	8,752.2	8,748.4	3.8	0.0%	8,748.0	4.2	0.0%	8,747.7	4.5	0.1%	8,747.2	5.0	0.1%	8,746.9	5.3	0.1%	8,746.5	5.7	0.1%
ME 2	41 58 8	2009	Critical	February	--	22,495.4	22,491.9	3.5	0.0%	22,490.7	4.6	0.0%	22,490.7	4.6	0.0%	22,490.7	4.6	0.0%	22,490.7	4.6	0.0%	22,489.6	5.8	0.0%
ME 2	41 58 8	2009	Critical	March	--	21,031.3	21,027.8	3.5	0.0%	21,027.8	3.5	0.0%	21,026.6	4.6	0.0%	21,026.6	4.6	0.0%	21,026.6	4.6	0.0%	21,026.6	4.6	0.0%
ME 2	41 58 8	2009	Critical	April	--	10,081.7	10,074.4	7.3	0.1%	10,073.6	8.1	0.1%	10,072.9	8.8	0.1%	10,072.3	9.4	0.1%	10,071.5	10.2	0.1%	10,070.8	10.9	0.1%
ME 2	41 58 8	2009	Critical	May	--	15,534.7	15,526.6	8.1	0.1%	15,525.5	9.3	0.1%	15,524.3	10.4	0.1%	15,523.1	11.6	0.1%	15,523.1	11.6	0.1%	15,522.0	12.7	0.1%
ME 2	41 58 8	2009	Critical	June	--	3,148.6	3,137.2	11.5	0.4%	3,136.0	12.6	0.4%	3,134.8	13.8	0.4%	3,133.6	15.0	0.5%	3,132.5	16.1	0.5%	3,131.4	17.2	0.5%
ME 2	41 58 8	2009	Critical	July	--	1,252.3	1,242.0	10.3	0.8%	1,241.0	11.3	0.9%	1,239.9	12.4	1.0%	1,238.9	13.4	1.1%	1,238.0	14.4	1.1%	1,236.9	15.4	1.2%
ME 2	41 58 8	2009	Critical	August	--	658.0	648.3	9.7	1.5%	647.3	10.6	1.6%	646.4	11.6	1.8%	645.4	12.6	1.9%	644.5	13.5	2.1%	643.5	14.4	2.2%
ME 2	41 58 8	2009	Critical	September	Used in Summary Table Analysis	379.8	371.4	8.4	2.2%	370.6	9.2	2.4%	369.7	10.0	2.6%	368.9	10.9	2.9%	368.1	11.7	3.1%	367.2	12.5	3.3%
ME 2	41 58 8	2010	Below Normal	October	Used in Summary Table Analysis	6,074.0	6,067.1	6.8	0.1%	6,066.4	7.5	0.1%	6,065.7	8.2	0.1%	6,065.0	8.9	0.1%	6,064.4	9.6	0.2%	6,063.8	10.2	0.2%
ME 2	41 58 8	2010	Below Normal	November	Used in Summary Table Analysis	8,241.0	8,235.9	5.1	0.1%	8,235.3	5.7	0.1%	8,234.8	6.1	0.1%	8,234.3	6.7	0.1%	8,233.8	7.2	0.1%	8,233.2	7.8	0.1%
ME 2	41 58 8	2010	Below Normal	December	--	12,261.6	12,256.9	4.6	0.0%	12,256.9	4.6	0.0%	12,255.8	5.8	0.0%	12,255.8	5.8	0.0%	12,255.8	5.8	0.0%	12,254.6	6.9	0.1%
ME 2	41 58 8	2010	Below Normal	January	--	35,932.9	35,929.4	3.5	0.0%	35,928.2	4.6	0.0%	35,928.2	4.6	0.0%	35,928.2	4.6	0.0%	35,927.1	5.8	0.0%	35,927.1	5.8	0.0%
ME 2	41 58 8	2010	Below Normal	February	--	27,156.3	27,152.8	3.5	0.0%	27,152.8	3.5	0.0%	27,152.8	3.5	0.0%	27,151.6	4.6	0.0%	27,151.6	4.6	0.0%	27,151.6	4.6	0.0%
ME 2	41 58 8	2010	Below Normal	March	--	28,760.4	28,756.9	3.5	0.0%	28,756.9	3.5	0.0%	28,755.8	4.6	0.0%	28,755.8	4.6	0.0%	28,755.8	4.6	0.0%	28,755.8	4.6	0.0%
ME 2	41 58 8	2010	Below Normal	April	--	39,875.0	39,871.5	3.5	0.0%	39,871.5	3.5	0.0%	39,871.5	3.5	0.0%	39,871.5	3.5	0.0%	39,870.4	4.6	0.0%	39,870.4	4.6	0.0%
ME 2	41 58 8	2010	Below Normal	May	--	20,160.9	20,153.9	6.9	0.0%	20,152.8	8.1	0.0%	20,151.6	9.3	0.0%	20,151.6	9.3	0.0%	20,150.5	10.4	0.1%	20,149.3	11.6	0.1%
ME 2	41 58 8	2010	Below Normal	June	--	9,264.2	9,253.1	11.1	0.1%	9,252.0	12.3	0.1%	9,250.9	13.3	0.1%	9,249.9	14.4	0.2%	9,248.7	15.5	0.2%	9,247.6	16.7	0.2%
ME 2	41 58 8	2010	Below Normal	July	--	1,444.6	1,435.2	9.4	0.6%	1,434.3	10.3	0.7%	1,433.3	11.2	0.8%	1,432.4	12.2	0.8%	1,431.5	13.1	0.9%	1,430.6	14.0	1.0%
ME 2	41 58 8	2010	Below Normal	August	--	556.5	548.2	8.3	1.5%	547.4	9.1	1.6%	546.6	10.0	1.8%	545.8	10.8	1.9%	545.0	11.5	2.1%	544.2	12.4	2.2%
ME 2	41 58 8	2010	Below Normal	September	Used in Summary Table Analysis	638.3	630.5	7.8	1.2%	629.7	8.6	1.3%	628.9	9.4	1.5%	628.1	10.2	1.6%	627.3	10.9	1.7%	626.6	11.7	1.8%
ME 2	41 58 8	2011	Wet	October	Used in Summary Table Analysis	9,565.9	9,560.3	5.6	0.1%	9,559.7	6.1	0.1%	9,559.1	6.7	0.1%	9,558.6	7.3	0.1%	9,558.0	7.9	0.1%	9,557.4	8.4	0.1%
ME 2	41 58 8	2011	Wet	November	Used in Summary Table Analysis	14,143.5	14,138.9	4.6	0.0%	14,138.9	4.6	0.0%	14,138.9	4.6	0.0%	14,137.7	5.8	0.0%	14,137.7	5.8	0.0%	14,137.7	5.8	0.0%
ME 2	41 58 8	2011	Wet	December	--	33,405.1	33,401.6	3.5	0.0%	33,401.6	3.5	0.0%	33,401.6	3.5	0.0%	33,400.5	4.6	0.0%	33,400.5	4.6	0.0%	33,400.5	4.6	0.0%
ME 2	41 58 8	2011	Wet	January	--	14,096.1	14,093.8	2.3	0.0%	14,092.6	3.5	0.0%	14,092.6	3.5	0.0%	14,092.6	3.5	0.0%	14,091.4	4.6	0.0%	14,091.4	4.6	0.0%
ME 2	41 58 8	2011	Wet	February	--	20,709.5	20,706.0	3.5	0.0%	20,706.0	3.5	0.0%	20,704.9	4.6	0.0%	20,704.9	4.6	0.0%	20,704.9	4.6	0.0%	20,704.9	4.6	0.0%
ME 2	41 58 8	2011	Wet	March	--	51,810.2	51,807.9	2.3	0.0%	51,806.7	3.5	0.0%	51,806.7	3.5	0.0%	51,806.7	3.5	0.0%	51,806.7	3.5	0.0%	51,805.6	4.6	0.0%
ME 2	41 58 8	2011	Wet	April	--	24,729.2	24,726.9	2.3	0.0%	24,726.9	2.3	0.0%	24,726.9	2.3	0.0%	24,725.7	3.5	0.0%	24,725.7	3.5	0.0%	24,725.7	3.5	0.0%
ME 2	41 58 8	2011	Wet	May	--	11,347.0	11,340.2	6.8	0.1%	11,339.4	7.6	0.1%	11,338.7	8.3	0.1%	11,338.0	9.0	0.1%	11,337.3	9.7	0.1%	11,336.6	10.4	0.1%
ME 2	41 58 8	2011	Wet	June	--	7,020.9	7,010.2	10.8	0.2%	7,009.1	11.8	0.2%	7,008.0	13.0	0.2%	7,006.9	14.0	0.2%	7,005.9	15.0	0.2%	7,004.7	16.2	0.2%
ME 2	41 58 8	2011	Wet	July	--	1,820.8	1,810.6	10.2	0.6%	1,809.7	11.1	0.6%	1,808.7	12.2	0.7%	1,807.6	13.2	0.7%	1,806.6	14.2	0.8%	1,805.6	15.3	0.8%
ME 2	41 58 8	2011	Wet	August	--	765.8	757.7	8.1	1.1%	756.9	8.9	1.2%	756.1	9.7	1.3%	755.3	10.5	1.4%	754.5	11.4	1.5%	753.7	12.2	1.6%
ME 2	41 58 8	2011	Wet	September	Used in Summary Table Analysis	422.4	415.3	7.1	1.7%	414.6	7.8	1.8%	413.9	8.5	2.0%	413.2	9.2	2.2%	412.5	9.9	2.4%	411.8	10.6	2.5%
ME 2	41 58 8	2012	Below Normal	October	Used in Summary Table Analysis	4,504.6	4,499.1	5.6	0.1%	4,498.5	6.1	0.1%	4,497.9	6.7	0.1%	4,497.3	7.3	0.2%	4,496.8	7.9	0.2%	4,496.3	8.3	0.2%
ME 2	41 58 8	2012	Below Normal	November	Used in Summary Table Analysis	8,167.6	8,163.2	4.4	0.1%	8,162.8	4.7	0.1%	8,162.4	5.2	0.1%	8,161.9	5.7	0.1%	8,161.5	6.1	0.1%	8,161.1	6.5	0.1%
ME 2	41 58 8	2012	Below Normal	December	--	5,149.5	5,145.9	3.6	0.1%	5,145.5	4.1	0.1%	5,145.1	4.4	0.1%	5,144.8	4.7	0.1%	5,144.4	5.1	0.1%	5,144.1	5.4	0.1%
ME 2	41 58 8	2012	Below Normal	January	--	19,922.5	19,919.0	3.5	0.0%	19,919.0	3.5	0.0%	19,919.0	3.5	0.0%	19,919.0	3.5	0.0%	19,917.8	4.6	0.0%	19,917.8	4.6	0.0%
ME 2	41 58 8	2012	Below Normal	February	--	18,153.9	18,150.5	3.5	0.0%	18,150.5	3.5	0.0%	18,150.5	3.5	0.0%	18,150.5	3.5	0.0%	18,149.3	4.6	0.0%	18,149.3	4.6	0.0%
ME 2	41 58 8	2012	Below Normal	March	--	45,197.9	45,195.6	2.3	0.0%	45,194.4	3.5	0.0%	45,194.4	3.5	0.0%	45,194.4	3.5	0.0%	45,194.4	3.5	0.0%	45,193.3	4.6	0.0%
ME 2	41 58 8	2012	Below Normal	April	--	26,774.3	26,772.0	2.3	0.0%	26,770.8	3.5	0.0%	26,770.8	3.5	0.0%	26,770.8	3.5	0.0%	26,770.8	3.5	0.0%	26,769.7	4.6	0.0%
ME 2	41 58 8	2012	Below Normal	May	--	7,458.9	7,451.9	7.1	0.1%	7,451.2	7.8	0.1%	7,450.5	8.4	0.1%	7,449.7	9.3	0.1%	7,449.1	9.8	0.1%	7,448.5	10.4	0.1%
ME 2	41 58 8	2012	Below Normal	June	--	5,480.7	5,469.7	11.0	0.2%	5,468.5	12.2	0.2%	5,467.5	13.2	0.2%	5,466.3	14.4	0.3%	5,465.3	15.4	0.3%	5,464.2	16.4	0.3%
ME 2	41 58 8	2012	Below Normal	July	--	2,200.3	2,190.4	10.0	0.5%	2,189.4	11.0	0.5%	2,188.4	11.9	0.5%	2,187.4	13.0	0.6%	2,186.3	14.0	0.6%	2,185.4	14.9	0.7%
ME 2	41 58 8	2012	Below Normal	August	--	379.2	371.6	7.7	2.0%	370.8	8.4	2.2%	370.1	9.2	2.4%	369.3	9.9	2.6%	368.6	10.7	2.8%	367.8	11.4	3.0%
ME 2	41 58 8	2012	Below Normal	September	Used in Summary Table Analysis	238.4	231.8	6.6	2.8%	231.1	7.3	3.0%	230.4	7.9	3.3%	229.8	8.6	3.6%	229.1	9.2	3.9%	228.5	9.9	4.2%
ME 2	41 58 8	2013	Below Normal	October	Used in Summary Table Analysis	1,886.1	1,880.6	5.6	0.3%	1,880.0	6.1	0.3%	1,879.5	6.6	0.3%	1,878.9	7.2	0.4%	1,878.4	7.8	0.4%	1,877.8	8.3	0.4%
ME 2	41 58 8	2013	Below Normal	November	Used in Summary Table Analysis	14,560.2	14,555.6	4.6	0.0%	14,555.6	4.6	0.0%	14,555.6	4.6	0.0%	14,554.4	5.8	0.0%	14,554.4	5.8	0.0%	14,553.2	6.9	0.0%
ME 2	41 58 8	2013	Below Normal	December	--	59,716.4	59,711.8	4.6	0.0%	59,711.8	4.6	0.0%	59,711.8	4.6	0.0%	59,710.6	5.8	0.0%	59,710.6	5.8	0.0%	59,710.6	5.8	0.0%
ME 2	41 58 8	2013	Below Normal	January	--	22,118.1	22,114.6	3.5	0.0%	22,114.6	3.5	0.0%	22,113.4	4.6	0.0%	22,113.4	4.6	0.0%	22,113.4	4.6	0.0%	22,113.4	4.6	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	41 58 8	2013	Below Normal	February	--	8,803.9	8,801.0	2.9	0.0%	8,800.7	3.2	0.0%	8,800.5	3.5	0.0%	8,800.1	3.8	0.0%	8,799.8	4.2	0.0%	8,799.5	4.4	0.0%
ME 2	41 58 8	2013	Below Normal	March	--	10,269.3	10,266.4	2.9	0.0%	10,266.2	3.1	0.0%	10,265.9	3.5	0.0%	10,265.6	3.7	0.0%	10,265.3	4.1	0.0%	10,265.0	4.3	0.0%
ME 2	41 58 8	2013	Below Normal	April	--	8,269.2	8,262.6	6.6	0.1%	8,261.9	7.3	0.1%	8,261.3	7.9	0.1%	8,260.6	8.6	0.1%	8,260.0	9.3	0.1%	8,259.4	9.8	0.1%
ME 2	41 58 8	2013	Below Normal	May	--	4,404.1	4,396.2	7.9	0.2%	4,395.4	8.7	0.2%	4,394.7	9.4	0.2%	4,393.9	10.2	0.2%	4,393.1	11.0	0.2%	4,392.2	11.8	0.3%
ME 2	41 58 8	2013	Below Normal	June	--	2,098.3	2,088.5	9.7	0.5%	2,087.5	10.8	0.5%	2,086.6	11.7	0.6%	2,085.5	12.7	0.6%	2,084.6	13.7	0.7%	2,083.7	14.6	0.7%
ME 2	41 58 8	2013	Below Normal	July	--	710.2	701.2	8.9	1.3%	700.4	9.8	1.4%	699.5	10.7	1.5%	698.6	11.6	1.6%	697.7	12.5	1.8%	696.8	13.4	1.9%
ME 2	41 58 8	2013	Below Normal	August	--	330.4	322.2	8.2	2.5%	321.4	9.0	2.7%	320.6	9.8	3.0%	319.8	10.6	3.2%	318.9	11.4	3.5%	318.1	12.2	3.7%
ME 2	41 58 8	2013	Below Normal	September	Used in Summary Table Analysis	4,748.3	4,739.9	8.3	0.2%	4,739.0	9.3	0.2%	4,738.2	10.1	0.2%	4,737.4	10.9	0.2%	4,736.5	11.8	0.2%	4,735.6	12.6	0.3%
ME 2	41 58 8	2014	Critical	October	Used in Summary Table Analysis	275.2	269.4	5.8	2.1%	268.8	6.3	2.3%	268.3	6.9	2.5%	267.7	7.5	2.7%	267.1	8.0	2.9%	266.6	8.6	3.1%
ME 2	41 58 8	2014	Critical	November	Used in Summary Table Analysis	1,515.7	1,511.2	4.5	0.3%	1,510.9	4.9	0.3%	1,510.4	5.3	0.4%	1,510.0	5.8	0.4%	1,509.5	6.3	0.4%	1,509.0	6.7	0.4%
ME 2	41 58 8	2014	Critical	December	--	1,574.5	1,570.8	3.7	0.2%	1,570.4	4.2	0.3%	1,570.0	4.5	0.3%	1,569.7	4.9	0.3%	1,569.3	5.2	0.3%	1,568.9	5.7	0.4%
ME 2	41 58 8	2014	Critical	January	--	2,798.3	2,795.0	3.2	0.1%	2,794.7	3.6	0.1%	2,794.3	3.9	0.1%	2,794.0	4.3	0.2%	2,793.6	4.6	0.2%	2,793.3	5.0	0.2%
ME 2	41 58 8	2014	Critical	February	--	15,693.3	15,691.0	2.3	0.0%	15,689.8	3.5	0.0%	15,689.8	3.5	0.0%	15,689.8	3.5	0.0%	15,689.8	3.5	0.0%	15,688.7	4.6	0.0%
ME 2	41 58 8	2014	Critical	March	--	31,409.7	31,407.4	2.3	0.0%	31,407.4	2.3	0.0%	31,406.3	3.5	0.0%	31,406.3	3.5	0.0%	31,406.3	3.5	0.0%	31,406.3	3.5	0.0%
ME 2	41 58 8	2014	Critical	April	--	12,960.6	12,953.7	6.9	0.1%	12,952.5	8.1	0.1%	12,952.5	8.1	0.1%	12,951.4	9.3	0.1%	12,950.2	10.4	0.1%	12,950.2	10.4	0.1%
ME 2	41 58 8	2014	Critical	May	--	5,168.2	5,159.7	8.4	0.2%	5,158.9	9.3	0.2%	5,158.1	10.1	0.2%	5,157.2	11.0	0.2%	5,156.4	11.8	0.2%	5,155.4	12.7	0.2%
ME 2	41 58 8	2014	Critical	June	--	1,187.2	1,175.5	11.7	1.0%	1,174.2	13.0	1.1%	1,173.0	14.1	1.2%	1,171.9	15.3	1.3%	1,170.7	16.4	1.4%	1,169.6	17.6	1.5%
ME 2	41 58 8	2014	Critical	July	--	537.5	527.3	10.2	1.9%	526.3	11.3	2.1%	525.3	12.3	2.3%	524.2	13.3	2.5%	523.2	14.3	2.7%	522.2	15.3	2.8%
ME 2	41 58 8	2014	Critical	August	--	338.2	328.6	9.6	2.8%	327.7	10.5	3.1%	326.7	11.5	3.4%	325.8	12.4	3.7%	324.8	13.4	4.0%	323.9	14.3	4.2%
ME 2	41 58 8	2014	Critical	September	Used in Summary Table Analysis	2,552.8	2,543.4	9.4	0.4%	2,542.5	10.3	0.4%	2,541.6	11.2	0.4%	2,540.6	12.2	0.5%	2,539.6	13.2	0.5%	2,538.7	14.1	0.6%
ME 2	41 58 8	2015	Dry	October	Used in Summary Table Analysis	11,296.5	11,289.7	6.8	0.1%	11,289.0	7.5	0.1%	11,288.4	8.1	0.1%	11,287.0	9.5	0.1%	11,286.3	10.2	0.1%	11,285.6	10.9	0.1%
ME 2	41 58 8	2015	Dry	November	Used in Summary Table Analysis	8,971.6	8,966.6	5.1	0.1%	8,966.1	5.6	0.1%	8,965.5	6.1	0.1%	8,965.0	6.6	0.1%	8,964.5	7.2	0.1%	8,964.0	7.6	0.1%
ME 2	41 58 8	2015	Dry	December	--	32,379.6	32,375.0	4.6	0.0%	32,375.0	4.6	0.0%	32,373.8	5.8	0.0%	32,373.8	5.8	0.0%	32,373.8	5.8	0.0%	32,372.7	6.9	0.0%
ME 2	41 58 8	2015	Dry	January	--	14,537.0	14,533.6	3.5	0.0%	14,533.6	3.5	0.0%	14,532.4	4.6	0.0%	14,532.4	4.6	0.0%	14,532.4	4.6	0.0%	14,531.3	5.8	0.0%
ME 2	41 58 8	2015	Dry	February	--	27,137.7	27,134.3	3.5	0.0%	27,134.3	3.5	0.0%	27,133.1	4.6	0.0%	27,133.1	4.6	0.0%	27,133.1	4.6	0.0%	27,131.9	5.8	0.0%
ME 2	41 58 8	2015	Dry	March	--	11,544.2	11,541.3	2.9	0.0%	11,541.0	3.2	0.0%	11,540.7	3.5	0.0%	11,540.4	3.8	0.0%	11,540.2	4.1	0.0%	11,539.8	4.4	0.0%
ME 2	41 58 8	2015	Dry	April	--	8,322.0	8,314.7	7.3	0.1%	8,314.0	8.0	0.1%	8,313.3	8.7	0.1%	8,312.6	9.4	0.1%	8,311.8	10.2	0.1%	8,311.1	10.9	0.1%
ME 2	41 58 8	2015	Dry	May	--	1,503.0	1,494.6	8.4	0.6%	1,493.8	9.3	0.6%	1,492.8	10.2	0.7%	1,492.0	11.0	0.7%	1,491.2	11.8	0.8%	1,490.3	12.7	0.8%
ME 2	41 58 8	2015	Dry	June	--	645.0	634.0	11.0	1.7%	632.9	12.1	1.9%	631.7	13.3	2.1%	630.6	14.4	2.2%	629.6	15.4	2.4%	628.5	16.5	2.6%
ME 2	41 58 8	2015	Dry	July	--	260.7	250.5	10.2	3.9%	249.5	11.2	4.3%	248.4	12.2	4.7%	247.4	13.3	5.1%	246.4	14.3	5.5%	245.4	15.3	5.9%
ME 2	41 58 8	2015	Dry	August	--	157.1	147.5	9.6	6.1%	146.6	10.6	6.7%	145.6	11.5	7.3%	144.6	12.5	8.0%	143.7	13.5	8.6%	142.7	14.4	9.2%
ME 2	41 58 8	2015	Dry	September	Used in Summary Table Analysis	112.2	103.8	8.4	7.5%	103.0	9.2	8.2%	102.1	10.1	9.0%	101.3	10.9	9.7%	100.5	11.8	10.5%	99.6	12.6	11.2%
ME 2	41 58 8	2016	Above Normal	October	Used in Summary Table Analysis	77.8	70.8	7.0	9.0%	70.0	7.8	10.0%	69.3	8.5	10.9%	69.2	8.6	11.1%	68.7	9.2	11.8%	67.6	10.2	13.1%
ME 2	41 58 8	2016	Above Normal	November	Used in Summary Table Analysis	3,806.8	3,801.7	5.1	0.1%	3,801.3	5.6	0.1%	3,800.7	6.1	0.2%	3,800.2	6.6	0.2%	3,799.7	7.2	0.2%	3,799.2	7.6	0.2%
ME 2	41 58 8	2016	Above Normal	December	--	36,339.1	36,334.5	4.6	0.0%	36,334.5	4.6	0.0%	36,334.5	4.6	0.0%	36,333.3	5.8	0.0%	36,333.3	5.8	0.0%	36,332.2	6.9	0.0%
ME 2	41 58 8	2016	Above Normal	January	--	57,025.5	57,022.0	3.5	0.0%	57,020.8	4.6	0.0%	57,020.8	4.6	0.0%	57,020.8	4.6	0.0%	57,019.7	5.8	0.0%	57,019.7	5.8	0.0%
ME 2	41 58 8	2016	Above Normal	February	--	24,217.6	24,214.1	3.5	0.0%	24,214.1	3.5	0.0%	24,213.0	4.6	0.0%	24,213.0	4.6	0.0%	24,213.0	4.6	0.0%	24,211.8	5.8	0.0%
ME 2	41 58 8	2016	Above Normal	March	--	41,638.9	41,635.4	3.5	0.0%	41,635.4	3.5	0.0%	41,635.4	3.5	0.0%	41,635.4	3.5	0.0%	41,634.3	4.6	0.0%	41,634.3	4.6	0.0%
ME 2	41 58 8	2016	Above Normal	April	--	18,495.4	18,493.1	2.3	0.0%	18,491.9	3.5	0.0%	18,491.9	3.5	0.0%	18,491.9	3.5	0.0%	18,491.9	3.5	0.0%	18,490.7	4.6	0.0%
ME 2	41 58 8	2016	Above Normal	May	--	5,197.8	5,194.0	3.8	0.1%	5,193.6	4.2	0.1%	5,193.3	4.5	0.1%	5,192.8	5.0	0.1%	5,192.5	5.3	0.1%	5,192.1	5.7	0.1%
ME 2	41 58 8	2016	Above Normal	June	--	1,499.4	1,491.1	8.3	0.6%	1,490.3	9.1	0.6%	1,489.4	10.1	0.7%	1,488.5	10.9	0.7%	1,487.7	11.7	0.8%	1,486.9	12.5	0.8%
ME 2	41 58 8	2016	Above Normal	July	--	812.3	803.4	8.9	1.1%	802.5	9.8	1.2%	801.6	10.7	1.3%	800.8	11.6	1.4%	799.9	12.4	1.5%	799.0	13.3	1.6%
ME 2	41 58 8	2016	Above Normal	August	--	480.5	472.2	8.3	1.7%	471.3	9.2	1.9%	470.5	10.0	2.1%	469.7	10.9	2.3%	468.8	11.7	2.4%	468.0	12.5	2.6%
ME 2	41 58 8	2016	Above Normal	September	Used in Summary Table Analysis	317.2	310.1	7.1	2.2%	309.4	7.8	2.5%	308.7	8.6	2.7%	308.0	9.3	2.9%	307.2	10.0	3.1%	306.5	10.7	3.4%
ME 2	41 58 8	2017	Wet	October	Used in Summary Table Analysis	18,171.3	18,165.5	5.8	0.0%	18,164.4	6.9	0.0%	18,164.4	6.9	0.0%	18,163.2	8.1	0.0%	18,163.2	8.1	0.0%	18,162.0	9.3	0.1%
ME 2	41 58 8	2017	Wet	November	Used in Summary Table Analysis	18,699.1	18,694.4	4.6	0.0%	18,694.4	4.6	0.0%	18,694.4	4.6	0.0%	18,693.3	5.8	0.0%	18,693.3	5.8	0.0%	18,692.1	6.9	0.0%
ME 2	41 58 8	2017	Wet	December	--	23,921.3	23,916.7	4.6	0.0%	23,916.7	4.6	0.0%	23,916.7	4.6	0.0%	23,915.5	5.8	0.0%	23,915.5	5.8	0.0%	23,915.5	5.8	0.0%
ME 2	41 58 8	2017	Wet	January	--	106,346.1	106,343.8	2.3	0.0%	106,342.6	3.5	0.0%	106,342.6	3.5	0.0%	106,342.6	3.5	0.0%	106,341.4	4.6	0.0%	106,341.4	4.6	0.0%
ME 2	41 58 8	2017	Wet	February	--	81,511.6	81,509.3	2.3	0.0%	81,509.3	2.3	0.0%	81,508.1	3.5	0.0%	81,508.1	3.5	0.0%	81,508.1	3.5	0.0%	81,506.9	4.6	0.0%
ME 2	41 58 8	2017	Wet	March	--	27,169.0	27,166.7	2.3	0.0%	27,166.7	2.3	0.0%	27,165.5	3.5	0.0%	27,165.5	3.5	0.0%	27,165.5	3.5	0.0%	27,165.5	3.5	0.0%
ME 2	41 58 8	2017	Wet	April	--	22,824.1	22,821.8	2.3	0.0%	22,821.8	2.3	0.0%	22,821.8	2.3	0.0%	22,820.6	3.5	0.0%	22,820.6	3.5	0.0%	22,820.6	3.5	0.0%
ME 2	41 58 8	2017	Wet	May	--	6,264.9	6,261.1	3.8	0.1%	6,260.8	4.2	0.1%	6,260.4	4.5	0.1%	6,260.0	5.0	0.1%	6,259.6	5.3	0.1%	6,259.3	5.7	0.1%
ME 2	41 58 8	2017	Wet	June	--	2,098.3	2,089.6	8.7	0.4%	2,088.8	9.5	0.5%	2,087.8	10.4	0.5%	2,086.9	11.3	0.5%	2,086.1	12.2	0.6%	2,085.3	13.0	0.6%
ME 2	41 58 8	2017	Wet	July	--	921.3	912.4	8.9	1.0%	911.5	9.8	1.1%	910.6	10.7	1.2%	909.7	11.6	1.3%	908.8	12.5	1.4%	908.0	13.4	1.5%
ME 2	41 58 8	2017	Wet	August	--	493.5	485.1	8.3	1.7%	484.3	9.2	1.9%	483.5	10.0	2.0%	482.6	10.8	2.2%	481.8	11.7	2.4%	481.0	12.5	2.5%
ME 2	41 58 8	2017	Wet	September	Used in Summary Table Analysis	311.0	303.4	7.6	2.4%	302.6	8.4	2.7%	301.8	9.1	2.9%	301.1	9.9	3.2%	300.3	10.6	3.4%	299.6	11.4	3.7%
ME 2	41 58 8	2018	Above Normal	October	Used in Summary Table Analysis	263.7	258.8	4.9	1.8%	257.9	5.8	2.2%	257.2	6.5	2.5%	256.4	7.3	2.8%	255.7	8.0	3.0%	255.1	8.6	3.3%
ME 2	41 58 8	2018	Above Normal	November	Used in Summary Table Analysis	10,658.9	10,654.6	4.3	0.0%	10,654.2	4.7	0.0%	10,653.8	5.1	0.0%	10,653.4	5.6	0.1%	10,652.9	6.0	0.1%	10,652.4	6.5	0.1%
ME 2	41 58 8	2018	Above Normal	December	--	5,428.9	5,425.3	3.6	0.1%	5,425.0	3.9	0.1%	5,424.7	4.3	0.1%	5,424.3	4.6	0.1%	5,424.0	5.0	0.1%	5,423.6	5.3	0.1%
ME 2	41 58 8	2018	Above Normal	January	--	17,556.7	17,553.2	3.5	0.0%	17,553.2	3.5	0.0%	17,552.1	4.6	0.0%	17,552.1	4.6	0.0%	17,552.1	4.6	0.0%	17,550.9	5.8	0.0%
ME 2	41 58 8	2018	Above Normal	February	--	7,581.9	7,579.3	2.7	0.0%	7,579.1	2.9	0.0%	7,578.7	3.2	0.0%	7,578.5	3.5	0.0%	7,578.2	3.7	0.0%	7,577.9	4.1	0.1%
ME 2	41 58 8	2018	Above Normal	March	--	20,553.2	20,550.9	2.3	0.0%	20,550.9	2.3	0.0%	20,550.9	2.3	0.0%	20,549.8	3.5	0.0%	20,549.8	3.5	0.0%	20,549.8	3.5	0.0%
ME 2	41 58 8	2018	Above Normal	April	--	32,030.1	32,027.8	2.3	0.0%	32,026.6	3.5	0.0%	32,026.6	3.5	0.0%	32,026.6	3.5	0.0%	32,026.6	3.5	0.0%	32,026.6	3.5	0.0%
ME 2	41 58 8	2018	Above Normal	May	--	6,978.1	6,971.3	6.8	0.1%	6,970.6	7.5	0.1%	6,970.0	8.1	0.1%	6,969.3	8.8	0.1%	6,968.6	9.5	0.1%	6,967.9	10.2	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	41 58 8	2018	Above Normal	June	--	1,903.2	1,894.6	8.7	0.5%	1,893.8	9.5	0.5%	1,892.8	10.4	0.5%	1,892.0	11.2	0.6%	1,891.2	12.0	0.6%	1,890.3	13.0	0.7%
ME 2	41 58 8	2018	Above Normal	July	--	769.8	760.9	8.9	1.2%	760.0	9.7	1.3%	759.1	10.6	1.4%	758.2	11.5	1.5%	757.4	12.4	1.6%	756.5	13.3	1.7%
ME 2	41 58 8	2018	Above Normal	August	--	430.9	423.0	8.0	1.8%	422.2	8.8	2.0%	421.4	9.5	2.2%	420.6	10.3	2.4%	419.8	11.1	2.6%	419.0	11.9	2.8%
ME 2	41 58 8	2018	Above Normal	September	Used in Summary Table Analysis	288.9	281.3	7.6	2.6%	280.6	8.3	2.9%	279.8	9.1	3.1%	279.0	9.9	3.4%	278.3	10.6	3.7%	277.5	11.4	3.9%
ME 2	41 58 8	2019	Below Normal	October	Used in Summary Table Analysis	198.2	192.5	5.7	2.9%	191.9	6.3	3.2%	191.4	6.8	3.4%	190.8	7.4	3.7%	190.3	7.9	4.0%	189.7	8.4	4.3%
ME 2	41 58 8	2019	Below Normal	November	Used in Summary Table Analysis	6,534.6	6,530.3	4.3	0.1%	6,529.9	4.7	0.1%	6,529.5	5.1	0.1%	6,529.1	5.6	0.1%	6,528.6	6.0	0.1%	6,528.1	6.5	0.1%
ME 2	41 58 8	2019	Below Normal	December	--	14,517.4	14,513.9	3.5	0.0%	14,513.9	3.5	0.0%	14,513.9	3.5	0.0%	14,512.7	4.6	0.0%	14,512.7	4.6	0.0%	14,512.7	4.6	0.0%
ME 2	41 58 8	2019	Below Normal	January	--	34,925.9	34,922.5	3.5	0.0%	34,922.5	3.5	0.0%	34,922.5	3.5	0.0%	34,921.3	4.6	0.0%	34,921.3	4.6	0.0%	34,921.3	4.6	0.0%
ME 2	41 58 8	2019	Below Normal	February	--	141,608.8	141,608.8	0.0	0.0%	141,608.8	0.0	0.0%	141,608.8	0.0	0.0%	141,597.2	11.6	0.0%	141,597.2	11.6	0.0%	141,597.2	11.6	0.0%
ME 2	41 58 8	2019	Below Normal	March	--	42,157.4	42,155.1	2.3	0.0%	42,155.1	2.3	0.0%	42,155.1	2.3	0.0%	42,153.9	3.5	0.0%	42,153.9	3.5	0.0%	42,153.9	3.5	0.0%
ME 2	41 58 8	2019	Below Normal	April	--	15,224.5	15,222.2	2.3	0.0%	15,222.2	2.3	0.0%	15,221.1	3.5	0.0%	15,221.1	3.5	0.0%	15,221.1	3.5	0.0%	15,221.1	3.5	0.0%
ME 2	41 58 8	2019	Below Normal	May	--	16,716.4	16,709.5	6.9	0.0%	16,709.5	6.9	0.0%	16,708.3	8.1	0.0%	16,708.3	8.1	0.0%	16,707.2	9.3	0.1%	16,706.0	10.4	0.1%
ME 2	41 58 8	2019	Below Normal	June	--	4,238.4	4,229.2	9.3	0.2%	4,228.1	10.3	0.2%	4,227.2	11.2	0.3%	4,226.3	12.2	0.3%	4,225.3	13.1	0.3%	4,224.4	14.0	0.3%
ME 2	41 58 8	2019	Below Normal	July	--	1,347.9	1,339.0	8.9	0.7%	1,338.1	9.8	0.7%	1,337.3	10.6	0.8%	1,336.3	11.6	0.9%	1,335.4	12.5	0.9%	1,334.6	13.3	1.0%
ME 2	41 58 8	2019	Below Normal	August	--	583.7	575.6	8.1	1.4%	574.8	8.9	1.5%	574.0	9.8	1.7%	573.1	10.6	1.8%	572.3	11.4	2.0%	571.5	12.2	2.1%
ME 2	41 58 8	2019	Below Normal	September	Used in Summary Table Analysis	451.3	443.7	7.6	1.7%	442.9	8.3	1.8%	442.2	9.1	2.0%	441.4	9.8	2.2%	440.7	10.6	2.3%	439.9	11.3	2.5%
ME 2	41 58 8	2020	Dry	October	Used in Summary Table Analysis	346.2	340.9	5.3	1.5%	340.3	5.9	1.7%	339.8	6.4	1.8%	339.3	6.9	2.0%	338.7	7.5	2.2%	338.2	8.0	2.3%
ME 2	41 58 8	2020	Dry	November	Used in Summary Table Analysis	304.0	300.1	3.9	1.3%	299.7	4.3	1.4%	299.3	4.7	1.5%	298.9	5.1	1.7%	298.5	5.5	1.8%	298.1	5.9	1.9%
ME 2	41 58 8	2020	Dry	December	--	13,071.8	13,068.3	3.5	0.0%	13,067.1	4.6	0.0%	13,067.1	4.6	0.0%	13,067.1	4.6	0.0%	13,066.0	5.8	0.0%	13,066.0	5.8	0.0%
ME 2	41 58 8	2020	Dry	January	--	22,159.7	22,157.4	2.3	0.0%	22,156.3	3.5	0.0%	22,156.3	3.5	0.0%	22,156.3	3.5	0.0%	22,156.3	3.5	0.0%	22,155.1	4.6	0.0%
ME 2	41 58 8	2020	Dry	February	--	7,402.5	7,399.8	2.8	0.0%	7,399.5	3.0	0.0%	7,399.2	3.4	0.0%	7,399.0	3.6	0.0%	7,398.6	3.9	0.1%	7,398.4	4.2	0.1%
ME 2	41 58 8	2020	Dry	March	--	7,209.4	7,206.8	2.5	0.0%	7,206.6	2.8	0.0%	7,206.3	3.1	0.0%	7,206.0	3.4	0.0%	7,205.8	3.6	0.0%	7,205.6	3.8	0.1%
ME 2	41 58 8	2020	Dry	April	--	5,445.0	5,438.0	7.1	0.1%	5,437.3	7.8	0.1%	5,436.6	8.4	0.2%	5,435.9	9.1	0.2%	5,435.2	9.8	0.2%	5,434.5	10.5	0.2%
ME 2	41 58 8	2020	Dry	May	--	7,329.4	7,321.1	8.3	0.1%	7,320.3	9.1	0.1%	7,319.4	10.0	0.1%	7,318.5	10.9	0.1%	7,317.7	11.7	0.2%	7,316.9	12.5	0.2%
ME 2	41 58 8	2020	Dry	June	--	2,098.5	2,087.2	11.3	0.5%	2,086.1	12.4	0.6%	2,085.0	13.5	0.6%	2,083.8	14.7	0.7%	2,082.6	15.9	0.8%	2,081.6	16.9	0.8%
ME 2	41 58 8	2020	Dry	July	--	786.6	776.2	10.3	1.3%	775.2	11.3	1.4%	774.2	12.4	1.6%	773.1	13.4	1.7%	772.1	14.4	1.8%	771.1	15.5	2.0%
ME 2	41 58 8	2020	Dry	August	--	388.9	379.0	9.9	2.5%	378.0	10.9	2.8%	377.0	11.8	3.0%	376.0	12.8	3.3%	375.0	13.8	3.6%	374.1	14.8	3.8%
ME 2	41 58 8	2020	Dry	September	Used in Summary Table Analysis	238.4	229.8	8.6	3.6%	229.0	9.5	4.0%	228.1	10.3	4.3%	227.3	11.2	4.7%	226.4	12.0	5.0%	225.6	12.9	5.4%
ME 3	39 58 10	2000	Above Normal	October	Used in Summary Table Analysis	806.9	800.7	6.2	0.8%	800.0	6.8	0.8%	799.4	7.4	0.9%	798.8	8.1	1.0%	798.2	8.7	1.1%	797.6	9.3	1.2%
ME 3	39 58 10	2000	Above Normal	November	Used in Summary Table Analysis	11,991.9	11,987.3	4.6	0.0%	11,986.1	5.8	0.0%	11,986.1	5.8	0.0%	11,985.0	6.9	0.1%	11,985.0	6.9	0.1%	11,983.8	8.1	0.1%
ME 3	39 58 10	2000	Above Normal	December	--	10,741.8	10,737.8	3.9	0.0%	10,737.4	4.4	0.0%	10,737.0	4.7	0.0%	10,736.6	5.2	0.0%	10,736.2	5.6	0.1%	10,735.8	6.0	0.1%
ME 3	39 58 10	2000	Above Normal	January	--	28,364.6	28,360.0	4.6	0.0%	28,360.0	4.6	0.0%	28,360.0	4.6	0.0%	28,358.8	5.8	0.0%	28,358.8	5.8	0.0%	28,358.8	5.8	0.0%
ME 3	39 58 10	2000	Above Normal	February	--	36,901.6	36,898.1	3.5	0.0%	36,898.1	3.5	0.0%	36,897.0	4.6	0.0%	36,897.0	4.6	0.0%	36,897.0	4.6	0.0%	36,897.0	4.6	0.0%
ME 3	39 58 10	2000	Above Normal	March	--	18,270.8	18,267.4	3.5	0.0%	18,267.4	3.5	0.0%	18,267.4	3.5	0.0%	18,267.4	3.5	0.0%	18,266.2	4.6	0.0%	18,266.2	4.6	0.0%
ME 3	39 58 10	2000	Above Normal	April	--	12,280.1	12,276.6	3.5	0.0%	12,276.6	3.5	0.0%	12,275.5	4.6	0.0%	12,275.5	4.6	0.0%	12,275.5	4.6	0.0%	12,275.5	4.6	0.0%
ME 3	39 58 10	2000	Above Normal	May	--	7,065.4	7,058.0	7.4	0.1%	7,057.3	8.1	0.1%	7,056.5	8.9	0.1%	7,055.8	9.6	0.1%	7,055.0	10.4	0.1%	7,054.3	11.1	0.2%
ME 3	39 58 10	2000	Above Normal	June	--	2,598.5	2,587.3	11.2	0.4%	2,586.1	12.4	0.5%	2,585.0	13.5	0.5%	2,583.9	14.6	0.6%	2,582.8	15.7	0.6%	2,581.6	16.9	0.7%
ME 3	39 58 10	2000	Above Normal	July	--	984.5	974.9	9.6	1.0%	973.9	10.6	1.1%	973.0	11.6	1.2%	972.0	12.5	1.3%	971.1	13.5	1.4%	970.1	14.4	1.5%
ME 3	39 58 10	2000	Above Normal	August	--	514.4	505.5	8.8	1.7%	504.7	9.7	1.9%	503.8	10.6	2.1%	502.9	11.5	2.2%	502.0	12.3	2.4%	501.1	13.2	2.6%
ME 3	39 58 10	2000	Above Normal	September	Used in Summary Table Analysis	288.5	280.9	7.6	2.6%	280.1	8.4	2.9%	279.4	9.1	3.2%	278.6	9.9	3.4%	277.8	10.7	3.7%	277.1	11.4	4.0%
ME 3	39 58 10	2001	Dry	October	Used in Summary Table Analysis	3,784.3	3,778.1	6.1	0.2%	3,777.5	6.7	0.2%	3,777.0	7.3	0.2%	3,776.4	7.9	0.2%	3,775.7	8.6	0.2%	3,775.1	9.1	0.2%
ME 3	39 58 10	2001	Dry	November	Used in Summary Table Analysis	6,075.2	6,070.5	4.7	0.1%	6,070.0	5.2	0.1%	6,069.6	5.7	0.1%	6,069.1	6.1	0.1%	6,068.6	6.6	0.1%	6,068.2	7.1	0.1%
ME 3	39 58 10	2001	Dry	December	--	8,789.4	8,785.3	4.1	0.0%	8,785.0	4.4	0.1%	8,784.5	4.9	0.1%	8,784.1	5.2	0.1%	8,783.7	5.7	0.1%	8,783.2	6.1	0.1%
ME 3	39 58 10	2001	Dry	January	--	12,699.1	12,695.6	3.5	0.0%	12,695.6	3.5	0.0%	12,694.4	4.6	0.0%	12,694.4	4.6	0.0%	12,694.4	4.6	0.0%	12,693.3	5.8	0.0%
ME 3	39 58 10	2001	Dry	February	--	17,413.2	17,409.7	3.5	0.0%	17,409.7	3.5	0.0%	17,408.6	4.6	0.0%	17,408.6	4.6	0.0%	17,408.6	4.6	0.0%	17,407.4	5.8	0.0%
ME 3	39 58 10	2001	Dry	March	--	12,265.0	12,262.7	2.3	0.0%	12,261.6	3.5	0.0%	12,261.6	3.5	0.0%	12,261.6	3.5	0.0%	12,260.4	4.6	0.0%	12,260.4	4.6	0.0%
ME 3	39 58 10	2001	Dry	April	--	10,938.9	10,931.3	7.6	0.1%	10,930.4	8.4	0.1%	10,929.7	9.1	0.1%	10,928.9	10.0	0.1%	10,928.2	10.6	0.1%	10,927.4	11.5	0.1%
ME 3	39 58 10	2001	Dry	May	--	2,633.8	2,624.8	9.0	0.3%	2,623.8	10.0	0.4%	2,622.9	10.9	0.4%	2,622.1	11.7	0.4%	2,621.2	12.6	0.5%	2,620.3	13.5	0.5%
ME 3	39 58 10	2001	Dry	June	--	2,626.5	2,614.1	12.4	0.5%	2,612.8	13.7	0.5%	2,611.7	14.8	0.6%	2,610.4	16.1	0.6%	2,609.1	17.4	0.7%	2,607.9	18.6	0.7%
ME 3	39 58 10	2001	Dry	July	--	714.3	703.3	11.1	1.6%	702.2	12.2	1.7%	701.0	13.3	1.9%	699.9	14.4	2.0%	698.8	15.5	2.2%	697.7	16.6	2.3%
ME 3	39 58 10	2001	Dry	August	--	166.7	156.1	10.6	6.4%	155.0	11.7	7.0%	154.0	12.8	7.6%	152.9	13.8	8.3%	151.9	14.9	8.9%	150.8	15.9	9.6%
ME 3	39 58 10	2001	Dry	September	Used in Summary Table Analysis	89.4	80.1	9.3	10.4%	79.2	10.2	11.4%	78.2	11.1	12.4%	77.3	12.0	13.5%	76.4	13.0	14.5%	75.5	13.9	15.6%
ME 3	39 58 10	2002	Below Normal	October	Used in Summary Table Analysis	258.5	250.9	7.5	2.9%	250.2	8.3	3.2%	249.4	9.1	3.5%	248.7	9.8	3.8%	247.9	10.6	4.1%	247.1	11.3	4.4%
ME 3	39 58 10	2002	Below Normal	November	Used in Summary Table Analysis	11,961.8	11,956.0	5.8	0.0%	11,954.9	6.9	0.1%	11,954.9	6.9	0.1%	11,953.7	8.1	0.1%	11,953.7	8.1	0.1%	11,952.5	9.3	0.1%
ME 3	39 58 10	2002	Below Normal	December	--	35,490.7	35,486.1	4.6	0.0%	35,486.1	4.6	0.0%	35,485.0	5.8	0.0%	35,485.0	5.8	0.0%	35,483.8	6.9	0.0%	35,483.8	6.9	0.0%
ME 3	39 58 10	2002	Below Normal	January	--	30,754.6	30,750.0	4.6	0.0%	30,750.0	4.6	0.0%	30,748.8	5.8	0.0%	30,748.8	5.8	0.0%	30,748.8	5.8	0.0%	30,747.7	6.9	0.0%
ME 3	39 58 10	2002	Below Normal	February	--	24,603.0	24,598.4	4.6	0.0%	24,598.4	4.6	0.0%	24,597.2	5.8	0.0%	24,597.2	5.8	0.0%	24,597.2	5.8	0.0%	24,596.1	6.9	0.0%
ME 3	39 58 10	2002	Below Normal	March	--	17,719.9	17,716.4	3.5	0.0%	17,716.4	3.5	0.0%	17,716.4	3.5	0.0%	17,715.3	4.6	0.0%	17,715.3	4.6	0.0%	17,715.3	4.6	0.0%
ME 3	39 58 10	2002	Below Normal	April	--	9,900.8	9,893.3	7.5	0.1%	9,892.6	8.2	0.1%	9,891.8	9.0	0.1%	9,891.0	9.8	0.1%	9,890.3	10.5	0.1%	9,889.5	11.3	0.1%
ME 3	39 58 10	2002	Below Normal	May	--	3,309.1	3,300.3	8.8	0.3%	3,299.5	9.6	0.3%	3,298.6	10.5	0.3%	3,297.7	11.5	0.3%	3,296.9	12.3	0.4%	3,295.9	13.2	0.4%
ME 3	39 58 10	2002	Below Normal	June	--	848.1	837.9	10.2	1.2%	836.9	11.2	1.3%	835.9	12.2	1.4%	834.9	13.2	1.6%	833.9	14.2	1.7%	832.8	15.2	1.8%
ME 3	39 58 10	2002	Below Normal	July	--	356.5	346.6	9.9	2.8%	345.6	10.9	3.1%	344.6	11.9	3.3%	343.6	12.9	3.6%	342.6	13.9	3.9%	341.6	14.9	4.2%
ME 3	39 58 10	2002	Below Normal	August	--	220.5	211.3	9.2	4.2%	210.4	10.1	4.6%	209.4	11.0	5.0%	208.5	11.9	5.4%	207.6	12.8	5.8%	206.7	13.8	6.2%
ME 3	39 58 10	2002	Below Normal	September	Used in Summary Table Analysis	157.5	149.1	8.4	5.4%	148.3	9.3	5.9%	147.4	10.1	6.4%	146.6	11.0	7.0%	145.7	11.8	7.5%	144.9	12.7	8.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 58 10	2003	Wet	October	Used in Summary Table Analysis	122.7	116.0	6.7	5.4%	115.3	7.3	6.0%	114.7	8.0	6.5%	114.0	8.7	7.1%	113.3	9.4	7.6%	112.6	10.0	8.2%
ME 3	39 58 10	2003	Wet	November	Used in Summary Table Analysis	888.5	883.3	5.2	0.6%	882.7	5.7	0.6%	882.2	6.3	0.7%	881.7	6.8	0.8%	881.2	7.3	0.8%	880.6	7.8	0.9%
ME 3	39 58 10	2003	Wet	December	--	56,371.5	56,366.9	4.6	0.0%	56,366.9	4.6	0.0%	56,365.7	5.8	0.0%	56,365.7	5.8	0.0%	56,365.7	5.8	0.0%	56,364.6	6.9	0.0%
ME 3	39 58 10	2003	Wet	January	--	31,435.2	31,431.7	3.5	0.0%	31,431.7	3.5	0.0%	31,430.6	4.6	0.0%	31,430.6	4.6	0.0%	31,430.6	4.6	0.0%	31,429.4	5.8	0.0%
ME 3	39 58 10	2003	Wet	February	--	20,302.1	20,298.6	3.5	0.0%	20,298.6	3.5	0.0%	20,297.5	4.6	0.0%	20,297.5	4.6	0.0%	20,297.5	4.6	0.0%	20,296.3	5.8	0.0%
ME 3	39 58 10	2003	Wet	March	--	23,956.0	23,952.5	3.5	0.0%	23,952.5	3.5	0.0%	23,952.5	3.5	0.0%	23,952.5	3.5	0.0%	23,951.4	4.6	0.0%	23,951.4	4.6	0.0%
ME 3	39 58 10	2003	Wet	April	--	42,725.7	42,722.2	3.5	0.0%	42,722.2	3.5	0.0%	42,722.2	3.5	0.0%	42,721.1	4.6	0.0%	42,721.1	4.6	0.0%	42,721.1	4.6	0.0%
ME 3	39 58 10	2003	Wet	May	--	12,195.6	12,188.7	6.9	0.1%	12,187.5	8.1	0.1%	12,186.3	9.3	0.1%	12,186.3	9.3	0.1%	12,185.2	10.4	0.1%	12,184.0	11.6	0.1%
ME 3	39 58 10	2003	Wet	June	--	3,158.1	3,148.1	10.0	0.3%	3,147.2	10.9	0.3%	3,146.3	11.8	0.4%	3,145.4	12.7	0.4%	3,144.3	13.8	0.4%	3,143.4	14.7	0.5%
ME 3	39 58 10	2003	Wet	July	--	1,465.6	1,455.8	9.8	0.7%	1,454.7	10.9	0.7%	1,453.7	11.9	0.8%	1,452.8	12.8	0.9%	1,451.9	13.8	0.9%	1,450.8	14.8	1.0%
ME 3	39 58 10	2003	Wet	August	--	752.2	742.9	9.3	1.2%	742.0	10.3	1.4%	741.0	11.2	1.5%	740.0	12.2	1.6%	739.1	13.1	1.7%	738.2	14.1	1.9%
ME 3	39 58 10	2003	Wet	September	Used in Summary Table Analysis	450.6	442.9	7.7	1.7%	442.1	8.5	1.9%	441.4	9.3	2.1%	440.6	10.1	2.2%	439.8	10.8	2.4%	439.0	11.6	2.6%
ME 3	39 58 10	2004	Wet	October	Used in Summary Table Analysis	317.8	311.6	6.2	1.9%	311.0	6.8	2.1%	310.3	7.4	2.3%	309.7	8.1	2.5%	309.1	8.7	2.7%	308.5	9.3	2.9%
ME 3	39 58 10	2004	Wet	November	Used in Summary Table Analysis	5,751.9	5,747.0	4.9	0.1%	5,746.5	5.3	0.1%	5,745.9	5.9	0.1%	5,745.5	6.4	0.1%	5,745.0	6.8	0.1%	5,744.6	7.3	0.1%
ME 3	39 58 10	2004	Wet	December	--	36,089.1	36,084.5	4.6	0.0%	36,084.5	4.6	0.0%	36,084.5	4.6	0.0%	36,083.3	5.8	0.0%	36,083.3	5.8	0.0%	36,082.2	6.9	0.0%
ME 3	39 58 10	2004	Wet	January	--	31,321.8	31,318.3	3.5	0.0%	31,317.1	4.6	0.0%	31,317.1	4.6	0.0%	31,317.1	4.6	0.0%	31,316.0	5.8	0.0%	31,316.0	5.8	0.0%
ME 3	39 58 10	2004	Wet	February	--	38,090.3	38,086.8	3.5	0.0%	38,086.8	3.5	0.0%	38,085.6	4.6	0.0%	38,085.6	4.6	0.0%	38,085.6	4.6	0.0%	38,084.5	5.8	0.0%
ME 3	39 58 10	2004	Wet	March	--	16,495.4	16,491.9	3.5	0.0%	16,491.9	3.5	0.0%	16,491.9	3.5	0.0%	16,490.7	4.6	0.0%	16,490.7	4.6	0.0%	16,490.7	4.6	0.0%
ME 3	39 58 10	2004	Wet	April	--	9,428.9	9,426.0	2.9	0.0%	9,425.7	3.2	0.0%	9,425.3	3.6	0.0%	9,425.1	3.8	0.0%	9,424.8	4.2	0.0%	9,424.4	4.5	0.0%
ME 3	39 58 10	2004	Wet	May	--	3,402.3	3,394.9	7.4	0.2%	3,394.1	8.2	0.2%	3,393.4	8.9	0.3%	3,392.7	9.6	0.3%	3,391.9	10.4	0.3%	3,391.2	11.1	0.3%
ME 3	39 58 10	2004	Wet	June	--	686.4	677.0	9.3	1.4%	676.1	10.3	1.5%	675.2	11.2	1.6%	674.3	12.1	1.8%	673.3	13.0	1.9%	672.4	14.0	2.0%
ME 3	39 58 10	2004	Wet	July	--	349.3	339.7	9.7	2.8%	338.7	10.6	3.0%	337.8	11.6	3.3%	336.8	12.5	3.6%	335.8	13.5	3.9%	334.9	14.5	4.1%
ME 3	39 58 10	2004	Wet	August	--	218.7	209.9	8.9	4.1%	209.0	9.7	4.5%	208.1	10.6	4.9%	207.2	11.5	5.3%	206.3	12.4	5.7%	205.4	13.3	6.1%
ME 3	39 58 10	2004	Wet	September	Used in Summary Table Analysis	156.2	147.8	8.4	5.3%	147.0	9.2	5.9%	146.2	10.0	6.4%	145.4	10.8	6.9%	144.5	11.7	7.5%	143.7	12.5	8.0%
ME 3	39 58 10	2005	Above Normal	October	Used in Summary Table Analysis	7,616.6	7,610.2	6.4	0.1%	7,609.6	6.9	0.1%	7,608.9	7.6	0.1%	7,608.3	8.2	0.1%	7,607.6	8.9	0.1%	7,607.1	9.5	0.1%
ME 3	39 58 10	2005	Above Normal	November	Used in Summary Table Analysis	2,245.6	2,240.9	4.7	0.2%	2,240.3	5.3	0.2%	2,239.8	5.8	0.3%	2,239.4	6.3	0.3%	2,238.9	6.7	0.3%	2,238.4	7.2	0.3%
ME 3	39 58 10	2005	Above Normal	December	--	20,842.6	20,838.0	4.6	0.0%	20,838.0	4.6	0.0%	20,836.8	5.8	0.0%	20,836.8	5.8	0.0%	20,836.8	5.8	0.0%	20,835.6	6.9	0.0%
ME 3	39 58 10	2005	Above Normal	January	--	22,238.4	22,235.0	3.5	0.0%	22,235.0	3.5	0.0%	22,233.8	4.6	0.0%	22,233.8	4.6	0.0%	22,233.8	4.6	0.0%	22,232.6	5.8	0.0%
ME 3	39 58 10	2005	Above Normal	February	--	13,982.6	13,979.2	3.5	0.0%	13,979.2	3.5	0.0%	13,979.2	3.5	0.0%	13,979.2	3.5	0.0%	13,978.0	4.6	0.0%	13,978.0	4.6	0.0%
ME 3	39 58 10	2005	Above Normal	March	--	28,456.0	28,452.5	3.5	0.0%	28,452.5	3.5	0.0%	28,452.5	3.5	0.0%	28,451.4	4.6	0.0%	28,451.4	4.6	0.0%	28,451.4	4.6	0.0%
ME 3	39 58 10	2005	Above Normal	April	--	21,370.4	21,368.1	2.3	0.0%	21,368.1	2.3	0.0%	21,366.9	3.5	0.0%	21,366.9	3.5	0.0%	21,366.9	3.5	0.0%	21,366.9	3.5	0.0%
ME 3	39 58 10	2005	Above Normal	May	--	19,481.5	19,474.5	6.9	0.0%	19,473.4	8.1	0.0%	19,473.4	8.1	0.0%	19,472.2	9.3	0.0%	19,471.1	10.4	0.1%	19,471.1	10.4	0.1%
ME 3	39 58 10	2005	Above Normal	June	--	15,767.4	15,755.8	11.6	0.1%	15,754.6	12.7	0.1%	15,753.5	13.9	0.1%	15,752.3	15.0	0.1%	15,751.2	16.2	0.1%	15,750.0	17.4	0.1%
ME 3	39 58 10	2005	Above Normal	July	--	2,860.0	2,849.9	10.1	0.4%	2,848.8	11.1	0.4%	2,847.9	12.0	0.4%	2,846.9	13.1	0.5%	2,845.8	14.1	0.5%	2,844.8	15.2	0.5%
ME 3	39 58 10	2005	Above Normal	August	--	974.7	965.9	8.9	0.9%	965.0	9.7	1.0%	964.1	10.6	1.1%	963.2	11.5	1.2%	962.3	12.4	1.3%	961.5	13.3	1.4%
ME 3	39 58 10	2005	Above Normal	September	Used in Summary Table Analysis	516.6	509.0	7.6	1.5%	508.2	8.4	1.6%	507.5	9.2	1.8%	506.7	9.9	1.9%	505.9	10.7	2.1%	505.2	11.4	2.2%
ME 3	39 58 10	2006	Wet	October	Used in Summary Table Analysis	625.6	619.6	6.0	1.0%	619.0	6.6	1.1%	618.4	7.2	1.2%	617.8	7.8	1.3%	617.2	8.4	1.4%	616.6	9.1	1.4%
ME 3	39 58 10	2006	Wet	November	Used in Summary Table Analysis	9,220.4	9,215.7	4.6	0.1%	9,215.3	5.1	0.1%	9,214.8	5.6	0.1%	9,214.4	6.0	0.1%	9,213.9	6.5	0.1%	9,213.4	6.9	0.1%
ME 3	39 58 10	2006	Wet	December	--	43,221.1	43,217.6	3.5	0.0%	43,217.6	3.5	0.0%	43,216.4	4.6	0.0%	43,216.4	4.6	0.0%	43,216.4	4.6	0.0%	43,215.3	5.8	0.0%
ME 3	39 58 10	2006	Wet	January	--	46,046.3	46,042.8	3.5	0.0%	46,042.8	3.5	0.0%	46,041.7	4.6	0.0%	46,041.7	4.6	0.0%	46,041.7	4.6	0.0%	46,040.5	5.8	0.0%
ME 3	39 58 10	2006	Wet	February	--	26,509.3	26,505.8	3.5	0.0%	26,505.8	3.5	0.0%	26,504.6	4.6	0.0%	26,504.6	4.6	0.0%	26,504.6	4.6	0.0%	26,504.6	4.6	0.0%
ME 3	39 58 10	2006	Wet	March	--	46,959.5	46,956.0	3.5	0.0%	46,956.0	3.5	0.0%	46,956.0	3.5	0.0%	46,956.0	3.5	0.0%	46,954.9	4.6	0.0%	46,954.9	4.6	0.0%
ME 3	39 58 10	2006	Wet	April	--	30,347.2	30,344.9	2.3	0.0%	30,344.9	2.3	0.0%	30,343.8	3.5	0.0%	30,343.8	3.5	0.0%	30,343.8	3.5	0.0%	30,343.8	3.5	0.0%
ME 3	39 58 10	2006	Wet	May	--	14,159.7	14,155.1	4.6	0.0%	14,155.1	4.6	0.0%	14,153.9	5.8	0.0%	14,153.9	5.8	0.0%	14,153.9	5.8	0.0%	14,152.8	6.9	0.0%
ME 3	39 58 10	2006	Wet	June	--	3,539.8	3,530.3	9.5	0.3%	3,529.4	10.4	0.3%	3,528.5	11.3	0.3%	3,527.5	12.3	0.3%	3,526.5	13.3	0.4%	3,525.6	14.2	0.4%
ME 3	39 58 10	2006	Wet	July	--	1,269.9	1,260.2	9.7	0.8%	1,259.3	10.6	0.8%	1,258.3	11.6	0.9%	1,257.4	12.5	1.0%	1,256.4	13.5	1.1%	1,255.4	14.5	1.1%
ME 3	39 58 10	2006	Wet	August	--	656.3	647.2	9.1	1.4%	646.3	10.0	1.5%	645.4	10.9	1.7%	644.4	11.9	1.8%	643.5	12.8	2.0%	642.6	13.7	2.1%
ME 3	39 58 10	2006	Wet	September	Used in Summary Table Analysis	417.9	410.2	7.7	1.8%	409.4	8.5	2.0%	408.6	9.3	2.2%	407.9	10.1	2.4%	407.1	10.8	2.6%	406.3	11.6	2.8%
ME 3	39 58 10	2007	Above Normal	October	Used in Summary Table Analysis	267.3	261.1	6.1	2.3%	260.5	6.7	2.5%	259.9	7.3	2.7%	259.3	8.0	3.0%	258.7	8.6	3.2%	258.1	9.2	3.4%
ME 3	39 58 10	2007	Above Normal	November	Used in Summary Table Analysis	8,591.1	8,586.2	4.9	0.1%	8,585.8	5.3	0.1%	8,585.3	5.8	0.1%	8,584.8	6.3	0.1%	8,584.4	6.7	0.1%	8,583.8	7.3	0.1%
ME 3	39 58 10	2007	Above Normal	December	--	20,258.1	20,254.6	3.5	0.0%	20,253.5	4.6	0.0%	20,253.5	4.6	0.0%	20,253.5	4.6	0.0%	20,252.3	5.8	0.0%	20,252.3	5.8	0.0%
ME 3	39 58 10	2007	Above Normal	January	--	10,209.0	10,205.3	3.7	0.0%	10,205.0	4.1	0.0%	10,204.6	4.4	0.0%	10,204.2	4.9	0.0%	10,203.8	5.2	0.1%	10,203.5	5.6	0.1%
ME 3	39 58 10	2007	Above Normal	February	--	30,401.6	30,398.1	3.5	0.0%	30,398.1	3.5	0.0%	30,397.0	4.6	0.0%	30,397.0	4.6	0.0%	30,397.0	4.6	0.0%	30,397.0	4.6	0.0%
ME 3	39 58 10	2007	Above Normal	March	--	13,069.4	13,067.1	2.3	0.0%	13,066.0	3.5	0.0%	13,066.0	3.5	0.0%	13,066.0	3.5	0.0%	13,064.8	4.6	0.0%	13,064.8	4.6	0.0%
ME 3	39 58 10	2007	Above Normal	April	--	11,505.1	11,497.9	7.2	0.1%	11,497.1	8.0	0.1%	11,496.4	8.7	0.1%	11,495.7	9.4	0.1%	11,495.0	10.1	0.1%	11,494.2	10.9	0.1%
ME 3	39 58 10	2007	Above Normal	May	--	4,125.0	4,116.6	8.4	0.2%	4,115.6	9.4	0.2%	4,114.8	10.2	0.2%	4,114.0	11.0	0.3%	4,113.1	11.9	0.3%	4,112.3	12.7	0.3%
ME 3	39 58 10	2007	Above Normal	June	--	1,487.7	1,477.2	10.5	0.7%	1,476.2	11.6	0.8%	1,475.1	12.6	0.8%	1,474.1	13.7	0.9%	1,473.0	14.7	1.0%	1,472.0	15.7	1.1%
ME 3	39 58 10	2007	Above Normal	July	--	490.4	480.1	10.2	2.1%	479.1	11.3	2.3%	478.1	12.3	2.5%	477.1	13.3	2.7%	476.0	14.3	2.9%	475.0	15.4	3.1%
ME 3	39 58 10	2007	Above Normal	August	--	216.4	207.4	9.0	4.2%	206.5	9.9	4.6%	205.6	10.8	5.0%	204.7	11.7	5.4%	203.8	12.6	5.8%	202.9	13.5	6.2%
ME 3	39 58 10	2007	Above Normal	September	Used in Summary Table Analysis	144.1	135.8	8.3	5.8%	135.0	9.1	6.3%	134.1	10.0	6.9%	133.3	10.8	7.5%	132.5	11.6	8.1%	131.7	12.4	8.6%
ME 3	39 58 10	2008	Dry	October	Used in Summary Table Analysis	3,405.1	3,398.6	6.5	0.2%	3,397.9	7.2	0.2%	3,397.2	7.9	0.2%	3,396.6	8.4	0.2%	3,395.9	9.1	0.3%	3,395.3	9.8	0.3%
ME 3	39 58 10	2008	Dry	November	Used in Summary Table Analysis	3,247.3	3,242.4	5.0	0.2%	3,241.9	5.4	0.2%	3,241.4	5.9	0.2%	3,241.0	6.4	0.2%	3,240.4	6.9	0.2%	3,239.9	7.4	0.2%
ME 3	39 58 10	2008	Dry	December	--	22,929.4	22,925.9	3.5	0.0%	22,924.8	4.6	0.0%	22,924.8	4.6	0.0%	22,923.6	5.8	0.0%	22,923.6	5.8	0.0%	22,923.6	5.8	0.0%
ME 3	39 58 10	2008	Dry	January	--	37,342.6	37,338.0	4.6	0.0%	37,338.0	4.6	0.0%	37,338.0	4.6	0.0%	37,336.8	5.8	0.0%	37,336.8	5.8	0.0%	37,336.8	5.8	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 58 10	2008	Dry	February	--	26,222.2	26,218.8	3.5	0.0%	26,218.8	3.5	0.0%	26,218.8	3.5	0.0%	26,217.6	4.6	0.0%	26,217.6	4.6	0.0%	26,217.6	4.6	0.0%
ME 3	39 58 10	2008	Dry	March	--	11,770.8	11,767.4	3.5	0.0%	11,767.4	3.5	0.0%	11,767.4	3.5	0.0%	11,766.2	4.6	0.0%	11,766.2	4.6	0.0%	11,766.2	4.6	0.0%
ME 3	39 58 10	2008	Dry	April	--	8,997.7	8,990.2	7.5	0.1%	8,989.4	8.3	0.1%	8,988.7	9.0	0.1%	8,987.8	9.8	0.1%	8,987.2	10.5	0.1%	8,986.3	11.3	0.1%
ME 3	39 58 10	2008	Dry	May	--	1,358.6	1,350.7	7.9	0.6%	1,349.9	8.7	0.6%	1,349.1	9.5	0.7%	1,348.3	10.3	0.8%	1,347.5	11.1	0.8%	1,346.6	11.9	0.9%
ME 3	39 58 10	2008	Dry	June	--	431.9	420.2	11.6	2.7%	419.1	12.8	3.0%	417.9	14.0	3.2%	416.8	15.1	3.5%	415.6	16.3	3.8%	414.5	17.4	4.0%
ME 3	39 58 10	2008	Dry	July	--	250.5	239.5	11.0	4.4%	238.4	12.1	4.8%	237.3	13.2	5.3%	236.2	14.3	5.7%	235.1	15.4	6.1%	234.0	16.5	6.6%
ME 3	39 58 10	2008	Dry	August	--	173.6	163.1	10.5	6.0%	162.1	11.5	6.6%	161.1	12.6	7.2%	160.0	13.6	7.8%	159.0	14.7	8.4%	157.9	15.7	9.0%
ME 3	39 58 10	2008	Dry	September	Used in Summary Table Analysis	135.4	125.4	10.0	7.4%	124.4	11.0	8.1%	123.4	12.0	8.8%	122.4	13.0	9.6%	121.4	14.0	10.3%	120.4	15.0	11.0%
ME 3	39 58 10	2009	Critical	October	Used in Summary Table Analysis	916.5	909.0	7.5	0.8%	908.3	8.2	0.9%	907.5	9.0	1.0%	906.7	9.7	1.1%	906.0	10.5	1.1%	905.2	11.3	1.2%
ME 3	39 58 10	2009	Critical	November	Used in Summary Table Analysis	5,462.0	5,456.5	5.6	0.1%	5,455.9	6.1	0.1%	5,455.3	6.7	0.1%	5,454.7	7.3	0.1%	5,454.2	7.9	0.1%	5,453.6	8.4	0.2%
ME 3	39 58 10	2009	Critical	December	--	12,063.7	12,059.0	4.6	0.0%	12,059.0	4.6	0.0%	12,057.9	5.8	0.0%	12,057.9	5.8	0.0%	12,057.9	5.8	0.0%	12,056.7	6.9	0.1%
ME 3	39 58 10	2009	Critical	January	--	8,765.7	8,761.5	4.3	0.0%	8,761.0	4.7	0.1%	8,760.5	5.2	0.1%	8,760.1	5.7	0.1%	8,759.6	6.1	0.1%	8,759.3	6.5	0.1%
ME 3	39 58 10	2009	Critical	February	--	22,528.9	22,525.5	3.5	0.0%	22,525.5	3.5	0.0%	22,525.5	3.5	0.0%	22,524.3	4.6	0.0%	22,524.3	4.6	0.0%	22,524.3	4.6	0.0%
ME 3	39 58 10	2009	Critical	March	--	21,056.7	21,053.2	3.5	0.0%	21,053.2	3.5	0.0%	21,053.2	3.5	0.0%	21,052.1	4.6	0.0%	21,052.1	4.6	0.0%	21,052.1	4.6	0.0%
ME 3	39 58 10	2009	Critical	April	--	10,086.7	10,078.8	7.9	0.1%	10,078.0	8.7	0.1%	10,077.2	9.5	0.1%	10,076.5	10.2	0.1%	10,075.8	10.9	0.1%	10,075.0	11.7	0.1%
ME 3	39 58 10	2009	Critical	May	--	15,549.8	15,540.5	9.3	0.1%	15,539.4	10.4	0.1%	15,538.2	11.6	0.1%	15,537.0	12.7	0.1%	15,535.9	13.9	0.1%	15,535.9	13.9	0.1%
ME 3	39 58 10	2009	Critical	June	--	3,152.7	3,140.3	12.4	0.4%	3,139.1	13.5	0.4%	3,137.8	14.8	0.5%	3,136.6	16.1	0.5%	3,135.4	17.2	0.5%	3,134.1	18.5	0.6%
ME 3	39 58 10	2009	Critical	July	--	1,256.1	1,245.0	11.1	0.9%	1,243.9	12.3	1.0%	1,242.8	13.3	1.1%	1,241.7	14.5	1.2%	1,240.6	15.5	1.2%	1,239.5	16.7	1.3%
ME 3	39 58 10	2009	Critical	August	--	662.0	651.5	10.6	1.6%	650.4	11.6	1.8%	649.4	12.7	1.9%	648.3	13.7	2.1%	647.3	14.8	2.2%	646.2	15.8	2.4%
ME 3	39 58 10	2009	Critical	September	Used in Summary Table Analysis	383.8	374.6	9.2	2.4%	373.7	10.1	2.6%	372.8	11.0	2.9%	371.8	12.0	3.1%	370.9	12.8	3.3%	370.0	13.8	3.6%
ME 3	39 58 10	2010	Below Normal	October	Used in Summary Table Analysis	6,079.5	6,072.0	7.5	0.1%	6,071.2	8.3	0.1%	6,070.4	9.1	0.2%	6,069.7	9.8	0.2%	6,068.9	10.6	0.2%	6,068.2	11.3	0.2%
ME 3	39 58 10	2010	Below Normal	November	Used in Summary Table Analysis	8,256.1	8,250.3	5.8	0.1%	8,249.8	6.4	0.1%	8,249.2	6.9	0.1%	8,248.6	7.5	0.1%	8,248.0	8.1	0.1%	8,247.5	8.7	0.1%
ME 3	39 58 10	2010	Below Normal	December	--	12,289.4	12,283.6	5.8	0.0%	12,283.6	5.8	0.0%	12,283.6	5.8	0.0%	12,282.4	6.9	0.1%	12,282.4	6.9	0.1%	12,281.3	8.1	0.1%
ME 3	39 58 10	2010	Below Normal	January	--	36,019.7	36,015.0	4.6	0.0%	36,015.0	4.6	0.0%	36,013.9	5.8	0.0%	36,013.9	5.8	0.0%	36,013.9	5.8	0.0%	36,012.7	6.9	0.0%
ME 3	39 58 10	2010	Below Normal	February	--	27,181.7	27,178.2	3.5	0.0%	27,178.2	3.5	0.0%	27,177.1	4.6	0.0%	27,177.1	4.6	0.0%	27,177.1	4.6	0.0%	27,175.9	5.8	0.0%
ME 3	39 58 10	2010	Below Normal	March	--	28,782.4	28,778.9	3.5	0.0%	28,778.9	3.5	0.0%	28,778.9	3.5	0.0%	28,777.8	4.6	0.0%	28,777.8	4.6	0.0%	28,777.8	4.6	0.0%
ME 3	39 58 10	2010	Below Normal	April	--	39,915.5	39,912.0	3.5	0.0%	39,912.0	3.5	0.0%	39,910.9	4.6	0.0%	39,910.9	4.6	0.0%	39,910.9	4.6	0.0%	39,910.9	4.6	0.0%
ME 3	39 58 10	2010	Below Normal	May	--	20,192.1	20,184.0	8.1	0.0%	20,182.9	9.3	0.0%	20,182.9	9.3	0.0%	20,181.7	10.4	0.1%	20,180.6	11.6	0.1%	20,180.6	11.6	0.1%
ME 3	39 58 10	2010	Below Normal	June	--	9,289.2	9,277.4	11.8	0.1%	9,276.3	13.0	0.1%	9,275.0	14.2	0.2%	9,273.8	15.4	0.2%	9,272.7	16.6	0.2%	9,271.5	17.7	0.2%
ME 3	39 58 10	2010	Below Normal	July	--	1,447.9	1,437.7	10.2	0.7%	1,436.7	11.2	0.8%	1,435.6	12.3	0.8%	1,434.7	13.2	0.9%	1,433.7	14.2	1.0%	1,432.6	15.3	1.1%
ME 3	39 58 10	2010	Below Normal	August	--	560.8	551.7	9.2	1.6%	550.8	10.1	1.8%	549.8	11.0	2.0%	548.9	11.9	2.1%	548.1	12.7	2.3%	547.2	13.7	2.4%
ME 3	39 58 10	2010	Below Normal	September	Used in Summary Table Analysis	642.9	634.3	8.6	1.3%	633.4	9.4	1.5%	632.5	10.3	1.6%	631.7	11.2	1.7%	630.8	12.0	1.9%	630.0	12.9	2.0%
ME 3	39 58 10	2011	Wet	October	Used in Summary Table Analysis	9,586.9	9,580.7	6.3	0.1%	9,580.1	6.8	0.1%	9,579.4	7.5	0.1%	9,578.8	8.1	0.1%	9,578.1	8.8	0.1%	9,577.5	9.4	0.1%
ME 3	39 58 10	2011	Wet	November	Used in Summary Table Analysis	14,166.7	14,162.0	4.6	0.0%	14,162.0	4.6	0.0%	14,160.9	5.8	0.0%	14,160.9	5.8	0.0%	14,160.9	5.8	0.0%	14,159.7	6.9	0.0%
ME 3	39 58 10	2011	Wet	December	--	33,493.1	33,489.6	3.5	0.0%	33,488.4	4.6	0.0%	33,488.4	4.6	0.0%	33,487.3	5.8	0.0%	33,487.3	5.8	0.0%	33,487.3	5.8	0.0%
ME 3	39 58 10	2011	Wet	January	--	14,114.6	14,111.1	3.5	0.0%	14,110.0	4.6	0.0%	14,110.0	4.6	0.0%	14,110.0	4.6	0.0%	14,108.8	5.8	0.0%	14,108.8	5.8	0.0%
ME 3	39 58 10	2011	Wet	February	--	20,726.9	20,723.4	3.5	0.0%	20,723.4	3.5	0.0%	20,723.4	3.5	0.0%	20,722.2	4.6	0.0%	20,722.2	4.6	0.0%	20,722.2	4.6	0.0%
ME 3	39 58 10	2011	Wet	March	--	51,869.2	51,865.7	3.5	0.0%	51,865.7	3.5	0.0%	51,864.6	4.6	0.0%	51,864.6	4.6	0.0%	51,864.6	4.6	0.0%	51,863.4	5.8	0.0%
ME 3	39 58 10	2011	Wet	April	--	24,750.0	24,747.7	2.3	0.0%	24,746.5	3.5	0.0%	24,746.5	3.5	0.0%	24,746.5	3.5	0.0%	24,746.5	3.5	0.0%	24,745.4	4.6	0.0%
ME 3	39 58 10	2011	Wet	May	--	11,357.9	11,350.3	7.5	0.1%	11,349.7	8.2	0.1%	11,348.8	9.0	0.1%	11,348.1	9.7	0.1%	11,347.3	10.5	0.1%	11,346.5	11.3	0.1%
ME 3	39 58 10	2011	Wet	June	--	7,032.1	7,020.5	11.6	0.2%	7,019.3	12.7	0.2%	7,018.2	13.9	0.2%	7,017.0	15.0	0.2%	7,015.9	16.2	0.2%	7,014.7	17.4	0.2%
ME 3	39 58 10	2011	Wet	July	--	1,823.8	1,812.8	11.0	0.6%	1,811.7	12.2	0.7%	1,810.6	13.2	0.7%	1,809.5	14.4	0.8%	1,808.4	15.4	0.8%	1,807.3	16.6	0.9%
ME 3	39 58 10	2011	Wet	August	--	769.8	760.8	9.0	1.2%	759.9	9.9	1.3%	759.0	10.8	1.4%	758.1	11.7	1.5%	757.2	12.6	1.6%	756.4	13.5	1.8%
ME 3	39 58 10	2011	Wet	September	Used in Summary Table Analysis	426.5	418.6	7.9	1.9%	417.8	8.7	2.0%	417.0	9.5	2.2%	416.2	10.3	2.4%	415.4	11.1	2.6%	414.6	11.9	2.8%
ME 3	39 58 10	2012	Below Normal	October	Used in Summary Table Analysis	4,516.7	4,510.4	6.3	0.1%	4,509.7	6.9	0.2%	4,509.1	7.5	0.2%	4,508.6	8.1	0.2%	4,507.9	8.8	0.2%	4,507.3	9.4	0.2%
ME 3	39 58 10	2012	Below Normal	November	Used in Summary Table Analysis	8,189.5	8,184.5	5.0	0.1%	8,184.0	5.4	0.1%	8,183.6	5.9	0.1%	8,183.1	6.4	0.1%	8,182.5	6.9	0.1%	8,182.1	7.4	0.1%
ME 3	39 58 10	2012	Below Normal	December	--	5,160.5	5,156.4	4.2	0.1%	5,155.9	4.6	0.1%	5,155.6	5.0	0.1%	5,155.1	5.4	0.1%	5,154.6	5.9	0.1%	5,154.3	6.3	0.1%
ME 3	39 58 10	2012	Below Normal	January	--	19,980.3	19,976.9	3.5	0.0%	19,976.9	3.5	0.0%	19,975.7	4.6	0.0%	19,975.7	4.6	0.0%	19,975.7	4.6	0.0%	19,974.5	5.8	0.0%
ME 3	39 58 10	2012	Below Normal	February	--	18,172.5	18,169.0	3.5	0.0%	18,167.8	4.6	0.0%	18,167.8	4.6	0.0%	18,167.8	4.6	0.0%	18,167.8	4.6	0.0%	18,166.7	5.8	0.0%
ME 3	39 58 10	2012	Below Normal	March	--	45,266.2	45,262.7	3.5	0.0%	45,262.7	3.5	0.0%	45,261.6	4.6	0.0%	45,261.6	4.6	0.0%	45,261.6	4.6	0.0%	45,261.6	4.6	0.0%
ME 3	39 58 10	2012	Below Normal	April	--	26,799.8	26,796.3	3.5	0.0%	26,796.3	3.5	0.0%	26,796.3	3.5	0.0%	26,795.1	4.6	0.0%	26,795.1	4.6	0.0%	26,795.1	4.6	0.0%
ME 3	39 58 10	2012	Below Normal	May	--	7,466.2	7,458.6	7.6	0.1%	7,457.9	8.3	0.1%	7,457.1	9.1	0.1%	7,456.3	10.0	0.1%	7,455.6	10.6	0.1%	7,455.0	11.2	0.2%
ME 3	39 58 10	2012	Below Normal	June	--	5,491.7	5,479.9	11.8	0.2%	5,478.7	13.0	0.2%	5,477.5	14.1	0.3%	5,476.4	15.3	0.3%	5,475.2	16.4	0.3%	5,474.1	17.6	0.3%
ME 3	39 58 10	2012	Below Normal	July	--	2,208.1	2,197.3	10.8	0.5%	2,196.2	11.9	0.5%	2,195.1	13.0	0.6%	2,194.1	14.0	0.6%	2,193.1	15.0	0.7%	2,191.9	16.2	0.7%
ME 3	39 58 10	2012	Below Normal	August	--	382.8	374.3	8.4	2.2%	373.5	9.2	2.4%	372.7	10.1	2.6%	371.9	10.9	2.8%	371.1	11.7	3.1%	370.2	12.5	3.3%
ME 3	39 58 10	2012	Below Normal	September	Used in Summary Table Analysis	242.4	235.2	7.3	3.0%	234.4	8.0	3.3%	233.7	8.8	3.6%	233.0	9.5	3.9%	232.2	10.2	4.2%	231.5	10.9	4.5%
ME 3	39 58 10	2013	Below Normal	October	Used in Summary Table Analysis	1,894.9	1,888.8	6.1	0.3%	1,888.1	6.8	0.4%	1,887.5	7.4	0.4%	1,886.9	8.0	0.4%	1,886.2	8.7	0.5%	1,885.6	9.3	0.5%
ME 3	39 58 10	2013	Below Normal	November	Used in Summary Table Analysis	14,598.4	14,593.8	4.6	0.0%	14,592.6	5.8	0.0%	14,592.6	5.8	0.0%	14,592.6	5.8	0.0%	14,591.4	6.9	0.0%	14,591.4	6.9	0.0%
ME 3	39 58 10	2013	Below Normal	December	--	59,798.6	59,794.0	4.6	0.0%	59,794.0	4.6	0.0%	59,794.0	4.6	0.0%	59,792.8	5.8	0.0%	59,792.8	5.8	0.0%	59,791.7	6.9	0.0%
ME 3	39 58 10	2013	Below Normal	January	--	22,142.4	22,138.9	3.5	0.0%	22,137.7	4.6	0.0%	22,137.7	4.6	0.0%	22,137.7	4.6	0.0%	22,136.6	5.8	0.0%	22,136.6	5.8	0.0%
ME 3	39 58 10	2013	Below Normal	February	--	8,816.6	8,813.2	3.4	0.0%	8,812.8	3.7	0.0%	8,812.5	4.1	0.0%	8,812.2	4.4	0.0%	8,811.8	4.7	0.1%	8,811.5	5.1	0.1%
ME 3	39 58 10	2013	Below Normal	March	--	10,287.8	10,284.6	3.2	0.0%	10,284.3	3.6	0.0%	10,283.9	3.9	0.0%	10,283.7	4.2	0.0%	10,283.3	4.5	0.0%	10,283.0	4.9	0.0%
ME 3	39 58 10	2013	Below Normal	April	--	8,276.4	8,269.3	7.1	0.1%	8,268.6	7.8	0.1%	8,267.8	8.6	0.1%	8,267.1	9.3	0.1%	8,266.4	10.0	0.1%	8,265.7	10.6	0.1%
ME 3	39 58 10	2013	Below Normal	May	--	4,412.7	4,404.2	8.6	0.2%	4,403.4	9.4	0.2%	4,402.4	10.3	0.2%	4,401.6	11.1	0.3%	4,400.7	12.0	0.3%	4,399.9	12.8	0.3%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 58 10	2013	Below Normal	June	--	2,102.8	2,092.2	10.5	0.5%	2,091.2	11.6	0.6%	2,090.2	12.6	0.6%	2,089.1	13.7	0.6%	2,088.1	14.7	0.7%	2,087.0	15.7	0.7%
ME 3	39 58 10	2013	Below Normal	July	--	713.5	703.7	9.8	1.4%	702.8	10.7	1.5%	701.8	11.7	1.6%	700.8	12.7	1.8%	699.8	13.6	1.9%	698.9	14.6	2.0%
ME 3	39 58 10	2013	Below Normal	August	--	334.2	325.3	9.0	2.7%	324.4	9.9	3.0%	323.5	10.8	3.2%	322.6	11.7	3.5%	321.7	12.6	3.8%	320.8	13.5	4.0%
ME 3	39 58 10	2013	Below Normal	September	Used in Summary Table Analysis	4,760.6	4,751.4	9.3	0.2%	4,750.6	10.1	0.2%	4,749.7	11.0	0.2%	4,748.7	11.9	0.3%	4,747.8	12.8	0.3%	4,746.9	13.8	0.3%
ME 3	39 58 10	2014	Critical	October	Used in Summary Table Analysis	278.0	271.6	6.4	2.3%	270.9	7.0	2.5%	270.3	7.7	2.8%	269.7	8.3	3.0%	269.0	9.0	3.2%	268.4	9.6	3.4%
ME 3	39 58 10	2014	Critical	November	Used in Summary Table Analysis	1,523.5	1,518.5	5.0	0.3%	1,517.9	5.6	0.4%	1,517.5	6.0	0.4%	1,517.0	6.5	0.4%	1,516.4	7.1	0.5%	1,516.0	7.5	0.5%
ME 3	39 58 10	2014	Critical	December	--	1,580.2	1,575.9	4.3	0.3%	1,575.6	4.6	0.3%	1,575.1	5.1	0.3%	1,574.7	5.6	0.4%	1,574.2	6.0	0.4%	1,573.8	6.4	0.4%
ME 3	39 58 10	2014	Critical	January	--	2,806.4	2,802.5	3.8	0.1%	2,802.2	4.2	0.1%	2,801.9	4.5	0.2%	2,801.4	5.0	0.2%	2,801.0	5.3	0.2%	2,800.7	5.7	0.2%
ME 3	39 58 10	2014	Critical	February	--	15,713.0	15,709.5	3.5	0.0%	15,708.3	4.6	0.0%	15,708.3	4.6	0.0%	15,708.3	4.6	0.0%	15,707.2	5.8	0.0%	15,707.2	5.8	0.0%
ME 3	39 58 10	2014	Critical	March	--	31,434.0	31,430.6	3.5	0.0%	31,430.6	3.5	0.0%	31,429.4	4.6	0.0%	31,429.4	4.6	0.0%	31,429.4	4.6	0.0%	31,429.4	4.6	0.0%
ME 3	39 58 10	2014	Critical	April	--	12,969.9	12,963.0	6.9	0.1%	12,961.8	8.1	0.1%	12,960.6	9.3	0.1%	12,959.5	10.4	0.1%	12,959.5	10.4	0.1%	12,958.3	11.6	0.1%
ME 3	39 58 10	2014	Critical	May	--	5,174.8	5,165.6	9.1	0.2%	5,164.7	10.1	0.2%	5,163.8	11.0	0.2%	5,162.8	11.9	0.2%	5,161.9	12.8	0.2%	5,161.0	13.8	0.3%
ME 3	39 58 10	2014	Critical	June	--	1,191.2	1,178.6	12.6	1.1%	1,177.3	13.9	1.2%	1,176.0	15.2	1.3%	1,174.8	16.4	1.4%	1,173.5	17.7	1.5%	1,172.3	18.9	1.6%
ME 3	39 58 10	2014	Critical	July	--	541.0	529.9	11.2	2.1%	528.8	12.3	2.3%	527.6	13.4	2.5%	526.5	14.5	2.7%	525.4	15.6	2.9%	524.3	16.7	3.1%
ME 3	39 58 10	2014	Critical	August	--	342.2	331.7	10.5	3.1%	330.6	11.5	3.4%	329.6	12.6	3.7%	328.5	13.6	4.0%	327.5	14.7	4.3%	326.4	15.7	4.6%
ME 3	39 58 10	2014	Critical	September	Used in Summary Table Analysis	2,560.2	2,549.9	10.3	0.4%	2,548.8	11.3	0.4%	2,547.9	12.3	0.5%	2,546.9	13.3	0.5%	2,545.8	14.4	0.6%	2,544.8	15.4	0.6%
ME 3	39 58 10	2015	Dry	October	Used in Summary Table Analysis	11,317.2	11,309.7	7.5	0.1%	11,309.0	8.2	0.1%	11,308.2	9.0	0.1%	11,306.8	10.4	0.1%	11,306.0	11.2	0.1%	11,305.3	11.9	0.1%
ME 3	39 58 10	2015	Dry	November	Used in Summary Table Analysis	8,992.7	8,987.0	5.7	0.1%	8,986.5	6.3	0.1%	8,986.0	6.7	0.1%	8,985.4	7.3	0.1%	8,984.8	7.9	0.1%	8,984.3	8.4	0.1%
ME 3	39 58 10	2015	Dry	December	--	32,451.4	32,446.8	4.6	0.0%	32,446.8	4.6	0.0%	32,445.6	5.8	0.0%	32,445.6	5.8	0.0%	32,444.4	6.9	0.0%	32,444.4	6.9	0.0%
ME 3	39 58 10	2015	Dry	January	--	14,549.8	14,545.1	4.6	0.0%	14,545.1	4.6	0.0%	14,544.0	5.8	0.0%	14,544.0	5.8	0.0%	14,544.0	5.8	0.0%	14,542.8	6.9	0.0%
ME 3	39 58 10	2015	Dry	February	--	27,166.7	27,163.2	3.5	0.0%	27,163.2	3.5	0.0%	27,163.2	3.5	0.0%	27,162.0	4.6	0.0%	27,162.0	4.6	0.0%	27,162.0	4.6	0.0%
ME 3	39 58 10	2015	Dry	March	--	11,552.7	11,549.3	3.4	0.0%	11,549.0	3.7	0.0%	11,548.6	4.1	0.0%	11,548.3	4.4	0.0%	11,547.9	4.7	0.0%	11,547.6	5.1	0.0%
ME 3	39 58 10	2015	Dry	April	--	8,341.9	8,334.3	7.6	0.1%	8,333.4	8.4	0.1%	8,332.6	9.3	0.1%	8,331.9	10.0	0.1%	8,331.1	10.8	0.1%	8,330.3	11.6	0.1%
ME 3	39 58 10	2015	Dry	May	--	1,505.6	1,496.5	9.0	0.6%	1,495.6	10.0	0.7%	1,494.7	10.9	0.7%	1,493.8	11.8	0.8%	1,492.8	12.7	0.8%	1,491.9	13.7	0.9%
ME 3	39 58 10	2015	Dry	June	--	648.2	636.4	11.8	1.8%	635.2	13.0	2.0%	634.1	14.2	2.2%	632.9	15.4	2.4%	631.7	16.5	2.5%	630.5	17.7	2.7%
ME 3	39 58 10	2015	Dry	July	--	264.1	253.1	11.1	4.2%	252.0	12.2	4.6%	250.8	13.3	5.0%	249.7	14.4	5.5%	248.6	15.5	5.9%	247.5	16.6	6.3%
ME 3	39 58 10	2015	Dry	August	--	161.0	150.5	10.5	6.5%	149.4	11.6	7.2%	148.4	12.6	7.8%	147.3	13.7	8.5%	146.3	14.7	9.1%	145.2	15.8	9.8%
ME 3	39 58 10	2015	Dry	September	Used in Summary Table Analysis	115.9	106.7	9.2	7.9%	105.8	10.1	8.7%	104.9	11.0	9.5%	103.9	12.0	10.3%	103.0	12.9	11.1%	102.1	13.8	11.9%
ME 3	39 58 10	2016	Above Normal	October	Used in Summary Table Analysis	81.5	73.8	7.7	9.5%	73.0	8.5	10.5%	72.2	9.3	11.4%	72.0	9.5	11.6%	71.4	10.1	12.4%	70.3	11.2	13.8%
ME 3	39 58 10	2016	Above Normal	November	Used in Summary Table Analysis	3,825.7	3,820.0	5.7	0.1%	3,819.4	6.3	0.2%	3,819.0	6.7	0.2%	3,818.3	7.4	0.2%	3,817.7	8.0	0.2%	3,817.1	8.6	0.2%
ME 3	39 58 10	2016	Above Normal	December	--	36,423.6	36,419.0	4.6	0.0%	36,419.0	4.6	0.0%	36,417.8	5.8	0.0%	36,417.8	5.8	0.0%	36,416.7	6.9	0.0%	36,416.7	6.9	0.0%
ME 3	39 58 10	2016	Above Normal	January	--	57,113.4	57,108.8	4.6	0.0%	57,107.6	5.8	0.0%	57,107.6	5.8	0.0%	57,107.6	5.8	0.0%	57,106.5	6.9	0.0%	57,106.5	6.9	0.0%
ME 3	39 58 10	2016	Above Normal	February	--	24,232.6	24,228.0	4.6	0.0%	24,228.0	4.6	0.0%	24,228.0	4.6	0.0%	24,226.9	5.8	0.0%	24,226.9	5.8	0.0%	24,226.9	5.8	0.0%
ME 3	39 58 10	2016	Above Normal	March	--	41,680.6	41,677.1	3.5	0.0%	41,677.1	3.5	0.0%	41,677.1	3.5	0.0%	41,675.9	4.6	0.0%	41,675.9	4.6	0.0%	41,675.9	4.6	0.0%
ME 3	39 58 10	2016	Above Normal	April	--	18,508.1	18,504.6	3.5	0.0%	18,504.6	3.5	0.0%	18,504.6	3.5	0.0%	18,503.5	4.6	0.0%	18,503.5	4.6	0.0%	18,503.5	4.6	0.0%
ME 3	39 58 10	2016	Above Normal	May	--	5,203.5	5,199.2	4.3	0.1%	5,198.8	4.6	0.1%	5,198.4	5.1	0.1%	5,197.9	5.6	0.1%	5,197.6	5.9	0.1%	5,197.1	6.4	0.1%
ME 3	39 58 10	2016	Above Normal	June	--	1,503.1	1,494.0	9.1	0.6%	1,493.2	10.0	0.7%	1,492.2	10.9	0.7%	1,491.3	11.8	0.8%	1,490.4	12.7	0.8%	1,489.6	13.5	0.9%
ME 3	39 58 10	2016	Above Normal	July	--	816.3	806.6	9.7	1.2%	805.6	10.7	1.3%	804.7	11.6	1.4%	803.7	12.6	1.5%	802.7	13.6	1.7%	801.8	14.5	1.8%
ME 3	39 58 10	2016	Above Normal	August	--	484.8	475.6	9.2	1.9%	474.7	10.1	2.1%	473.7	11.0	2.3%	472.8	12.0	2.5%	471.9	12.9	2.7%	471.0	13.8	2.8%
ME 3	39 58 10	2016	Above Normal	September	Used in Summary Table Analysis	321.4	313.5	7.9	2.5%	312.7	8.7	2.7%	312.0	9.5	3.0%	311.1	10.3	3.2%	310.4	11.1	3.4%	309.6	11.9	3.7%
ME 3	39 58 10	2017	Wet	October	Used in Summary Table Analysis	18,206.0	18,200.2	5.8	0.0%	18,199.1	6.9	0.0%	18,197.9	8.1	0.0%	18,197.9	8.1	0.0%	18,196.8	9.3	0.1%	18,196.8	9.3	0.1%
ME 3	39 58 10	2017	Wet	November	Used in Summary Table Analysis	18,737.3	18,732.6	4.6	0.0%	18,731.5	5.8	0.0%	18,731.5	5.8	0.0%	18,730.3	6.9	0.0%	18,730.3	6.9	0.0%	18,729.2	8.1	0.0%
ME 3	39 58 10	2017	Wet	December	--	23,978.0	23,973.4	4.6	0.0%	23,973.4	4.6	0.0%	23,973.4	4.6	0.0%	23,972.2	5.8	0.0%	23,972.2	5.8	0.0%	23,972.2	5.8	0.0%
ME 3	39 58 10	2017	Wet	January	--	106,510.4	106,506.9	3.5	0.0%	106,505.8	4.6	0.0%	106,505.8	4.6	0.0%	106,505.8	4.6	0.0%	106,504.6	5.8	0.0%	106,504.6	5.8	0.0%
ME 3	39 58 10	2017	Wet	February	--	81,606.5	81,603.0	3.5	0.0%	81,603.0	3.5	0.0%	81,603.0	3.5	0.0%	81,601.9	4.6	0.0%	81,601.9	4.6	0.0%	81,601.9	4.6	0.0%
ME 3	39 58 10	2017	Wet	March	--	27,199.1	27,196.8	2.3	0.0%	27,195.6	3.5	0.0%	27,195.6	3.5	0.0%	27,195.6	3.5	0.0%	27,195.6	3.5	0.0%	27,194.4	4.6	0.0%
ME 3	39 58 10	2017	Wet	April	--	22,857.6	22,854.2	3.5	0.0%	22,854.2	3.5	0.0%	22,854.2	3.5	0.0%	22,854.2	3.5	0.0%	22,853.0	4.6	0.0%	22,853.0	4.6	0.0%
ME 3	39 58 10	2017	Wet	May	--	6,267.5	6,263.2	4.3	0.1%	6,262.8	4.6	0.1%	6,262.4	5.1	0.1%	6,261.9	5.6	0.1%	6,261.5	6.0	0.1%	6,261.0	6.5	0.1%
ME 3	39 58 10	2017	Wet	June	--	2,104.1	2,094.8	9.3	0.4%	2,093.9	10.2	0.5%	2,092.9	11.1	0.5%	2,091.9	12.2	0.6%	2,091.0	13.1	0.6%	2,090.0	14.0	0.7%
ME 3	39 58 10	2017	Wet	July	--	925.8	916.0	9.8	1.1%	915.1	10.7	1.2%	914.1	11.7	1.3%	913.1	12.7	1.4%	912.1	13.7	1.5%	911.2	14.6	1.6%
ME 3	39 58 10	2017	Wet	August	--	498.1	488.9	9.2	1.8%	488.0	10.1	2.0%	487.1	11.0	2.2%	486.2	12.0	2.4%	485.3	12.9	2.6%	484.3	13.8	2.8%
ME 3	39 58 10	2017	Wet	September	Used in Summary Table Analysis	315.3	307.0	8.4	2.7%	306.1	9.2	2.9%	305.3	10.1	3.2%	304.5	10.9	3.5%	303.6	11.7	3.7%	302.8	12.6	4.0%
ME 3	39 58 10	2018	Above Normal	October	Used in Summary Table Analysis	268.2	262.7	5.5	2.1%	261.6	6.5	2.4%	260.9	7.3	2.7%	260.0	8.2	3.0%	259.2	8.9	3.3%	258.6	9.6	3.6%
ME 3	39 58 10	2018	Above Normal	November	Used in Summary Table Analysis	10,698.3	10,693.5	4.7	0.0%	10,693.1	5.2	0.0%	10,692.5	5.8	0.1%	10,692.0	6.3	0.1%	10,691.6	6.7	0.1%	10,691.1	7.2	0.1%
ME 3	39 58 10	2018	Above Normal	December	--	5,435.0	5,431.0	3.9	0.1%	5,430.6	4.4	0.1%	5,430.2	4.7	0.1%	5,429.7	5.2	0.1%	5,429.4	5.6	0.1%	5,428.9	6.0	0.1%
ME 3	39 58 10	2018	Above Normal	January	--	17,621.5	17,618.1	3.5	0.0%	17,618.1	3.5	0.0%	17,616.9	4.6	0.0%	17,616.9	4.6	0.0%	17,616.9	4.6	0.0%	17,615.7	5.8	0.0%
ME 3	39 58 10	2018	Above Normal	February	--	7,587.3	7,584.1	3.1	0.0%	7,583.8	3.5	0.0%	7,583.4	3.8	0.1%	7,583.1	4.2	0.1%	7,582.9	4.4	0.1%	7,582.5	4.7	0.1%
ME 3	39 58 10	2018	Above Normal	March	--	20,597.2	20,593.8	3.5	0.0%	20,593.8	3.5	0.0%	20,592.6	4.6	0.0%	20,592.6	4.6	0.0%	20,592.6	4.6	0.0%	20,592.6	4.6	0.0%
ME 3	39 58 10	2018	Above Normal	April	--	32,079.9	32,076.4	3.5	0.0%	32,076.4	3.5	0.0%	32,076.4	3.5	0.0%	32,076.4	3.5	0.0%	32,076.4	3.5	0.0%	32,075.2	4.6	0.0%
ME 3	39 58 10	2018	Above Normal	May	--	6,981.5	6,974.3	7.2	0.1%	6,973.5	8.0	0.1%	6,972.8	8.7	0.1%	6,972.1	9.4	0.1%	6,971.4	10.1	0.1%	6,970.6	10.9	0.2%
ME 3	39 58 10	2018	Above Normal	June	--	1,906.9	1,897.7	9.3	0.5%	1,896.8	10.2	0.5%	1,895.8	11.1	0.6%	1,894.9	12.0	0.6%	1,894.0	13.0	0.7%	1,893.1	13.9	0.7%
ME 3	39 58 10	2018	Above Normal	July	--	774.0	764.3	9.7	1.3%	763.3	10.7	1.4%	762.3	11.6	1.5%	761.4	12.6	1.6%	760.4	13.6	1.8%	759.4	14.5	1.9%
ME 3	39 58 10	2018	Above Normal	August	--	435.3	426.5	8.8	2.0%	425.6	9.7	2.2%	424.8	10.5	2.4%	423.9	11.4	2.6%	423.0	12.3	2.8%	422.1	13.2	3.0%
ME 3	39 58 10	2018	Above Normal	September	Used in Summary Table Analysis	293.2	284.9	8.4	2.8%	284.0	9.2	3.1%	283.2	10.0	3.4%	282.3	10.9	3.7%	281.5	11.7	4.0%	280.7	12.5	4.3%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 58 10	2019	Below Normal	October	Used in Summary Table Analysis	202.2	195.9	6.3	3.1%	195.2	7.0	3.4%	194.6	7.5	3.7%	194.0	8.2	4.1%	193.4	8.8	4.3%	192.8	9.4	4.6%
ME 3	39 58 10	2019	Below Normal	November	Used in Summary Table Analysis	6,561.6	6,556.7	4.9	0.1%	6,556.3	5.3	0.1%	6,555.7	5.9	0.1%	6,555.2	6.4	0.1%	6,554.7	6.8	0.1%	6,554.3	7.3	0.1%
ME 3	39 58 10	2019	Below Normal	December	--	14,561.3	14,557.9	3.5	0.0%	14,556.7	4.6	0.0%	14,556.7	4.6	0.0%	14,556.7	4.6	0.0%	14,555.6	5.8	0.0%	14,555.6	5.8	0.0%
ME 3	39 58 10	2019	Below Normal	January	--	35,011.6	35,008.1	3.5	0.0%	35,006.9	4.6	0.0%	35,006.9	4.6	0.0%	35,006.9	4.6	0.0%	35,005.8	5.8	0.0%	35,005.8	5.8	0.0%
ME 3	39 58 10	2019	Below Normal	February	--	141,701.4	141,689.8	11.6	0.0%	141,689.8	11.6	0.0%	141,689.8	11.6	0.0%	141,689.8	11.6	0.0%	141,689.8	11.6	0.0%	141,689.8	11.6	0.0%
ME 3	39 58 10	2019	Below Normal	March	--	42,203.7	42,201.4	2.3	0.0%	42,200.2	3.5	0.0%	42,200.2	3.5	0.0%	42,200.2	3.5	0.0%	42,200.2	3.5	0.0%	42,199.1	4.6	0.0%
ME 3	39 58 10	2019	Below Normal	April	--	15,238.4	15,235.0	3.5	0.0%	15,235.0	3.5	0.0%	15,235.0	3.5	0.0%	15,235.0	3.5	0.0%	15,233.8	4.6	0.0%	15,233.8	4.6	0.0%
ME 3	39 58 10	2019	Below Normal	May	--	16,781.3	16,774.3	6.9	0.0%	16,773.1	8.1	0.0%	16,772.0	9.3	0.1%	16,772.0	9.3	0.1%	16,770.8	10.4	0.1%	16,769.7	11.6	0.1%
ME 3	39 58 10	2019	Below Normal	June	--	4,240.3	4,230.3	10.1	0.2%	4,229.2	11.1	0.3%	4,228.1	12.2	0.3%	4,227.1	13.2	0.3%	4,226.2	14.1	0.3%	4,225.1	15.2	0.4%
ME 3	39 58 10	2019	Below Normal	July	--	1,352.3	1,342.6	9.7	0.7%	1,341.7	10.6	0.8%	1,340.6	11.7	0.9%	1,339.7	12.6	0.9%	1,338.7	13.7	1.0%	1,337.7	14.6	1.1%
ME 3	39 58 10	2019	Below Normal	August	--	588.2	579.2	9.0	1.5%	578.3	9.9	1.7%	577.4	10.8	1.8%	576.5	11.7	2.0%	575.6	12.6	2.1%	574.7	13.5	2.3%
ME 3	39 58 10	2019	Below Normal	September	Used in Summary Table Analysis	455.5	447.2	8.3	1.8%	446.4	9.2	2.0%	445.5	10.0	2.2%	444.7	10.8	2.4%	443.9	11.7	2.6%	443.0	12.5	2.7%
ME 3	39 58 10	2020	Dry	October	Used in Summary Table Analysis	350.1	344.1	5.9	1.7%	343.5	6.6	1.9%	342.9	7.2	2.0%	342.3	7.7	2.2%	341.7	8.3	2.4%	341.1	8.9	2.6%
ME 3	39 58 10	2020	Dry	November	Used in Summary Table Analysis	309.5	305.1	4.4	1.4%	304.7	4.9	1.6%	304.2	5.3	1.7%	303.8	5.8	1.9%	303.3	6.2	2.0%	302.8	6.7	2.2%
ME 3	39 58 10	2020	Dry	December	--	13,134.3	13,129.6	4.6	0.0%	13,129.6	4.6	0.0%	13,128.5	5.8	0.0%	13,128.5	5.8	0.0%	13,128.5	5.8	0.0%	13,127.3	6.9	0.1%
ME 3	39 58 10	2020	Dry	January	--	22,209.5	22,206.0	3.5	0.0%	22,206.0	3.5	0.0%	22,206.0	3.5	0.0%	22,204.9	4.6	0.0%	22,204.9	4.6	0.0%	22,204.9	4.6	0.0%
ME 3	39 58 10	2020	Dry	February	--	7,406.7	7,403.5	3.2	0.0%	7,403.1	3.6	0.0%	7,402.8	3.9	0.1%	7,402.4	4.3	0.1%	7,402.1	4.6	0.1%	7,401.9	4.9	0.1%
ME 3	39 58 10	2020	Dry	March	--	7,220.3	7,217.2	3.0	0.0%	7,216.9	3.4	0.0%	7,216.7	3.6	0.0%	7,216.3	3.9	0.1%	7,216.0	4.3	0.1%	7,215.7	4.5	0.1%
ME 3	39 58 10	2020	Dry	April	--	5,456.8	5,449.3	7.5	0.1%	5,448.5	8.3	0.2%	5,447.7	9.1	0.2%	5,447.0	9.8	0.2%	5,446.2	10.6	0.2%	5,445.5	11.3	0.2%
ME 3	39 58 10	2020	Dry	May	--	7,344.1	7,335.1	9.0	0.1%	7,334.1	10.0	0.1%	7,333.2	10.9	0.1%	7,332.3	11.8	0.2%	7,331.4	12.7	0.2%	7,330.4	13.7	0.2%
ME 3	39 58 10	2020	Dry	June	--	2,101.2	2,089.1	12.0	0.6%	2,088.0	13.2	0.6%	2,086.7	14.5	0.7%	2,085.5	15.6	0.7%	2,084.3	16.9	0.8%	2,083.1	18.1	0.9%
ME 3	39 58 10	2020	Dry	July	--	790.4	779.1	11.3	1.4%	778.0	12.4	1.6%	776.9	13.5	1.7%	775.7	14.7	1.9%	774.6	15.8	2.0%	773.5	16.9	2.1%
ME 3	39 58 10	2020	Dry	August	--	392.9	382.0	10.9	2.8%	380.9	12.0	3.1%	379.8	13.1	3.3%	378.8	14.2	3.6%	377.7	15.3	3.9%	376.6	16.4	4.2%
ME 3	39 58 10	2020	Dry	September	Used in Summary Table Analysis	242.5	233.0	9.5	3.9%	232.1	10.5	4.3%	231.1	11.4	4.7%	230.2	12.4	5.1%	229.2	13.3	5.5%	228.3	14.3	5.9%
ME 3	39 57 11	2000	Above Normal	October	Used in Summary Table Analysis	809.2	802.3	6.9	0.9%	801.6	7.6	0.9%	801.0	8.3	1.0%	800.3	8.9	1.1%	799.6	9.6	1.2%	798.9	10.3	1.3%
ME 3	39 57 11	2000	Above Normal	November	Used in Summary Table Analysis	12,006.9	12,002.3	4.6	0.0%	12,001.2	5.8	0.0%	12,001.2	5.8	0.0%	12,000.0	6.9	0.1%	12,000.0	6.9	0.1%	11,998.8	8.1	0.1%
ME 3	39 57 11	2000	Above Normal	December	--	10,751.2	10,746.5	4.6	0.0%	10,746.1	5.1	0.0%	10,745.6	5.6	0.1%	10,745.1	6.0	0.1%	10,744.7	6.5	0.1%	10,744.2	6.9	0.1%
ME 3	39 57 11	2000	Above Normal	January	--	28,388.9	28,385.4	3.5	0.0%	28,384.3	4.6	0.0%	28,384.3	4.6	0.0%	28,384.3	4.6	0.0%	28,383.1	5.8	0.0%	28,383.1	5.8	0.0%
ME 3	39 57 11	2000	Above Normal	February	--	36,919.0	36,915.5	3.5	0.0%	36,915.5	3.5	0.0%	36,914.4	4.6	0.0%	36,914.4	4.6	0.0%	36,914.4	4.6	0.0%	36,913.2	5.8	0.0%
ME 3	39 57 11	2000	Above Normal	March	--	18,277.8	18,274.3	3.5	0.0%	18,274.3	3.5	0.0%	18,273.1	4.6	0.0%	18,273.1	4.6	0.0%	18,273.1	4.6	0.0%	18,273.1	4.6	0.0%
ME 3	39 57 11	2000	Above Normal	April	--	12,284.7	12,281.3	3.5	0.0%	12,281.3	3.5	0.0%	12,281.3	3.5	0.0%	12,280.1	4.6	0.0%	12,280.1	4.6	0.0%	12,280.1	4.6	0.0%
ME 3	39 57 11	2000	Above Normal	May	--	7,070.3	7,062.3	8.0	0.1%	7,061.5	8.8	0.1%	7,060.6	9.6	0.1%	7,059.8	10.4	0.1%	7,059.0	11.2	0.2%	7,058.2	12.0	0.2%
ME 3	39 57 11	2000	Above Normal	June	--	2,601.4	2,589.5	11.9	0.5%	2,588.2	13.2	0.5%	2,587.0	14.4	0.6%	2,585.9	15.5	0.6%	2,584.6	16.8	0.6%	2,583.4	17.9	0.7%
ME 3	39 57 11	2000	Above Normal	July	--	986.7	976.3	10.5	1.1%	975.2	11.5	1.2%	974.2	12.6	1.3%	973.1	13.6	1.4%	972.1	14.7	1.5%	971.0	15.7	1.6%
ME 3	39 57 11	2000	Above Normal	August	--	516.6	506.9	9.7	1.9%	505.9	10.7	2.1%	504.9	11.6	2.3%	504.0	12.6	2.4%	503.0	13.6	2.6%	502.0	14.5	2.8%
ME 3	39 57 11	2000	Above Normal	September	Used in Summary Table Analysis	290.6	282.2	8.4	2.9%	281.4	9.2	3.2%	280.5	10.1	3.5%	279.7	10.9	3.8%	278.8	11.8	4.1%	278.0	12.6	4.3%
ME 3	39 57 11	2001	Dry	October	Used in Summary Table Analysis	3,789.1	3,782.3	6.8	0.2%	3,781.6	7.5	0.2%	3,780.9	8.2	0.2%	3,780.3	8.8	0.2%	3,779.6	9.5	0.3%	3,778.9	10.2	0.3%
ME 3	39 57 11	2001	Dry	November	Used in Summary Table Analysis	6,082.2	6,076.9	5.3	0.1%	6,076.3	5.9	0.1%	6,075.8	6.4	0.1%	6,075.2	6.9	0.1%	6,074.7	7.5	0.1%	6,074.1	8.1	0.1%
ME 3	39 57 11	2001	Dry	December	--	8,796.4	8,791.8	4.6	0.1%	8,791.3	5.1	0.1%	8,790.9	5.6	0.1%	8,790.4	6.0	0.1%	8,789.8	6.6	0.1%	8,789.4	7.1	0.1%
ME 3	39 57 11	2001	Dry	January	--	12,710.6	12,707.2	3.5	0.0%	12,706.0	4.6	0.0%	12,706.0	4.6	0.0%	12,704.9	5.8	0.0%	12,704.9	5.8	0.0%	12,704.9	5.8	0.0%
ME 3	39 57 11	2001	Dry	February	--	17,421.3	17,417.8	3.5	0.0%	17,416.7	4.6	0.0%	17,416.7	4.6	0.0%	17,416.7	4.6	0.0%	17,415.5	5.8	0.0%	17,415.5	5.8	0.0%
ME 3	39 57 11	2001	Dry	March	--	12,270.8	12,267.4	3.5	0.0%	12,266.2	4.6	0.0%	12,266.2	4.6	0.0%	12,266.2	4.6	0.0%	12,265.0	5.8	0.0%	12,265.0	5.8	0.0%
ME 3	39 57 11	2001	Dry	April	--	10,944.3	10,936.0	8.3	0.1%	10,935.2	9.1	0.1%	10,934.4	10.0	0.1%	10,933.6	10.8	0.1%	10,932.8	11.6	0.1%	10,931.8	12.5	0.1%
ME 3	39 57 11	2001	Dry	May	--	2,635.8	2,626.0	9.7	0.4%	2,625.0	10.8	0.4%	2,624.1	11.7	0.4%	2,623.1	12.6	0.5%	2,622.2	13.5	0.5%	2,621.2	14.6	0.6%
ME 3	39 57 11	2001	Dry	June	--	2,630.4	2,617.1	13.3	0.5%	2,615.9	14.6	0.6%	2,614.5	16.0	0.6%	2,613.2	17.2	0.7%	2,611.8	18.6	0.7%	2,610.5	19.9	0.8%
ME 3	39 57 11	2001	Dry	July	--	716.3	704.2	12.0	1.7%	703.0	13.2	1.8%	701.8	14.4	2.0%	700.6	15.6	2.2%	699.4	16.8	2.3%	698.2	18.0	2.5%
ME 3	39 57 11	2001	Dry	August	--	168.7	157.2	11.5	6.8%	156.1	12.7	7.5%	154.9	13.8	8.2%	153.8	15.0	8.9%	152.6	16.1	9.6%	151.5	17.3	10.2%
ME 3	39 57 11	2001	Dry	September	Used in Summary Table Analysis	91.4	81.3	10.1	11.0%	80.3	11.1	12.1%	79.3	12.1	13.2%	78.3	13.1	14.3%	77.3	14.1	15.4%	76.3	15.1	16.5%
ME 3	39 57 11	2002	Below Normal	October	Used in Summary Table Analysis	260.5	252.3	8.2	3.2%	251.5	9.0	3.5%	250.7	9.9	3.8%	249.8	10.7	4.1%	249.0	11.5	4.4%	248.2	12.3	4.7%
ME 3	39 57 11	2002	Below Normal	November	Used in Summary Table Analysis	11,969.9	11,964.1	5.8	0.0%	11,963.0	6.9	0.1%	11,963.0	6.9	0.1%	11,961.8	8.1	0.1%	11,961.8	8.1	0.1%	11,960.6	9.3	0.1%
ME 3	39 57 11	2002	Below Normal	December	--	35,515.0	35,509.3	5.8	0.0%	35,508.1	6.9	0.0%	35,508.1	6.9	0.0%	35,506.9	8.1	0.0%	35,506.9	8.1	0.0%	35,505.8	9.3	0.0%
ME 3	39 57 11	2002	Below Normal	January	--	30,770.8	30,765.0	5.8	0.0%	30,765.0	5.8	0.0%	30,765.0	5.8	0.0%	30,763.9	6.9	0.0%	30,763.9	6.9	0.0%	30,762.7	8.1	0.0%
ME 3	39 57 11	2002	Below Normal	February	--	24,613.4	24,608.8	4.6	0.0%	24,607.6	5.8	0.0%	24,607.6	5.8	0.0%	24,606.5	6.9	0.0%	24,606.5	6.9	0.0%	24,606.5	6.9	0.0%
ME 3	39 57 11	2002	Below Normal	March	--	17,729.2	17,724.5	4.6	0.0%	17,724.5	4.6	0.0%	17,723.4	5.8	0.0%	17,723.4	5.8	0.0%	17,722.2	6.9	0.0%	17,722.2	6.9	0.0%
ME 3	39 57 11	2002	Below Normal	April	--	9,905.2	9,897.0	8.2	0.1%	9,896.2	9.0	0.1%	9,895.4	9.8	0.1%	9,894.6	10.6	0.1%	9,893.8	11.5	0.1%	9,892.9	12.3	0.1%
ME 3	39 57 11	2002	Below Normal	May	--	3,311.9	3,302.3	9.6	0.3%	3,301.4	10.5	0.3%	3,300.3	11.6	0.3%	3,299.4	12.5	0.4%	3,298.4	13.5	0.4%	3,297.5	14.5	0.4%
ME 3	39 57 11	2002	Below Normal	June	--	850.2	839.3	10.9	1.3%	838.2	12.0	1.4%	837.1	13.1	1.5%	836.0	14.2	1.7%	834.9	15.2	1.8%	833.9	16.3	1.9%
ME 3	39 57 11	2002	Below Normal	July	--	358.6	347.8	10.8	3.0%	346.7	11.9	3.3%	345.6	12.9	3.6%	344.5	14.0	3.9%	343.5	15.1	4.2%	342.4	16.1	4.5%
ME 3	39 57 11	2002	Below Normal	August	--	222.5	212.6	9.9	4.5%	211.6	10.9	4.9%	210.6	11.9	5.4%	209.6	12.9	5.8%	208.6	13.9	6.3%	207.6	14.9	6.7%
ME 3	39 57 11	2002	Below Normal	September	Used in Summary Table Analysis	159.6	150.3	9.2	5.8%	149.4	10.2	6.4%	148.5	11.1	7.0%	147.6	12.0	7.5%	146.6	13.0	8.1%	145.7	13.9	8.7%
ME 3	39 57 11	2003	Wet	October	Used in Summary Table Analysis	124.7	117.3	7.4	5.9%	116.6	8.1	6.5%	115.9	8.8	7.1%	115.1	9.6	7.7%	114.4	10.3	8.3%	113.6	11.1	8.9%
ME 3	39 57 11	2003	Wet	November	Used in Summary Table Analysis	890.7	884.8	5.8	0.7%	884.3	6.4	0.7%	883.7	7.0	0.8%	883.1	7.6	0.8%	882.5	8.2	0.9%	881.9	8.7	1.0%
ME 3	39 57 11	2003	Wet	December	--	56,423.6	56,417.8	5.8	0.0%	56,417.8	5.8	0.0%	56,416.7	6.9	0.0%	56,416.7	6.9	0.0%	56,416.7	6.9	0.0%	56,415.5	8.1	0.0%
ME 3	39 57 11	2003	Wet	January	--	31,447.9	31,443.3	4.6	0.0%	31,443.3	4.6	0.0%	31,443.3	4.6	0.0%	31,442.1	5.8	0.0%	31,442.1	5.8	0.0%	31,442.1	5.8	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 57 11	2003	Wet	February	--	20,310.2	20,305.6	4.6	0.0%	20,305.6	4.6	0.0%	20,304.4	5.8	0.0%	20,304.4	5.8	0.0%	20,304.4	5.8	0.0%	20,303.2	6.9	0.0%
ME 3	39 57 11	2003	Wet	March	--	23,966.4	23,963.0	3.5	0.0%	23,963.0	3.5	0.0%	23,961.8	4.6	0.0%	23,961.8	4.6	0.0%	23,961.8	4.6	0.0%	23,960.6	5.8	0.0%
ME 3	39 57 11	2003	Wet	April	--	42,748.8	42,744.2	4.6	0.0%	42,744.2	4.6	0.0%	42,744.2	4.6	0.0%	42,743.1	5.8	0.0%	42,743.1	5.8	0.0%	42,743.1	5.8	0.0%
ME 3	39 57 11	2003	Wet	May	--	12,201.4	12,193.3	8.1	0.1%	12,192.1	9.3	0.1%	12,191.0	10.4	0.1%	12,189.8	11.6	0.1%	12,189.8	11.6	0.1%	12,188.7	12.7	0.1%
ME 3	39 57 11	2003	Wet	June	--	3,160.6	3,150.0	10.6	0.3%	3,149.0	11.7	0.4%	3,147.9	12.7	0.4%	3,146.9	13.8	0.4%	3,145.8	14.8	0.5%	3,144.8	15.9	0.5%
ME 3	39 57 11	2003	Wet	July	--	1,467.9	1,457.2	10.8	0.7%	1,456.1	11.8	0.8%	1,455.1	12.8	0.9%	1,454.1	13.9	0.9%	1,452.9	15.0	1.0%	1,451.9	16.1	1.1%
ME 3	39 57 11	2003	Wet	August	--	754.4	744.2	10.2	1.4%	743.2	11.2	1.5%	742.2	12.2	1.6%	741.2	13.3	1.8%	740.2	14.3	1.9%	739.1	15.3	2.0%
ME 3	39 57 11	2003	Wet	September	Used in Summary Table Analysis	452.8	444.3	8.5	1.9%	443.4	9.4	2.1%	442.6	10.2	2.3%	441.7	11.1	2.4%	440.9	11.9	2.6%	440.0	12.8	2.8%
ME 3	39 57 11	2004	Wet	October	Used in Summary Table Analysis	319.9	313.0	6.9	2.1%	312.3	7.6	2.4%	311.6	8.3	2.6%	310.9	8.9	2.8%	310.3	9.6	3.0%	309.6	10.3	3.2%
ME 3	39 57 11	2004	Wet	November	Used in Summary Table Analysis	5,759.0	5,753.6	5.4	0.1%	5,753.0	6.0	0.1%	5,752.4	6.6	0.1%	5,752.0	7.1	0.1%	5,751.4	7.6	0.1%	5,750.8	8.2	0.1%
ME 3	39 57 11	2004	Wet	December	--	36,116.9	36,112.3	4.6	0.0%	36,111.1	5.8	0.0%	36,111.1	5.8	0.0%	36,110.0	6.9	0.0%	36,110.0	6.9	0.0%	36,108.8	8.1	0.0%
ME 3	39 57 11	2004	Wet	January	--	31,341.4	31,336.8	4.6	0.0%	31,336.8	4.6	0.0%	31,335.6	5.8	0.0%	31,335.6	5.8	0.0%	31,335.6	5.8	0.0%	31,334.5	6.9	0.0%
ME 3	39 57 11	2004	Wet	February	--	38,108.8	38,105.3	3.5	0.0%	38,105.3	3.5	0.0%	38,104.2	4.6	0.0%	38,104.2	4.6	0.0%	38,103.0	5.8	0.0%	38,103.0	5.8	0.0%
ME 3	39 57 11	2004	Wet	March	--	16,500.0	16,496.5	3.5	0.0%	16,496.5	3.5	0.0%	16,496.5	3.5	0.0%	16,495.4	4.6	0.0%	16,495.4	4.6	0.0%	16,495.4	4.6	0.0%
ME 3	39 57 11	2004	Wet	April	--	9,433.0	9,429.5	3.5	0.0%	9,429.2	3.8	0.0%	9,428.8	4.2	0.0%	9,428.5	4.5	0.0%	9,428.1	4.9	0.1%	9,427.8	5.2	0.1%
ME 3	39 57 11	2004	Wet	May	--	3,405.9	3,397.8	8.1	0.2%	3,397.0	8.9	0.3%	3,396.2	9.7	0.3%	3,395.4	10.5	0.3%	3,394.6	11.3	0.3%	3,393.8	12.2	0.4%
ME 3	39 57 11	2004	Wet	June	--	688.4	678.3	10.1	1.5%	677.3	11.1	1.6%	676.3	12.1	1.8%	675.3	13.1	1.9%	674.3	14.1	2.0%	673.3	15.1	2.2%
ME 3	39 57 11	2004	Wet	July	--	351.4	340.9	10.5	3.0%	339.9	11.6	3.3%	338.8	12.6	3.6%	337.8	13.7	3.9%	336.7	14.7	4.2%	335.7	15.8	4.5%
ME 3	39 57 11	2004	Wet	August	--	220.8	211.0	9.7	4.4%	210.1	10.7	4.8%	209.1	11.7	5.3%	208.1	12.6	5.7%	207.2	13.6	6.2%	206.2	14.6	6.6%
ME 3	39 57 11	2004	Wet	September	Used in Summary Table Analysis	158.2	149.1	9.1	5.8%	148.1	10.0	6.4%	147.2	11.0	6.9%	146.3	11.9	7.5%	145.4	12.8	8.1%	144.5	13.7	8.7%
ME 3	39 57 11	2005	Above Normal	October	Used in Summary Table Analysis	7,625.5	7,618.4	7.1	0.1%	7,617.7	7.8	0.1%	7,617.0	8.4	0.1%	7,616.3	9.1	0.1%	7,615.6	9.8	0.1%	7,614.9	10.5	0.1%
ME 3	39 57 11	2005	Above Normal	November	Used in Summary Table Analysis	2,248.4	2,242.9	5.4	0.2%	2,242.5	5.9	0.3%	2,241.9	6.5	0.3%	2,241.3	7.1	0.3%	2,240.9	7.5	0.3%	2,240.3	8.1	0.4%
ME 3	39 57 11	2005	Above Normal	December	--	20,864.6	20,860.0	4.6	0.0%	20,860.0	4.6	0.0%	20,858.8	5.8	0.0%	20,858.8	5.8	0.0%	20,858.8	5.8	0.0%	20,857.6	6.9	0.0%
ME 3	39 57 11	2005	Above Normal	January	--	22,256.9	22,253.5	3.5	0.0%	22,252.3	4.6	0.0%	22,252.3	4.6	0.0%	22,252.3	4.6	0.0%	22,251.2	5.8	0.0%	22,251.2	5.8	0.0%
ME 3	39 57 11	2005	Above Normal	February	--	13,988.4	13,983.8	4.6	0.0%	13,983.8	4.6	0.0%	13,983.8	4.6	0.0%	13,982.6	5.8	0.0%	13,982.6	5.8	0.0%	13,982.6	5.8	0.0%
ME 3	39 57 11	2005	Above Normal	March	--	28,471.1	28,466.4	4.6	0.0%	28,466.4	4.6	0.0%	28,466.4	4.6	0.0%	28,465.3	5.8	0.0%	28,465.3	5.8	0.0%	28,465.3	5.8	0.0%
ME 3	39 57 11	2005	Above Normal	April	--	21,380.8	21,377.3	3.5	0.0%	21,377.3	3.5	0.0%	21,377.3	3.5	0.0%	21,377.3	3.5	0.0%	21,376.2	4.6	0.0%	21,376.2	4.6	0.0%
ME 3	39 57 11	2005	Above Normal	May	--	19,494.2	19,486.1	8.1	0.0%	19,485.0	9.3	0.0%	19,483.8	10.4	0.1%	19,482.6	11.6	0.1%	19,482.6	11.6	0.1%	19,481.5	12.7	0.1%
ME 3	39 57 11	2005	Above Normal	June	--	15,781.3	15,769.7	11.6	0.1%	15,767.4	13.9	0.1%	15,766.2	15.0	0.1%	15,765.0	16.2	0.1%	15,763.9	17.4	0.1%	15,762.7	18.5	0.1%
ME 3	39 57 11	2005	Above Normal	July	--	2,862.0	2,851.0	11.0	0.4%	2,850.0	12.0	0.4%	2,848.8	13.2	0.5%	2,847.8	14.2	0.5%	2,846.6	15.4	0.5%	2,845.6	16.4	0.6%
ME 3	39 57 11	2005	Above Normal	August	--	977.0	967.3	9.7	1.0%	966.4	10.7	1.1%	965.4	11.7	1.2%	964.4	12.7	1.3%	963.4	13.6	1.4%	962.5	14.6	1.5%
ME 3	39 57 11	2005	Above Normal	September	Used in Summary Table Analysis	518.8	510.4	8.4	1.6%	509.6	9.3	1.8%	508.7	10.1	1.9%	507.9	10.9	2.1%	507.0	11.8	2.3%	506.2	12.6	2.4%
ME 3	39 57 11	2006	Wet	October	Used in Summary Table Analysis	627.9	621.2	6.7	1.1%	620.6	7.3	1.2%	619.9	8.0	1.3%	619.2	8.7	1.4%	618.5	9.4	1.5%	617.9	10.0	1.6%
ME 3	39 57 11	2006	Wet	November	Used in Summary Table Analysis	9,231.6	9,226.4	5.2	0.1%	9,225.9	5.7	0.1%	9,225.3	6.3	0.1%	9,224.9	6.7	0.1%	9,224.3	7.3	0.1%	9,223.8	7.8	0.1%
ME 3	39 57 11	2006	Wet	December	--	43,255.8	43,251.2	4.6	0.0%	43,250.0	5.8	0.0%	43,250.0	5.8	0.0%	43,250.0	5.8	0.0%	43,248.8	6.9	0.0%	43,248.8	6.9	0.0%
ME 3	39 57 11	2006	Wet	January	--	46,077.5	46,072.9	4.6	0.0%	46,072.9	4.6	0.0%	46,072.9	4.6	0.0%	46,071.8	5.8	0.0%	46,071.8	5.8	0.0%	46,071.8	5.8	0.0%
ME 3	39 57 11	2006	Wet	February	--	26,524.3	26,519.7	4.6	0.0%	26,519.7	4.6	0.0%	26,519.7	4.6	0.0%	26,518.5	5.8	0.0%	26,518.5	5.8	0.0%	26,518.5	5.8	0.0%
ME 3	39 57 11	2006	Wet	March	--	46,985.0	46,981.5	3.5	0.0%	46,980.3	4.6	0.0%	46,980.3	4.6	0.0%	46,980.3	4.6	0.0%	46,979.2	5.8	0.0%	46,979.2	5.8	0.0%
ME 3	39 57 11	2006	Wet	April	--	30,358.8	30,355.3	3.5	0.0%	30,355.3	3.5	0.0%	30,355.3	3.5	0.0%	30,354.2	4.6	0.0%	30,354.2	4.6	0.0%	30,354.2	4.6	0.0%
ME 3	39 57 11	2006	Wet	May	--	14,166.7	14,162.0	4.6	0.0%	14,162.0	4.6	0.0%	14,160.9	5.8	0.0%	14,160.9	5.8	0.0%	14,159.7	6.9	0.0%	14,159.7	6.9	0.0%
ME 3	39 57 11	2006	Wet	June	--	3,542.2	3,532.1	10.2	0.3%	3,531.1	11.1	0.3%	3,530.1	12.2	0.3%	3,529.1	13.2	0.4%	3,528.0	14.2	0.4%	3,527.1	15.2	0.4%
ME 3	39 57 11	2006	Wet	July	--	1,272.3	1,261.9	10.4	0.8%	1,260.9	11.5	0.9%	1,259.8	12.5	1.0%	1,258.8	13.5	1.1%	1,257.8	14.6	1.1%	1,256.7	15.6	1.2%
ME 3	39 57 11	2006	Wet	August	--	658.6	648.7	9.9	1.5%	647.7	10.9	1.7%	646.7	11.9	1.8%	645.6	13.0	2.0%	644.7	14.0	2.1%	643.7	15.0	2.3%
ME 3	39 57 11	2006	Wet	September	Used in Summary Table Analysis	420.2	411.7	8.5	2.0%	410.8	9.4	2.2%	409.9	10.2	2.4%	409.1	11.1	2.6%	408.2	11.9	2.8%	407.4	12.8	3.0%
ME 3	39 57 11	2007	Above Normal	October	Used in Summary Table Analysis	269.4	262.6	6.8	2.5%	261.9	7.5	2.8%	261.2	8.1	3.0%	260.5	8.8	3.3%	259.9	9.5	3.5%	259.2	10.2	3.8%
ME 3	39 57 11	2007	Above Normal	November	Used in Summary Table Analysis	8,601.2	8,595.7	5.4	0.1%	8,595.3	5.9	0.1%	8,594.7	6.5	0.1%	8,594.1	7.1	0.1%	8,593.6	7.5	0.1%	8,593.1	8.1	0.1%
ME 3	39 57 11	2007	Above Normal	December	--	20,277.8	20,273.1	4.6	0.0%	20,272.0	5.8	0.0%	20,272.0	5.8	0.0%	20,272.0	5.8	0.0%	20,270.8	6.9	0.0%	20,270.8	6.9	0.0%
ME 3	39 57 11	2007	Above Normal	January	--	10,215.7	10,211.5	4.3	0.0%	10,211.0	4.7	0.0%	10,210.6	5.1	0.0%	10,210.2	5.6	0.1%	10,209.7	6.0	0.1%	10,209.4	6.4	0.1%
ME 3	39 57 11	2007	Above Normal	February	--	30,422.5	30,419.0	3.5	0.0%	30,419.0	3.5	0.0%	30,417.8	4.6	0.0%	30,417.8	4.6	0.0%	30,417.8	4.6	0.0%	30,416.7	5.8	0.0%
ME 3	39 57 11	2007	Above Normal	March	--	13,075.2	13,071.8	3.5	0.0%	13,071.8	3.5	0.0%	13,070.6	4.6	0.0%	13,070.6	4.6	0.0%	13,070.6	4.6	0.0%	13,069.4	5.8	0.0%
ME 3	39 57 11	2007	Above Normal	April	--	11,510.2	11,502.2	8.0	0.1%	11,501.5	8.7	0.1%	11,500.7	9.5	0.1%	11,499.9	10.3	0.1%	11,499.1	11.1	0.1%	11,498.3	11.9	0.1%
ME 3	39 57 11	2007	Above Normal	May	--	4,128.4	4,119.0	9.4	0.2%	4,118.1	10.3	0.2%	4,117.1	11.2	0.3%	4,116.2	12.2	0.3%	4,115.3	13.1	0.3%	4,114.4	14.0	0.3%
ME 3	39 57 11	2007	Above Normal	June	--	1,490.5	1,479.2	11.3	0.8%	1,478.0	12.5	0.8%	1,477.0	13.5	0.9%	1,475.8	14.7	1.0%	1,474.7	15.9	1.1%	1,473.6	16.9	1.1%
ME 3	39 57 11	2007	Above Normal	July	--	492.4	481.3	11.1	2.2%	480.2	12.2	2.5%	479.1	13.3	2.7%	478.0	14.4	2.9%	476.9	15.5	3.1%	475.8	16.6	3.4%
ME 3	39 57 11	2007	Above Normal	August	--	218.5	208.7	9.8	4.5%	207.7	10.8	4.9%	206.7	11.7	5.4%	205.8	12.7	5.8%	204.8	13.7	6.3%	203.8	14.7	6.7%
ME 3	39 57 11	2007	Above Normal	September	Used in Summary Table Analysis	146.2	137.1	9.1	6.2%	136.2	10.0	6.8%	135.2	10.9	7.5%	134.3	11.8	8.1%	133.4	12.7	8.7%	132.5	13.6	9.3%
ME 3	39 57 11	2008	Dry	October	Used in Summary Table Analysis	3,409.7	3,402.5	7.2	0.2%	3,401.9	7.9	0.2%	3,401.0	8.7	0.3%	3,400.3	9.4	0.3%	3,399.7	10.1	0.3%	3,399.0	10.8	0.3%
ME 3	39 57 11	2008	Dry	November	Used in Summary Table Analysis	3,252.0	3,246.5	5.4	0.2%	3,245.9	6.0	0.2%	3,245.4	6.6	0.2%	3,244.8	7.2	0.2%	3,244.2	7.8	0.2%	3,243.8	8.2	0.3%
ME 3	39 57 11	2008	Dry	December	--	22,953.7	22,949.1	4.6	0.0%	22,949.1	4.6	0.0%	22,947.9	5.8	0.0%	22,947.9	5.8	0.0%	22,946.8	6.9	0.0%	22,946.8	6.9	0.0%
ME 3	39 57 11	2008	Dry	January	--	37,366.9	37,362.3	4.6	0.0%	37,361.1	5.8	0.0%	37,361.1	5.8	0.0%	37,360.0	6.9	0.0%	37,360.0	6.9	0.0%	37,360.0	6.9	0.0%
ME 3	39 57 11	2008	Dry	February	--	26,230.3	26,226.9	3.5	0.0%	26,225.7	4.6	0.0%	26,225.7	4.6	0.0%	26,225.7	4.6	0.0%	26,224.5	5.8	0.0%	26,224.5	5.8	0.0%
ME 3	39 57 11	2008	Dry	March	--	11,775.5	11,772.0	3.5	0.0%	11,772.0	3.5	0.0%	11,770.8	4.6	0.0%	11,770.8	4.6	0.0%	11,770.8	4.6	0.0%	11,769.7	5.8	0.0%
ME 3	39 57 11	2008	Dry	April	--	9,001.5	8,993.4	8.1	0.1%	8,992.6	8.9	0.1%	8,991.8	9.7	0.1%	8,991.0	10.5	0.1%	8,990.2	11.3	0.1%	8,989.4	12.2	0.1%
ME 3	39 57 11	2008	Dry	May	--	1,360.3	1,351.7	8.6	0.6%	1,350.9	9.4	0.7%	1,350.0	10.3	0.8%	1,349.2	11.1	0.8%	1,348.4	11.9	0.9%	1,347.5	12.8	0.9%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 57 11	2008	Dry	June	--	433.9	421.6	12.3	2.8%	420.4	13.6	3.1%	419.1	14.8	3.4%	417.9	16.0	3.7%	416.7	17.2	4.0%	415.5	18.4	4.2%
ME 3	39 57 11	2008	Dry	July	--	252.4	240.7	11.8	4.7%	239.5	12.9	5.1%	238.3	14.1	5.6%	237.2	15.3	6.0%	236.0	16.4	6.5%	234.8	17.6	7.0%
ME 3	39 57 11	2008	Dry	August	--	175.6	164.4	11.2	6.4%	163.3	12.3	7.0%	162.2	13.5	7.7%	161.0	14.6	8.3%	159.9	15.7	8.9%	158.8	16.8	9.6%
ME 3	39 57 11	2008	Dry	September	Used in Summary Table Analysis	137.4	126.7	10.7	7.8%	125.6	11.7	8.5%	124.6	12.8	9.3%	123.5	13.9	10.1%	122.4	14.9	10.9%	121.4	16.0	11.6%
ME 3	39 57 11	2009	Critical	October	Used in Summary Table Analysis	918.7	910.6	8.1	0.9%	909.8	8.9	1.0%	908.9	9.8	1.1%	908.1	10.6	1.2%	907.3	11.4	1.2%	906.5	12.2	1.3%
ME 3	39 57 11	2009	Critical	November	Used in Summary Table Analysis	5,469.2	5,463.1	6.1	0.1%	5,462.4	6.8	0.1%	5,461.8	7.4	0.1%	5,461.2	8.0	0.1%	5,460.5	8.7	0.2%	5,460.0	9.3	0.2%
ME 3	39 57 11	2009	Critical	December	--	12,077.5	12,071.8	5.8	0.0%	12,071.8	5.8	0.0%	12,070.6	6.9	0.1%	12,070.6	6.9	0.1%	12,069.4	8.1	0.1%	12,069.4	8.1	0.1%
ME 3	39 57 11	2009	Critical	January	--	8,770.9	8,766.0	5.0	0.1%	8,765.5	5.4	0.1%	8,765.0	5.9	0.1%	8,764.5	6.5	0.1%	8,764.0	6.9	0.1%	8,763.5	7.4	0.1%
ME 3	39 57 11	2009	Critical	February	--	22,541.7	22,537.0	4.6	0.0%	22,535.9	5.8	0.0%	22,535.9	5.8	0.0%	22,535.9	5.8	0.0%	22,534.7	6.9	0.0%	22,534.7	6.9	0.0%
ME 3	39 57 11	2009	Critical	March	--	21,066.0	21,062.5	3.5	0.0%	21,062.5	3.5	0.0%	21,061.3	4.6	0.0%	21,061.3	4.6	0.0%	21,061.3	4.6	0.0%	21,060.2	5.8	0.0%
ME 3	39 57 11	2009	Critical	April	--	10,089.7	10,081.3	8.4	0.1%	10,080.4	9.3	0.1%	10,079.6	10.1	0.1%	10,078.9	10.8	0.1%	10,078.0	11.7	0.1%	10,077.2	12.5	0.1%
ME 3	39 57 11	2009	Critical	May	--	15,555.6	15,545.1	10.4	0.1%	15,544.0	11.6	0.1%	15,542.8	12.7	0.1%	15,541.7	13.9	0.1%	15,541.7	13.9	0.1%	15,540.5	15.0	0.1%
ME 3	39 57 11	2009	Critical	June	--	3,155.2	3,142.2	13.0	0.4%	3,140.9	14.4	0.5%	3,139.6	15.6	0.5%	3,138.3	16.9	0.5%	3,137.0	18.2	0.6%	3,135.8	19.4	0.6%
ME 3	39 57 11	2009	Critical	July	--	1,258.3	1,246.4	11.9	0.9%	1,245.3	13.1	1.0%	1,244.1	14.2	1.1%	1,242.9	15.4	1.2%	1,241.8	16.6	1.3%	1,240.5	17.8	1.4%
ME 3	39 57 11	2009	Critical	August	--	664.2	652.9	11.3	1.7%	651.7	12.5	1.9%	650.6	13.6	2.0%	649.5	14.7	2.2%	648.4	15.8	2.4%	647.3	16.9	2.5%
ME 3	39 57 11	2009	Critical	September	Used in Summary Table Analysis	385.8	376.0	9.9	2.6%	375.0	10.9	2.8%	374.0	11.9	3.1%	373.0	12.8	3.3%	372.0	13.8	3.6%	371.1	14.8	3.8%
ME 3	39 57 11	2010	Below Normal	October	Used in Summary Table Analysis	6,081.9	6,073.6	8.3	0.1%	6,072.8	9.1	0.2%	6,072.0	10.0	0.2%	6,071.2	10.8	0.2%	6,070.4	11.6	0.2%	6,069.6	12.4	0.2%
ME 3	39 57 11	2010	Below Normal	November	Used in Summary Table Analysis	8,261.6	8,255.3	6.3	0.1%	8,254.6	6.9	0.1%	8,254.1	7.5	0.1%	8,253.4	8.2	0.1%	8,252.8	8.8	0.1%	8,252.1	9.5	0.1%
ME 3	39 57 11	2010	Below Normal	December	--	12,298.6	12,292.8	5.8	0.0%	12,292.8	5.8	0.0%	12,291.7	6.9	0.1%	12,291.7	6.9	0.1%	12,290.5	8.1	0.1%	12,290.5	8.1	0.1%
ME 3	39 57 11	2010	Below Normal	January	--	36,047.5	36,042.8	4.6	0.0%	36,041.7	5.8	0.0%	36,041.7	5.8	0.0%	36,040.5	6.9	0.0%	36,040.5	6.9	0.0%	36,039.4	8.1	0.0%
ME 3	39 57 11	2010	Below Normal	February	--	27,192.1	27,187.5	4.6	0.0%	27,187.5	4.6	0.0%	27,186.3	5.8	0.0%	27,186.3	5.8	0.0%	27,185.2	6.9	0.0%	27,185.2	6.9	0.0%
ME 3	39 57 11	2010	Below Normal	March	--	28,791.7	28,787.0	4.6	0.0%	28,787.0	4.6	0.0%	28,785.9	5.8	0.0%	28,785.9	5.8	0.0%	28,785.9	5.8	0.0%	28,784.7	6.9	0.0%
ME 3	39 57 11	2010	Below Normal	April	--	39,929.4	39,925.9	3.5	0.0%	39,924.8	4.6	0.0%	39,924.8	4.6	0.0%	39,924.8	4.6	0.0%	39,923.6	5.8	0.0%	39,923.6	5.8	0.0%
ME 3	39 57 11	2010	Below Normal	May	--	20,203.7	20,194.4	9.3	0.0%	20,194.4	9.3	0.0%	20,193.3	10.4	0.1%	20,192.1	11.6	0.1%	20,191.0	12.7	0.1%	20,191.0	12.7	0.1%
ME 3	39 57 11	2010	Below Normal	June	--	9,298.5	9,285.9	12.6	0.1%	9,284.6	13.9	0.1%	9,283.3	15.2	0.2%	9,282.1	16.4	0.2%	9,280.8	17.7	0.2%	9,279.6	18.9	0.2%
ME 3	39 57 11	2010	Below Normal	July	--	1,450.2	1,439.2	11.0	0.8%	1,438.1	12.2	0.8%	1,437.0	13.2	0.9%	1,435.9	14.4	1.0%	1,434.8	15.4	1.1%	1,433.7	16.6	1.1%
ME 3	39 57 11	2010	Below Normal	August	--	563.1	553.1	10.0	1.8%	552.1	11.0	2.0%	551.1	12.0	2.1%	550.1	13.0	2.3%	549.2	13.9	2.5%	548.1	15.0	2.7%
ME 3	39 57 11	2010	Below Normal	September	Used in Summary Table Analysis	645.1	635.7	9.4	1.5%	634.8	10.3	1.6%	633.8	11.3	1.7%	632.9	12.2	1.9%	632.0	13.1	2.0%	631.0	14.1	2.2%
ME 3	39 57 11	2011	Wet	October	Used in Summary Table Analysis	9,594.1	9,587.2	6.9	0.1%	9,586.5	7.6	0.1%	9,585.8	8.3	0.1%	9,585.1	9.0	0.1%	9,584.4	9.7	0.1%	9,583.7	10.4	0.1%
ME 3	39 57 11	2011	Wet	November	Used in Summary Table Analysis	14,174.8	14,170.1	4.6	0.0%	14,169.0	5.8	0.0%	14,169.0	5.8	0.0%	14,167.8	6.9	0.0%	14,167.8	6.9	0.0%	14,166.7	8.1	0.1%
ME 3	39 57 11	2011	Wet	December	--	33,520.8	33,516.2	4.6	0.0%	33,516.2	4.6	0.0%	33,515.0	5.8	0.0%	33,515.0	5.8	0.0%	33,513.9	6.9	0.0%	33,513.9	6.9	0.0%
ME 3	39 57 11	2011	Wet	January	--	14,121.5	14,116.9	4.6	0.0%	14,116.9	4.6	0.0%	14,116.9	4.6	0.0%	14,115.7	5.8	0.0%	14,115.7	5.8	0.0%	14,115.7	5.8	0.0%
ME 3	39 57 11	2011	Wet	February	--	20,733.8	20,730.3	3.5	0.0%	20,729.2	4.6	0.0%	20,729.2	4.6	0.0%	20,729.2	4.6	0.0%	20,728.0	5.8	0.0%	20,728.0	5.8	0.0%
ME 3	39 57 11	2011	Wet	March	--	51,887.7	51,884.3	3.5	0.0%	51,884.3	3.5	0.0%	51,884.3	3.5	0.0%	51,883.1	4.6	0.0%	51,883.1	4.6	0.0%	51,883.1	4.6	0.0%
ME 3	39 57 11	2011	Wet	April	--	24,759.3	24,754.6	4.6	0.0%	24,754.6	4.6	0.0%	24,754.6	4.6	0.0%	24,753.5	5.8	0.0%	24,753.5	5.8	0.0%	24,753.5	5.8	0.0%
ME 3	39 57 11	2011	Wet	May	--	11,362.7	11,354.6	8.1	0.1%	11,353.8	8.9	0.1%	11,353.0	9.7	0.1%	11,352.2	10.5	0.1%	11,351.3	11.5	0.1%	11,350.5	12.3	0.1%
ME 3	39 57 11	2011	Wet	June	--	7,036.7	7,024.4	12.3	0.2%	7,023.1	13.5	0.2%	7,021.9	14.8	0.2%	7,020.7	16.0	0.2%	7,019.4	17.2	0.2%	7,018.3	18.4	0.3%
ME 3	39 57 11	2011	Wet	July	--	1,825.9	1,814.0	11.9	0.7%	1,812.8	13.1	0.7%	1,811.6	14.4	0.8%	1,810.4	15.5	0.8%	1,809.3	16.7	0.9%	1,808.0	17.9	1.0%
ME 3	39 57 11	2011	Wet	August	--	772.0	762.1	9.9	1.3%	761.1	10.9	1.4%	760.1	11.9	1.5%	759.1	12.8	1.7%	758.1	13.8	1.8%	757.2	14.8	1.9%
ME 3	39 57 11	2011	Wet	September	Used in Summary Table Analysis	428.6	419.8	8.8	2.1%	418.9	9.7	2.3%	418.0	10.6	2.5%	417.2	11.4	2.7%	416.3	12.3	2.9%	415.4	13.2	3.1%
ME 3	39 57 11	2012	Below Normal	October	Used in Summary Table Analysis	4,521.1	4,514.1	6.9	0.2%	4,513.3	7.8	0.2%	4,512.6	8.4	0.2%	4,511.9	9.1	0.2%	4,511.2	9.8	0.2%	4,510.5	10.5	0.2%
ME 3	39 57 11	2012	Below Normal	November	Used in Summary Table Analysis	8,197.0	8,191.4	5.6	0.1%	8,190.9	6.1	0.1%	8,190.4	6.6	0.1%	8,189.8	7.2	0.1%	8,189.2	7.8	0.1%	8,188.7	8.3	0.1%
ME 3	39 57 11	2012	Below Normal	December	--	5,164.9	5,160.2	4.7	0.1%	5,159.6	5.3	0.1%	5,159.1	5.8	0.1%	5,158.7	6.3	0.1%	5,158.2	6.7	0.1%	5,157.8	7.2	0.1%
ME 3	39 57 11	2012	Below Normal	January	--	19,998.8	19,995.4	3.5	0.0%	19,994.2	4.6	0.0%	19,994.2	4.6	0.0%	19,993.1	5.8	0.0%	19,993.1	5.8	0.0%	19,993.1	5.8	0.0%
ME 3	39 57 11	2012	Below Normal	February	--	18,179.4	18,174.8	4.6	0.0%	18,174.8	4.6	0.0%	18,174.8	4.6	0.0%	18,173.6	5.8	0.0%	18,173.6	5.8	0.0%	18,173.6	5.8	0.0%
ME 3	39 57 11	2012	Below Normal	March	--	45,288.2	45,284.7	3.5	0.0%	45,283.6	4.6	0.0%	45,283.6	4.6	0.0%	45,283.6	4.6	0.0%	45,282.4	5.8	0.0%	45,282.4	5.8	0.0%
ME 3	39 57 11	2012	Below Normal	April	--	26,809.0	26,805.6	3.5	0.0%	26,805.6	3.5	0.0%	26,804.4	4.6	0.0%	26,804.4	4.6	0.0%	26,804.4	4.6	0.0%	26,803.2	5.8	0.0%
ME 3	39 57 11	2012	Below Normal	May	--	7,470.1	7,461.9	8.2	0.1%	7,461.1	9.0	0.1%	7,460.2	10.0	0.1%	7,459.4	10.8	0.1%	7,458.7	11.5	0.2%	7,457.9	12.3	0.2%
ME 3	39 57 11	2012	Below Normal	June	--	5,496.2	5,483.7	12.5	0.2%	5,482.4	13.8	0.3%	5,481.1	15.0	0.3%	5,479.9	16.3	0.3%	5,478.6	17.6	0.3%	5,477.3	18.9	0.3%
ME 3	39 57 11	2012	Below Normal	July	--	2,211.5	2,200.0	11.5	0.5%	2,198.8	12.6	0.6%	2,197.7	13.8	0.6%	2,196.5	14.9	0.7%	2,195.4	16.1	0.7%	2,194.2	17.2	0.8%
ME 3	39 57 11	2012	Below Normal	August	--	384.8	375.7	9.1	2.4%	374.8	10.0	2.6%	373.9	10.9	2.8%	373.0	11.8	3.1%	372.1	12.7	3.3%	371.2	13.6	3.5%
ME 3	39 57 11	2012	Below Normal	September	Used in Summary Table Analysis	244.5	236.6	7.9	3.2%	235.8	8.7	3.6%	235.0	9.5	3.9%	234.2	10.3	4.2%	233.4	11.1	4.5%	232.6	11.9	4.9%
ME 3	39 57 11	2013	Below Normal	October	Used in Summary Table Analysis	1,898.3	1,891.6	6.7	0.4%	1,890.9	7.4	0.4%	1,890.2	8.1	0.4%	1,889.5	8.8	0.5%	1,888.8	9.5	0.5%	1,888.1	10.2	0.5%
ME 3	39 57 11	2013	Below Normal	November	Used in Summary Table Analysis	14,611.1	14,605.3	5.8	0.0%	14,605.3	5.8	0.0%	14,604.2	6.9	0.0%	14,604.2	6.9	0.0%	14,603.0	8.1	0.1%	14,603.0	8.1	0.1%
ME 3	39 57 11	2013	Below Normal	December	--	59,825.2	59,820.6	4.6	0.0%	59,819.4	5.8	0.0%	59,819.4	5.8	0.0%	59,818.3	6.9	0.0%	59,818.3	6.9	0.0%	59,818.3	6.9	0.0%
ME 3	39 57 11	2013	Below Normal	January	--	22,151.6	22,147.0	4.6	0.0%	22,147.0	4.6	0.0%	22,147.0	4.6	0.0%	22,145.8	5.8	0.0%	22,145.8	5.8	0.0%	22,145.8	5.8	0.0%
ME 3	39 57 11	2013	Below Normal	February	--	8,822.0	8,818.1	3.9	0.0%	8,817.6	4.4	0.0%	8,817.2	4.7	0.1%	8,816.8	5.2	0.1%	8,816.4	5.6	0.1%	8,816.0	6.0	0.1%
ME 3	39 57 11	2013	Below Normal	March	--	10,294.8	10,290.9	3.9	0.0%	10,290.5	4.3	0.0%	10,290.2	4.6	0.0%	10,289.7	5.1	0.0%	10,289.4	5.4	0.1%	10,289.0	5.8	0.1%
ME 3	39 57 11	2013	Below Normal	April	--	8,279.7	8,272.0	7.8	0.1%	8,271.2	8.6	0.1%	8,270.5	9.3	0.1%	8,269.7	10.1	0.1%	8,268.9	10.9	0.1%	8,268.1	11.7	0.1%
ME 3	39 57 11	2013	Below Normal	May	--	4,416.4	4,407.2	9.3	0.2%	4,406.1	10.3	0.2%	4,405.2	11.2	0.3%	4,404.3	12.2	0.3%	4,403.4	13.1	0.3%	4,402.4	14.0	0.3%
ME 3	39 57 11	2013	Below Normal	June	--	2,105.1	2,093.9	11.2	0.5%	2,092.8	12.3	0.6%	2,091.7	13.4	0.6%	2,090.5	14.6	0.7%	2,089.5	15.6	0.7%	2,088.3	16.8	0.8%
ME 3	39 57 11	2013	Below Normal	July	--	715.4	704.8	10.6	1.5%	703.8	11.6	1.6%	702.7	12.7	1.8%	701.7	13.8	1.9%	700.6	14.8	2.1%	699.5	15.9	2.2%
ME 3	39 57 11	2013	Below Normal	August	--	336.3	326.5	9.8	2.9%	325.6	10.7	3.2%	324.6	11.7	3.5%	323.6	12.7	3.8%	322.6	13.6	4.1%	321.7	14.6	4.3%
ME 3	39 57 11	2013	Below Normal	September	Used in Summary Table Analysis	4,765.2	4,755.1	10.1	0.2%	4,754.2	11.0	0.2%	4,753.1	12.0	0.3%	4,752.1	13.1	0.3%	4,751.2	14.0	0.3%	4,750.1	15.0	0.3%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 57 11	2014	Critical	October	Used in Summary Table Analysis	279.8	272.7	7.1	2.5%	272.0	7.8	2.8%	271.3	8.5	3.0%	270.6	9.2	3.3%	269.8	9.9	3.5%	269.2	10.6	3.8%
ME 3	39 57 11	2014	Critical	November	Used in Summary Table Analysis	1,526.6	1,521.1	5.6	0.4%	1,520.5	6.1	0.4%	1,519.9	6.7	0.4%	1,519.3	7.3	0.5%	1,518.8	7.9	0.5%	1,518.2	8.4	0.6%
ME 3	39 57 11	2014	Critical	December	--	1,582.9	1,577.9	5.0	0.3%	1,577.4	5.4	0.3%	1,576.9	6.0	0.4%	1,576.4	6.5	0.4%	1,575.9	6.9	0.4%	1,575.5	7.4	0.5%
ME 3	39 57 11	2014	Critical	January	--	2,809.6	2,805.2	4.4	0.2%	2,804.7	4.9	0.2%	2,804.3	5.3	0.2%	2,803.9	5.7	0.2%	2,803.5	6.1	0.2%	2,803.0	6.6	0.2%
ME 3	39 57 11	2014	Critical	February	--	15,718.8	15,715.3	3.5	0.0%	15,714.1	4.6	0.0%	15,714.1	4.6	0.0%	15,714.1	4.6	0.0%	15,713.0	5.8	0.0%	15,713.0	5.8	0.0%
ME 3	39 57 11	2014	Critical	March	--	31,442.1	31,438.7	3.5	0.0%	31,437.5	4.6	0.0%	31,437.5	4.6	0.0%	31,437.5	4.6	0.0%	31,436.3	5.8	0.0%	31,436.3	5.8	0.0%
ME 3	39 57 11	2014	Critical	April	--	12,974.5	12,966.4	8.1	0.1%	12,965.3	9.3	0.1%	12,964.1	10.4	0.1%	12,964.1	10.4	0.1%	12,963.0	11.6	0.1%	12,961.8	12.7	0.1%
ME 3	39 57 11	2014	Critical	May	--	5,178.0	5,168.2	9.8	0.2%	5,167.2	10.8	0.2%	5,166.2	11.8	0.2%	5,165.2	12.8	0.2%	5,164.2	13.8	0.3%	5,163.2	14.8	0.3%
ME 3	39 57 11	2014	Critical	June	--	1,193.5	1,180.0	13.5	1.1%	1,178.6	14.9	1.3%	1,177.3	16.2	1.4%	1,175.9	17.6	1.5%	1,174.5	19.0	1.6%	1,173.3	20.3	1.7%
ME 3	39 57 11	2014	Critical	July	--	543.0	530.9	12.1	2.2%	529.7	13.3	2.4%	528.5	14.5	2.7%	527.3	15.7	2.9%	526.1	16.9	3.1%	524.9	18.1	3.3%
ME 3	39 57 11	2014	Critical	August	--	344.2	332.9	11.3	3.3%	331.7	12.5	3.6%	330.6	13.6	4.0%	329.5	14.7	4.3%	328.4	15.9	4.6%	327.2	17.0	4.9%
ME 3	39 57 11	2014	Critical	September	Used in Summary Table Analysis	2,563.1	2,552.1	11.0	0.4%	2,551.0	12.0	0.5%	2,549.9	13.2	0.5%	2,548.8	14.2	0.6%	2,547.7	15.4	0.6%	2,546.6	16.4	0.6%
ME 3	39 57 11	2015	Dry	October	Used in Summary Table Analysis	11,324.3	11,316.1	8.2	0.1%	11,315.4	8.9	0.1%	11,314.6	9.7	0.1%	11,313.1	11.2	0.1%	11,312.3	12.0	0.1%	11,311.5	12.8	0.1%
ME 3	39 57 11	2015	Dry	November	Used in Summary Table Analysis	9,000.2	8,994.0	6.3	0.1%	8,993.4	6.8	0.1%	8,992.8	7.4	0.1%	8,992.1	8.1	0.1%	8,991.6	8.7	0.1%	8,990.9	9.4	0.1%
ME 3	39 57 11	2015	Dry	December	--	32,474.5	32,468.8	5.8	0.0%	32,468.8	5.8	0.0%	32,467.6	6.9	0.0%	32,467.6	6.9	0.0%	32,467.6	6.9	0.0%	32,466.4	8.1	0.0%
ME 3	39 57 11	2015	Dry	January	--	14,555.6	14,550.9	4.6	0.0%	14,549.8	5.8	0.0%	14,549.8	5.8	0.0%	14,548.6	6.9	0.0%	14,548.6	6.9	0.0%	14,548.6	6.9	0.0%
ME 3	39 57 11	2015	Dry	February	--	27,177.1	27,173.6	3.5	0.0%	27,172.5	4.6	0.0%	27,172.5	4.6	0.0%	27,172.5	4.6	0.0%	27,171.3	5.8	0.0%	27,171.3	5.8	0.0%
ME 3	39 57 11	2015	Dry	March	--	11,556.8	11,553.0	3.8	0.0%	11,552.5	4.3	0.0%	11,552.2	4.6	0.0%	11,551.9	5.0	0.0%	11,551.4	5.4	0.0%	11,551.0	5.8	0.1%
ME 3	39 57 11	2015	Dry	April	--	8,349.2	8,341.0	8.2	0.1%	8,340.2	9.0	0.1%	8,339.4	9.8	0.1%	8,338.5	10.6	0.1%	8,337.7	11.5	0.1%	8,336.9	12.3	0.1%
ME 3	39 57 11	2015	Dry	May	--	1,507.5	1,497.8	9.7	0.6%	1,496.9	10.6	0.7%	1,495.8	11.7	0.8%	1,494.9	12.6	0.8%	1,493.9	13.7	0.9%	1,492.9	14.6	1.0%
ME 3	39 57 11	2015	Dry	June	--	650.1	637.6	12.5	1.9%	636.4	13.7	2.1%	635.1	15.0	2.3%	633.9	16.2	2.5%	632.6	17.5	2.7%	631.4	18.7	2.9%
ME 3	39 57 11	2015	Dry	July	--	266.0	254.2	11.8	4.5%	253.0	13.0	4.9%	251.8	14.2	5.3%	250.6	15.4	5.8%	249.4	16.6	6.2%	248.3	17.7	6.7%
ME 3	39 57 11	2015	Dry	August	--	162.9	151.7	11.3	6.9%	150.6	12.4	7.6%	149.4	13.5	8.3%	148.3	14.6	9.0%	147.2	15.8	9.7%	146.1	16.9	10.4%
ME 3	39 57 11	2015	Dry	September	Used in Summary Table Analysis	117.8	107.9	9.9	8.4%	106.9	10.9	9.2%	105.9	11.9	10.1%	104.9	12.9	10.9%	103.9	13.9	11.8%	102.9	14.8	12.6%
ME 3	39 57 11	2016	Above Normal	October	Used in Summary Table Analysis	83.3	75.0	8.3	10.0%	74.1	9.2	11.1%	73.3	10.1	12.1%	73.0	10.3	12.4%	72.3	11.0	13.2%	71.1	12.2	14.6%
ME 3	39 57 11	2016	Above Normal	November	Used in Summary Table Analysis	3,832.2	3,825.9	6.3	0.2%	3,825.3	6.8	0.2%	3,824.7	7.5	0.2%	3,824.0	8.2	0.2%	3,823.4	8.8	0.2%	3,822.8	9.4	0.2%
ME 3	39 57 11	2016	Above Normal	December	--	36,451.4	36,445.6	5.8	0.0%	36,444.4	6.9	0.0%	36,444.4	6.9	0.0%	36,443.3	8.1	0.0%	36,443.3	8.1	0.0%	36,443.3	8.1	0.0%
ME 3	39 57 11	2016	Above Normal	January	--	57,141.2	57,136.6	4.6	0.0%	57,136.6	4.6	0.0%	57,135.4	5.8	0.0%	57,135.4	5.8	0.0%	57,134.3	6.9	0.0%	57,134.3	6.9	0.0%
ME 3	39 57 11	2016	Above Normal	February	--	24,239.6	24,235.0	4.6	0.0%	24,235.0	4.6	0.0%	24,233.8	5.8	0.0%	24,233.8	5.8	0.0%	24,233.8	5.8	0.0%	24,232.6	6.9	0.0%
ME 3	39 57 11	2016	Above Normal	March	--	41,695.6	41,691.0	4.6	0.0%	41,691.0	4.6	0.0%	41,691.0	4.6	0.0%	41,689.8	5.8	0.0%	41,689.8	5.8	0.0%	41,689.8	5.8	0.0%
ME 3	39 57 11	2016	Above Normal	April	--	18,513.9	18,510.4	3.5	0.0%	18,509.3	4.6	0.0%	18,509.3	4.6	0.0%	18,509.3	4.6	0.0%	18,508.1	5.8	0.0%	18,508.1	5.8	0.0%
ME 3	39 57 11	2016	Above Normal	May	--	5,206.6	5,201.9	4.7	0.1%	5,201.4	5.2	0.1%	5,200.8	5.8	0.1%	5,200.3	6.3	0.1%	5,199.9	6.7	0.1%	5,199.4	7.2	0.1%
ME 3	39 57 11	2016	Above Normal	June	--	1,505.2	1,495.5	9.7	0.6%	1,494.6	10.6	0.7%	1,493.5	11.7	0.8%	1,492.6	12.6	0.8%	1,491.7	13.5	0.9%	1,490.6	14.6	1.0%
ME 3	39 57 11	2016	Above Normal	July	--	818.4	808.0	10.5	1.3%	806.9	11.5	1.4%	805.9	12.5	1.5%	804.8	13.6	1.7%	803.8	14.6	1.8%	802.8	15.7	1.9%
ME 3	39 57 11	2016	Above Normal	August	--	486.9	476.9	10.0	2.1%	475.9	11.0	2.3%	474.8	12.0	2.5%	473.9	13.0	2.7%	472.8	14.0	2.9%	471.9	15.0	3.1%
ME 3	39 57 11	2016	Above Normal	September	Used in Summary Table Analysis	323.5	314.8	8.7	2.7%	313.9	9.6	3.0%	313.0	10.5	3.2%	312.2	11.3	3.5%	311.3	12.2	3.8%	310.4	13.1	4.0%
ME 3	39 57 11	2017	Wet	October	Used in Summary Table Analysis	18,217.6	18,210.6	6.9	0.0%	18,209.5	8.1	0.0%	18,209.5	8.1	0.0%	18,208.3	9.3	0.1%	18,207.2	10.4	0.1%	18,207.2	10.4	0.1%
ME 3	39 57 11	2017	Wet	November	Used in Summary Table Analysis	18,750.0	18,744.2	5.8	0.0%	18,744.2	5.8	0.0%	18,743.1	6.9	0.0%	18,743.1	6.9	0.0%	18,741.9	8.1	0.0%	18,741.9	8.1	0.0%
ME 3	39 57 11	2017	Wet	December	--	23,996.5	23,991.9	4.6	0.0%	23,991.9	4.6	0.0%	23,990.7	5.8	0.0%	23,990.7	5.8	0.0%	23,989.6	6.9	0.0%	23,989.6	6.9	0.0%
ME 3	39 57 11	2017	Wet	January	--	106,562.5	106,557.9	4.6	0.0%	106,557.9	4.6	0.0%	106,556.7	5.8	0.0%	106,556.7	5.8	0.0%	106,556.6	5.8	0.0%	106,555.6	6.9	0.0%
ME 3	39 57 11	2017	Wet	February	--	81,638.9	81,635.4	3.5	0.0%	81,634.3	4.6	0.0%	81,634.3	4.6	0.0%	81,634.3	4.6	0.0%	81,633.1	5.8	0.0%	81,633.1	5.8	0.0%
ME 3	39 57 11	2017	Wet	March	--	27,211.8	27,207.2	4.6	0.0%	27,207.2	4.6	0.0%	27,207.2	4.6	0.0%	27,206.0	5.8	0.0%	27,206.0	5.8	0.0%	27,206.0	5.8	0.0%
ME 3	39 57 11	2017	Wet	April	--	22,869.2	22,865.7	3.5	0.0%	22,865.7	3.5	0.0%	22,864.6	4.6	0.0%	22,864.6	4.6	0.0%	22,864.6	4.6	0.0%	22,863.4	5.8	0.0%
ME 3	39 57 11	2017	Wet	May	--	6,269.8	6,264.9	4.9	0.1%	6,264.5	5.3	0.1%	6,264.0	5.8	0.1%	6,263.4	6.4	0.1%	6,263.0	6.8	0.1%	6,262.5	7.3	0.1%
ME 3	39 57 11	2017	Wet	June	--	2,106.9	2,097.0	10.0	0.5%	2,095.9	11.0	0.5%	2,095.0	11.9	0.6%	2,094.0	13.0	0.6%	2,092.9	14.0	0.7%	2,092.0	14.9	0.7%
ME 3	39 57 11	2017	Wet	July	--	928.1	917.5	10.6	1.1%	916.4	11.6	1.3%	915.4	12.7	1.4%	914.3	13.8	1.5%	913.3	14.8	1.6%	912.2	15.9	1.7%
ME 3	39 57 11	2017	Wet	August	--	500.3	490.3	10.0	2.0%	489.3	11.0	2.2%	488.3	12.0	2.4%	487.3	13.1	2.6%	486.3	14.1	2.8%	485.3	15.0	3.0%
ME 3	39 57 11	2017	Wet	September	Used in Summary Table Analysis	317.4	308.3	9.1	2.9%	307.4	10.1	3.2%	306.5	11.0	3.5%	305.6	11.9	3.7%	304.7	12.8	4.0%	303.7	13.7	4.3%
ME 3	39 57 11	2018	Above Normal	October	Used in Summary Table Analysis	270.3	264.1	6.2	2.3%	263.0	7.3	2.7%	262.2	8.1	3.0%	261.2	9.1	3.4%	260.4	9.9	3.7%	259.6	10.6	3.9%
ME 3	39 57 11	2018	Above Normal	November	Used in Summary Table Analysis	10,711.0	10,705.6	5.4	0.1%	10,705.1	5.9	0.1%	10,704.5	6.5	0.1%	10,703.9	7.1	0.1%	10,703.4	7.6	0.1%	10,702.9	8.1	0.1%
ME 3	39 57 11	2018	Above Normal	December	--	5,437.8	5,433.3	4.5	0.1%	5,432.9	5.0	0.1%	5,432.4	5.4	0.1%	5,431.9	5.9	0.1%	5,431.5	6.4	0.1%	5,431.0	6.8	0.1%
ME 3	39 57 11	2018	Above Normal	January	--	17,642.4	17,638.9	3.5	0.0%	17,637.7	4.6	0.0%	17,637.7	4.6	0.0%	17,636.6	5.8	0.0%	17,636.6	5.8	0.0%	17,636.6	5.8	0.0%
ME 3	39 57 11	2018	Above Normal	February	--	7,590.3	7,586.6	3.7	0.0%	7,586.2	4.1	0.1%	7,585.9	4.4	0.1%	7,585.4	4.9	0.1%	7,585.1	5.2	0.1%	7,584.7	5.6	0.1%
ME 3	39 57 11	2018	Above Normal	March	--	20,611.1	20,607.6	3.5	0.0%	20,606.5	4.6	0.0%	20,606.5	4.6	0.0%	20,606.5	4.6	0.0%	20,606.5	4.6	0.0%	20,605.3	5.8	0.0%
ME 3	39 57 11	2018	Above Normal	April	--	32,096.1	32,092.6	3.5	0.0%	32,092.6	3.5	0.0%	32,092.6	3.5	0.0%	32,092.6	3.5	0.0%	32,091.4	4.6	0.0%	32,091.4	4.6	0.0%
ME 3	39 57 11	2018	Above Normal	May	--	6,984.3	6,976.4	7.9	0.1%	6,975.6	8.7	0.1%	6,974.9	9.4	0.1%	6,974.1	10.2	0.1%	6,973.3	11.0	0.2%	6,972.5	11.8	0.2%
ME 3	39 57 11	2018	Above Normal	June	--	1,909.3	1,899.3	10.0	0.5%	1,898.3	11.0	0.6%	1,897.2	12.0	0.6%	1,896.3	13.0	0.7%	1,895.3	14.0	0.7%	1,894.2	15.0	0.8%
ME 3	39 57 11	2018	Above Normal	July	--	776.2	765.6	10.6	1.4%	764.6	11.6	1.5%	763.5	12.7	1.6%	762.5	13.7	1.8%	761.4	14.8	1.9%	760.4	15.8	2.0%
ME 3	39 57 11	2018	Above Normal	August	--	437.5	427.9	9.6	2.2%	426.9	10.6	2.4%	425.9	11.5	2.6%	425.0	12.5	2.9%	424.0	13.5	3.1%	423.0	14.4	3.3%
ME 3	39 57 11	2018	Above Normal	September	Used in Summary Table Analysis	295.3	286.2	9.1	3.1%	285.2	10.1	3.4%	284.3	11.0	3.7%	283.4	11.9	4.0%	282.5	12.8	4.3%	281.6	13.7	4.6%
ME 3	39 57 11	2019	Below Normal	October	Used in Summary Table Analysis	204.1	197.2	7.0	3.4%	196.4	7.7	3.8%	195.8	8.3	4.1%	195.1	9.1	4.4%	194.4	9.7	4.7%	193.8	10.4	5.1%
ME 3	39 57 11	2019	Below Normal	November	Used in Summary Table Analysis	6,570.5	6,565.0	5.4	0.1%	6,564.5	6.0	0.1%	6,563.9	6.6	0.1%	6,563.3	7.2	0.1%	6,562.8	7.6	0.1%	6,562.3	8.2	0.1%
ME 3	39 57 11	2019	Below Normal	December	--	14,576.4	14,571.8	4.6	0.0%	14,570.6	5.8	0.0%	14,570.6	5.8	0.0%	14,569.4	6.9	0.0%	14,569.4	6.9	0.0%	14,569.4	6.9	0.0%
ME 3	39 57 11	2019	Below Normal	January	--	35,038.2	35,034.7	3.5	0.0%	35,033.6	4.6	0.0%	35,033.6	4.6	0.0%	35,033.6	4.6	0.0%	35,032.4	5.8	0.0%	35,032.4	5.8	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 57 11	2019	Below Normal	February	--	141,724.5	141,724.5	0.0	0.0%	141,724.5	0.0	0.0%	141,724.5	0.0	0.0%	141,724.5	0.0	0.0%	141,724.5	0.0	0.0%	141,724.5	0.0	0.0%
ME 3	39 57 11	2019	Below Normal	March	--	42,221.1	42,217.6	3.5	0.0%	42,216.4	4.6	0.0%	42,216.4	4.6	0.0%	42,216.4	4.6	0.0%	42,215.3	5.8	0.0%	42,215.3	5.8	0.0%
ME 3	39 57 11	2019	Below Normal	April	--	15,244.2	15,240.7	3.5	0.0%	15,240.7	3.5	0.0%	15,240.7	3.5	0.0%	15,239.6	4.6	0.0%	15,239.6	4.6	0.0%	15,239.6	4.6	0.0%
ME 3	39 57 11	2019	Below Normal	May	--	16,802.1	16,794.0	8.1	0.0%	16,794.0	8.1	0.0%	16,792.8	9.3	0.1%	16,791.7	10.4	0.1%	16,790.5	11.6	0.1%	16,790.5	11.6	0.1%
ME 3	39 57 11	2019	Below Normal	June	--	4,242.2	4,231.4	10.9	0.3%	4,230.3	11.9	0.3%	4,229.2	13.1	0.3%	4,228.1	14.1	0.3%	4,227.0	15.3	0.4%	4,225.9	16.3	0.4%
ME 3	39 57 11	2019	Below Normal	July	--	1,354.7	1,344.1	10.6	0.8%	1,343.1	11.7	0.9%	1,342.0	12.7	0.9%	1,341.0	13.8	1.0%	1,339.9	14.8	1.1%	1,338.9	15.9	1.2%
ME 3	39 57 11	2019	Below Normal	August	--	590.4	580.5	9.9	1.7%	579.5	10.9	1.8%	578.6	11.9	2.0%	577.6	12.9	2.2%	576.6	13.9	2.3%	575.6	14.9	2.5%
ME 3	39 57 11	2019	Below Normal	September	Used in Summary Table Analysis	457.6	448.5	9.1	2.0%	447.6	10.0	2.2%	446.7	10.9	2.4%	445.8	11.8	2.6%	444.9	12.8	2.8%	444.0	13.7	3.0%
ME 3	39 57 11	2020	Dry	October	Used in Summary Table Analysis	352.0	345.4	6.6	1.9%	344.7	7.3	2.1%	344.1	7.9	2.3%	343.4	8.6	2.4%	342.8	9.3	2.6%	342.1	9.9	2.8%
ME 3	39 57 11	2020	Dry	November	Used in Summary Table Analysis	312.0	306.9	5.0	1.6%	306.4	5.6	1.8%	305.9	6.1	1.9%	305.4	6.6	2.1%	304.9	7.1	2.3%	304.3	7.6	2.4%
ME 3	39 57 11	2020	Dry	December	--	13,153.9	13,149.3	4.6	0.0%	13,148.1	5.8	0.0%	13,148.1	5.8	0.0%	13,148.1	5.8	0.0%	13,147.0	6.9	0.1%	13,147.0	6.9	0.1%
ME 3	39 57 11	2020	Dry	January	--	22,226.9	22,222.2	4.6	0.0%	22,222.2	4.6	0.0%	22,221.1	5.8	0.0%	22,221.1	5.8	0.0%	22,219.9	6.9	0.0%	22,219.9	6.9	0.0%
ME 3	39 57 11	2020	Dry	February	--	7,409.5	7,405.7	3.8	0.1%	7,405.3	4.2	0.1%	7,405.0	4.5	0.1%	7,404.5	5.0	0.1%	7,404.2	5.3	0.1%	7,403.8	5.7	0.1%
ME 3	39 57 11	2020	Dry	March	--	7,224.7	7,221.1	3.6	0.0%	7,220.7	3.9	0.1%	7,220.4	4.3	0.1%	7,220.0	4.6	0.1%	7,219.7	5.0	0.1%	7,219.3	5.3	0.1%
ME 3	39 57 11	2020	Dry	April	--	5,461.5	5,453.2	8.2	0.2%	5,452.4	9.0	0.2%	5,451.6	9.8	0.2%	5,450.8	10.6	0.2%	5,450.0	11.5	0.2%	5,449.2	12.3	0.2%
ME 3	39 57 11	2020	Dry	May	--	7,349.5	7,339.7	9.8	0.1%	7,338.8	10.8	0.1%	7,337.7	11.8	0.2%	7,336.8	12.7	0.2%	7,335.8	13.8	0.2%	7,334.8	14.7	0.2%
ME 3	39 57 11	2020	Dry	June	--	2,103.1	2,090.3	12.8	0.6%	2,089.0	14.1	0.7%	2,087.6	15.5	0.7%	2,086.3	16.8	0.8%	2,085.1	18.1	0.9%	2,083.8	19.3	0.9%
ME 3	39 57 11	2020	Dry	July	--	792.5	780.2	12.3	1.5%	779.0	13.5	1.7%	777.8	14.7	1.9%	776.6	15.9	2.0%	775.3	17.2	2.2%	774.1	18.4	2.3%
ME 3	39 57 11	2020	Dry	August	--	395.0	383.1	11.9	3.0%	381.9	13.1	3.3%	380.7	14.3	3.6%	379.5	15.5	3.9%	378.3	16.6	4.2%	377.2	17.8	4.5%
ME 3	39 57 11	2020	Dry	September	Used in Summary Table Analysis	244.6	234.1	10.4	4.3%	233.1	11.5	4.7%	232.0	12.5	5.1%	231.0	13.6	5.5%	230.0	14.6	6.0%	228.9	15.6	6.4%
ME 3	38 57 12	2000	Above Normal	October	Used in Summary Table Analysis	810.6	803.5	7.1	0.9%	802.8	7.8	1.0%	802.1	8.5	1.1%	801.4	9.2	1.1%	800.7	9.9	1.2%	800.0	10.6	1.3%
ME 3	38 57 12	2000	Above Normal	November	Used in Summary Table Analysis	12,023.1	12,018.5	4.6	0.0%	12,017.4	5.8	0.0%	12,016.2	6.9	0.1%	12,016.2	6.9	0.1%	12,015.0	8.1	0.1%	12,015.0	8.1	0.1%
ME 3	38 57 12	2000	Above Normal	December	--	10,760.4	10,755.8	4.6	0.0%	10,755.3	5.1	0.0%	10,754.7	5.7	0.1%	10,754.3	6.1	0.1%	10,753.8	6.6	0.1%	10,753.4	7.1	0.1%
ME 3	38 57 12	2000	Above Normal	January	--	28,416.7	28,412.0	4.6	0.0%	28,412.0	4.6	0.0%	28,410.9	5.8	0.0%	28,410.9	5.8	0.0%	28,410.9	5.8	0.0%	28,409.7	6.9	0.0%
ME 3	38 57 12	2000	Above Normal	February	--	36,937.5	36,934.0	3.5	0.0%	36,934.0	3.5	0.0%	36,932.9	4.6	0.0%	36,932.9	4.6	0.0%	36,932.9	4.6	0.0%	36,931.7	5.8	0.0%
ME 3	38 57 12	2000	Above Normal	March	--	18,284.7	18,281.3	3.5	0.0%	18,280.1	4.6	0.0%	18,280.1	4.6	0.0%	18,280.1	4.6	0.0%	18,278.9	5.8	0.0%	18,278.9	5.8	0.0%
ME 3	38 57 12	2000	Above Normal	April	--	12,290.5	12,287.0	3.5	0.0%	12,285.9	4.6	0.0%	12,285.9	4.6	0.0%	12,285.9	4.6	0.0%	12,284.7	5.8	0.0%	12,284.7	5.8	0.0%
ME 3	38 57 12	2000	Above Normal	May	--	7,074.5	7,066.3	8.2	0.1%	7,065.5	9.0	0.1%	7,064.7	9.8	0.1%	7,063.9	10.6	0.2%	7,063.1	11.5	0.2%	7,062.3	12.3	0.2%
ME 3	38 57 12	2000	Above Normal	June	--	2,603.5	2,591.2	12.3	0.5%	2,590.0	13.4	0.5%	2,588.8	14.7	0.6%	2,587.6	15.9	0.6%	2,586.3	17.1	0.7%	2,585.2	18.3	0.7%
ME 3	38 57 12	2000	Above Normal	July	--	987.9	977.2	10.7	1.1%	976.1	11.8	1.2%	975.0	12.9	1.3%	974.0	14.0	1.4%	972.9	15.0	1.5%	971.8	16.1	1.6%
ME 3	38 57 12	2000	Above Normal	August	--	517.7	507.8	10.0	1.9%	506.8	11.0	2.1%	505.8	11.9	2.3%	504.8	12.9	2.5%	503.8	13.9	2.7%	502.8	14.9	2.9%
ME 3	38 57 12	2000	Above Normal	September	Used in Summary Table Analysis	291.7	283.0	8.7	3.0%	282.1	9.5	3.3%	281.3	10.4	3.6%	280.4	11.3	3.9%	279.5	12.1	4.2%	278.7	13.0	4.5%
ME 3	38 57 12	2001	Dry	October	Used in Summary Table Analysis	3,793.3	3,786.3	6.9	0.2%	3,785.6	7.6	0.2%	3,785.0	8.3	0.2%	3,784.3	9.0	0.2%	3,783.4	9.8	0.3%	3,782.8	10.5	0.3%
ME 3	38 57 12	2001	Dry	November	Used in Summary Table Analysis	6,088.8	6,083.2	5.6	0.1%	6,082.6	6.1	0.1%	6,082.2	6.6	0.1%	6,081.6	7.2	0.1%	6,081.0	7.8	0.1%	6,080.4	8.3	0.1%
ME 3	38 57 12	2001	Dry	December	--	8,803.1	8,798.4	4.7	0.1%	8,797.8	5.3	0.1%	8,797.3	5.8	0.1%	8,796.9	6.3	0.1%	8,796.4	6.7	0.1%	8,795.9	7.2	0.1%
ME 3	38 57 12	2001	Dry	January	--	12,723.4	12,718.8	4.6	0.0%	12,718.8	4.6	0.0%	12,717.6	5.8	0.0%	12,717.6	5.8	0.0%	12,716.4	6.9	0.1%	12,716.4	6.9	0.1%
ME 3	38 57 12	2001	Dry	February	--	17,429.4	17,425.9	3.5	0.0%	17,424.8	4.6	0.0%	17,424.8	4.6	0.0%	17,423.6	5.8	0.0%	17,423.6	5.8	0.0%	17,423.6	5.8	0.0%
ME 3	38 57 12	2001	Dry	March	--	12,275.5	12,272.0	3.5	0.0%	12,270.8	4.6	0.0%	12,270.8	4.6	0.0%	12,270.8	4.6	0.0%	12,269.7	5.8	0.0%	12,269.7	5.8	0.0%
ME 3	38 57 12	2001	Dry	April	--	10,949.1	10,940.6	8.4	0.1%	10,939.8	9.3	0.1%	10,939.0	10.1	0.1%	10,938.1	11.0	0.1%	10,937.3	11.8	0.1%	10,936.5	12.6	0.1%
ME 3	38 57 12	2001	Dry	May	--	2,636.6	2,626.7	9.8	0.4%	2,625.7	10.9	0.4%	2,624.7	11.9	0.5%	2,623.7	12.8	0.5%	2,622.8	13.8	0.5%	2,621.8	14.8	0.6%
ME 3	38 57 12	2001	Dry	June	--	2,633.4	2,619.9	13.5	0.5%	2,618.6	14.8	0.6%	2,617.2	16.2	0.6%	2,615.9	17.6	0.7%	2,614.6	18.9	0.7%	2,613.2	20.3	0.8%
ME 3	38 57 12	2001	Dry	July	--	717.1	704.8	12.3	1.7%	703.5	13.6	1.9%	702.3	14.8	2.1%	701.1	16.0	2.2%	699.8	17.2	2.4%	698.6	18.5	2.6%
ME 3	38 57 12	2001	Dry	August	--	169.7	157.8	11.9	7.0%	156.7	13.0	7.7%	155.5	14.2	8.4%	154.3	15.4	9.1%	153.1	16.6	9.8%	151.9	17.8	10.5%
ME 3	38 57 12	2001	Dry	September	Used in Summary Table Analysis	92.3	82.0	10.4	11.2%	80.9	11.4	12.4%	79.9	12.5	13.5%	78.8	13.5	14.6%	77.8	14.5	15.7%	76.8	15.6	16.9%
ME 3	38 57 12	2002	Below Normal	October	Used in Summary Table Analysis	261.6	253.1	8.5	3.2%	252.3	9.3	3.6%	251.4	10.2	3.9%	250.6	11.0	4.2%	249.7	11.9	4.5%	248.9	12.7	4.9%
ME 3	38 57 12	2002	Below Normal	November	Used in Summary Table Analysis	11,979.2	11,972.2	6.9	0.1%	11,971.1	8.1	0.1%	11,971.1	8.1	0.1%	11,969.9	9.3	0.1%	11,969.9	9.3	0.1%	11,968.8	10.4	0.1%
ME 3	38 57 12	2002	Below Normal	December	--	35,539.4	35,533.6	5.8	0.0%	35,533.6	5.8	0.0%	35,532.4	6.9	0.0%	35,532.4	6.9	0.0%	35,531.3	8.1	0.0%	35,531.3	8.1	0.0%
ME 3	38 57 12	2002	Below Normal	January	--	30,787.0	30,781.3	5.8	0.0%	30,781.3	5.8	0.0%	30,780.1	6.9	0.0%	30,780.1	6.9	0.0%	30,780.1	6.9	0.0%	30,778.9	8.1	0.0%
ME 3	38 57 12	2002	Below Normal	February	--	24,622.7	24,618.1	4.6	0.0%	24,618.1	4.6	0.0%	24,616.9	5.8	0.0%	24,616.9	5.8	0.0%	24,616.9	5.8	0.0%	24,615.7	6.9	0.0%
ME 3	38 57 12	2002	Below Normal	March	--	17,737.3	17,732.6	4.6	0.0%	17,731.5	5.8	0.0%	17,731.5	5.8	0.0%	17,731.5	5.8	0.0%	17,730.3	6.9	0.0%	17,730.3	6.9	0.0%
ME 3	38 57 12	2002	Below Normal	April	--	9,908.9	9,900.6	8.3	0.1%	9,899.7	9.3	0.1%	9,898.8	10.1	0.1%	9,898.0	10.9	0.1%	9,897.1	11.8	0.1%	9,896.3	12.6	0.1%
ME 3	38 57 12	2002	Below Normal	May	--	3,313.7	3,303.8	9.8	0.3%	3,302.8	10.9	0.3%	3,301.9	11.8	0.4%	3,300.8	12.8	0.4%	3,299.9	13.8	0.4%	3,298.8	14.8	0.4%
ME 3	38 57 12	2002	Below Normal	June	--	851.2	840.1	11.1	1.3%	839.0	12.2	1.4%	837.9	13.3	1.6%	836.8	14.4	1.7%	835.7	15.5	1.8%	834.5	16.7	2.0%
ME 3	38 57 12	2002	Below Normal	July	--	359.5	348.5	11.0	3.1%	347.4	12.1	3.4%	346.3	13.3	3.7%	345.2	14.4	4.0%	344.1	15.5	4.3%	343.0	16.6	4.6%
ME 3	38 57 12	2002	Below Normal	August	--	223.6	213.4	10.2	4.6%	212.3	11.2	5.0%	211.3	12.3	5.5%	210.3	13.3	5.9%	209.3	14.3	6.4%	208.3	15.3	6.9%
ME 3	38 57 12	2002	Below Normal	September	Used in Summary Table Analysis	160.6	151.1	9.5	5.9%	150.1	10.5	6.5%	149.2	11.4	7.1%	148.2	12.4	7.7%	147.3	13.3	8.3%	146.3	14.3	8.9%
ME 3	38 57 12	2003	Wet	October	Used in Summary Table Analysis	125.7	118.1	7.6	6.0%	117.3	8.3	6.6%	116.6	9.1	7.2%	115.8	9.9	7.9%	115.0	10.6	8.5%	114.3	11.4	9.1%
ME 3	38 57 12	2003	Wet	November	Used in Summary Table Analysis	891.9	885.9	6.0	0.7%	885.3	6.6	0.7%	884.7	7.2	0.8%	884.1	7.8	0.9%	883.5	8.4	0.9%	882.9	9.0	1.0%
ME 3	38 57 12	2003	Wet	December	--	56,480.3	56,475.7	4.6	0.0%	56,474.5	5.8	0.0%	56,474.5	5.8	0.0%	56,473.4	6.9	0.0%	56,473.4	6.9	0.0%	56,472.2	8.1	0.0%
ME 3	38 57 12	2003	Wet	January	--	31,460.6	31,456.0	4.6	0.0%	31,456.0	4.6	0.0%	31,456.0	4.6	0.0%	31,454.9	5.8	0.0%	31,454.9	5.8	0.0%	31,453.7	6.9	0.0%
ME 3	38 57 12	2003	Wet	February	--	20,317.1	20,312.5	4.6	0.0%	20,312.5	4.6	0.0%	20,311.3	5.8	0.0%	20,311.3	5.8	0.0%	20,311.3	5.8	0.0%	20,310.2	6.9	0.0%
ME 3	38 57 12	2003	Wet	March	--	23,976.9	23,973.4	3.5	0.0%	23,973.4	3.5	0.0%	23,972.2	4.6	0.0%	23,972.2	4.6	0.0%	23,971.1	5.8	0.0%	23,971.1	5.8	0.0%
ME 3	38 57 12	2003	Wet	April	--	42,773.1	42,769.7	3.5	0.0%	42,768.5	4.6	0.0%	42,768.5	4.6	0.0%	42,768.5	4.6	0.0%	42,767.4	5.8	0.0%	42,767.4	5.8	0.0%
ME 3	38 57 12	2003	Wet	May	--	12,206.0	12,196.8	9.3	0.1%	12,195.6	10.4	0.1%	12,195.6	10.4	0.1%	12,194.4	11.6	0.1%	12,193.3	12.7	0.1%	12,192.1	13.9	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 57 12	2003	Wet	June	--	3,162.2	3,151.2	11.0	0.3%	3,150.1	12.0	0.4%	3,149.1	13.1	0.4%	3,148.0	14.1	0.4%	3,147.0	15.2	0.5%	3,145.9	16.2	0.5%
ME 3	38 57 12	2003	Wet	July	--	1,469.3	1,458.3	11.0	0.7%	1,457.3	12.0	0.8%	1,456.1	13.2	0.9%	1,455.0	14.4	1.0%	1,453.9	15.4	1.0%	1,452.9	16.4	1.1%
ME 3	38 57 12	2003	Wet	August	--	755.7	745.2	10.5	1.4%	744.2	11.5	1.5%	743.1	12.5	1.7%	742.0	13.6	1.8%	741.0	14.7	1.9%	739.9	15.8	2.1%
ME 3	38 57 12	2003	Wet	September	Used in Summary Table Analysis	453.9	445.2	8.8	1.9%	444.3	9.7	2.1%	443.4	10.5	2.3%	442.5	11.4	2.5%	441.7	12.3	2.7%	440.8	13.2	2.9%
ME 3	38 57 12	2004	Wet	October	Used in Summary Table Analysis	321.0	313.9	7.1	2.2%	313.2	7.8	2.4%	312.5	8.5	2.7%	311.8	9.2	2.9%	311.1	9.9	3.1%	310.4	10.6	3.3%
ME 3	38 57 12	2004	Wet	November	Used in Summary Table Analysis	5,766.0	5,760.3	5.7	0.1%	5,759.7	6.3	0.1%	5,759.1	6.8	0.1%	5,758.6	7.4	0.1%	5,758.0	8.0	0.1%	5,757.5	8.4	0.1%
ME 3	38 57 12	2004	Wet	December	--	36,147.0	36,141.2	5.8	0.0%	36,141.2	5.8	0.0%	36,140.0	6.9	0.0%	36,140.0	6.9	0.0%	36,138.9	8.1	0.0%	36,138.9	8.1	0.0%
ME 3	38 57 12	2004	Wet	January	--	31,361.1	31,357.6	3.5	0.0%	31,356.5	4.6	0.0%	31,356.5	4.6	0.0%	31,355.3	5.8	0.0%	31,355.3	5.8	0.0%	31,355.3	5.8	0.0%
ME 3	38 57 12	2004	Wet	February	--	38,128.5	38,125.0	3.5	0.0%	38,125.0	3.5	0.0%	38,123.8	4.6	0.0%	38,123.8	4.6	0.0%	38,123.8	4.6	0.0%	38,122.7	5.8	0.0%
ME 3	38 57 12	2004	Wet	March	--	16,504.6	16,501.2	3.5	0.0%	16,501.2	3.5	0.0%	16,500.0	4.6	0.0%	16,500.0	4.6	0.0%	16,500.0	4.6	0.0%	16,498.8	5.8	0.0%
ME 3	38 57 12	2004	Wet	April	--	9,436.3	9,432.8	3.6	0.0%	9,432.4	3.9	0.0%	9,432.1	4.3	0.0%	9,431.6	4.7	0.1%	9,431.3	5.1	0.1%	9,430.9	5.4	0.1%
ME 3	38 57 12	2004	Wet	May	--	3,408.6	3,400.3	8.2	0.2%	3,399.5	9.0	0.3%	3,398.7	9.8	0.3%	3,397.8	10.8	0.3%	3,397.0	11.6	0.3%	3,396.2	12.4	0.4%
ME 3	38 57 12	2004	Wet	June	--	689.4	679.1	10.3	1.5%	678.1	11.3	1.6%	677.0	12.4	1.8%	676.0	13.4	1.9%	675.0	14.4	2.1%	674.0	15.4	2.2%
ME 3	38 57 12	2004	Wet	July	--	352.5	341.8	10.8	3.1%	340.7	11.8	3.4%	339.6	12.9	3.7%	338.5	14.0	4.0%	337.5	15.1	4.3%	336.4	16.1	4.6%
ME 3	38 57 12	2004	Wet	August	--	221.8	211.8	10.0	4.5%	210.8	11.0	5.0%	209.8	12.0	5.4%	208.8	13.0	5.9%	207.8	14.0	6.3%	206.8	15.0	6.8%
ME 3	38 57 12	2004	Wet	September	Used in Summary Table Analysis	159.2	149.8	9.4	5.9%	148.8	10.3	6.5%	147.9	11.3	7.1%	147.0	12.2	7.7%	146.0	13.1	8.3%	145.1	14.1	8.8%
ME 3	38 57 12	2005	Above Normal	October	Used in Summary Table Analysis	7,634.3	7,627.1	7.2	0.1%	7,626.4	7.9	0.1%	7,625.6	8.7	0.1%	7,624.9	9.4	0.1%	7,624.2	10.1	0.1%	7,623.5	10.8	0.1%
ME 3	38 57 12	2005	Above Normal	November	Used in Summary Table Analysis	2,250.3	2,244.7	5.7	0.3%	2,244.2	6.1	0.3%	2,243.6	6.7	0.3%	2,243.1	7.3	0.3%	2,242.5	7.9	0.3%	2,241.9	8.4	0.4%
ME 3	38 57 12	2005	Above Normal	December	--	20,890.0	20,884.3	5.8	0.0%	20,884.3	5.8	0.0%	20,883.1	6.9	0.0%	20,883.1	6.9	0.0%	20,883.1	6.9	0.0%	20,881.9	8.1	0.0%
ME 3	38 57 12	2005	Above Normal	January	--	22,277.8	22,273.1	4.6	0.0%	22,272.0	5.8	0.0%	22,272.0	5.8	0.0%	22,272.0	5.8	0.0%	22,270.8	6.9	0.0%	22,270.8	6.9	0.0%
ME 3	38 57 12	2005	Above Normal	February	--	13,993.1	13,988.4	4.6	0.0%	13,988.4	4.6	0.0%	13,987.3	5.8	0.0%	13,987.3	5.8	0.0%	13,987.3	5.8	0.0%	13,986.1	6.9	0.0%
ME 3	38 57 12	2005	Above Normal	March	--	28,486.1	28,481.5	4.6	0.0%	28,481.5	4.6	0.0%	28,481.5	4.6	0.0%	28,480.3	5.8	0.0%	28,480.3	5.8	0.0%	28,480.3	5.8	0.0%
ME 3	38 57 12	2005	Above Normal	April	--	21,392.4	21,387.7	4.6	0.0%	21,387.7	4.6	0.0%	21,387.7	4.6	0.0%	21,386.6	5.8	0.0%	21,386.6	5.8	0.0%	21,386.6	5.8	0.0%
ME 3	38 57 12	2005	Above Normal	May	--	19,505.8	19,497.7	8.1	0.0%	19,496.5	9.3	0.0%	19,496.5	9.3	0.0%	19,495.4	10.4	0.1%	19,494.2	11.6	0.1%	19,493.1	12.7	0.1%
ME 3	38 57 12	2005	Above Normal	June	--	15,795.1	15,783.6	11.6	0.1%	15,781.3	13.9	0.1%	15,780.1	15.0	0.1%	15,778.9	16.2	0.1%	15,777.8	17.4	0.1%	15,776.6	18.5	0.1%
ME 3	38 57 12	2005	Above Normal	July	--	2,863.1	2,851.9	11.2	0.4%	2,850.7	12.4	0.4%	2,849.7	13.4	0.5%	2,848.5	14.6	0.5%	2,847.3	15.7	0.5%	2,846.3	16.8	0.6%
ME 3	38 57 12	2005	Above Normal	August	--	978.4	968.4	10.0	1.0%	967.4	11.0	1.1%	966.4	12.0	1.2%	965.4	13.0	1.3%	964.4	14.0	1.4%	963.4	15.0	1.5%
ME 3	38 57 12	2005	Above Normal	September	Used in Summary Table Analysis	520.1	511.4	8.7	1.7%	510.5	9.5	1.8%	509.7	10.4	2.0%	508.8	11.3	2.2%	507.9	12.1	2.3%	507.1	13.0	2.5%
ME 3	38 57 12	2006	Wet	October	Used in Summary Table Analysis	629.2	622.4	6.9	1.1%	621.7	7.6	1.2%	621.0	8.3	1.3%	620.3	8.9	1.4%	619.6	9.6	1.5%	618.9	10.3	1.6%
ME 3	38 57 12	2006	Wet	November	Used in Summary Table Analysis	9,243.1	9,237.7	5.3	0.1%	9,237.2	5.9	0.1%	9,236.6	6.5	0.1%	9,236.1	6.9	0.1%	9,235.5	7.5	0.1%	9,235.0	8.1	0.1%
ME 3	38 57 12	2006	Wet	December	--	43,292.8	43,288.2	4.6	0.0%	43,287.0	5.8	0.0%	43,287.0	5.8	0.0%	43,287.0	5.8	0.0%	43,285.9	6.9	0.0%	43,285.9	6.9	0.0%
ME 3	38 57 12	2006	Wet	January	--	46,111.1	46,106.5	4.6	0.0%	46,106.5	4.6	0.0%	46,106.5	4.6	0.0%	46,105.3	5.8	0.0%	46,105.3	5.8	0.0%	46,104.2	6.9	0.0%
ME 3	38 57 12	2006	Wet	February	--	26,539.4	26,534.7	4.6	0.0%	26,534.7	4.6	0.0%	26,534.7	4.6	0.0%	26,533.6	5.8	0.0%	26,533.6	5.8	0.0%	26,533.6	5.8	0.0%
ME 3	38 57 12	2006	Wet	March	--	47,011.6	47,008.1	3.5	0.0%	47,008.1	3.5	0.0%	47,006.9	4.6	0.0%	47,006.9	4.6	0.0%	47,006.9	4.6	0.0%	47,005.8	5.8	0.0%
ME 3	38 57 12	2006	Wet	April	--	30,370.4	30,366.9	3.5	0.0%	30,366.9	3.5	0.0%	30,366.9	3.5	0.0%	30,365.7	4.6	0.0%	30,365.7	4.6	0.0%	30,365.7	4.6	0.0%
ME 3	38 57 12	2006	Wet	May	--	14,173.6	14,169.0	4.6	0.0%	14,167.8	5.8	0.0%	14,167.8	5.8	0.0%	14,167.8	5.8	0.0%	14,166.7	6.9	0.0%	14,166.7	6.9	0.0%
ME 3	38 57 12	2006	Wet	June	--	3,543.8	3,533.3	10.4	0.3%	3,532.4	11.3	0.3%	3,531.4	12.4	0.3%	3,530.3	13.4	0.4%	3,529.3	14.5	0.4%	3,528.2	15.5	0.4%
ME 3	38 57 12	2006	Wet	July	--	1,273.8	1,263.1	10.8	0.8%	1,262.0	11.8	0.9%	1,261.0	12.8	1.0%	1,260.0	13.9	1.1%	1,258.8	15.0	1.2%	1,257.8	16.1	1.3%
ME 3	38 57 12	2006	Wet	August	--	660.0	649.8	10.2	1.5%	648.8	11.2	1.7%	647.7	12.3	1.9%	646.7	13.3	2.0%	645.7	14.3	2.2%	644.6	15.4	2.3%
ME 3	38 57 12	2006	Wet	September	Used in Summary Table Analysis	421.4	412.7	8.8	2.1%	411.8	9.6	2.3%	410.9	10.5	2.5%	410.0	11.4	2.7%	409.1	12.3	2.9%	408.3	13.2	3.1%
ME 3	38 57 12	2007	Above Normal	October	Used in Summary Table Analysis	270.5	263.5	7.0	2.6%	262.8	7.7	2.8%	262.1	8.4	3.1%	261.4	9.1	3.4%	260.7	9.8	3.6%	260.0	10.5	3.9%
ME 3	38 57 12	2007	Above Normal	November	Used in Summary Table Analysis	8,611.2	8,605.8	5.4	0.1%	8,605.2	6.0	0.1%	8,604.6	6.6	0.1%	8,604.1	7.2	0.1%	8,603.5	7.8	0.1%	8,602.9	8.3	0.1%
ME 3	38 57 12	2007	Above Normal	December	--	20,298.6	20,292.8	5.8	0.0%	20,292.8	5.8	0.0%	20,292.8	5.8	0.0%	20,291.7	6.9	0.0%	20,291.7	6.9	0.0%	20,290.5	8.1	0.0%
ME 3	38 57 12	2007	Above Normal	January	--	10,221.9	10,217.6	4.3	0.0%	10,217.1	4.7	0.0%	10,216.7	5.2	0.1%	10,216.2	5.7	0.1%	10,215.7	6.1	0.1%	10,215.4	6.5	0.1%
ME 3	38 57 12	2007	Above Normal	February	--	30,445.6	30,442.1	3.5	0.0%	30,441.0	4.6	0.0%	30,441.0	4.6	0.0%	30,441.0	4.6	0.0%	30,439.8	5.8	0.0%	30,439.8	5.8	0.0%
ME 3	38 57 12	2007	Above Normal	March	--	13,081.0	13,076.4	4.6	0.0%	13,076.4	4.6	0.0%	13,075.2	5.8	0.0%	13,075.2	5.8	0.0%	13,075.2	5.8	0.0%	13,074.1	6.9	0.1%
ME 3	38 57 12	2007	Above Normal	April	--	11,514.6	11,506.5	8.1	0.1%	11,505.7	8.9	0.1%	11,505.0	9.6	0.1%	11,504.2	10.4	0.1%	11,503.2	11.3	0.1%	11,502.5	12.0	0.1%
ME 3	38 57 12	2007	Above Normal	May	--	4,130.8	4,121.2	9.6	0.2%	4,120.3	10.5	0.3%	4,119.3	11.5	0.3%	4,118.4	12.4	0.3%	4,117.4	13.4	0.3%	4,116.4	14.4	0.3%
ME 3	38 57 12	2007	Above Normal	June	--	1,492.1	1,480.7	11.5	0.8%	1,479.5	12.6	0.8%	1,478.4	13.8	0.9%	1,477.2	14.9	1.0%	1,476.0	16.1	1.1%	1,475.0	17.1	1.1%
ME 3	38 57 12	2007	Above Normal	July	--	493.4	482.0	11.3	2.3%	480.9	12.5	2.5%	479.8	13.6	2.8%	478.6	14.7	3.0%	477.5	15.9	3.2%	476.4	17.0	3.4%
ME 3	38 57 12	2007	Above Normal	August	--	219.5	209.5	10.0	4.6%	208.5	11.1	5.0%	207.5	12.1	5.5%	206.5	13.0	5.9%	205.5	14.1	6.4%	204.5	15.0	6.9%
ME 3	38 57 12	2007	Above Normal	September	Used in Summary Table Analysis	147.2	137.8	9.4	6.4%	136.9	10.3	7.0%	136.0	11.3	7.6%	135.0	12.2	8.3%	134.1	13.1	8.9%	133.2	14.1	9.5%
ME 3	38 57 12	2008	Dry	October	Used in Summary Table Analysis	3,413.8	3,406.4	7.4	0.2%	3,405.6	8.2	0.2%	3,404.9	8.9	0.3%	3,404.1	9.7	0.3%	3,403.4	10.4	0.3%	3,402.7	11.1	0.3%
ME 3	38 57 12	2008	Dry	November	Used in Summary Table Analysis	3,255.9	3,250.2	5.7	0.2%	3,249.7	6.3	0.2%	3,249.1	6.8	0.2%	3,248.6	7.3	0.2%	3,248.0	7.9	0.2%	3,247.5	8.4	0.3%
ME 3	38 57 12	2008	Dry	December	--	22,980.3	22,975.7	4.6	0.0%	22,974.5	5.8	0.0%	22,974.5	5.8	0.0%	22,973.4	6.9	0.0%	22,973.4	6.9	0.0%	22,972.2	8.1	0.0%
ME 3	38 57 12	2008	Dry	January	--	37,392.4	37,387.7	4.6	0.0%	37,386.6	5.8	0.0%	37,386.6	5.8	0.0%	37,385.4	6.9	0.0%	37,385.4	6.9	0.0%	37,385.4	6.9	0.0%
ME 3	38 57 12	2008	Dry	February	--	26,237.3	26,233.8	3.5	0.0%	26,232.6	4.6	0.0%	26,232.6	4.6	0.0%	26,232.6	4.6	0.0%	26,231.5	5.8	0.0%	26,231.5	5.8	0.0%
ME 3	38 57 12	2008	Dry	March	--	11,778.9	11,775.5	3.5	0.0%	11,775.5	3.5	0.0%	11,774.3	4.6	0.0%	11,774.3	4.6	0.0%	11,774.3	4.6	0.0%	11,773.1	5.8	0.0%
ME 3	38 57 12	2008	Dry	April	--	9,004.5	8,996.3	8.2	0.1%	8,995.5	9.0	0.1%	8,994.7	9.8	0.1%	8,993.9	10.6	0.1%	8,993.1	11.5	0.1%	8,992.2	12.3	0.1%
ME 3	38 57 12	2008	Dry	May	--	1,360.9	1,352.1	8.8	0.6%	1,351.3	9.6	0.7%	1,350.3	10.5	0.8%	1,349.5	11.3	0.8%	1,348.6	12.3	0.9%	1,347.8	13.1	1.0%
ME 3	38 57 12	2008	Dry	June	--	435.0	422.4	12.6	2.9%	421.1	13.8	3.2%	419.9	15.1	3.5%	418.6	16.3	3.8%	417.4	17.6	4.0%	416.2	18.8	4.3%
ME 3	38 57 12	2008	Dry	July	--	253.4	241.3	12.0	4.8%	240.1	13.2	5.2%	238.9	14.4	5.7%	237.7	15.6	6.2%	236.5	16.8	6.6%	235.3	18.0	7.1%
ME 3	38 57 12	2008	Dry	August	--	176.6	165.0	11.5	6.5%	163.9	12.7	7.2%	162.7	13.8	7.8%	161.6	15.0	8.5%	160.5	16.1	9.1%	159.3	17.3	9.8%
ME 3	38 57 12	2008	Dry	September	Used in Summary Table Analysis	138.3	127.4	10.9	7.9%	126.3	12.0	8.7%	125.2	13.1	9.5%	124.1	14.2	10.3%	123.0	15.3	11.1%	121.9	16.4	11.9%

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Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 57 12	2009	Critical	October	Used in Summary Table Analysis	919.9	911.6	8.4	0.9%	910.7	9.2	1.0%	909.9	10.0	1.1%	909.1	10.9	1.2%	908.2	11.7	1.3%	907.4	12.6	1.4%
ME 3	38 57 12	2009	Critical	November	Used in Summary Table Analysis	5,476.0	5,469.7	6.4	0.1%	5,469.0	7.1	0.1%	5,468.4	7.6	0.1%	5,467.7	8.3	0.2%	5,467.1	8.9	0.2%	5,466.4	9.6	0.2%
ME 3	38 57 12	2009	Critical	December	--	12,091.4	12,085.6	5.8	0.0%	12,085.6	5.8	0.0%	12,084.5	6.9	0.1%	12,084.5	6.9	0.1%	12,083.3	8.1	0.1%	12,083.3	8.1	0.1%
ME 3	38 57 12	2009	Critical	January	--	8,775.6	8,770.6	5.0	0.1%	8,770.0	5.6	0.1%	8,769.6	6.0	0.1%	8,769.1	6.5	0.1%	8,768.5	7.1	0.1%	8,768.1	7.5	0.1%
ME 3	38 57 12	2009	Critical	February	--	22,553.2	22,548.6	4.6	0.0%	22,548.6	4.6	0.0%	22,547.5	5.8	0.0%	22,547.5	5.8	0.0%	22,546.3	6.9	0.0%	22,546.3	6.9	0.0%
ME 3	38 57 12	2009	Critical	March	--	21,075.2	21,071.8	3.5	0.0%	21,071.8	3.5	0.0%	21,070.6	4.6	0.0%	21,070.6	4.6	0.0%	21,069.4	5.8	0.0%	21,069.4	5.8	0.0%
ME 3	38 57 12	2009	Critical	April	--	10,091.7	10,083.2	8.4	0.1%	10,082.3	9.4	0.1%	10,081.5	10.2	0.1%	10,080.8	10.9	0.1%	10,079.9	11.8	0.1%	10,079.1	12.6	0.1%
ME 3	38 57 12	2009	Critical	May	--	15,560.2	15,549.8	10.4	0.1%	15,548.6	11.6	0.1%	15,548.6	11.6	0.1%	15,547.5	12.7	0.1%	15,546.3	13.9	0.1%	15,545.1	15.0	0.1%
ME 3	38 57 12	2009	Critical	June	--	3,156.7	3,143.5	13.2	0.4%	3,142.1	14.6	0.5%	3,140.7	16.0	0.5%	3,139.5	17.2	0.5%	3,138.2	18.5	0.6%	3,136.8	19.9	0.6%
ME 3	38 57 12	2009	Critical	July	--	1,259.6	1,247.3	12.3	1.0%	1,246.2	13.4	1.1%	1,244.9	14.7	1.2%	1,243.6	16.0	1.3%	1,242.5	17.1	1.4%	1,241.3	18.3	1.5%
ME 3	38 57 12	2009	Critical	August	--	665.3	653.7	11.6	1.7%	652.5	12.8	1.9%	651.4	13.9	2.1%	650.2	15.1	2.3%	649.1	16.2	2.4%	647.9	17.4	2.6%
ME 3	38 57 12	2009	Critical	September	Used in Summary Table Analysis	386.9	376.7	10.2	2.6%	375.7	11.2	2.9%	374.7	12.2	3.2%	373.7	13.2	3.4%	372.7	14.2	3.7%	371.7	15.2	3.9%
ME 3	38 57 12	2010	Below Normal	October	Used in Summary Table Analysis	6,083.4	6,075.0	8.4	0.1%	6,074.2	9.3	0.2%	6,073.3	10.2	0.2%	6,072.5	11.0	0.2%	6,071.6	11.8	0.2%	6,070.7	12.7	0.2%
ME 3	38 57 12	2010	Below Normal	November	Used in Summary Table Analysis	8,266.7	8,260.1	6.6	0.1%	8,259.5	7.2	0.1%	8,258.8	7.9	0.1%	8,258.1	8.6	0.1%	8,257.5	9.1	0.1%	8,256.8	9.8	0.1%
ME 3	38 57 12	2010	Below Normal	December	--	12,307.9	12,302.1	5.8	0.0%	12,302.1	5.8	0.0%	12,300.9	6.9	0.1%	12,300.9	6.9	0.1%	12,299.8	8.1	0.1%	12,299.8	8.1	0.1%
ME 3	38 57 12	2010	Below Normal	January	--	36,077.5	36,071.8	5.8	0.0%	36,071.8	5.8	0.0%	36,071.8	5.8	0.0%	36,070.6	6.9	0.0%	36,070.6	6.9	0.0%	36,069.4	8.1	0.0%
ME 3	38 57 12	2010	Below Normal	February	--	27,201.4	27,196.8	4.6	0.0%	27,196.8	4.6	0.0%	27,195.6	5.8	0.0%	27,195.6	5.8	0.0%	27,194.4	6.9	0.0%	27,194.4	6.9	0.0%
ME 3	38 57 12	2010	Below Normal	March	--	28,799.8	28,795.1	4.6	0.0%	28,795.1	4.6	0.0%	28,794.0	5.8	0.0%	28,794.0	5.8	0.0%	28,794.0	5.8	0.0%	28,792.8	6.9	0.0%
ME 3	38 57 12	2010	Below Normal	April	--	39,944.4	39,939.8	4.6	0.0%	39,939.8	4.6	0.0%	39,939.8	4.6	0.0%	39,938.7	5.8	0.0%	39,938.7	5.8	0.0%	39,937.5	6.9	0.0%
ME 3	38 57 12	2010	Below Normal	May	--	20,215.3	20,206.0	9.3	0.0%	20,204.9	10.4	0.1%	20,203.7	11.6	0.1%	20,203.7	11.6	0.1%	20,202.5	12.7	0.1%	20,201.4	13.9	0.1%
ME 3	38 57 12	2010	Below Normal	June	--	9,307.3	9,294.6	12.7	0.1%	9,293.3	14.0	0.2%	9,291.9	15.4	0.2%	9,290.7	16.6	0.2%	9,289.5	17.8	0.2%	9,288.2	19.1	0.2%
ME 3	38 57 12	2010	Below Normal	July	--	1,451.5	1,440.2	11.3	0.8%	1,439.0	12.5	0.9%	1,437.8	13.7	0.9%	1,436.8	14.7	1.0%	1,435.6	15.9	1.1%	1,434.5	17.0	1.2%
ME 3	38 57 12	2010	Below Normal	August	--	564.4	554.1	10.3	1.8%	553.1	11.3	2.0%	552.0	12.3	2.2%	551.0	13.4	2.4%	550.0	14.3	2.5%	549.0	15.4	2.7%
ME 3	38 57 12	2010	Below Normal	September	Used in Summary Table Analysis	646.4	636.8	9.6	1.5%	635.8	10.6	1.6%	634.8	11.6	1.8%	633.9	12.5	1.9%	632.9	13.5	2.1%	631.9	14.4	2.2%
ME 3	38 57 12	2011	Wet	October	Used in Summary Table Analysis	9,601.0	9,593.9	7.2	0.1%	9,593.2	7.9	0.1%	9,592.5	8.6	0.1%	9,591.8	9.3	0.1%	9,591.1	10.0	0.1%	9,590.4	10.6	0.1%
ME 3	38 57 12	2011	Wet	November	Used in Summary Table Analysis	14,184.0	14,178.2	5.8	0.0%	14,177.1	6.9	0.0%	14,177.1	6.9	0.0%	14,175.9	8.1	0.1%	14,175.9	8.1	0.1%	14,174.8	9.3	0.1%
ME 3	38 57 12	2011	Wet	December	--	33,550.9	33,546.3	4.6	0.0%	33,546.3	4.6	0.0%	33,545.1	5.8	0.0%	33,545.1	5.8	0.0%	33,544.0	6.9	0.0%	33,544.0	6.9	0.0%
ME 3	38 57 12	2011	Wet	January	--	14,128.5	14,123.8	4.6	0.0%	14,123.8	4.6	0.0%	14,122.7	5.8	0.0%	14,122.7	5.8	0.0%	14,121.5	6.9	0.0%	14,121.5	6.9	0.0%
ME 3	38 57 12	2011	Wet	February	--	20,740.7	20,736.1	4.6	0.0%	20,736.1	4.6	0.0%	20,735.0	5.8	0.0%	20,735.0	5.8	0.0%	20,735.0	5.8	0.0%	20,733.8	6.9	0.0%
ME 3	38 57 12	2011	Wet	March	--	51,908.6	51,905.1	3.5	0.0%	51,905.1	3.5	0.0%	51,903.9	4.6	0.0%	51,903.9	4.6	0.0%	51,903.9	4.6	0.0%	51,902.8	5.8	0.0%
ME 3	38 57 12	2011	Wet	April	--	24,766.2	24,762.7	3.5	0.0%	24,762.7	3.5	0.0%	24,761.6	4.6	0.0%	24,761.6	4.6	0.0%	24,761.6	4.6	0.0%	24,760.4	5.8	0.0%
ME 3	38 57 12	2011	Wet	May	--	11,366.9	11,358.7	8.2	0.1%	11,357.8	9.1	0.1%	11,356.9	10.0	0.1%	11,356.1	10.8	0.1%	11,355.2	11.7	0.1%	11,354.4	12.5	0.1%
ME 3	38 57 12	2011	Wet	June	--	7,040.7	7,028.1	12.6	0.2%	7,026.9	13.9	0.2%	7,025.6	15.2	0.2%	7,024.4	16.3	0.2%	7,023.1	17.6	0.2%	7,021.9	18.9	0.3%
ME 3	38 57 12	2011	Wet	July	--	1,827.0	1,814.7	12.3	0.7%	1,813.5	13.4	0.7%	1,812.3	14.7	0.8%	1,811.1	15.9	0.9%	1,809.8	17.1	0.9%	1,808.7	18.3	1.0%
ME 3	38 57 12	2011	Wet	August	--	773.2	763.0	10.2	1.3%	762.0	11.2	1.4%	761.0	12.2	1.6%	760.0	13.2	1.7%	759.0	14.2	1.8%	758.0	15.2	2.0%
ME 3	38 57 12	2011	Wet	September	Used in Summary Table Analysis	429.7	420.7	9.1	2.1%	419.8	10.0	2.3%	418.9	10.9	2.5%	418.0	11.8	2.7%	417.0	12.7	3.0%	416.1	13.6	3.2%
ME 3	38 57 12	2012	Below Normal	October	Used in Summary Table Analysis	4,524.9	4,517.7	7.2	0.2%	4,516.9	8.0	0.2%	4,516.2	8.7	0.2%	4,515.5	9.4	0.2%	4,514.8	10.1	0.2%	4,514.0	10.9	0.2%
ME 3	38 57 12	2012	Below Normal	November	Used in Summary Table Analysis	8,204.3	8,198.6	5.7	0.1%	8,198.0	6.3	0.1%	8,197.5	6.8	0.1%	8,196.9	7.4	0.1%	8,196.3	8.0	0.1%	8,195.7	8.6	0.1%
ME 3	38 57 12	2012	Below Normal	December	--	5,168.6	5,163.8	4.9	0.1%	5,163.2	5.4	0.1%	5,162.7	5.9	0.1%	5,162.3	6.4	0.1%	5,161.7	6.9	0.1%	5,161.2	7.4	0.1%
ME 3	38 57 12	2012	Below Normal	January	--	20,018.5	20,013.9	4.6	0.0%	20,013.9	4.6	0.0%	20,013.9	4.6	0.0%	20,012.7	5.8	0.0%	20,012.7	5.8	0.0%	20,012.7	5.8	0.0%
ME 3	38 57 12	2012	Below Normal	February	--	18,185.2	18,181.7	3.5	0.0%	18,181.7	3.5	0.0%	18,180.6	4.6	0.0%	18,180.6	4.6	0.0%	18,179.4	5.8	0.0%	18,179.4	5.8	0.0%
ME 3	38 57 12	2012	Below Normal	March	--	45,312.5	45,307.9	4.6	0.0%	45,307.9	4.6	0.0%	45,306.7	5.8	0.0%	45,306.7	5.8	0.0%	45,306.7	5.8	0.0%	45,305.6	6.9	0.0%
ME 3	38 57 12	2012	Below Normal	April	--	26,818.3	26,814.8	3.5	0.0%	26,814.8	3.5	0.0%	26,813.7	4.6	0.0%	26,813.7	4.6	0.0%	26,813.7	4.6	0.0%	26,812.5	5.8	0.0%
ME 3	38 57 12	2012	Below Normal	May	--	7,473.0	7,464.7	8.3	0.1%	7,463.9	9.1	0.1%	7,463.0	10.1	0.1%	7,462.2	10.9	0.1%	7,461.5	11.6	0.2%	7,460.6	12.4	0.2%
ME 3	38 57 12	2012	Below Normal	June	--	5,500.0	5,487.3	12.7	0.2%	5,486.0	14.0	0.3%	5,484.6	15.4	0.3%	5,483.3	16.7	0.3%	5,482.1	17.9	0.3%	5,480.9	19.1	0.3%
ME 3	38 57 12	2012	Below Normal	July	--	2,214.1	2,202.3	11.8	0.5%	2,201.2	13.0	0.6%	2,200.0	14.1	0.6%	2,198.7	15.4	0.7%	2,197.6	16.6	0.7%	2,196.4	17.7	0.8%
ME 3	38 57 12	2012	Below Normal	August	--	385.8	376.4	9.4	2.4%	375.5	10.3	2.7%	374.6	11.2	2.9%	373.7	12.1	3.1%	372.8	13.0	3.4%	371.9	13.9	3.6%
ME 3	38 57 12	2012	Below Normal	September	Used in Summary Table Analysis	245.6	237.4	8.2	3.3%	236.6	9.0	3.7%	235.8	9.8	4.0%	235.0	10.6	4.3%	234.2	11.4	4.7%	233.3	12.2	5.0%
ME 3	38 57 12	2013	Below Normal	October	Used in Summary Table Analysis	1,900.9	1,894.0	6.9	0.4%	1,893.3	7.6	0.4%	1,892.6	8.3	0.4%	1,891.9	9.0	0.5%	1,891.1	9.8	0.5%	1,890.4	10.5	0.6%
ME 3	38 57 12	2013	Below Normal	November	Used in Summary Table Analysis	14,623.8	14,618.1	5.8	0.0%	14,618.1	5.8	0.0%	14,616.9	6.9	0.0%	14,616.9	6.9	0.0%	14,615.7	8.1	0.1%	14,615.7	8.1	0.1%
ME 3	38 57 12	2013	Below Normal	December	--	59,854.2	59,849.5	4.6	0.0%	59,848.4	5.8	0.0%	59,848.4	5.8	0.0%	59,847.2	6.9	0.0%	59,847.2	6.9	0.0%	59,846.1	8.1	0.0%
ME 3	38 57 12	2013	Below Normal	January	--	22,160.9	22,156.3	4.6	0.0%	22,156.3	4.6	0.0%	22,156.3	4.6	0.0%	22,155.1	5.8	0.0%	22,155.1	5.8	0.0%	22,155.1	5.8	0.0%
ME 3	38 57 12	2013	Below Normal	February	--	8,826.5	8,822.5	4.1	0.0%	8,822.1	4.4	0.0%	8,821.6	4.9	0.1%	8,821.3	5.2	0.1%	8,820.8	5.7	0.1%	8,820.4	6.1	0.1%
ME 3	38 57 12	2013	Below Normal	March	--	10,301.3	10,297.2	4.1	0.0%	10,296.9	4.4	0.0%	10,296.4	4.9	0.0%	10,296.1	5.2	0.1%	10,295.7	5.6	0.1%	10,295.3	6.0	0.1%
ME 3	38 57 12	2013	Below Normal	April	--	8,282.4	8,274.4	8.0	0.1%	8,273.7	8.7	0.1%	8,272.9	9.5	0.1%	8,272.1	10.3	0.1%	8,271.3	11.1	0.1%	8,270.5	11.9	0.1%
ME 3	38 57 12	2013	Below Normal	May	--	4,419.4	4,410.0	9.5	0.2%	4,409.0	10.4	0.2%	4,408.0	11.5	0.3%	4,407.1	12.4	0.3%	4,406.1	13.3	0.3%	4,405.2	14.2	0.3%
ME 3	38 57 12	2013	Below Normal	June	--	2,106.5	2,095.1	11.3	0.5%	2,094.0	12.5	0.6%	2,092.8	13.7	0.6%	2,091.7	14.8	0.7%	2,090.5	16.0	0.8%	2,089.4	17.1	0.8%
ME 3	38 57 12	2013	Below Normal	July	--	716.4	705.5	10.9	1.5%	704.4	11.9	1.7%	703.3	13.0	1.8%	702.2	14.1	2.0%	701.2	15.2	2.1%	700.1	16.3	2.3%
ME 3	38 57 12	2013	Below Normal	August	--	337.3	327.3	10.0	3.0%	326.3	11.0	3.3%	325.3	12.0	3.6%	324.3	13.0	3.9%	323.3	14.0	4.2%	322.3	15.0	4.5%
ME 3	38 57 12	2013	Below Normal	September	Used in Summary Table Analysis	4,769.1	4,758.8	10.3	0.2%	4,757.8	11.3	0.2%	4,756.7	12.4	0.3%	4,755.7	13.4	0.3%	4,754.6	14.5	0.3%	4,753.6	15.5	0.3%
ME 3	38 57 12	2014	Critical	October	Used in Summary Table Analysis	280.5	273.2	7.3	2.6%	272.5	8.0	2.9%	271.8	8.8	3.1%	271.1	9.5	3.4%	270.3	10.2	3.6%	269.6	10.9	3.9%
ME 3	38 57 12	2014	Critical	November	Used in Summary Table Analysis	1,528.9	1,523.1	5.8	0.4%	1,522.6	6.4	0.4%	1,522.0	6.9	0.5%	1,521.4	7.5	0.5%	1,520.8	8.1	0.5%	1,520.3	8.7	0.6%
ME 3	38 57 12	2014	Critical	December	--	1,584.5	1,579.4	5.1	0.3%	1,578.8	5.7	0.4%	1,578.4	6.1	0.4%	1,577.9	6.6	0.4%	1,577.3	7.2	0.5%	1,576.9	7.6	0.5%
ME 3	38 57 12	2014	Critical	January	--	2,812.0	2,807.5	4.5	0.2%	2,807.1	5.0	0.2%	2,806.6	5.4	0.2%	2,806.1	5.9	0.2%	2,805.7	6.4	0.2%	2,805.2	6.8	0.2%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 57 12	2014	Critical	February	--	15,725.7	15,721.1	4.6	0.0%	15,721.1	4.6	0.0%	15,719.9	5.8	0.0%	15,719.9	5.8	0.0%	15,719.9	5.8	0.0%	15,718.8	6.9	0.0%
ME 3	38 57 12	2014	Critical	March	--	31,450.2	31,446.8	3.5	0.0%	31,445.6	4.6	0.0%	31,445.6	4.6	0.0%	31,445.6	4.6	0.0%	31,444.4	5.8	0.0%	31,444.4	5.8	0.0%
ME 3	38 57 12	2014	Critical	April	--	12,978.0	12,969.9	8.1	0.1%	12,968.8	9.3	0.1%	12,967.6	10.4	0.1%	12,967.6	10.4	0.1%	12,966.4	11.6	0.1%	12,965.3	12.7	0.1%
ME 3	38 57 12	2014	Critical	May	--	5,180.4	5,170.4	10.1	0.2%	5,169.3	11.1	0.2%	5,168.4	12.0	0.2%	5,167.4	13.1	0.3%	5,166.3	14.1	0.3%	5,165.3	15.2	0.3%
ME 3	38 57 12	2014	Critical	June	--	1,194.8	1,181.0	13.8	1.2%	1,179.6	15.2	1.3%	1,178.2	16.6	1.4%	1,176.9	17.9	1.5%	1,175.5	19.3	1.6%	1,174.1	20.7	1.7%
ME 3	38 57 12	2014	Critical	July	--	543.9	531.6	12.4	2.3%	530.3	13.6	2.5%	529.1	14.9	2.7%	527.9	16.1	3.0%	526.6	17.3	3.2%	525.4	18.5	3.4%
ME 3	38 57 12	2014	Critical	August	--	345.2	333.6	11.6	3.4%	332.4	12.8	3.7%	331.3	14.0	4.0%	330.1	15.1	4.4%	328.9	16.3	4.7%	327.8	17.5	5.1%
ME 3	38 57 12	2014	Critical	September	Used in Summary Table Analysis	2,565.3	2,553.9	11.3	0.4%	2,552.9	12.4	0.5%	2,551.7	13.5	0.5%	2,550.6	14.7	0.6%	2,549.4	15.9	0.6%	2,548.4	16.9	0.7%
ME 3	38 57 12	2015	Dry	October	Used in Summary Table Analysis	11,331.1	11,322.8	8.3	0.1%	11,322.0	9.1	0.1%	11,321.2	10.0	0.1%	11,319.7	11.5	0.1%	11,318.9	12.3	0.1%	11,317.9	13.2	0.1%
ME 3	38 57 12	2015	Dry	November	Used in Summary Table Analysis	9,007.5	9,001.0	6.5	0.1%	9,000.5	7.1	0.1%	8,999.8	7.8	0.1%	8,999.2	8.3	0.1%	8,998.5	9.0	0.1%	8,997.8	9.7	0.1%
ME 3	38 57 12	2015	Dry	December	--	32,498.8	32,494.2	4.6	0.0%	32,493.1	5.8	0.0%	32,493.1	5.8	0.0%	32,491.9	6.9	0.0%	32,491.9	6.9	0.0%	32,490.7	8.1	0.0%
ME 3	38 57 12	2015	Dry	January	--	14,560.2	14,555.6	4.6	0.0%	14,554.4	5.8	0.0%	14,554.4	5.8	0.0%	14,553.2	6.9	0.0%	14,553.2	6.9	0.0%	14,552.1	8.1	0.1%
ME 3	38 57 12	2015	Dry	February	--	27,187.5	27,184.0	3.5	0.0%	27,182.9	4.6	0.0%	27,182.9	4.6	0.0%	27,181.7	5.8	0.0%	27,181.7	5.8	0.0%	27,181.7	5.8	0.0%
ME 3	38 57 12	2015	Dry	March	--	11,560.1	11,556.1	3.9	0.0%	11,555.7	4.4	0.0%	11,555.3	4.7	0.0%	11,555.0	5.1	0.0%	11,554.5	5.6	0.0%	11,554.2	5.9	0.1%
ME 3	38 57 12	2015	Dry	April	--	8,356.1	8,347.8	8.3	0.1%	8,347.0	9.1	0.1%	8,346.2	10.0	0.1%	8,345.3	10.9	0.1%	8,344.4	11.7	0.1%	8,343.6	12.5	0.1%
ME 3	38 57 12	2015	Dry	May	--	1,508.4	1,498.5	10.0	0.7%	1,497.6	10.9	0.7%	1,496.5	11.9	0.8%	1,495.5	13.0	0.9%	1,494.6	13.9	0.9%	1,493.5	14.9	1.0%
ME 3	38 57 12	2015	Dry	June	--	651.0	638.3	12.7	2.0%	637.0	14.0	2.2%	635.7	15.3	2.3%	634.4	16.6	2.5%	633.2	17.8	2.7%	631.9	19.1	2.9%
ME 3	38 57 12	2015	Dry	July	--	266.9	254.7	12.1	4.5%	253.5	13.3	5.0%	252.3	14.5	5.5%	251.1	15.8	5.9%	249.9	17.0	6.4%	248.7	18.2	6.8%
ME 3	38 57 12	2015	Dry	August	--	163.9	152.3	11.6	7.1%	151.2	12.7	7.8%	150.0	13.9	8.5%	148.9	15.0	9.2%	147.7	16.2	9.9%	146.6	17.3	10.6%
ME 3	38 57 12	2015	Dry	September	Used in Summary Table Analysis	118.6	108.5	10.2	8.6%	107.5	11.2	9.4%	106.4	12.2	10.3%	105.4	13.2	11.2%	104.4	14.2	12.0%	103.4	15.3	12.9%
ME 3	38 57 12	2016	Above Normal	October	Used in Summary Table Analysis	84.2	75.6	8.6	10.2%	74.7	9.5	11.3%	73.8	10.3	12.3%	73.5	10.6	12.6%	72.8	11.3	13.4%	71.6	12.5	14.9%
ME 3	38 57 12	2016	Above Normal	November	Used in Summary Table Analysis	3,838.2	3,831.8	6.4	0.2%	3,831.1	7.1	0.2%	3,830.6	7.6	0.2%	3,829.9	8.3	0.2%	3,829.2	9.0	0.2%	3,828.5	9.7	0.3%
ME 3	38 57 12	2016	Above Normal	December	--	36,480.3	36,474.5	5.8	0.0%	36,474.5	5.8	0.0%	36,473.4	6.9	0.0%	36,473.4	6.9	0.0%	36,472.2	8.1	0.0%	36,472.2	8.1	0.0%
ME 3	38 57 12	2016	Above Normal	January	--	57,172.5	57,166.7	5.8	0.0%	57,166.7	5.8	0.0%	57,166.7	5.8	0.0%	57,165.5	6.9	0.0%	57,165.5	6.9	0.0%	57,164.4	8.1	0.0%
ME 3	38 57 12	2016	Above Normal	February	--	24,245.4	24,240.7	4.6	0.0%	24,240.7	4.6	0.0%	24,239.6	5.8	0.0%	24,239.6	5.8	0.0%	24,239.6	5.8	0.0%	24,238.4	6.9	0.0%
ME 3	38 57 12	2016	Above Normal	March	--	41,710.6	41,707.2	3.5	0.0%	41,706.0	4.6	0.0%	41,706.0	4.6	0.0%	41,704.9	5.8	0.0%	41,704.9	5.8	0.0%	41,704.9	5.8	0.0%
ME 3	38 57 12	2016	Above Normal	April	--	18,518.5	18,515.0	3.5	0.0%	18,515.0	3.5	0.0%	18,513.9	4.6	0.0%	18,513.9	4.6	0.0%	18,513.9	4.6	0.0%	18,512.7	5.8	0.0%
ME 3	38 57 12	2016	Above Normal	May	--	5,208.8	5,203.9	4.9	0.1%	5,203.5	5.3	0.1%	5,202.9	5.9	0.1%	5,202.4	6.4	0.1%	5,202.0	6.8	0.1%	5,201.4	7.4	0.1%
ME 3	38 57 12	2016	Above Normal	June	--	1,506.5	1,496.5	10.0	0.7%	1,495.6	10.9	0.7%	1,494.6	11.9	0.8%	1,493.5	13.0	0.9%	1,492.6	13.9	0.9%	1,491.6	14.9	1.0%
ME 3	38 57 12	2016	Above Normal	July	--	819.6	808.9	10.7	1.3%	807.8	11.8	1.4%	806.8	12.9	1.6%	805.7	13.9	1.7%	804.6	15.0	1.8%	803.6	16.1	2.0%
ME 3	38 57 12	2016	Above Normal	August	--	488.0	477.8	10.3	2.1%	476.7	11.3	2.3%	475.7	12.3	2.5%	474.7	13.4	2.7%	473.7	14.4	2.9%	472.6	15.4	3.2%
ME 3	38 57 12	2016	Above Normal	September	Used in Summary Table Analysis	324.6	315.7	9.0	2.8%	314.8	9.8	3.0%	313.9	10.8	3.3%	313.0	11.7	3.6%	312.1	12.6	3.9%	311.2	13.4	4.1%
ME 3	38 57 12	2017	Wet	October	Used in Summary Table Analysis	18,229.2	18,222.2	6.9	0.0%	18,221.1	8.1	0.0%	18,219.9	9.3	0.1%	18,219.9	9.3	0.1%	18,218.8	10.4	0.1%	18,217.6	11.6	0.1%
ME 3	38 57 12	2017	Wet	November	Used in Summary Table Analysis	18,762.7	18,756.9	5.8	0.0%	18,756.9	5.8	0.0%	18,755.8	6.9	0.0%	18,755.8	6.9	0.0%	18,754.6	8.1	0.0%	18,754.6	8.1	0.0%
ME 3	38 57 12	2017	Wet	December	--	24,016.2	24,011.6	4.6	0.0%	24,011.6	4.6	0.0%	24,010.4	5.8	0.0%	24,010.4	5.8	0.0%	24,010.4	5.8	0.0%	24,009.3	6.9	0.0%
ME 3	38 57 12	2017	Wet	January	--	106,619.2	106,614.6	4.6	0.0%	106,614.6	4.6	0.0%	106,614.6	4.6	0.0%	106,613.4	5.8	0.0%	106,613.4	5.8	0.0%	106,613.4	5.8	0.0%
ME 3	38 57 12	2017	Wet	February	--	81,673.6	81,669.0	4.6	0.0%	81,669.0	4.6	0.0%	81,667.8	5.8	0.0%	81,667.8	5.8	0.0%	81,666.7	6.9	0.0%	81,666.7	6.9	0.0%
ME 3	38 57 12	2017	Wet	March	--	27,223.4	27,218.8	4.6	0.0%	27,218.8	4.6	0.0%	27,218.8	4.6	0.0%	27,217.6	5.8	0.0%	27,217.6	5.8	0.0%	27,217.6	5.8	0.0%
ME 3	38 57 12	2017	Wet	April	--	22,880.8	22,877.3	3.5	0.0%	22,877.3	3.5	0.0%	22,877.3	3.5	0.0%	22,876.2	4.6	0.0%	22,876.2	4.6	0.0%	22,876.2	4.6	0.0%
ME 3	38 57 12	2017	Wet	May	--	6,271.3	6,266.2	5.1	0.1%	6,265.7	5.6	0.1%	6,265.3	6.0	0.1%	6,264.7	6.6	0.1%	6,264.1	7.2	0.1%	6,263.7	7.6	0.1%
ME 3	38 57 12	2017	Wet	June	--	2,109.0	2,098.8	10.2	0.5%	2,097.8	11.2	0.5%	2,096.8	12.3	0.6%	2,095.8	13.2	0.6%	2,094.8	14.2	0.7%	2,093.8	15.3	0.7%
ME 3	38 57 12	2017	Wet	July	--	929.5	918.7	10.9	1.2%	917.6	11.9	1.3%	916.5	13.0	1.4%	915.4	14.1	1.5%	914.3	15.2	1.6%	913.3	16.3	1.7%
ME 3	38 57 12	2017	Wet	August	--	501.7	491.4	10.3	2.1%	490.4	11.3	2.3%	489.3	12.4	2.5%	488.3	13.4	2.7%	487.3	14.4	2.9%	486.3	15.5	3.1%
ME 3	38 57 12	2017	Wet	September	Used in Summary Table Analysis	318.7	309.3	9.4	2.9%	308.3	10.3	3.2%	307.4	11.3	3.5%	306.4	12.2	3.8%	305.5	13.1	4.1%	304.6	14.1	4.4%
ME 3	38 57 12	2018	Above Normal	October	Used in Summary Table Analysis	271.5	265.0	6.4	2.4%	263.9	7.5	2.8%	263.1	8.4	3.1%	262.1	9.4	3.4%	261.3	10.2	3.8%	260.5	10.9	4.0%
ME 3	38 57 12	2018	Above Normal	November	Used in Summary Table Analysis	10,724.2	10,718.6	5.6	0.1%	10,718.1	6.1	0.1%	10,717.5	6.7	0.1%	10,716.9	7.3	0.1%	10,716.3	7.9	0.1%	10,715.9	8.3	0.1%
ME 3	38 57 12	2018	Above Normal	December	--	5,440.0	5,435.4	4.6	0.1%	5,435.0	5.1	0.1%	5,434.4	5.7	0.1%	5,433.9	6.1	0.1%	5,433.4	6.6	0.1%	5,433.0	7.1	0.1%
ME 3	38 57 12	2018	Above Normal	January	--	17,664.4	17,660.9	3.5	0.0%	17,659.7	4.6	0.0%	17,659.7	4.6	0.0%	17,659.7	4.6	0.0%	17,658.6	5.8	0.0%	17,658.6	5.8	0.0%
ME 3	38 57 12	2018	Above Normal	February	--	7,592.4	7,588.5	3.8	0.1%	7,588.2	4.2	0.1%	7,587.8	4.5	0.1%	7,587.4	5.0	0.1%	7,587.0	5.3	0.1%	7,586.7	5.7	0.1%
ME 3	38 57 12	2018	Above Normal	March	--	20,626.2	20,621.5	4.6	0.0%	20,621.5	4.6	0.0%	20,621.5	4.6	0.0%	20,621.5	4.6	0.0%	20,620.4	5.8	0.0%	20,620.4	5.8	0.0%
ME 3	38 57 12	2018	Above Normal	April	--	32,114.6	32,111.1	3.5	0.0%	32,110.0	4.6	0.0%	32,110.0	4.6	0.0%	32,110.0	4.6	0.0%	32,108.8	5.8	0.0%	32,108.8	5.8	0.0%
ME 3	38 57 12	2018	Above Normal	May	--	6,985.9	6,977.9	8.0	0.1%	6,977.1	8.8	0.1%	6,976.4	9.5	0.1%	6,975.6	10.3	0.1%	6,974.8	11.1	0.2%	6,974.0	11.9	0.2%
ME 3	38 57 12	2018	Above Normal	June	--	1,910.6	1,900.3	10.3	0.5%	1,899.3	11.3	0.6%	1,898.3	12.4	0.6%	1,897.2	13.4	0.7%	1,896.3	14.4	0.8%	1,895.3	15.4	0.8%
ME 3	38 57 12	2018	Above Normal	July	--	777.4	766.6	10.8	1.4%	765.6	11.9	1.5%	764.5	13.0	1.7%	763.4	14.0	1.8%	762.3	15.1	1.9%	761.2	16.2	2.1%
ME 3	38 57 12	2018	Above Normal	August	--	438.7	428.8	9.9	2.3%	427.8	10.9	2.5%	426.8	11.9	2.7%	425.8	12.8	2.9%	424.8	13.8	3.2%	423.9	14.8	3.4%
ME 3	38 57 12	2018	Above Normal	September	Used in Summary Table Analysis	296.4	287.1	9.4	3.2%	286.1	10.3	3.5%	285.2	11.3	3.8%	284.2	12.2	4.1%	283.3	13.2	4.4%	282.3	14.1	4.8%
ME 3	38 57 12	2019	Below Normal	October	Used in Summary Table Analysis	205.1	198.0	7.2	3.5%	197.2	7.9	3.9%	196.6	8.6	4.2%	195.8	9.3	4.6%	195.1	10.0	4.9%	194.4	10.7	5.2%
ME 3	38 57 12	2019	Below Normal	November	Used in Summary Table Analysis	6,579.3	6,573.7	5.6	0.1%	6,573.1	6.1	0.1%	6,572.6	6.7	0.1%	6,572.0	7.3	0.1%	6,571.4	7.9	0.1%	6,570.8	8.4	0.1%
ME 3	38 57 12	2019	Below Normal	December	--	14,590.3	14,585.6	4.6	0.0%	14,585.6	4.6	0.0%	14,584.5	5.8	0.0%	14,584.5	5.8	0.0%	14,584.5	5.8	0.0%	14,583.3	6.9	0.0%
ME 3	38 57 12	2019	Below Normal	January	--	35,068.3	35,063.7	4.6	0.0%	35,063.7	4.6	0.0%	35,063.7	4.6	0.0%	35,062.5	5.8	0.0%	35,062.5	5.8	0.0%	35,062.5	5.8	0.0%
ME 3	38 57 12	2019	Below Normal	February	--	141,759.3	141,759.3	0.0	0.0%	141,759.3	0.0	0.0%	141,759.3	0.0	0.0%	141,759.3	0.0	0.0%	141,759.3	0.0	0.0%	141,759.3	0.0	0.0%
ME 3	38 57 12	2019	Below Normal	March	--	42,237.3	42,233.8	3.5	0.0%	42,233.8	3.5	0.0%	42,233.8	3.5	0.0%	42,232.6	4.6	0.0%	42,232.6	4.6	0.0%	42,232.6	4.6	0.0%
ME 3	38 57 12	2019	Below Normal	April	--	15,250.0	15,246.5	3.5	0.0%	15,246.5	3.5	0.0%	15,245.4	4.6	0.0%	15,245.4	4.6	0.0%	15,245.4	4.6	0.0%	15,244.2	5.8	0.0%
ME 3	38 57 12	2019	Below Normal	May	--	16,825.2	16,817.1	8.1	0.0%	16,816.0	9.3	0.1%	16,814.8	10.4	0.1%	16,813.7	11.6	0.1%	16,813.7	11.6	0.1%	16,812.5	12.7	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 57 12	2019	Below Normal	June	--	4,243.2	4,232.2	11.0	0.3%	4,231.0	12.2	0.3%	4,229.9	13.3	0.3%	4,228.8	14.4	0.3%	4,227.7	15.5	0.4%	4,226.6	16.6	0.4%
ME 3	38 57 12	2019	Below Normal	July	--	1,356.3	1,345.4	10.9	0.8%	1,344.3	11.9	0.9%	1,343.2	13.1	1.0%	1,342.1	14.1	1.0%	1,341.1	15.2	1.1%	1,339.9	16.3	1.2%
ME 3	38 57 12	2019	Below Normal	August	--	591.8	581.6	10.2	1.7%	580.6	11.2	1.9%	579.6	12.2	2.1%	578.6	13.2	2.2%	577.5	14.2	2.4%	576.5	15.3	2.6%
ME 3	38 57 12	2019	Below Normal	September	Used in Summary Table Analysis	458.8	449.4	9.4	2.0%	448.5	10.3	2.2%	447.6	11.2	2.4%	446.6	12.2	2.6%	445.7	13.1	2.9%	444.8	14.0	3.1%
ME 3	38 57 12	2020	Dry	October	Used in Summary Table Analysis	353.0	346.2	6.8	1.9%	345.5	7.5	2.1%	344.8	8.2	2.3%	344.2	8.9	2.5%	343.5	9.6	2.7%	342.8	10.2	2.9%
ME 3	38 57 12	2020	Dry	November	Used in Summary Table Analysis	313.5	308.3	5.2	1.7%	307.7	5.8	1.8%	307.2	6.3	2.0%	306.7	6.8	2.2%	306.2	7.3	2.3%	305.6	7.9	2.5%
ME 3	38 57 12	2020	Dry	December	--	13,174.8	13,170.1	4.6	0.0%	13,169.0	5.8	0.0%	13,169.0	5.8	0.0%	13,169.0	5.8	0.0%	13,167.8	6.9	0.1%	13,167.8	6.9	0.1%
ME 3	38 57 12	2020	Dry	January	--	22,244.2	22,239.6	4.6	0.0%	22,238.4	5.8	0.0%	22,238.4	5.8	0.0%	22,238.4	5.8	0.0%	22,237.3	6.9	0.0%	22,237.3	6.9	0.0%
ME 3	38 57 12	2020	Dry	February	--	7,411.2	7,407.3	3.9	0.1%	7,406.9	4.3	0.1%	7,406.6	4.6	0.1%	7,406.1	5.1	0.1%	7,405.8	5.4	0.1%	7,405.3	5.9	0.1%
ME 3	38 57 12	2020	Dry	March	--	7,228.5	7,224.8	3.7	0.1%	7,224.3	4.2	0.1%	7,224.0	4.5	0.1%	7,223.6	4.9	0.1%	7,223.3	5.2	0.1%	7,222.8	5.7	0.1%
ME 3	38 57 12	2020	Dry	April	--	5,465.5	5,457.2	8.3	0.2%	5,456.4	9.1	0.2%	5,455.4	10.1	0.2%	5,454.6	10.9	0.2%	5,453.8	11.7	0.2%	5,453.0	12.5	0.2%
ME 3	38 57 12	2020	Dry	May	--	7,354.4	7,344.4	10.0	0.1%	7,343.5	10.9	0.1%	7,342.5	11.9	0.2%	7,341.6	12.8	0.2%	7,340.5	13.9	0.2%	7,339.5	14.9	0.2%
ME 3	38 57 12	2020	Dry	June	--	2,104.1	2,090.9	13.2	0.6%	2,089.6	14.5	0.7%	2,088.3	15.7	0.7%	2,086.9	17.1	0.8%	2,085.6	18.4	0.9%	2,084.4	19.7	0.9%
ME 3	38 57 12	2020	Dry	July	--	793.6	781.0	12.6	1.6%	779.8	13.8	1.7%	778.5	15.1	1.9%	777.3	16.3	2.1%	776.0	17.6	2.2%	774.8	18.8	2.4%
ME 3	38 57 12	2020	Dry	August	--	396.1	383.8	12.2	3.1%	382.6	13.4	3.4%	381.4	14.7	3.7%	380.2	15.9	4.0%	378.9	17.1	4.3%	377.7	18.3	4.6%
ME 3	38 57 12	2020	Dry	September	Used in Summary Table Analysis	245.6	234.8	10.7	4.4%	233.8	11.8	4.8%	232.7	12.9	5.2%	231.6	13.9	5.7%	230.6	15.0	6.1%	229.5	16.1	6.6%
ME 3	38 56 13	2000	Above Normal	October	Used in Summary Table Analysis	811.9	804.6	7.3	0.9%	803.9	8.0	1.0%	803.2	8.7	1.1%	802.4	9.4	1.2%	801.7	10.2	1.3%	801.0	10.9	1.3%
ME 3	38 56 13	2000	Above Normal	November	Used in Summary Table Analysis	12,046.3	12,040.5	5.8	0.0%	12,039.4	6.9	0.1%	12,038.2	8.1	0.1%	12,038.2	8.1	0.1%	12,037.0	9.3	0.1%	12,037.0	9.3	0.1%
ME 3	38 56 13	2000	Above Normal	December	--	10,771.9	10,767.0	4.9	0.0%	10,766.6	5.3	0.0%	10,766.1	5.8	0.1%	10,765.6	6.3	0.1%	10,765.0	6.8	0.1%	10,764.6	7.3	0.1%
ME 3	38 56 13	2000	Above Normal	January	--	28,453.7	28,449.1	4.6	0.0%	28,449.1	4.6	0.0%	28,447.9	5.8	0.0%	28,447.9	5.8	0.0%	28,446.8	6.9	0.0%	28,446.8	6.9	0.0%
ME 3	38 56 13	2000	Above Normal	February	--	36,961.8	36,957.2	4.6	0.0%	36,957.2	4.6	0.0%	36,956.0	5.8	0.0%	36,956.0	5.8	0.0%	36,956.0	5.8	0.0%	36,954.9	6.9	0.0%
ME 3	38 56 13	2000	Above Normal	March	--	18,290.5	18,287.0	3.5	0.0%	18,287.0	3.5	0.0%	18,287.0	3.5	0.0%	18,285.9	4.6	0.0%	18,285.9	4.6	0.0%	18,285.9	4.6	0.0%
ME 3	38 56 13	2000	Above Normal	April	--	12,295.1	12,291.7	3.5	0.0%	12,291.7	3.5	0.0%	12,290.5	4.6	0.0%	12,290.5	4.6	0.0%	12,290.5	4.6	0.0%	12,289.4	5.8	0.0%
ME 3	38 56 13	2000	Above Normal	May	--	7,078.7	7,070.4	8.3	0.1%	7,069.6	9.1	0.1%	7,068.8	10.0	0.1%	7,067.8	10.9	0.2%	7,067.0	11.7	0.2%	7,066.2	12.5	0.2%
ME 3	38 56 13	2000	Above Normal	June	--	2,604.9	2,592.5	12.4	0.5%	2,591.3	13.5	0.5%	2,590.0	14.8	0.6%	2,588.8	16.1	0.6%	2,587.6	17.2	0.7%	2,586.3	18.5	0.7%
ME 3	38 56 13	2000	Above Normal	July	--	988.6	977.6	10.9	1.1%	976.5	12.0	1.2%	975.5	13.1	1.3%	974.4	14.2	1.4%	973.3	15.3	1.5%	972.2	16.4	1.7%
ME 3	38 56 13	2000	Above Normal	August	--	518.5	508.4	10.2	2.0%	507.4	11.2	2.2%	506.4	12.2	2.3%	505.3	13.2	2.5%	504.3	14.2	2.7%	503.3	15.2	2.9%
ME 3	38 56 13	2000	Above Normal	September	Used in Summary Table Analysis	292.4	283.6	8.8	3.0%	282.7	9.7	3.3%	281.8	10.6	3.6%	280.9	11.5	3.9%	280.1	12.4	4.2%	279.2	13.3	4.5%
ME 3	38 56 13	2001	Dry	October	Used in Summary Table Analysis	3,798.5	3,791.3	7.2	0.2%	3,790.6	7.9	0.2%	3,789.8	8.7	0.2%	3,789.1	9.4	0.2%	3,788.4	10.1	0.3%	3,787.7	10.8	0.3%
ME 3	38 56 13	2001	Dry	November	Used in Summary Table Analysis	6,097.1	6,091.3	5.8	0.1%	6,090.7	6.4	0.1%	6,090.2	6.9	0.1%	6,089.6	7.5	0.1%	6,089.1	8.0	0.1%	6,088.5	8.6	0.1%
ME 3	38 56 13	2001	Dry	December	--	8,811.3	8,806.4	5.0	0.1%	8,805.9	5.4	0.1%	8,805.3	6.0	0.1%	8,804.9	6.5	0.1%	8,804.4	6.9	0.1%	8,803.8	7.5	0.1%
ME 3	38 56 13	2001	Dry	January	--	12,738.4	12,733.8	4.6	0.0%	12,733.8	4.6	0.0%	12,733.8	4.6	0.0%	12,732.6	5.8	0.0%	12,732.6	5.8	0.0%	12,731.5	6.9	0.1%
ME 3	38 56 13	2001	Dry	February	--	17,438.7	17,435.2	3.5	0.0%	17,434.0	4.6	0.0%	17,434.0	4.6	0.0%	17,434.0	4.6	0.0%	17,432.9	5.8	0.0%	17,432.9	5.8	0.0%
ME 3	38 56 13	2001	Dry	March	--	12,280.1	12,275.5	4.6	0.0%	12,275.5	4.6	0.0%	12,275.5	4.6	0.0%	12,274.3	5.8	0.0%	12,274.3	5.8	0.0%	12,274.3	5.8	0.0%
ME 3	38 56 13	2001	Dry	April	--	10,954.1	10,945.5	8.6	0.1%	10,944.6	9.5	0.1%	10,943.8	10.3	0.1%	10,942.9	11.1	0.1%	10,942.0	12.0	0.1%	10,941.2	12.8	0.1%
ME 3	38 56 13	2001	Dry	May	--	2,636.3	2,626.3	10.1	0.4%	2,625.2	11.1	0.4%	2,624.2	12.2	0.5%	2,623.3	13.1	0.5%	2,622.2	14.1	0.5%	2,621.3	15.0	0.6%
ME 3	38 56 13	2001	Dry	June	--	2,636.7	2,623.0	13.7	0.5%	2,621.6	15.0	0.6%	2,620.3	16.4	0.6%	2,618.9	17.8	0.7%	2,617.6	19.1	0.7%	2,616.2	20.5	0.8%
ME 3	38 56 13	2001	Dry	July	--	717.3	704.8	12.5	1.7%	703.5	13.8	1.9%	702.3	15.0	2.1%	701.0	16.3	2.3%	699.8	17.5	2.4%	698.5	18.8	2.6%
ME 3	38 56 13	2001	Dry	August	--	170.3	158.3	12.1	7.1%	157.0	13.3	7.8%	155.8	14.5	8.5%	154.6	15.7	9.2%	153.4	16.9	9.9%	152.2	18.1	10.6%
ME 3	38 56 13	2001	Dry	September	Used in Summary Table Analysis	93.1	82.5	10.6	11.4%	81.4	11.6	12.5%	80.4	12.7	13.6%	79.3	13.8	14.8%	78.3	14.8	15.9%	77.2	15.9	17.0%
ME 3	38 56 13	2002	Below Normal	October	Used in Summary Table Analysis	262.5	253.8	8.6	3.3%	253.0	9.5	3.6%	252.1	10.4	4.0%	251.2	11.3	4.3%	250.4	12.1	4.6%	249.5	13.0	4.9%
ME 3	38 56 13	2002	Below Normal	November	Used in Summary Table Analysis	11,989.6	11,983.8	5.8	0.0%	11,982.6	6.9	0.1%	11,981.5	8.1	0.1%	11,981.5	8.1	0.1%	11,980.3	9.3	0.1%	11,980.3	9.3	0.1%
ME 3	38 56 13	2002	Below Normal	December	--	35,572.9	35,567.1	5.8	0.0%	35,566.0	6.9	0.0%	35,566.0	6.9	0.0%	35,564.8	8.1	0.0%	35,564.8	8.1	0.0%	35,563.7	9.3	0.0%
ME 3	38 56 13	2002	Below Normal	January	--	30,806.7	30,802.1	4.6	0.0%	30,800.9	5.8	0.0%	30,800.9	5.8	0.0%	30,800.9	5.8	0.0%	30,799.8	6.9	0.0%	30,799.8	6.9	0.0%
ME 3	38 56 13	2002	Below Normal	February	--	24,635.4	24,629.6	5.8	0.0%	24,629.6	5.8	0.0%	24,629.6	5.8	0.0%	24,628.5	6.9	0.0%	24,628.5	6.9	0.0%	24,627.3	8.1	0.0%
ME 3	38 56 13	2002	Below Normal	March	--	17,746.5	17,741.9	4.6	0.0%	17,740.7	5.8	0.0%	17,740.7	5.8	0.0%	17,739.6	6.9	0.0%	17,739.6	6.9	0.0%	17,739.6	6.9	0.0%
ME 3	38 56 13	2002	Below Normal	April	--	9,911.9	9,903.5	8.4	0.1%	9,902.7	9.3	0.1%	9,901.7	10.2	0.1%	9,900.9	11.0	0.1%	9,900.0	11.9	0.1%	9,899.2	12.7	0.1%
ME 3	38 56 13	2002	Below Normal	May	--	3,314.5	3,304.5	10.0	0.3%	3,303.5	11.0	0.3%	3,302.5	11.9	0.4%	3,301.5	13.0	0.4%	3,300.5	14.0	0.4%	3,299.4	15.0	0.5%
ME 3	38 56 13	2002	Below Normal	June	--	851.6	840.3	11.3	1.3%	839.2	12.4	1.5%	838.0	13.5	1.6%	836.9	14.7	1.7%	835.8	15.8	1.9%	834.7	16.9	2.0%
ME 3	38 56 13	2002	Below Normal	July	--	360.1	348.9	11.2	3.1%	347.7	12.3	3.4%	346.6	13.5	3.7%	345.5	14.6	4.1%	344.4	15.7	4.4%	343.3	16.8	4.7%
ME 3	38 56 13	2002	Below Normal	August	--	224.4	214.0	10.4	4.6%	212.9	11.4	5.1%	211.9	12.5	5.6%	210.8	13.5	6.0%	209.8	14.6	6.5%	208.8	15.6	7.0%
ME 3	38 56 13	2002	Below Normal	September	Used in Summary Table Analysis	161.4	151.7	9.7	6.0%	150.7	10.7	6.6%	149.7	11.7	7.2%	148.8	12.6	7.8%	147.8	13.6	8.4%	146.8	14.6	9.0%
ME 3	38 56 13	2003	Wet	October	Used in Summary Table Analysis	126.5	118.8	7.8	6.1%	118.0	8.5	6.8%	117.2	9.3	7.4%	116.4	10.1	8.0%	115.6	10.9	8.6%	114.9	11.7	9.2%
ME 3	38 56 13	2003	Wet	November	Used in Summary Table Analysis	893.0	886.9	6.1	0.7%	886.3	6.8	0.8%	885.6	7.4	0.8%	885.0	8.0	0.9%	884.4	8.6	1.0%	883.8	9.2	1.0%
ME 3	38 56 13	2003	Wet	December	--	56,559.0	56,553.2	5.8	0.0%	56,553.2	5.8	0.0%	56,553.2	5.8	0.0%	56,552.1	6.9	0.0%	56,552.1	6.9	0.0%	56,550.9	8.1	0.0%
ME 3	38 56 13	2003	Wet	January	--	31,476.9	31,471.1	5.8	0.0%	31,471.1	5.8	0.0%	31,471.1	5.8	0.0%	31,469.9	6.9	0.0%	31,469.9	6.9	0.0%	31,468.8	8.1	0.0%
ME 3	38 56 13	2003	Wet	February	--	20,325.2	20,320.6	4.6	0.0%	20,319.4	5.8	0.0%	20,319.4	5.8	0.0%	20,319.4	5.8	0.0%	20,318.3	6.9	0.0%	20,318.3	6.9	0.0%
ME 3	38 56 13	2003	Wet	March	--	23,989.6	23,986.1	3.5	0.0%	23,985.0	4.6	0.0%	23,985.0	4.6	0.0%	23,983.8	5.8	0.0%	23,983.8	5.8	0.0%	23,983.8	5.8	0.0%
ME 3	38 56 13	2003	Wet	April	--	42,805.6	42,800.9	4.6	0.0%	42,800.9	4.6	0.0%	42,799.8	5.8	0.0%	42,799.8	5.8	0.0%	42,799.8	5.8	0.0%	42,798.6	6.9	0.0%
ME 3	38 56 13	2003	Wet	May	--	12,208.3	12,200.2	8.1	0.1%	12,199.1	9.3	0.1%	12,197.9	10.4	0.1%	12,197.9	10.4	0.1%	12,196.8	11.6	0.1%	12,195.6	12.7	0.1%
ME 3	38 56 13	2003	Wet	June	--	3,162.5	3,151.4	11.1	0.4%	3,150.3	12.2	0.4%	3,149.3	13.2	0.4%	3,148.1	14.4	0.5%	3,147.1	15.4	0.5%	3,146.1	16.4	0.5%
ME 3	38 56 13	2003	Wet	July	--	1,470.0	1,458.9	11.1	0.8%	1,457.8	12.3	0.8%	1,456.6	13.4	0.9%	1,455.6	14.5	1.0%	1,454.4	15.6	1.1%	1,453.2	16.8	1.1%
ME 3	38 56 13	2003	Wet	August	--	756.5	745.8	10.7	1.4%	744.8	11.7	1.5%	743.7	12.8	1.7%	742.6	13.9	1.8%	741.6	15.0	2.0%	740.5	16.1	2.1%
ME 3	38 56 13	2003	Wet	September	Used in Summary Table Analysis	454.8	445.8	9.0	2.0%	444.9	9.8	2.2%	444.0	10.8	2.4%	443.1	11.6	2.6%	442.2	12.5	2.8%	441.3	13.4	3.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 56 13	2004	Wet	October	Used in Summary Table Analysis	321.9	314.6	7.2	2.3%	313.9	8.0	2.5%	313.2	8.7	2.7%	312.4	9.4	2.9%	311.7	10.2	3.2%	311.0	10.9	3.4%
ME 3	38 56 13	2004	Wet	November	Used in Summary Table Analysis	5,775.0	5,769.2	5.8	0.1%	5,768.6	6.4	0.1%	5,768.1	6.9	0.1%	5,767.5	7.5	0.1%	5,766.9	8.1	0.1%	5,766.2	8.8	0.2%
ME 3	38 56 13	2004	Wet	December	--	36,186.3	36,181.7	4.6	0.0%	36,180.6	5.8	0.0%	36,180.6	5.8	0.0%	36,179.4	6.9	0.0%	36,179.4	6.9	0.0%	36,178.2	8.1	0.0%
ME 3	38 56 13	2004	Wet	January	--	31,387.7	31,383.1	4.6	0.0%	31,383.1	4.6	0.0%	31,383.1	4.6	0.0%	31,381.9	5.8	0.0%	31,381.9	5.8	0.0%	31,380.8	6.9	0.0%
ME 3	38 56 13	2004	Wet	February	--	38,153.9	38,150.5	3.5	0.0%	38,149.3	4.6	0.0%	38,149.3	4.6	0.0%	38,149.3	4.6	0.0%	38,148.1	5.8	0.0%	38,148.1	5.8	0.0%
ME 3	38 56 13	2004	Wet	March	--	16,508.1	16,504.6	3.5	0.0%	16,504.6	3.5	0.0%	16,503.5	4.6	0.0%	16,503.5	4.6	0.0%	16,503.5	4.6	0.0%	16,502.3	5.8	0.0%
ME 3	38 56 13	2004	Wet	April	--	9,439.0	9,435.3	3.7	0.0%	9,435.0	4.1	0.0%	9,434.6	4.4	0.0%	9,434.1	4.9	0.1%	9,433.8	5.2	0.1%	9,433.4	5.6	0.1%
ME 3	38 56 13	2004	Wet	May	--	3,410.8	3,402.4	8.3	0.2%	3,401.6	9.1	0.3%	3,400.8	10.0	0.3%	3,399.9	10.9	0.3%	3,399.1	11.7	0.3%	3,398.3	12.5	0.4%
ME 3	38 56 13	2004	Wet	June	--	689.7	679.2	10.5	1.5%	678.2	11.5	1.7%	677.1	12.5	1.8%	676.1	13.6	2.0%	675.1	14.6	2.1%	674.0	15.7	2.3%
ME 3	38 56 13	2004	Wet	July	--	353.2	342.3	11.0	3.1%	341.2	12.0	3.4%	340.1	13.1	3.7%	339.0	14.2	4.0%	337.9	15.3	4.3%	336.8	16.4	4.6%
ME 3	38 56 13	2004	Wet	August	--	222.5	212.3	10.2	4.6%	211.3	11.2	5.0%	210.3	12.2	5.5%	209.3	13.3	6.0%	208.3	14.3	6.4%	207.2	15.3	6.9%
ME 3	38 56 13	2004	Wet	September	Used in Summary Table Analysis	159.9	150.3	9.6	6.0%	149.4	10.5	6.6%	148.4	11.5	7.2%	147.5	12.4	7.8%	146.5	13.4	8.4%	145.5	14.4	9.0%
ME 3	38 56 13	2005	Above Normal	October	Used in Summary Table Analysis	7,646.1	7,638.7	7.4	0.1%	7,638.0	8.1	0.1%	7,637.2	8.9	0.1%	7,636.5	9.6	0.1%	7,635.6	10.4	0.1%	7,635.0	11.1	0.1%
ME 3	38 56 13	2005	Above Normal	November	Used in Summary Table Analysis	2,251.7	2,246.1	5.7	0.3%	2,245.5	6.3	0.3%	2,244.9	6.8	0.3%	2,244.3	7.4	0.3%	2,243.8	8.0	0.4%	2,243.2	8.6	0.4%
ME 3	38 56 13	2005	Above Normal	December	--	20,923.6	20,917.8	5.8	0.0%	20,917.8	5.8	0.0%	20,916.7	6.9	0.0%	20,916.7	6.9	0.0%	20,915.5	8.1	0.0%	20,915.5	8.1	0.0%
ME 3	38 56 13	2005	Above Normal	January	--	22,303.2	22,298.6	4.6	0.0%	22,298.6	4.6	0.0%	22,297.5	5.8	0.0%	22,297.5	5.8	0.0%	22,296.3	6.9	0.0%	22,296.3	6.9	0.0%
ME 3	38 56 13	2005	Above Normal	February	--	13,996.5	13,993.1	3.5	0.0%	13,991.9	4.6	0.0%	13,991.9	4.6	0.0%	13,990.7	5.8	0.0%	13,990.7	5.8	0.0%	13,990.7	5.8	0.0%
ME 3	38 56 13	2005	Above Normal	March	--	28,505.8	28,501.2	4.6	0.0%	28,501.2	4.6	0.0%	28,500.0	5.8	0.0%	28,500.0	5.8	0.0%	28,500.0	5.8	0.0%	28,498.8	6.9	0.0%
ME 3	38 56 13	2005	Above Normal	April	--	21,403.9	21,400.5	3.5	0.0%	21,400.5	3.5	0.0%	21,399.3	4.6	0.0%	21,399.3	4.6	0.0%	21,399.3	4.6	0.0%	21,398.1	5.8	0.0%
ME 3	38 56 13	2005	Above Normal	May	--	19,520.8	19,512.7	8.1	0.0%	19,511.6	9.3	0.0%	19,510.4	10.4	0.1%	19,510.4	10.4	0.1%	19,509.3	11.6	0.1%	19,508.1	12.7	0.1%
ME 3	38 56 13	2005	Above Normal	June	--	15,813.7	15,800.9	12.7	0.1%	15,799.8	13.9	0.1%	15,798.6	15.0	0.1%	15,797.5	16.2	0.1%	15,796.3	17.4	0.1%	15,794.0	19.7	0.1%
ME 3	38 56 13	2005	Above Normal	July	--	2,862.7	2,851.3	11.5	0.4%	2,850.1	12.6	0.4%	2,849.0	13.8	0.5%	2,847.9	14.8	0.5%	2,846.8	16.0	0.6%	2,845.6	17.1	0.6%
ME 3	38 56 13	2005	Above Normal	August	--	979.1	968.9	10.2	1.0%	967.9	11.2	1.1%	966.9	12.2	1.2%	965.9	13.2	1.4%	964.8	14.3	1.5%	963.8	15.3	1.6%
ME 3	38 56 13	2005	Above Normal	September	Used in Summary Table Analysis	520.9	512.1	8.9	1.7%	511.2	9.7	1.9%	510.3	10.6	2.0%	509.4	11.5	2.2%	508.5	12.4	2.4%	507.7	13.3	2.5%
ME 3	38 56 13	2006	Wet	October	Used in Summary Table Analysis	630.3	623.3	7.0	1.1%	622.6	7.7	1.2%	621.9	8.4	1.3%	621.2	9.1	1.5%	620.5	9.9	1.6%	619.8	10.6	1.7%
ME 3	38 56 13	2006	Wet	November	Used in Summary Table Analysis	9,258.4	9,252.9	5.6	0.1%	9,252.4	6.0	0.1%	9,251.9	6.6	0.1%	9,251.3	7.2	0.1%	9,250.7	7.8	0.1%	9,250.2	8.2	0.1%
ME 3	38 56 13	2006	Wet	December	--	43,342.6	43,338.0	4.6	0.0%	43,336.8	5.8	0.0%	43,336.8	5.8	0.0%	43,336.8	5.8	0.0%	43,335.6	6.9	0.0%	43,335.6	6.9	0.0%
ME 3	38 56 13	2006	Wet	January	--	46,156.3	46,151.6	4.6	0.0%	46,151.6	4.6	0.0%	46,150.5	5.8	0.0%	46,150.5	5.8	0.0%	46,150.5	5.8	0.0%	46,149.3	6.9	0.0%
ME 3	38 56 13	2006	Wet	February	--	26,557.9	26,553.2	4.6	0.0%	26,553.2	4.6	0.0%	26,553.2	4.6	0.0%	26,552.1	5.8	0.0%	26,552.1	5.8	0.0%	26,550.9	6.9	0.0%
ME 3	38 56 13	2006	Wet	March	--	47,046.3	47,042.8	3.5	0.0%	47,042.8	3.5	0.0%	47,041.7	4.6	0.0%	47,041.7	4.6	0.0%	47,041.7	4.6	0.0%	47,040.5	5.8	0.0%
ME 3	38 56 13	2006	Wet	April	--	30,383.1	30,379.6	3.5	0.0%	30,379.6	3.5	0.0%	30,379.6	3.5	0.0%	30,378.5	4.6	0.0%	30,378.5	4.6	0.0%	30,378.5	4.6	0.0%
ME 3	38 56 13	2006	Wet	May	--	14,180.6	14,175.9	4.6	0.0%	14,174.8	5.8	0.0%	14,174.8	5.8	0.0%	14,174.8	5.8	0.0%	14,173.6	6.9	0.0%	14,173.6	6.9	0.0%
ME 3	38 56 13	2006	Wet	June	--	3,543.9	3,533.3	10.5	0.3%	3,532.3	11.6	0.3%	3,531.3	12.6	0.4%	3,530.2	13.7	0.4%	3,529.2	14.7	0.4%	3,528.1	15.7	0.4%
ME 3	38 56 13	2006	Wet	July	--	1,274.5	1,263.7	10.9	0.9%	1,262.6	11.9	0.9%	1,261.6	13.0	1.0%	1,260.4	14.1	1.1%	1,259.4	15.2	1.2%	1,258.3	16.2	1.3%
ME 3	38 56 13	2006	Wet	August	--	660.9	650.6	10.4	1.6%	649.5	11.4	1.7%	648.5	12.5	1.9%	647.4	13.6	2.1%	646.3	14.6	2.2%	645.3	15.6	2.4%
ME 3	38 56 13	2006	Wet	September	Used in Summary Table Analysis	422.4	413.4	8.9	2.1%	412.5	9.8	2.3%	411.6	10.7	2.5%	410.7	11.6	2.8%	409.8	12.5	3.0%	408.9	13.4	3.2%
ME 3	38 56 13	2007	Above Normal	October	Used in Summary Table Analysis	271.3	264.2	7.2	2.6%	263.5	7.9	2.9%	262.7	8.6	3.2%	262.0	9.3	3.4%	261.3	10.0	3.7%	260.6	10.7	4.0%
ME 3	38 56 13	2007	Above Normal	November	Used in Summary Table Analysis	8,624.8	8,619.1	5.7	0.1%	8,618.5	6.3	0.1%	8,617.9	6.8	0.1%	8,617.4	7.4	0.1%	8,616.8	8.0	0.1%	8,616.2	8.6	0.1%
ME 3	38 56 13	2007	Above Normal	December	--	20,325.2	20,320.6	4.6	0.0%	20,319.4	5.8	0.0%	20,319.4	5.8	0.0%	20,319.4	5.8	0.0%	20,318.3	6.9	0.0%	20,318.3	6.9	0.0%
ME 3	38 56 13	2007	Above Normal	January	--	10,228.6	10,224.1	4.5	0.0%	10,223.6	5.0	0.0%	10,223.3	5.3	0.1%	10,222.8	5.8	0.1%	10,222.3	6.3	0.1%	10,221.9	6.7	0.1%
ME 3	38 56 13	2007	Above Normal	February	--	30,476.9	30,472.2	4.6	0.0%	30,471.1	5.8	0.0%	30,471.1	5.8	0.0%	30,471.1	5.8	0.0%	30,469.9	6.9	0.0%	30,469.9	6.9	0.0%
ME 3	38 56 13	2007	Above Normal	March	--	13,084.5	13,081.0	3.5	0.0%	13,079.9	4.6	0.0%	13,079.9	4.6	0.0%	13,079.9	4.6	0.0%	13,078.7	5.8	0.0%	13,078.7	5.8	0.0%
ME 3	38 56 13	2007	Above Normal	April	--	11,519.0	11,510.8	8.2	0.1%	11,510.0	9.0	0.1%	11,509.1	9.8	0.1%	11,508.3	10.6	0.1%	11,507.4	11.6	0.1%	11,506.6	12.4	0.1%
ME 3	38 56 13	2007	Above Normal	May	--	4,132.4	4,122.8	9.6	0.2%	4,121.8	10.6	0.3%	4,120.8	11.6	0.3%	4,119.8	12.6	0.3%	4,118.9	13.5	0.3%	4,117.9	14.5	0.4%
ME 3	38 56 13	2007	Above Normal	June	--	1,493.4	1,481.8	11.6	0.8%	1,480.6	12.8	0.9%	1,479.4	14.0	0.9%	1,478.2	15.2	1.0%	1,477.1	16.3	1.1%	1,475.9	17.5	1.2%
ME 3	38 56 13	2007	Above Normal	July	--	493.9	482.3	11.5	2.3%	481.2	12.7	2.6%	480.0	13.8	2.8%	478.9	15.0	3.0%	477.7	16.1	3.3%	476.6	17.3	3.5%
ME 3	38 56 13	2007	Above Normal	August	--	220.3	210.1	10.2	4.6%	209.1	11.3	5.1%	208.0	12.3	5.6%	207.0	13.3	6.0%	206.0	14.3	6.5%	205.0	15.3	7.0%
ME 3	38 56 13	2007	Above Normal	September	Used in Summary Table Analysis	148.1	138.5	9.6	6.5%	137.5	10.5	7.1%	136.6	11.5	7.7%	135.6	12.4	8.4%	134.7	13.4	9.0%	133.7	14.3	9.7%
ME 3	38 56 13	2008	Dry	October	Used in Summary Table Analysis	3,418.6	3,411.1	7.5	0.2%	3,410.4	8.2	0.2%	3,409.6	9.0	0.3%	3,408.8	9.8	0.3%	3,408.1	10.5	0.3%	3,407.3	11.3	0.3%
ME 3	38 56 13	2008	Dry	November	Used in Summary Table Analysis	3,260.5	3,254.7	5.8	0.2%	3,254.2	6.4	0.2%	3,253.6	6.9	0.2%	3,253.0	7.5	0.2%	3,252.4	8.1	0.2%	3,251.9	8.7	0.3%
ME 3	38 56 13	2008	Dry	December	--	23,016.2	23,010.4	5.8	0.0%	23,010.4	5.8	0.0%	23,010.4	5.8	0.0%	23,009.3	6.9	0.0%	23,009.3	6.9	0.0%	23,008.1	8.1	0.0%
ME 3	38 56 13	2008	Dry	January	--	37,425.9	37,421.3	4.6	0.0%	37,420.1	5.8	0.0%	37,420.1	5.8	0.0%	37,419.0	6.9	0.0%	37,419.0	6.9	0.0%	37,419.0	6.9	0.0%
ME 3	38 56 13	2008	Dry	February	--	26,245.4	26,240.7	4.6	0.0%	26,240.7	4.6	0.0%	26,239.6	5.8	0.0%	26,239.6	5.8	0.0%	26,239.6	5.8	0.0%	26,238.4	6.9	0.0%
ME 3	38 56 13	2008	Dry	March	--	11,782.4	11,777.8	4.6	0.0%	11,777.8	4.6	0.0%	11,777.8	4.6	0.0%	11,776.6	5.8	0.0%	11,776.6	5.8	0.0%	11,776.6	5.8	0.0%
ME 3	38 56 13	2008	Dry	April	--	9,007.1	8,998.7	8.3	0.1%	8,997.9	9.1	0.1%	8,997.1	10.0	0.1%	8,996.3	10.8	0.1%	8,995.4	11.7	0.1%	8,994.6	12.5	0.1%
ME 3	38 56 13	2008	Dry	May	--	1,360.2	1,351.3	8.9	0.7%	1,350.5	9.7	0.7%	1,349.5	10.6	0.8%	1,348.6	11.6	0.9%	1,347.8	12.4	0.9%	1,346.9	13.3	1.0%
ME 3	38 56 13	2008	Dry	June	--	435.5	422.7	12.7	2.9%	421.5	14.0	3.2%	420.2	15.3	3.5%	419.0	16.5	3.8%	417.7	17.8	4.1%	416.4	19.0	4.4%
ME 3	38 56 13	2008	Dry	July	--	253.9	241.7	12.2	4.8%	240.5	13.4	5.3%	239.3	14.7	5.8%	238.1	15.9	6.2%	236.9	17.1	6.7%	235.6	18.3	7.2%
ME 3	38 56 13	2008	Dry	August	--	177.3	165.6	11.7	6.6%	164.4	12.9	7.3%	163.2	14.1	7.9%	162.1	15.2	8.6%	160.9	16.4	9.2%	159.7	17.5	9.9%
ME 3	38 56 13	2008	Dry	September	Used in Summary Table Analysis	139.0	127.9	11.1	8.0%	126.8	12.2	8.8%	125.7	13.3	9.6%	124.6	14.5	10.4%	123.5	15.6	11.2%	122.4	16.7	12.0%
ME 3	38 56 13	2009	Critical	October	Used in Summary Table Analysis	921.1	912.5	8.5	0.9%	911.7	9.4	1.0%	910.8	10.3	1.1%	910.0	11.1	1.2%	909.1	12.0	1.3%	908.2	12.8	1.4%
ME 3	38 56 13	2009	Critical	November	Used in Summary Table Analysis	5,485.0	5,478.4	6.6	0.1%	5,477.7	7.3	0.1%	5,477.1	7.9	0.1%	5,476.4	8.6	0.2%	5,475.7	9.3	0.2%	5,475.1	9.8	0.2%
ME 3	38 56 13	2009	Critical	December	--	12,110.0	12,104.2	5.8	0.0%	12,103.0	6.9	0.1%	12,103.0	6.9	0.1%	12,101.9	8.1	0.1%	12,101.9	8.1	0.1%	12,100.7	9.3	0.1%
ME 3	38 56 13	2009	Critical	January	--	8,780.6	8,775.3	5.2	0.1%	8,774.8	5.8	0.1%	8,774.3	6.3	0.1%	8,773.7	6.8	0.1%	8,773.3	7.3	0.1%	8,772.7	7.9	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 56 13	2009	Critical	February	--	22,568.3	22,563.7	4.6	0.0%	22,563.7	4.6	0.0%	22,562.5	5.8	0.0%	22,562.5	5.8	0.0%	22,561.3	6.9	0.0%	22,561.3	6.9	0.0%
ME 3	38 56 13	2009	Critical	March	--	21,086.8	21,082.2	4.6	0.0%	21,082.2	4.6	0.0%	21,081.0	5.8	0.0%	21,081.0	5.8	0.0%	21,081.0	5.8	0.0%	21,079.9	6.9	0.0%
ME 3	38 56 13	2009	Critical	April	--	10,092.5	10,083.8	8.7	0.1%	10,083.0	9.5	0.1%	10,082.1	10.4	0.1%	10,081.4	11.1	0.1%	10,080.4	12.0	0.1%	10,079.5	13.0	0.1%
ME 3	38 56 13	2009	Critical	May	--	15,566.0	15,555.6	10.4	0.1%	15,554.4	11.6	0.1%	15,553.2	12.7	0.1%	15,552.1	13.9	0.1%	15,550.9	15.0	0.1%	15,549.8	16.2	0.1%
ME 3	38 56 13	2009	Critical	June	--	3,157.2	3,143.8	13.4	0.4%	3,142.4	14.8	0.5%	3,141.1	16.1	0.5%	3,139.7	17.5	0.6%	3,138.3	18.9	0.6%	3,137.0	20.1	0.6%
ME 3	38 56 13	2009	Critical	July	--	1,260.2	1,247.7	12.5	1.0%	1,246.5	13.7	1.1%	1,245.3	14.9	1.2%	1,244.0	16.2	1.3%	1,242.8	17.4	1.4%	1,241.6	18.6	1.5%
ME 3	38 56 13	2009	Critical	August	--	666.1	654.2	11.8	1.8%	653.1	13.0	1.9%	651.9	14.2	2.1%	650.7	15.3	2.3%	649.6	16.5	2.5%	648.4	17.7	2.7%
ME 3	38 56 13	2009	Critical	September	Used in Summary Table Analysis	387.6	377.3	10.3	2.7%	376.3	11.4	2.9%	375.2	12.4	3.2%	374.2	13.4	3.5%	373.2	14.5	3.7%	372.1	15.5	4.0%
ME 3	38 56 13	2010	Below Normal	October	Used in Summary Table Analysis	6,084.7	6,076.2	8.6	0.1%	6,075.2	9.5	0.2%	6,074.4	10.3	0.2%	6,073.5	11.2	0.2%	6,072.7	12.0	0.2%	6,071.8	13.0	0.2%
ME 3	38 56 13	2010	Below Normal	November	Used in Summary Table Analysis	8,272.6	8,265.9	6.7	0.1%	8,265.2	7.4	0.1%	8,264.5	8.1	0.1%	8,263.8	8.8	0.1%	8,263.1	9.5	0.1%	8,262.5	10.1	0.1%
ME 3	38 56 13	2010	Below Normal	December	--	12,319.4	12,313.7	5.8	0.0%	12,313.7	5.8	0.0%	12,312.5	6.9	0.1%	12,312.5	6.9	0.1%	12,311.3	8.1	0.1%	12,311.3	8.1	0.1%
ME 3	38 56 13	2010	Below Normal	January	--	36,118.1	36,112.3	5.8	0.0%	36,112.3	5.8	0.0%	36,111.1	6.9	0.0%	36,111.1	6.9	0.0%	36,110.0	8.1	0.0%	36,110.0	8.1	0.0%
ME 3	38 56 13	2010	Below Normal	February	--	27,211.8	27,207.2	4.6	0.0%	27,207.2	4.6	0.0%	27,206.0	5.8	0.0%	27,206.0	5.8	0.0%	27,206.0	5.8	0.0%	27,204.9	6.9	0.0%
ME 3	38 56 13	2010	Below Normal	March	--	28,809.0	28,804.4	4.6	0.0%	28,804.4	4.6	0.0%	28,803.2	5.8	0.0%	28,803.2	5.8	0.0%	28,802.1	6.9	0.0%	28,802.1	6.9	0.0%
ME 3	38 56 13	2010	Below Normal	April	--	39,961.8	39,957.2	4.6	0.0%	39,957.2	4.6	0.0%	39,957.2	4.6	0.0%	39,956.0	5.8	0.0%	39,956.0	5.8	0.0%	39,954.9	6.9	0.0%
ME 3	38 56 13	2010	Below Normal	May	--	20,228.0	20,218.8	9.3	0.0%	20,218.8	9.3	0.0%	20,217.6	10.4	0.1%	20,216.4	11.6	0.1%	20,215.3	12.7	0.1%	20,215.3	12.7	0.1%
ME 3	38 56 13	2010	Below Normal	June	--	9,318.1	9,305.0	13.1	0.1%	9,303.7	14.4	0.2%	9,302.4	15.6	0.2%	9,301.2	16.9	0.2%	9,299.9	18.2	0.2%	9,298.6	19.4	0.2%
ME 3	38 56 13	2010	Below Normal	July	--	1,451.7	1,440.3	11.5	0.8%	1,439.1	12.6	0.9%	1,438.0	13.8	0.9%	1,436.8	14.9	1.0%	1,435.6	16.1	1.1%	1,434.5	17.2	1.2%
ME 3	38 56 13	2010	Below Normal	August	--	565.2	554.7	10.5	1.9%	553.6	11.5	2.0%	552.6	12.6	2.2%	551.5	13.6	2.4%	550.6	14.6	2.6%	549.5	15.7	2.8%
ME 3	38 56 13	2010	Below Normal	September	Used in Summary Table Analysis	647.3	637.5	9.8	1.5%	636.6	10.8	1.7%	635.6	11.8	1.8%	634.6	12.8	2.0%	633.6	13.8	2.1%	632.6	14.7	2.3%
ME 3	38 56 13	2011	Wet	October	Used in Summary Table Analysis	9,609.8	9,602.5	7.3	0.1%	9,601.9	8.0	0.1%	9,601.0	8.8	0.1%	9,600.3	9.5	0.1%	9,599.7	10.2	0.1%	9,599.0	10.9	0.1%
ME 3	38 56 13	2011	Wet	November	Used in Summary Table Analysis	14,193.3	14,187.5	5.8	0.0%	14,187.5	5.8	0.0%	14,186.3	6.9	0.0%	14,186.3	6.9	0.0%	14,185.2	8.1	0.1%	14,185.2	8.1	0.1%
ME 3	38 56 13	2011	Wet	December	--	33,592.6	33,586.8	5.8	0.0%	33,586.8	5.8	0.0%	33,585.6	6.9	0.0%	33,585.6	6.9	0.0%	33,585.6	6.9	0.0%	33,584.5	8.1	0.0%
ME 3	38 56 13	2011	Wet	January	--	14,135.4	14,130.8	4.6	0.0%	14,130.8	4.6	0.0%	14,129.6	5.8	0.0%	14,129.6	5.8	0.0%	14,128.5	6.9	0.0%	14,128.5	6.9	0.0%
ME 3	38 56 13	2011	Wet	February	--	20,747.7	20,743.1	4.6	0.0%	20,743.1	4.6	0.0%	20,741.9	5.8	0.0%	20,741.9	5.8	0.0%	20,741.9	5.8	0.0%	20,740.7	6.9	0.0%
ME 3	38 56 13	2011	Wet	March	--	51,935.2	51,931.7	3.5	0.0%	51,930.6	4.6	0.0%	51,930.6	4.6	0.0%	51,930.6	4.6	0.0%	51,929.4	5.8	0.0%	51,929.4	5.8	0.0%
ME 3	38 56 13	2011	Wet	April	--	24,774.3	24,770.8	3.5	0.0%	24,770.8	3.5	0.0%	24,769.7	4.6	0.0%	24,769.7	4.6	0.0%	24,769.7	4.6	0.0%	24,768.5	5.8	0.0%
ME 3	38 56 13	2011	Wet	May	--	11,370.5	11,362.2	8.3	0.1%	11,361.2	9.3	0.1%	11,360.4	10.1	0.1%	11,359.6	10.9	0.1%	11,358.7	11.8	0.1%	11,357.8	12.7	0.1%
ME 3	38 56 13	2011	Wet	June	--	7,044.6	7,031.8	12.7	0.2%	7,030.6	14.0	0.2%	7,029.3	15.3	0.2%	7,028.0	16.6	0.2%	7,026.7	17.8	0.3%	7,025.5	19.1	0.3%
ME 3	38 56 13	2011	Wet	July	--	1,827.0	1,814.6	12.4	0.7%	1,813.3	13.7	0.7%	1,812.2	14.8	0.8%	1,810.9	16.1	0.9%	1,809.6	17.4	1.0%	1,808.4	18.5	1.0%
ME 3	38 56 13	2011	Wet	August	--	773.8	763.4	10.4	1.3%	762.4	11.4	1.5%	761.4	12.4	1.6%	760.3	13.5	1.7%	759.3	14.5	1.9%	758.3	15.5	2.0%
ME 3	38 56 13	2011	Wet	September	Used in Summary Table Analysis	430.5	421.2	9.3	2.2%	420.3	10.2	2.4%	419.4	11.1	2.6%	418.4	12.0	2.8%	417.5	13.0	3.0%	416.6	13.9	3.2%
ME 3	38 56 13	2012	Below Normal	October	Used in Summary Table Analysis	4,529.4	4,522.0	7.4	0.2%	4,521.3	8.1	0.2%	4,520.5	8.9	0.2%	4,519.8	9.6	0.2%	4,519.1	10.3	0.2%	4,518.3	11.1	0.2%
ME 3	38 56 13	2012	Below Normal	November	Used in Summary Table Analysis	8,213.5	8,207.6	5.9	0.1%	8,207.1	6.5	0.1%	8,206.5	7.1	0.1%	8,205.9	7.6	0.1%	8,205.3	8.2	0.1%	8,204.7	8.8	0.1%
ME 3	38 56 13	2012	Below Normal	December	--	5,172.5	5,167.4	5.1	0.1%	5,166.9	5.6	0.1%	5,166.4	6.0	0.1%	5,165.9	6.6	0.1%	5,165.4	7.1	0.1%	5,164.8	7.6	0.1%
ME 3	38 56 13	2012	Below Normal	January	--	20,045.1	20,040.5	4.6	0.0%	20,040.5	4.6	0.0%	20,040.5	4.6	0.0%	20,039.4	5.8	0.0%	20,039.4	5.8	0.0%	20,038.2	6.9	0.0%
ME 3	38 56 13	2012	Below Normal	February	--	18,193.3	18,188.7	4.6	0.0%	18,188.7	4.6	0.0%	18,187.5	5.8	0.0%	18,187.5	5.8	0.0%	18,186.3	6.9	0.0%	18,186.3	6.9	0.0%
ME 3	38 56 13	2012	Below Normal	March	--	45,342.6	45,339.1	3.5	0.0%	45,338.0	4.6	0.0%	45,338.0	4.6	0.0%	45,338.0	4.6	0.0%	45,336.8	5.8	0.0%	45,336.8	5.8	0.0%
ME 3	38 56 13	2012	Below Normal	April	--	26,828.7	26,825.2	3.5	0.0%	26,825.2	3.5	0.0%	26,824.1	4.6	0.0%	26,824.1	4.6	0.0%	26,822.9	5.8	0.0%	26,822.9	5.8	0.0%
ME 3	38 56 13	2012	Below Normal	May	--	7,475.0	7,466.6	8.4	0.1%	7,465.6	9.4	0.1%	7,464.8	10.2	0.1%	7,463.9	11.1	0.1%	7,463.2	11.8	0.2%	7,462.4	12.6	0.2%
ME 3	38 56 13	2012	Below Normal	June	--	5,503.9	5,491.0	13.0	0.2%	5,489.7	14.2	0.3%	5,488.3	15.6	0.3%	5,487.0	16.9	0.3%	5,485.8	18.2	0.3%	5,484.5	19.4	0.4%
ME 3	38 56 13	2012	Below Normal	July	--	2,216.4	2,204.5	11.9	0.5%	2,203.2	13.2	0.6%	2,202.1	14.4	0.6%	2,200.9	15.5	0.7%	2,199.8	16.7	0.8%	2,198.5	17.9	0.8%
ME 3	38 56 13	2012	Below Normal	August	--	386.2	376.7	9.5	2.5%	375.8	10.5	2.7%	374.8	11.4	2.9%	373.9	12.3	3.2%	373.0	13.3	3.4%	372.0	14.2	3.7%
ME 3	38 56 13	2012	Below Normal	September	Used in Summary Table Analysis	246.3	238.0	8.3	3.4%	237.2	9.1	3.7%	236.3	10.0	4.1%	235.5	10.8	4.4%	234.7	11.6	4.7%	233.9	12.5	5.1%
ME 3	38 56 13	2013	Below Normal	October	Used in Summary Table Analysis	1,903.9	1,896.8	7.2	0.4%	1,896.1	7.9	0.4%	1,895.4	8.6	0.4%	1,894.7	9.3	0.5%	1,893.9	10.1	0.5%	1,893.2	10.8	0.6%
ME 3	38 56 13	2013	Below Normal	November	Used in Summary Table Analysis	14,641.2	14,635.4	5.8	0.0%	14,634.3	6.9	0.0%	14,634.3	6.9	0.0%	14,633.1	8.1	0.1%	14,633.1	8.1	0.1%	14,631.9	9.3	0.1%
ME 3	38 56 13	2013	Below Normal	December	--	59,892.4	59,886.6	5.8	0.0%	59,885.4	6.9	0.0%	59,885.4	6.9	0.0%	59,885.4	6.9	0.0%	59,884.3	8.1	0.0%	59,884.3	8.1	0.0%
ME 3	38 56 13	2013	Below Normal	January	--	22,171.3	22,166.7	4.6	0.0%	22,166.7	4.6	0.0%	22,165.5	5.8	0.0%	22,165.5	5.8	0.0%	22,164.4	6.9	0.0%	22,164.4	6.9	0.0%
ME 3	38 56 13	2013	Below Normal	February	--	8,831.1	8,827.0	4.2	0.0%	8,826.5	4.6	0.1%	8,826.0	5.1	0.1%	8,825.7	5.4	0.1%	8,825.2	5.9	0.1%	8,824.8	6.4	0.1%
ME 3	38 56 13	2013	Below Normal	March	--	10,308.7	10,304.6	4.1	0.0%	10,304.2	4.5	0.0%	10,303.8	4.9	0.0%	10,303.4	5.3	0.1%	10,303.0	5.7	0.1%	10,302.5	6.1	0.1%
ME 3	38 56 13	2013	Below Normal	April	--	8,284.3	8,276.3	8.0	0.1%	8,275.5	8.8	0.1%	8,274.7	9.6	0.1%	8,273.8	10.4	0.1%	8,273.0	11.2	0.1%	8,272.2	12.0	0.1%
ME 3	38 56 13	2013	Below Normal	May	--	4,422.2	4,412.5	9.7	0.2%	4,411.6	10.6	0.2%	4,410.5	11.7	0.3%	4,409.6	12.6	0.3%	4,408.6	13.7	0.3%	4,407.6	14.6	0.3%
ME 3	38 56 13	2013	Below Normal	June	--	2,107.3	2,095.7	11.6	0.5%	2,094.6	12.7	0.6%	2,093.4	13.9	0.7%	2,092.2	15.0	0.7%	2,091.1	16.2	0.8%	2,089.9	17.4	0.8%
ME 3	38 56 13	2013	Below Normal	July	--	716.7	705.6	11.0	1.5%	704.5	12.1	1.7%	703.4	13.3	1.8%	702.3	14.3	2.0%	701.2	15.4	2.2%	700.1	16.5	2.3%
ME 3	38 56 13	2013	Below Normal	August	--	337.9	327.7	10.2	3.0%	326.7	11.2	3.3%	325.7	12.2	3.6%	324.7	13.3	3.9%	323.7	14.3	4.2%	322.7	15.3	4.5%
ME 3	38 56 13	2013	Below Normal	September	Used in Summary Table Analysis	4,773.8	4,763.3	10.5	0.2%	4,762.3	11.6	0.2%	4,761.2	12.6	0.3%	4,760.2	13.7	0.3%	4,759.1	14.7	0.3%	4,758.1	15.7	0.3%
ME 3	38 56 13	2014	Critical	October	Used in Summary Table Analysis	280.6	273.1	7.5	2.7%	272.4	8.2	2.9%	271.6	9.0	3.2%	270.9	9.7	3.5%	270.1	10.5	3.7%	269.4	11.2	4.0%
ME 3	38 56 13	2014	Critical	November	Used in Summary Table Analysis	1,531.5	1,525.6	5.9	0.4%	1,524.9	6.6	0.4%	1,524.3	7.2	0.5%	1,523.7	7.8	0.5%	1,523.1	8.3	0.5%	1,522.6	8.9	0.6%
ME 3	38 56 13	2014	Critical	December	--	1,586.0	1,580.7	5.3	0.3%	1,580.2	5.8	0.4%	1,579.6	6.4	0.4%	1,579.2	6.8	0.4%	1,578.6	7.4	0.5%	1,578.1	7.9	0.5%
ME 3	38 56 13	2014	Critical	January	--	2,814.7	2,810.0	4.7	0.2%	2,809.5	5.2	0.2%	2,809.0	5.7	0.2%	2,808.6	6.1	0.2%	2,808.1	6.6	0.2%	2,807.6	7.1	0.3%
ME 3	38 56 13	2014	Critical	February	--	15,732.6	15,729.2	3.5	0.0%	15,728.0	4.6	0.0%	15,728.0	4.6	0.0%	15,726.9	5.8	0.0%	15,726.9	5.8	0.0%	15,726.9	5.8	0.0%
ME 3	38 56 13	2014	Critical	March	--	31,459.5	31,456.0	3.5	0.0%	31,454.9	4.6	0.0%	31,454.9	4.6	0.0%	31,454.9	4.6	0.0%	31,453.7	5.8	0.0%	31,453.7	5.8	0.0%
ME 3	38 56 13	2014	Critical	April	--	12,980.3	12,972.2	8.1	0.1%	12,971.1	9.3	0.1%	12,969.9	10.4	0.1%	12,969.9	10.4	0.1%	12,968.8	11.6	0.1%	12,967.6	12.7	0.1%
ME 3	38 56 13	2014	Critical	May	--	5,182.2	5,171.9	10.3	0.2%	5,170.8	11.3	0.2%	5,169.9	12.3	0.2%	5,168.9	13.3	0.3%	5,167.8	14.4	0.3%	5,166.8	15.4	0.3%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 56 13	2014	Critical	June	--	1,195.4	1,181.4	14.0	1.2%	1,180.0	15.4	1.3%	1,178.6	16.8	1.4%	1,177.2	18.2	1.5%	1,175.8	19.6	1.6%	1,174.4	20.9	1.8%
ME 3	38 56 13	2014	Critical	July	--	544.4	531.8	12.6	2.3%	530.5	13.9	2.5%	529.3	15.1	2.8%	528.0	16.4	3.0%	526.8	17.6	3.2%	525.5	18.8	3.5%
ME 3	38 56 13	2014	Critical	August	--	345.9	334.1	11.9	3.4%	332.9	13.0	3.8%	331.7	14.2	4.1%	330.6	15.4	4.4%	329.4	16.6	4.8%	328.2	17.8	5.1%
ME 3	38 56 13	2014	Critical	September	Used in Summary Table Analysis	2,567.6	2,556.1	11.5	0.4%	2,555.0	12.6	0.5%	2,553.8	13.8	0.5%	2,552.7	14.9	0.6%	2,551.5	16.1	0.6%	2,550.3	17.2	0.7%
ME 3	38 56 13	2015	Dry	October	Used in Summary Table Analysis	11,339.7	11,331.1	8.6	0.1%	11,330.3	9.4	0.1%	11,329.5	10.2	0.1%	11,328.0	11.7	0.1%	11,327.1	12.6	0.1%	11,326.3	13.4	0.1%
ME 3	38 56 13	2015	Dry	November	Used in Summary Table Analysis	9,016.2	9,009.6	6.6	0.1%	9,009.0	7.2	0.1%	9,008.3	7.9	0.1%	9,007.6	8.6	0.1%	9,007.1	9.1	0.1%	9,006.4	9.8	0.1%
ME 3	38 56 13	2015	Dry	December	--	32,532.4	32,526.6	5.8	0.0%	32,526.6	5.8	0.0%	32,525.5	6.9	0.0%	32,525.5	6.9	0.0%	32,524.3	8.1	0.0%	32,524.3	8.1	0.0%
ME 3	38 56 13	2015	Dry	January	--	14,564.8	14,559.0	5.8	0.0%	14,559.0	5.8	0.0%	14,557.9	6.9	0.0%	14,557.9	6.9	0.0%	14,556.7	8.1	0.1%	14,556.7	8.1	0.1%
ME 3	38 56 13	2015	Dry	February	--	27,200.2	27,195.6	4.6	0.0%	27,195.6	4.6	0.0%	27,195.6	4.6	0.0%	27,194.4	5.8	0.0%	27,194.4	5.8	0.0%	27,193.3	6.9	0.0%
ME 3	38 56 13	2015	Dry	March	--	11,562.5	11,558.4	4.1	0.0%	11,558.0	4.5	0.0%	11,557.6	4.9	0.0%	11,557.2	5.3	0.0%	11,556.8	5.7	0.0%	11,556.4	6.1	0.1%
ME 3	38 56 13	2015	Dry	April	--	8,364.4	8,355.9	8.4	0.1%	8,355.1	9.3	0.1%	8,354.2	10.2	0.1%	8,353.4	11.0	0.1%	8,352.4	11.9	0.1%	8,351.6	12.7	0.2%
ME 3	38 56 13	2015	Dry	May	--	1,508.2	1,498.1	10.1	0.7%	1,497.2	11.0	0.7%	1,496.2	12.0	0.8%	1,495.1	13.1	0.9%	1,494.2	14.0	0.9%	1,493.2	15.0	1.0%
ME 3	38 56 13	2015	Dry	June	--	651.3	638.4	12.9	2.0%	637.1	14.2	2.2%	635.8	15.5	2.4%	634.5	16.8	2.6%	633.2	18.0	2.8%	631.9	19.3	3.0%
ME 3	38 56 13	2015	Dry	July	--	267.3	255.0	12.3	4.6%	253.8	13.5	5.1%	252.5	14.8	5.5%	251.3	16.0	6.0%	250.1	17.2	6.4%	248.8	18.4	6.9%
ME 3	38 56 13	2015	Dry	August	--	164.6	152.8	11.8	7.1%	151.6	12.9	7.9%	150.5	14.1	8.6%	149.3	15.3	9.3%	148.1	16.4	10.0%	146.9	17.6	10.7%
ME 3	38 56 13	2015	Dry	September	Used in Summary Table Analysis	119.2	108.9	10.4	8.7%	107.9	11.4	9.5%	106.8	12.4	10.4%	105.8	13.5	11.3%	104.7	14.5	12.2%	103.7	15.5	13.0%
ME 3	38 56 13	2016	Above Normal	October	Used in Summary Table Analysis	84.7	76.0	8.7	10.3%	75.1	9.6	11.4%	74.2	10.5	12.4%	73.9	10.8	12.8%	73.2	11.5	13.6%	72.0	12.8	15.1%
ME 3	38 56 13	2016	Above Normal	November	Used in Summary Table Analysis	3,846.2	3,839.6	6.6	0.2%	3,838.9	7.3	0.2%	3,838.3	7.9	0.2%	3,837.6	8.6	0.2%	3,836.9	9.3	0.2%	3,836.2	10.0	0.3%
ME 3	38 56 13	2016	Above Normal	December	--	36,519.7	36,513.9	5.8	0.0%	36,513.9	5.8	0.0%	36,512.7	6.9	0.0%	36,512.7	6.9	0.0%	36,511.6	8.1	0.0%	36,511.6	8.1	0.0%
ME 3	38 56 13	2016	Above Normal	January	--	57,213.0	57,207.2	5.8	0.0%	57,207.2	5.8	0.0%	57,206.0	6.9	0.0%	57,206.0	6.9	0.0%	57,204.9	8.1	0.0%	57,204.9	8.1	0.0%
ME 3	38 56 13	2016	Above Normal	February	--	24,251.2	24,246.5	4.6	0.0%	24,245.4	5.8	0.0%	24,245.4	5.8	0.0%	24,245.4	5.8	0.0%	24,244.2	6.9	0.0%	24,244.2	6.9	0.0%
ME 3	38 56 13	2016	Above Normal	March	--	41,729.2	41,724.5	4.6	0.0%	41,724.5	4.6	0.0%	41,723.4	5.8	0.0%	41,723.4	5.8	0.0%	41,723.4	5.8	0.0%	41,722.2	6.9	0.0%
ME 3	38 56 13	2016	Above Normal	April	--	18,523.1	18,519.7	3.5	0.0%	18,518.5	4.6	0.0%	18,518.5	4.6	0.0%	18,518.5	4.6	0.0%	18,517.4	5.8	0.0%	18,517.4	5.8	0.0%
ME 3	38 56 13	2016	Above Normal	May	--	5,210.0	5,205.0	5.0	0.1%	5,204.4	5.6	0.1%	5,203.9	6.0	0.1%	5,203.5	6.5	0.1%	5,202.9	7.1	0.1%	5,202.4	7.5	0.1%
ME 3	38 56 13	2016	Above Normal	June	--	1,506.8	1,496.8	10.1	0.7%	1,495.7	11.1	0.7%	1,494.7	12.2	0.8%	1,493.8	13.1	0.9%	1,492.7	14.1	0.9%	1,491.7	15.2	1.0%
ME 3	38 56 13	2016	Above Normal	July	--	820.2	809.3	10.9	1.3%	808.2	12.0	1.5%	807.2	13.1	1.6%	806.1	14.2	1.7%	805.0	15.3	1.9%	803.9	16.3	2.0%
ME 3	38 56 13	2016	Above Normal	August	--	488.8	478.3	10.5	2.1%	477.3	11.5	2.4%	476.3	12.5	2.6%	475.2	13.6	2.8%	474.2	14.6	3.0%	473.1	15.7	3.2%
ME 3	38 56 13	2016	Above Normal	September	Used in Summary Table Analysis	325.4	316.3	9.1	2.8%	315.3	10.1	3.1%	314.4	11.0	3.4%	313.5	11.9	3.7%	312.6	12.8	3.9%	311.7	13.7	4.2%
ME 3	38 56 13	2017	Wet	October	Used in Summary Table Analysis	18,244.2	18,237.3	6.9	0.0%	18,236.1	8.1	0.0%	18,236.1	8.1	0.0%	18,235.0	9.3	0.1%	18,233.8	10.4	0.1%	18,233.8	10.4	0.1%
ME 3	38 56 13	2017	Wet	November	Used in Summary Table Analysis	18,780.1	18,774.3	5.8	0.0%	18,773.1	6.9	0.0%	18,773.1	6.9	0.0%	18,772.0	8.1	0.0%	18,772.0	8.1	0.0%	18,770.8	9.3	0.0%
ME 3	38 56 13	2017	Wet	December	--	24,042.8	24,038.2	4.6	0.0%	24,037.0	5.8	0.0%	24,037.0	5.8	0.0%	24,035.9	6.9	0.0%	24,035.9	6.9	0.0%	24,034.7	8.1	0.0%
ME 3	38 56 13	2017	Wet	January	--	106,696.8	106,692.1	4.6	0.0%	106,691.0	5.8	0.0%	106,691.0	5.8	0.0%	106,691.0	5.8	0.0%	106,689.8	6.9	0.0%	106,689.8	6.9	0.0%
ME 3	38 56 13	2017	Wet	February	--	81,717.6	81,713.0	4.6	0.0%	81,713.0	4.6	0.0%	81,711.8	5.8	0.0%	81,711.8	5.8	0.0%	81,711.8	5.8	0.0%	81,710.6	6.9	0.0%
ME 3	38 56 13	2017	Wet	March	--	27,236.1	27,231.5	4.6	0.0%	27,231.5	4.6	0.0%	27,230.3	5.8	0.0%	27,230.3	5.8	0.0%	27,230.3	5.8	0.0%	27,229.2	6.9	0.0%
ME 3	38 56 13	2017	Wet	April	--	22,895.8	22,891.2	4.6	0.0%	22,891.2	4.6	0.0%	22,891.2	4.6	0.0%	22,890.0	5.8	0.0%	22,890.0	5.8	0.0%	22,890.0	5.8	0.0%
ME 3	38 56 13	2017	Wet	May	--	6,270.7	6,265.6	5.1	0.1%	6,265.0	5.7	0.1%	6,264.6	6.1	0.1%	6,264.0	6.7	0.1%	6,263.4	7.3	0.1%	6,263.0	7.8	0.1%
ME 3	38 56 13	2017	Wet	June	--	2,110.3	2,100.0	10.3	0.5%	2,099.1	11.2	0.5%	2,098.0	12.3	0.6%	2,097.0	13.3	0.6%	2,095.9	14.4	0.7%	2,094.9	15.4	0.7%
ME 3	38 56 13	2017	Wet	July	--	930.3	919.3	11.0	1.2%	918.2	12.1	1.3%	917.1	13.2	1.4%	916.0	14.3	1.5%	914.9	15.4	1.7%	913.8	16.5	1.8%
ME 3	38 56 13	2017	Wet	August	--	502.7	492.1	10.5	2.1%	491.1	11.6	2.3%	490.0	12.6	2.5%	489.0	13.7	2.7%	488.0	14.7	2.9%	486.9	15.8	3.1%
ME 3	38 56 13	2017	Wet	September	Used in Summary Table Analysis	319.5	309.9	9.6	3.0%	309.0	10.5	3.3%	308.0	11.5	3.6%	307.1	12.5	3.9%	306.1	13.4	4.2%	305.2	14.4	4.5%
ME 3	38 56 13	2018	Above Normal	October	Used in Summary Table Analysis	272.4	265.8	6.6	2.4%	264.7	7.7	2.8%	263.8	8.6	3.1%	262.8	9.6	3.5%	261.9	10.4	3.8%	261.2	11.2	4.1%
ME 3	38 56 13	2018	Above Normal	November	Used in Summary Table Analysis	10,742.0	10,736.2	5.8	0.1%	10,735.8	6.3	0.1%	10,735.2	6.8	0.1%	10,734.6	7.4	0.1%	10,734.0	8.0	0.1%	10,733.4	8.6	0.1%
ME 3	38 56 13	2018	Above Normal	December	--	5,441.3	5,436.6	4.7	0.1%	5,436.0	5.3	0.1%	5,435.5	5.8	0.1%	5,435.1	6.3	0.1%	5,434.6	6.7	0.1%	5,434.0	7.3	0.1%
ME 3	38 56 13	2018	Above Normal	January	--	17,695.6	17,691.0	4.6	0.0%	17,691.0	4.6	0.0%	17,689.8	5.8	0.0%	17,689.8	5.8	0.0%	17,688.7	6.9	0.0%	17,688.7	6.9	0.0%
ME 3	38 56 13	2018	Above Normal	February	--	7,593.3	7,589.4	3.9	0.1%	7,589.0	4.3	0.1%	7,588.5	4.7	0.1%	7,588.2	5.1	0.1%	7,587.8	5.4	0.1%	7,587.4	5.9	0.1%
ME 3	38 56 13	2018	Above Normal	March	--	20,644.7	20,641.2	3.5	0.0%	20,641.2	3.5	0.0%	20,640.0	4.6	0.0%	20,640.0	4.6	0.0%	20,640.0	4.6	0.0%	20,638.9	5.8	0.0%
ME 3	38 56 13	2018	Above Normal	April	--	32,136.6	32,133.1	3.5	0.0%	32,133.1	3.5	0.0%	32,131.9	4.6	0.0%	32,131.9	4.6	0.0%	32,131.9	4.6	0.0%	32,130.8	5.8	0.0%
ME 3	38 56 13	2018	Above Normal	May	--	6,985.9	6,977.8	8.1	0.1%	6,977.0	8.9	0.1%	6,976.2	9.7	0.1%	6,975.3	10.5	0.2%	6,974.5	11.3	0.2%	6,973.7	12.2	0.2%
ME 3	38 56 13	2018	Above Normal	June	--	1,911.0	1,900.6	10.4	0.5%	1,899.5	11.5	0.6%	1,898.5	12.5	0.7%	1,897.5	13.5	0.7%	1,896.4	14.6	0.8%	1,895.5	15.5	0.8%
ME 3	38 56 13	2018	Above Normal	July	--	778.2	767.2	11.0	1.4%	766.1	12.1	1.6%	765.0	13.2	1.7%	763.9	14.3	1.8%	762.8	15.4	2.0%	761.7	16.5	2.1%
ME 3	38 56 13	2018	Above Normal	August	--	439.5	429.5	10.1	2.3%	428.5	11.1	2.5%	427.5	12.1	2.7%	426.5	13.1	3.0%	425.4	14.1	3.2%	424.4	15.1	3.4%
ME 3	38 56 13	2018	Above Normal	September	Used in Summary Table Analysis	297.3	287.7	9.6	3.2%	286.8	10.5	3.5%	285.8	11.5	3.9%	284.9	12.4	4.2%	283.9	13.4	4.5%	282.9	14.4	4.8%
ME 3	38 56 13	2019	Below Normal	October	Used in Summary Table Analysis	205.8	198.5	7.3	3.6%	197.8	8.1	3.9%	197.1	8.8	4.3%	196.3	9.5	4.6%	195.6	10.2	5.0%	194.9	10.9	5.3%
ME 3	38 56 13	2019	Below Normal	November	Used in Summary Table Analysis	6,591.1	6,585.3	5.8	0.1%	6,584.7	6.4	0.1%	6,584.1	6.9	0.1%	6,583.6	7.5	0.1%	6,583.0	8.1	0.1%	6,582.4	8.7	0.1%
ME 3	38 56 13	2019	Below Normal	December	--	14,611.1	14,605.3	5.8	0.0%	14,605.3	5.8	0.0%	14,604.2	6.9	0.0%	14,604.2	6.9	0.0%	14,604.2	6.9	0.0%	14,603.0	8.1	0.1%
ME 3	38 56 13	2019	Below Normal	January	--	35,107.6	35,104.2	3.5	0.0%	35,103.0	4.6	0.0%	35,103.0	4.6	0.0%	35,101.9	5.8	0.0%	35,101.9	5.8	0.0%	35,101.9	5.8	0.0%
ME 3	38 56 13	2019	Below Normal	February	--	141,805.6	141,794.0	11.6	0.0%	141,794.0	11.6	0.0%	141,794.0	11.6	0.0%	141,794.0	11.6	0.0%	141,794.0	11.6	0.0%	141,794.0	11.6	0.0%
ME 3	38 56 13	2019	Below Normal	March	--	42,258.1	42,254.6	3.5	0.0%	42,254.6	3.5	0.0%	42,253.5	4.6	0.0%	42,253.5	4.6	0.0%	42,253.5	4.6	0.0%	42,252.3	5.8	0.0%
ME 3	38 56 13	2019	Below Normal	April	--	15,254.6	15,251.2	3.5	0.0%	15,251.2	3.5	0.0%	15,250.0	4.6	0.0%	15,250.0	4.6	0.0%	15,250.0	4.6	0.0%	15,248.8	5.8	0.0%
ME 3	38 56 13	2019	Below Normal	May	--	16,855.3	16,846.1	9.3	0.1%	16,844.9	10.4	0.1%	16,844.9	10.4	0.1%	16,843.8	11.6	0.1%	16,842.6	12.7	0.1%	16,841.4	13.9	0.1%
ME 3	38 56 13	2019	Below Normal	June	--	4,242.4	4,231.3	11.1	0.3%	4,230.1	12.3	0.3%	4,228.9	13.4	0.3%	4,227.8	14.6	0.3%	4,226.6	15.7	0.4%	4,225.6	16.8	0.4%
ME 3	38 56 13	2019	Below Normal	July	--	1,356.9	1,345.9	11.0	0.8%	1,344.8	12.2	0.9%	1,343.8	13.2	1.0%	1,342.6	14.4	1.1%	1,341.6	15.4	1.1%	1,340.4	16.6	1.2%
ME 3	38 56 13	2019	Below Normal	August	--	592.7	582.3	10.4	1.8%	581.2	11.4	1.9%	580.2	12.5	2.1%	579.2	13.5	2.3%	578.1	14.5	2.5%	577.1	15.6	2.6%
ME 3	38 56 13	2019	Below Normal	September	Used in Summary Table Analysis	459.6	450.1	9.5	2.1%	449.1	10.5	2.3%	448.1	11.5	2.5%	447.2	12.4	2.7%	446.2	13.4	2.9%	445.3	14.3	3.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 56 13	2020	Dry	October	Used in Summary Table Analysis	353.7	346.7	7.0	2.0%	346.0	7.7	2.2%	345.3	8.4	2.4%	344.6	9.1	2.6%	343.9	9.8	2.8%	343.2	10.5	3.0%
ME 3	38 56 13	2020	Dry	November	Used in Summary Table Analysis	315.0	309.6	5.4	1.7%	309.1	5.9	1.9%	308.5	6.5	2.1%	308.0	7.0	2.2%	307.4	7.6	2.4%	306.9	8.1	2.6%
ME 3	38 56 13	2020	Dry	December	--	13,203.7	13,199.1	4.6	0.0%	13,197.9	5.8	0.0%	13,197.9	5.8	0.0%	13,197.9	5.8	0.0%	13,196.8	6.9	0.1%	13,196.8	6.9	0.1%
ME 3	38 56 13	2020	Dry	January	--	22,266.2	22,261.6	4.6	0.0%	22,261.6	4.6	0.0%	22,260.4	5.8	0.0%	22,260.4	5.8	0.0%	22,259.3	6.9	0.0%	22,259.3	6.9	0.0%
ME 3	38 56 13	2020	Dry	February	--	7,411.7	7,407.6	4.1	0.1%	7,407.2	4.5	0.1%	7,406.8	4.9	0.1%	7,406.4	5.3	0.1%	7,405.9	5.8	0.1%	7,405.6	6.1	0.1%
ME 3	38 56 13	2020	Dry	March	--	7,232.2	7,228.4	3.8	0.1%	7,228.0	4.2	0.1%	7,227.5	4.6	0.1%	7,227.2	5.0	0.1%	7,226.9	5.3	0.1%	7,226.4	5.8	0.1%
ME 3	38 56 13	2020	Dry	April	--	5,469.8	5,461.3	8.4	0.2%	5,460.4	9.4	0.2%	5,459.6	10.2	0.2%	5,458.8	11.0	0.2%	5,457.9	11.9	0.2%	5,457.1	12.7	0.2%
ME 3	38 56 13	2020	Dry	May	--	7,360.1	7,350.0	10.1	0.1%	7,349.0	11.1	0.2%	7,347.9	12.2	0.2%	7,346.9	13.2	0.2%	7,345.9	14.1	0.2%	7,344.9	15.2	0.2%
ME 3	38 56 13	2020	Dry	June	--	2,103.9	2,090.6	13.3	0.6%	2,089.2	14.7	0.7%	2,088.0	16.0	0.8%	2,086.6	17.4	0.8%	2,085.3	18.6	0.9%	2,084.0	19.9	0.9%
ME 3	38 56 13	2020	Dry	July	--	794.2	781.4	12.8	1.6%	780.1	14.1	1.8%	778.8	15.3	1.9%	777.6	16.6	2.1%	776.3	17.9	2.3%	775.0	19.2	2.4%
ME 3	38 56 13	2020	Dry	August	--	396.8	384.3	12.5	3.1%	383.1	13.7	3.5%	381.9	14.9	3.8%	380.6	16.2	4.1%	379.4	17.4	4.4%	378.1	18.7	4.7%
ME 3	38 56 13	2020	Dry	September	Used in Summary Table Analysis	246.4	235.4	10.9	4.4%	234.3	12.0	4.9%	233.2	13.1	5.3%	232.1	14.2	5.8%	231.0	15.3	6.2%	229.9	16.4	6.7%
ME 4	37 55 15	2000	Above Normal	October	Used in Summary Table Analysis	814.1	806.6	7.5	0.9%	805.9	8.3	1.0%	805.1	9.0	1.1%	804.4	9.8	1.2%	803.6	10.5	1.3%	802.9	11.3	1.4%
ME 4	37 55 15	2000	Above Normal	November	Used in Summary Table Analysis	12,079.9	12,074.1	5.8	0.0%	12,072.9	6.9	0.1%	12,072.9	6.9	0.1%	12,071.8	8.1	0.1%	12,071.8	8.1	0.1%	12,070.6	9.3	0.1%
ME 4	37 55 15	2000	Above Normal	December	--	10,790.3	10,785.3	5.0	0.0%	10,784.7	5.6	0.1%	10,784.3	6.0	0.1%	10,783.7	6.6	0.1%	10,783.2	7.1	0.1%	10,782.8	7.5	0.1%
ME 4	37 55 15	2000	Above Normal	January	--	28,510.4	28,505.8	4.6	0.0%	28,505.8	4.6	0.0%	28,504.6	5.8	0.0%	28,504.6	5.8	0.0%	28,503.5	6.9	0.0%	28,503.5	6.9	0.0%
ME 4	37 55 15	2000	Above Normal	February	--	36,998.8	36,994.2	4.6	0.0%	36,994.2	4.6	0.0%	36,994.2	4.6	0.0%	36,993.1	5.8	0.0%	36,993.1	5.8	0.0%	36,993.1	5.8	0.0%
ME 4	37 55 15	2000	Above Normal	March	--	18,303.2	18,299.8	3.5	0.0%	18,298.6	4.6	0.0%	18,298.6	4.6	0.0%	18,298.6	4.6	0.0%	18,297.5	5.8	0.0%	18,297.5	5.8	0.0%
ME 4	37 55 15	2000	Above Normal	April	--	12,304.4	12,300.9	3.5	0.0%	12,299.8	4.6	0.0%	12,299.8	4.6	0.0%	12,299.8	4.6	0.0%	12,298.6	5.8	0.0%	12,298.6	5.8	0.0%
ME 4	37 55 15	2000	Above Normal	May	--	7,086.5	7,078.1	8.3	0.1%	7,077.2	9.3	0.1%	7,076.4	10.1	0.1%	7,075.6	10.9	0.2%	7,074.7	11.8	0.2%	7,073.8	12.6	0.2%
ME 4	37 55 15	2000	Above Normal	June	--	2,608.2	2,595.7	12.5	0.5%	2,594.4	13.8	0.5%	2,593.2	15.0	0.6%	2,591.9	16.3	0.6%	2,590.6	17.6	0.7%	2,589.4	18.9	0.7%
ME 4	37 55 15	2000	Above Normal	July	--	990.3	979.1	11.2	1.1%	978.0	12.3	1.2%	976.9	13.4	1.4%	975.8	14.5	1.5%	974.7	15.7	1.6%	973.5	16.8	1.7%
ME 4	37 55 15	2000	Above Normal	August	--	520.3	509.9	10.4	2.0%	508.9	11.5	2.2%	507.8	12.5	2.4%	506.8	13.5	2.6%	505.7	14.6	2.8%	504.7	15.6	3.0%
ME 4	37 55 15	2000	Above Normal	September	Used in Summary Table Analysis	294.0	284.9	9.1	3.1%	284.0	10.0	3.4%	283.1	10.9	3.7%	282.2	11.8	4.0%	281.3	12.7	4.3%	280.3	13.7	4.6%
ME 4	37 55 15	2001	Dry	October	Used in Summary Table Analysis	3,806.6	3,799.2	7.4	0.2%	3,798.4	8.2	0.2%	3,797.7	8.9	0.2%	3,796.9	9.7	0.3%	3,796.2	10.4	0.3%	3,795.5	11.1	0.3%
ME 4	37 55 15	2001	Dry	November	Used in Summary Table Analysis	6,110.1	6,104.2	5.9	0.1%	6,103.5	6.6	0.1%	6,102.9	7.2	0.1%	6,102.3	7.8	0.1%	6,101.7	8.3	0.1%	6,101.2	8.9	0.1%
ME 4	37 55 15	2001	Dry	December	--	8,824.4	8,819.2	5.2	0.1%	8,818.8	5.7	0.1%	8,818.2	6.3	0.1%	8,817.7	6.7	0.1%	8,817.1	7.3	0.1%	8,816.7	7.8	0.1%
ME 4	37 55 15	2001	Dry	January	--	12,763.9	12,759.3	4.6	0.0%	12,758.1	5.8	0.0%	12,758.1	5.8	0.0%	12,756.9	6.9	0.1%	12,756.9	6.9	0.1%	12,756.9	6.9	0.1%
ME 4	37 55 15	2001	Dry	February	--	17,454.9	17,450.2	4.6	0.0%	17,450.2	4.6	0.0%	17,449.1	5.8	0.0%	17,449.1	5.8	0.0%	17,449.1	5.8	0.0%	17,447.9	6.9	0.0%
ME 4	37 55 15	2001	Dry	March	--	12,288.2	12,284.7	3.5	0.0%	12,283.6	4.6	0.0%	12,283.6	4.6	0.0%	12,283.6	4.6	0.0%	12,282.4	5.8	0.0%	12,282.4	5.8	0.0%
ME 4	37 55 15	2001	Dry	April	--	10,962.7	10,954.1	8.7	0.1%	10,953.2	9.5	0.1%	10,952.3	10.4	0.1%	10,951.5	11.2	0.1%	10,950.6	12.2	0.1%	10,949.8	13.0	0.1%
ME 4	37 55 15	2001	Dry	May	--	2,637.0	2,626.7	10.3	0.4%	2,625.8	11.2	0.4%	2,624.8	12.3	0.5%	2,623.7	13.3	0.5%	2,622.7	14.4	0.5%	2,621.6	15.4	0.6%
ME 4	37 55 15	2001	Dry	June	--	2,642.4	2,628.5	13.9	0.5%	2,627.0	15.4	0.6%	2,625.6	16.8	0.6%	2,624.2	18.2	0.7%	2,622.8	19.6	0.7%	2,621.4	20.9	0.8%
ME 4	37 55 15	2001	Dry	July	--	718.2	705.4	12.8	1.8%	704.1	14.1	2.0%	702.8	15.4	2.1%	701.6	16.7	2.3%	700.3	18.0	2.5%	699.0	19.2	2.7%
ME 4	37 55 15	2001	Dry	August	--	171.6	159.2	12.4	7.2%	158.0	13.6	7.9%	156.8	14.9	8.7%	155.5	16.1	9.4%	154.3	17.3	10.1%	153.1	18.6	10.8%
ME 4	37 55 15	2001	Dry	September	Used in Summary Table Analysis	94.4	83.5	10.9	11.5%	82.4	12.0	12.7%	81.3	13.1	13.9%	80.2	14.2	15.0%	79.2	15.3	16.2%	78.1	16.4	17.3%
ME 4	37 55 15	2002	Below Normal	October	Used in Summary Table Analysis	264.0	255.0	8.9	3.4%	254.1	9.8	3.7%	253.2	10.7	4.1%	252.3	11.7	4.4%	251.4	12.5	4.8%	250.5	13.4	5.1%
ME 4	37 55 15	2002	Below Normal	November	Used in Summary Table Analysis	12,006.9	12,000.0	6.9	0.1%	11,998.8	8.1	0.1%	11,998.8	8.1	0.1%	11,997.7	9.3	0.1%	11,997.7	9.3	0.1%	11,996.5	10.4	0.1%
ME 4	37 55 15	2002	Below Normal	December	--	35,623.8	35,618.1	5.8	0.0%	35,616.9	6.9	0.0%	35,616.9	6.9	0.0%	35,615.7	8.1	0.0%	35,615.7	8.1	0.0%	35,614.6	9.3	0.0%
ME 4	37 55 15	2002	Below Normal	January	--	30,840.3	30,834.5	5.8	0.0%	30,834.5	5.8	0.0%	30,833.3	6.9	0.0%	30,833.3	6.9	0.0%	30,832.2	8.1	0.0%	30,832.2	8.1	0.0%
ME 4	37 55 15	2002	Below Normal	February	--	24,655.1	24,650.5	4.6	0.0%	24,649.3	5.8	0.0%	24,649.3	5.8	0.0%	24,648.1	6.9	0.0%	24,648.1	6.9	0.0%	24,647.0	8.1	0.0%
ME 4	37 55 15	2002	Below Normal	March	--	17,761.6	17,756.9	4.6	0.0%	17,756.9	4.6	0.0%	17,755.8	5.8	0.0%	17,755.8	5.8	0.0%	17,754.6	6.9	0.0%	17,754.6	6.9	0.0%
ME 4	37 55 15	2002	Below Normal	April	--	9,918.3	9,909.7	8.6	0.1%	9,908.8	9.5	0.1%	9,908.0	10.3	0.1%	9,907.1	11.2	0.1%	9,906.1	12.2	0.1%	9,905.3	13.0	0.1%
ME 4	37 55 15	2002	Below Normal	May	--	3,317.1	3,306.9	10.2	0.3%	3,305.9	11.2	0.3%	3,304.9	12.3	0.4%	3,303.8	13.3	0.4%	3,302.8	14.4	0.4%	3,301.7	15.4	0.5%
ME 4	37 55 15	2002	Below Normal	June	--	853.0	841.4	11.5	1.3%	840.3	12.7	1.5%	839.2	13.8	1.6%	838.0	15.0	1.8%	836.9	16.1	1.9%	835.7	17.2	2.0%
ME 4	37 55 15	2002	Below Normal	July	--	361.4	350.0	11.5	3.2%	348.8	12.7	3.5%	347.7	13.8	3.8%	346.5	15.0	4.1%	345.3	16.1	4.5%	344.2	17.2	4.8%
ME 4	37 55 15	2002	Below Normal	August	--	225.9	215.2	10.7	4.7%	214.2	11.8	5.2%	213.1	12.8	5.7%	212.0	13.9	6.2%	210.9	15.0	6.6%	209.9	16.0	7.1%
ME 4	37 55 15	2002	Below Normal	September	Used in Summary Table Analysis	162.9	152.8	10.0	6.1%	151.9	11.0	6.8%	150.8	12.0	7.4%	149.8	13.0	8.0%	148.8	14.0	8.6%	147.8	15.0	9.2%
ME 4	37 55 15	2003	Wet	October	Used in Summary Table Analysis	127.9	119.9	8.0	6.3%	119.1	8.8	6.9%	118.3	9.6	7.5%	117.5	10.5	8.2%	116.7	11.3	8.8%	115.9	12.1	9.4%
ME 4	37 55 15	2003	Wet	November	Used in Summary Table Analysis	894.8	888.4	6.4	0.7%	887.8	7.0	0.8%	887.2	7.7	0.9%	886.5	8.3	0.9%	885.9	9.0	1.0%	885.2	9.6	1.1%
ME 4	37 55 15	2003	Wet	December	--	56,679.4	56,673.6	5.8	0.0%	56,672.5	6.9	0.0%	56,672.5	6.9	0.0%	56,671.3	8.1	0.0%	56,671.3	8.1	0.0%	56,670.1	9.3	0.0%
ME 4	37 55 15	2003	Wet	January	--	31,502.3	31,496.5	5.8	0.0%	31,496.5	5.8	0.0%	31,495.4	6.9	0.0%	31,495.4	6.9	0.0%	31,495.4	6.9	0.0%	31,494.2	8.1	0.0%
ME 4	37 55 15	2003	Wet	February	--	20,338.0	20,333.3	4.6	0.0%	20,333.3	4.6	0.0%	20,333.3	4.6	0.0%	20,332.2	5.8	0.0%	20,332.2	5.8	0.0%	20,331.0	6.9	0.0%
ME 4	37 55 15	2003	Wet	March	--	24,010.4	24,005.8	4.6	0.0%	24,005.8	4.6	0.0%	24,004.6	5.8	0.0%	24,004.6	5.8	0.0%	24,004.6	5.8	0.0%	24,003.5	6.9	0.0%
ME 4	37 55 15	2003	Wet	April	--	42,855.3	42,850.7	4.6	0.0%	42,850.7	4.6	0.0%	42,849.5	5.8	0.0%	42,849.5	5.8	0.0%	42,849.5	5.8	0.0%	42,848.4	6.9	0.0%
ME 4	37 55 15	2003	Wet	May	--	12,216.4	12,207.2	9.3	0.1%	12,206.0	10.4	0.1%	12,206.0	10.4	0.1%	12,204.9	11.6	0.1%	12,203.7	12.7	0.1%	12,202.5	13.9	0.1%
ME 4	37 55 15	2003	Wet	June	--	3,164.6	3,153.4	11.2	0.4%	3,152.3	12.3	0.4%	3,151.2	13.4	0.4%	3,150.1	14.5	0.5%	3,149.0	15.6	0.5%	3,147.9	16.7	0.5%
ME 4	37 55 15	2003	Wet	July	--	1,472.2	1,460.8	11.5	0.8%	1,459.6	12.6	0.9%	1,458.4	13.8	0.9%	1,457.3	14.9	1.0%	1,456.1	16.1	1.1%	1,455.0	17.2	1.2%
ME 4	37 55 15	2003	Wet	August	--	758.4	747.5	11.0	1.4%	746.4	12.0	1.6%	745.3	13.1	1.7%	744.2	14.3	1.9%	743.1	15.4	2.0%	742.0	16.5	2.2%
ME 4	37 55 15	2003	Wet	September	Used in Summary Table Analysis	456.5	447.3	9.2	2.0%	446.4	10.2	2.2%	445.4	11.1	2.4%	444.5	12.0	2.6%	443.6	12.9	2.8%	442.6	13.9	3.0%
ME 4	37 55 15	2004	Wet	October	Used in Summary Table Analysis	323.6	316.0	7.5	2.3%	315.3	8.3	2.6%	314.5	9.0	2.8%	313.8	9.8	3.0%	313.0	10.5	3.3%	312.3	11.3	3.5%
ME 4	37 55 15	2004	Wet	November	Used in Summary Table Analysis	5,788.8	5,782.9	5.9	0.1%	5,782.2	6.6	0.1%	5,781.6	7.2	0.1%	5,781.0	7.8	0.1%	5,780.4	8.3	0.1%	5,779.7	9.0	0.2%
ME 4	37 55 15	2004	Wet	December	--	36,247.7	36,241.9	5.8	0.0%	36,240.7	6.9	0.0%	36,240.7	6.9	0.0%	36,240.7	6.9	0.0%	36,239.6	8.1	0.0%	36,239.6	8.1	0.0%
ME 4	37 55 15	2004	Wet	January	--	31,430.6	31,425.9	4.6	0.0%	31,424.8	5.8	0.0%	31,424.8	5.8	0.0%	31,423.6	6.9	0.0%	31,423.6	6.9	0.0%	31,423.6	6.9	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	37 55 15	2004	Wet	February	--	38,194.4	38,189.8	4.6	0.0%	38,189.8	4.6	0.0%	38,189.8	4.6	0.0%	38,188.7	5.8	0.0%	38,188.7	5.8	0.0%	38,187.5	6.9	0.0%
ME 4	37 55 15	2004	Wet	March	--	16,516.2	16,512.7	3.5	0.0%	16,511.6	4.6	0.0%	16,511.6	4.6	0.0%	16,511.6	4.6	0.0%	16,510.4	5.8	0.0%	16,510.4	5.8	0.0%
ME 4	37 55 15	2004	Wet	April	--	9,444.8	9,441.0	3.8	0.0%	9,440.6	4.2	0.0%	9,440.2	4.6	0.0%	9,439.8	5.0	0.1%	9,439.4	5.4	0.1%	9,439.0	5.8	0.1%
ME 4	37 55 15	2004	Wet	May	--	3,415.5	3,407.1	8.4	0.2%	3,406.1	9.4	0.3%	3,405.3	10.2	0.3%	3,404.4	11.1	0.3%	3,403.6	11.9	0.3%	3,402.8	12.7	0.4%
ME 4	37 55 15	2004	Wet	June	--	691.0	680.4	10.6	1.5%	679.3	11.7	1.7%	678.2	12.8	1.8%	677.2	13.8	2.0%	676.1	14.9	2.2%	675.1	15.9	2.3%
ME 4	37 55 15	2004	Wet	July	--	354.9	343.6	11.2	3.2%	342.5	12.3	3.5%	341.4	13.5	3.8%	340.3	14.6	4.1%	339.2	15.7	4.4%	338.0	16.8	4.7%
ME 4	37 55 15	2004	Wet	August	--	224.1	213.6	10.5	4.7%	212.5	11.5	5.1%	211.5	12.6	5.6%	210.4	13.6	6.1%	209.4	14.7	6.5%	208.3	15.7	7.0%
ME 4	37 55 15	2004	Wet	September	Used in Summary Table Analysis	161.3	151.4	9.8	6.1%	150.5	10.8	6.7%	149.5	11.8	7.3%	148.5	12.8	7.9%	147.5	13.8	8.6%	146.5	14.8	9.2%
ME 4	37 55 15	2005	Above Normal	October	Used in Summary Table Analysis	7,664.0	7,656.4	7.6	0.1%	7,655.6	8.4	0.1%	7,654.9	9.1	0.1%	7,654.1	10.0	0.1%	7,653.2	10.8	0.1%	7,652.5	11.5	0.1%
ME 4	37 55 15	2005	Above Normal	November	Used in Summary Table Analysis	2,254.6	2,248.6	6.0	0.3%	2,248.0	6.6	0.3%	2,247.5	7.2	0.3%	2,246.9	7.8	0.3%	2,246.2	8.4	0.4%	2,245.6	9.0	0.4%
ME 4	37 55 15	2005	Above Normal	December	--	20,974.5	20,968.8	5.8	0.0%	20,968.8	5.8	0.0%	20,967.6	6.9	0.0%	20,967.6	6.9	0.0%	20,966.4	8.1	0.0%	20,966.4	8.1	0.0%
ME 4	37 55 15	2005	Above Normal	January	--	22,343.8	22,339.1	4.6	0.0%	22,338.0	5.8	0.0%	22,338.0	5.8	0.0%	22,338.0	5.8	0.0%	22,336.8	6.9	0.0%	22,336.8	6.9	0.0%
ME 4	37 55 15	2005	Above Normal	February	--	14,004.6	14,000.0	4.6	0.0%	14,000.0	4.6	0.0%	13,998.8	5.8	0.0%	13,998.8	5.8	0.0%	13,998.8	5.8	0.0%	13,997.7	6.9	0.0%
ME 4	37 55 15	2005	Above Normal	March	--	28,535.9	28,532.4	3.5	0.0%	28,531.3	4.6	0.0%	28,531.3	4.6	0.0%	28,531.3	4.6	0.0%	28,530.1	5.8	0.0%	28,530.1	5.8	0.0%
ME 4	37 55 15	2005	Above Normal	April	--	21,424.8	21,421.3	3.5	0.0%	21,420.1	4.6	0.0%	21,420.1	4.6	0.0%	21,420.1	4.6	0.0%	21,419.0	5.8	0.0%	21,419.0	5.8	0.0%
ME 4	37 55 15	2005	Above Normal	May	--	19,545.1	19,537.0	8.1	0.0%	19,535.9	9.3	0.0%	19,534.7	10.4	0.1%	19,534.7	10.4	0.1%	19,533.6	11.6	0.1%	19,532.4	12.7	0.1%
ME 4	37 55 15	2005	Above Normal	June	--	15,842.6	15,829.9	12.7	0.1%	15,828.7	13.9	0.1%	15,826.4	16.2	0.1%	15,825.2	17.4	0.1%	15,824.1	18.5	0.1%	15,822.9	19.7	0.1%
ME 4	37 55 15	2005	Above Normal	July	--	2,863.7	2,852.0	11.7	0.4%	2,850.8	12.8	0.4%	2,849.7	14.0	0.5%	2,848.5	15.2	0.5%	2,847.3	16.3	0.6%	2,846.2	17.5	0.6%
ME 4	37 55 15	2005	Above Normal	August	--	981.1	970.7	10.5	1.1%	969.6	11.5	1.2%	968.6	12.6	1.3%	967.5	13.6	1.4%	966.5	14.6	1.5%	965.5	15.7	1.6%
ME 4	37 55 15	2005	Above Normal	September	Used in Summary Table Analysis	522.8	513.7	9.1	1.7%	512.8	10.0	1.9%	511.9	10.9	2.1%	511.0	11.8	2.3%	510.1	12.8	2.4%	509.2	13.7	2.6%
ME 4	37 55 15	2006	Wet	October	Used in Summary Table Analysis	632.4	625.2	7.3	1.2%	624.4	8.0	1.3%	623.7	8.7	1.4%	623.0	9.5	1.5%	622.2	10.2	1.6%	621.5	10.9	1.7%
ME 4	37 55 15	2006	Wet	November	Used in Summary Table Analysis	9,281.9	9,276.3	5.7	0.1%	9,275.7	6.3	0.1%	9,275.1	6.8	0.1%	9,274.5	7.4	0.1%	9,274.0	8.0	0.1%	9,273.4	8.6	0.1%
ME 4	37 55 15	2006	Wet	December	--	43,419.0	43,414.4	4.6	0.0%	43,413.2	5.8	0.0%	43,413.2	5.8	0.0%	43,413.2	5.8	0.0%	43,412.0	6.9	0.0%	43,412.0	6.9	0.0%
ME 4	37 55 15	2006	Wet	January	--	46,226.9	46,222.2	4.6	0.0%	46,221.1	5.8	0.0%	46,221.1	5.8	0.0%	46,219.9	6.9	0.0%	46,219.9	6.9	0.0%	46,219.9	6.9	0.0%
ME 4	37 55 15	2006	Wet	February	--	26,588.0	26,584.5	3.5	0.0%	26,583.3	4.6	0.0%	26,583.3	4.6	0.0%	26,582.2	5.8	0.0%	26,582.2	5.8	0.0%	26,582.2	5.8	0.0%
ME 4	37 55 15	2006	Wet	March	--	47,101.9	47,098.4	3.5	0.0%	47,098.4	3.5	0.0%	47,097.2	4.6	0.0%	47,097.2	4.6	0.0%	47,096.1	5.8	0.0%	47,096.1	5.8	0.0%
ME 4	37 55 15	2006	Wet	April	--	30,406.3	30,402.8	3.5	0.0%	30,401.6	4.6	0.0%	30,401.6	4.6	0.0%	30,401.6	4.6	0.0%	30,400.5	5.8	0.0%	30,400.5	5.8	0.0%
ME 4	37 55 15	2006	Wet	May	--	14,194.4	14,188.7	5.8	0.0%	14,188.7	5.8	0.0%	14,187.5	6.9	0.0%	14,187.5	6.9	0.0%	14,187.5	6.9	0.0%	14,186.3	8.1	0.1%
ME 4	37 55 15	2006	Wet	June	--	3,545.8	3,535.2	10.6	0.3%	3,534.1	11.7	0.3%	3,533.1	12.7	0.4%	3,532.1	13.8	0.4%	3,531.0	14.8	0.4%	3,530.0	15.9	0.4%
ME 4	37 55 15	2006	Wet	July	--	1,277.0	1,265.9	11.1	0.9%	1,264.7	12.3	1.0%	1,263.5	13.4	1.1%	1,262.5	14.5	1.1%	1,261.3	15.6	1.2%	1,260.3	16.7	1.3%
ME 4	37 55 15	2006	Wet	August	--	663.2	652.5	10.7	1.6%	651.4	11.7	1.8%	650.4	12.8	1.9%	649.3	13.9	2.1%	648.2	15.0	2.3%	647.1	16.1	2.4%
ME 4	37 55 15	2006	Wet	September	Used in Summary Table Analysis	424.4	415.2	9.2	2.2%	414.2	10.2	2.4%	413.3	11.1	2.6%	412.4	12.0	2.8%	411.5	12.9	3.0%	410.5	13.9	3.3%
ME 4	37 55 15	2007	Above Normal	October	Used in Summary Table Analysis	273.0	265.6	7.4	2.7%	264.9	8.1	3.0%	264.2	8.9	3.3%	263.4	9.6	3.5%	262.7	10.3	3.8%	261.9	11.1	4.1%
ME 4	37 55 15	2007	Above Normal	November	Used in Summary Table Analysis	8,645.6	8,639.7	5.9	0.1%	8,639.1	6.5	0.1%	8,638.5	7.1	0.1%	8,637.8	7.8	0.1%	8,637.3	8.3	0.1%	8,636.7	8.9	0.1%
ME 4	37 55 15	2007	Above Normal	December	--	20,368.1	20,362.3	5.8	0.0%	20,362.3	5.8	0.0%	20,361.1	6.9	0.0%	20,361.1	6.9	0.0%	20,360.0	8.1	0.0%	20,360.0	8.1	0.0%
ME 4	37 55 15	2007	Above Normal	January	--	10,240.3	10,235.6	4.6	0.0%	10,235.2	5.1	0.0%	10,234.7	5.6	0.1%	10,234.3	6.0	0.1%	10,233.8	6.5	0.1%	10,233.2	7.1	0.1%
ME 4	37 55 15	2007	Above Normal	February	--	30,523.1	30,519.7	3.5	0.0%	30,518.5	4.6	0.0%	30,518.5	4.6	0.0%	30,517.4	5.8	0.0%	30,517.4	5.8	0.0%	30,517.4	5.8	0.0%
ME 4	37 55 15	2007	Above Normal	March	--	13,093.8	13,089.1	4.6	0.0%	13,089.1	4.6	0.0%	13,089.1	4.6	0.0%	13,088.0	5.8	0.0%	13,088.0	5.8	0.0%	13,086.8	6.9	0.1%
ME 4	37 55 15	2007	Above Normal	April	--	11,527.0	11,518.6	8.3	0.1%	11,517.8	9.1	0.1%	11,517.0	10.0	0.1%	11,516.2	10.8	0.1%	11,515.3	11.7	0.1%	11,514.5	12.5	0.1%
ME 4	37 55 15	2007	Above Normal	May	--	4,136.5	4,126.5	10.0	0.2%	4,125.6	10.9	0.3%	4,124.5	11.9	0.3%	4,123.6	12.8	0.3%	4,122.6	13.9	0.3%	4,121.6	14.8	0.4%
ME 4	37 55 15	2007	Above Normal	June	--	1,496.2	1,484.4	11.8	0.8%	1,483.2	13.0	0.9%	1,481.9	14.2	1.0%	1,480.8	15.4	1.0%	1,479.6	16.6	1.1%	1,478.5	17.7	1.2%
ME 4	37 55 15	2007	Above Normal	July	--	495.2	483.4	11.8	2.4%	482.2	13.0	2.6%	481.1	14.2	2.9%	479.9	15.3	3.1%	478.7	16.5	3.3%	477.5	17.7	3.6%
ME 4	37 55 15	2007	Above Normal	August	--	221.9	211.4	10.5	4.7%	210.3	11.6	5.2%	209.3	12.6	5.7%	208.2	13.7	6.2%	207.2	14.7	6.6%	206.1	15.8	7.1%
ME 4	37 55 15	2007	Above Normal	September	Used in Summary Table Analysis	149.6	139.8	9.8	6.6%	138.8	10.8	7.2%	137.8	11.8	7.9%	136.8	12.8	8.5%	135.8	13.8	9.2%	134.8	14.7	9.9%
ME 4	37 55 15	2008	Dry	October	Used in Summary Table Analysis	3,426.4	3,418.5	7.9	0.2%	3,417.7	8.7	0.3%	3,417.0	9.4	0.3%	3,416.2	10.2	0.3%	3,415.4	11.0	0.3%	3,414.6	11.8	0.3%
ME 4	37 55 15	2008	Dry	November	Used in Summary Table Analysis	3,267.9	3,261.9	6.0	0.2%	3,261.3	6.6	0.2%	3,260.8	7.2	0.2%	3,260.2	7.8	0.2%	3,259.5	8.4	0.3%	3,258.9	9.0	0.3%
ME 4	37 55 15	2008	Dry	December	--	23,070.6	23,066.0	4.6	0.0%	23,064.8	5.8	0.0%	23,064.8	5.8	0.0%	23,063.7	6.9	0.0%	23,063.7	6.9	0.0%	23,062.5	8.1	0.0%
ME 4	37 55 15	2008	Dry	January	--	37,478.0	37,473.4	4.6	0.0%	37,472.2	5.8	0.0%	37,472.2	5.8	0.0%	37,471.1	6.9	0.0%	37,471.1	6.9	0.0%	37,471.1	6.9	0.0%
ME 4	37 55 15	2008	Dry	February	--	26,258.1	26,253.5	4.6	0.0%	26,253.5	4.6	0.0%	26,253.5	4.6	0.0%	26,252.3	5.8	0.0%	26,252.3	5.8	0.0%	26,252.3	5.8	0.0%
ME 4	37 55 15	2008	Dry	March	--	11,788.2	11,784.7	3.5	0.0%	11,784.7	3.5	0.0%	11,783.6	4.6	0.0%	11,783.6	4.6	0.0%	11,783.6	4.6	0.0%	11,782.4	5.8	0.0%
ME 4	37 55 15	2008	Dry	April	--	9,012.3	9,003.8	8.4	0.1%	9,002.9	9.4	0.1%	9,002.1	10.2	0.1%	9,001.3	11.0	0.1%	9,000.3	11.9	0.1%	8,999.5	12.7	0.1%
ME 4	37 55 15	2008	Dry	May	--	1,360.3	1,351.3	9.0	0.7%	1,350.3	10.0	0.7%	1,349.5	10.8	0.8%	1,348.6	11.7	0.9%	1,347.7	12.6	0.9%	1,346.8	13.5	1.0%
ME 4	37 55 15	2008	Dry	June	--	436.9	424.0	13.0	3.0%	422.7	14.2	3.3%	421.4	15.5	3.6%	420.1	16.8	3.8%	418.8	18.1	4.1%	417.6	19.4	4.4%
ME 4	37 55 15	2008	Dry	July	--	255.2	242.7	12.5	4.9%	241.5	13.8	5.4%	240.2	15.0	5.9%	239.0	16.3	6.4%	237.7	17.5	6.9%	236.5	18.8	7.3%
ME 4	37 55 15	2008	Dry	August	--	178.6	166.6	12.0	6.7%	165.4	13.2	7.4%	164.2	14.4	8.1%	163.0	15.6	8.8%	161.8	16.8	9.4%	160.6	18.0	10.1%
ME 4	37 55 15	2008	Dry	September	Used in Summary Table Analysis	140.3	128.9	11.5	8.2%	127.7	12.6	9.0%	126.6	13.8	9.8%	125.5	14.9	10.6%	124.3	16.0	11.4%	123.2	17.2	12.2%
ME 4	37 55 15	2009	Critical	October	Used in Summary Table Analysis	922.9	914.1	8.8	1.0%	913.2	9.7	1.1%	912.3	10.6	1.2%	911.4	11.5	1.2%	910.5	12.4	1.3%	909.6	13.3	1.4%
ME 4	37 55 15	2009	Critical	November	Used in Summary Table Analysis	5,498.5	5,491.7	6.8	0.1%	5,491.0	7.5	0.1%	5,490.3	8.2	0.1%	5,489.6	8.9	0.2%	5,488.9	9.6	0.2%	5,488.3	10.2	0.2%
ME 4	37 55 15	2009	Critical	December	--	12,137.7	12,131.9	5.8	0.0%	12,131.9	5.8	0.0%	12,130.8	6.9	0.1%	12,130.8	6.9	0.1%	12,129.6	8.1	0.1%	12,129.6	8.1	0.1%
ME 4	37 55 15	2009	Critical	January	--	8,788.9	8,783.6	5.3	0.1%	8,783.0	5.9	0.1%	8,782.5	6.4	0.1%	8,781.9	6.9	0.1%	8,781.4	7.5	0.1%	8,780.9	8.0	0.1%
ME 4	37 55 15	2009	Critical	February	--	22,591.4	22,586.8	4.6	0.0%	22,586.8	4.6	0.0%	22,586.8	4.6	0.0%	22,585.6	5.8	0.0%	22,585.6	5.8	0.0%	22,584.5	6.9	0.0%
ME 4	37 55 15	2009	Critical	March	--	21,104.2	21,100.7	3.5	0.0%	21,099.5	4.6	0.0%	21,099.5	4.6	0.0%	21,099.5	4.6	0.0%	21,098.4	5.8	0.0%	21,098.4	5.8	0.0%
ME 4	37 55 15	2009	Critical	April	--	10,095.1	10,086.3	8.8	0.1%	10,085.5	9.6	0.1%	10,084.6	10.5	0.1%	10,083.8	11.3	0.1%	10,083.0	12.2	0.1%	10,082.1	13.1	0.1%
ME 4	37 55 15	2009	Critical	May	--	15,575.2	15,564.8	10.4	0.1%	15,563.7	11.6	0.1%	15,562.5	12.7	0.1%	15,561.3	13.9	0.1%	15,560.2	15.0	0.1%	15,559.0	16.2	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	37 55 15	2009	Critical	June	--	3,159.1	3,145.5	13.7	0.4%	3,144.1	15.0	0.5%	3,142.7	16.4	0.5%	3,141.3	17.8	0.6%	3,139.9	19.2	0.6%	3,138.7	20.5	0.6%
ME 4	37 55 15	2009	Critical	July	--	1,261.8	1,249.1	12.7	1.0%	1,247.8	14.0	1.1%	1,246.5	15.3	1.2%	1,245.3	16.6	1.3%	1,244.0	17.8	1.4%	1,242.7	19.1	1.5%
ME 4	37 55 15	2009	Critical	August	--	667.7	655.5	12.2	1.8%	654.3	13.3	2.0%	653.1	14.6	2.2%	651.9	15.8	2.4%	650.7	17.0	2.5%	649.5	18.2	2.7%
ME 4	37 55 15	2009	Critical	September	Used in Summary Table Analysis	389.1	378.4	10.7	2.7%	377.3	11.7	3.0%	376.3	12.8	3.3%	375.2	13.9	3.6%	374.1	14.9	3.8%	373.1	16.0	4.1%
ME 4	37 55 15	2010	Below Normal	October	Used in Summary Table Analysis	6,087.0	6,078.0	9.0	0.1%	6,077.1	10.0	0.2%	6,076.2	10.9	0.2%	6,075.3	11.7	0.2%	6,074.4	12.6	0.2%	6,073.5	13.5	0.2%
ME 4	37 55 15	2010	Below Normal	November	Used in Summary Table Analysis	8,281.9	8,275.0	6.9	0.1%	8,274.3	7.6	0.1%	8,273.6	8.3	0.1%	8,272.8	9.1	0.1%	8,272.1	9.8	0.1%	8,271.4	10.5	0.1%
ME 4	37 55 15	2010	Below Normal	December	--	12,338.0	12,332.2	5.8	0.0%	12,332.2	5.8	0.0%	12,331.0	6.9	0.1%	12,331.0	6.9	0.1%	12,329.9	8.1	0.1%	12,329.9	8.1	0.1%
ME 4	37 55 15	2010	Below Normal	January	--	36,179.4	36,173.6	5.8	0.0%	36,173.6	5.8	0.0%	36,172.5	6.9	0.0%	36,172.5	6.9	0.0%	36,172.5	6.9	0.0%	36,171.3	8.1	0.0%
ME 4	37 55 15	2010	Below Normal	February	--	27,230.3	27,225.7	4.6	0.0%	27,224.5	5.8	0.0%	27,224.5	5.8	0.0%	27,223.4	6.9	0.0%	27,223.4	6.9	0.0%	27,223.4	6.9	0.0%
ME 4	37 55 15	2010	Below Normal	March	--	28,824.1	28,819.4	4.6	0.0%	28,819.4	4.6	0.0%	28,819.4	4.6	0.0%	28,818.3	5.8	0.0%	28,818.3	5.8	0.0%	28,817.1	6.9	0.0%
ME 4	37 55 15	2010	Below Normal	April	--	39,990.7	39,986.1	4.6	0.0%	39,985.0	5.8	0.0%	39,985.0	5.8	0.0%	39,985.0	5.8	0.0%	39,983.8	6.9	0.0%	39,983.8	6.9	0.0%
ME 4	37 55 15	2010	Below Normal	May	--	20,251.2	20,241.9	9.3	0.0%	20,240.7	10.4	0.1%	20,239.6	11.6	0.1%	20,238.4	12.7	0.1%	20,238.4	12.7	0.1%	20,237.3	13.9	0.1%
ME 4	37 55 15	2010	Below Normal	June	--	9,335.9	9,322.7	13.2	0.1%	9,321.4	14.5	0.2%	9,320.0	15.9	0.2%	9,318.8	17.1	0.2%	9,317.5	18.4	0.2%	9,316.1	19.8	0.2%
ME 4	37 55 15	2010	Below Normal	July	--	1,453.5	1,441.7	11.8	0.8%	1,440.5	13.0	0.9%	1,439.4	14.1	1.0%	1,438.2	15.3	1.1%	1,436.9	16.6	1.1%	1,435.8	17.7	1.2%
ME 4	37 55 15	2010	Below Normal	August	--	567.2	556.4	10.8	1.9%	555.3	11.9	2.1%	554.3	12.9	2.3%	553.2	14.0	2.5%	552.2	15.0	2.6%	551.1	16.1	2.8%
ME 4	37 55 15	2010	Below Normal	September	Used in Summary Table Analysis	649.4	639.3	10.1	1.6%	638.2	11.1	1.7%	637.2	12.1	1.9%	636.2	13.1	2.0%	635.2	14.2	2.2%	634.2	15.2	2.3%
ME 4	37 55 15	2011	Wet	October	Used in Summary Table Analysis	9,623.6	9,616.0	7.6	0.1%	9,615.3	8.3	0.1%	9,614.5	9.1	0.1%	9,613.8	9.8	0.1%	9,613.0	10.6	0.1%	9,612.3	11.3	0.1%
ME 4	37 55 15	2011	Wet	November	Used in Summary Table Analysis	14,209.5	14,202.5	6.9	0.0%	14,202.5	6.9	0.0%	14,201.4	8.1	0.1%	14,201.4	8.1	0.1%	14,200.2	9.3	0.1%	14,200.2	9.3	0.1%
ME 4	37 55 15	2011	Wet	December	--	33,655.1	33,650.5	4.6	0.0%	33,649.3	5.8	0.0%	33,649.3	5.8	0.0%	33,648.1	6.9	0.0%	33,648.1	6.9	0.0%	33,647.0	8.1	0.0%
ME 4	37 55 15	2011	Wet	January	--	14,148.1	14,143.5	4.6	0.0%	14,142.4	5.8	0.0%	14,142.4	5.8	0.0%	14,141.2	6.9	0.0%	14,141.2	6.9	0.0%	14,141.2	6.9	0.0%
ME 4	37 55 15	2011	Wet	February	--	20,759.3	20,754.6	4.6	0.0%	20,754.6	4.6	0.0%	20,754.6	4.6	0.0%	20,753.5	5.8	0.0%	20,753.5	5.8	0.0%	20,752.3	6.9	0.0%
ME 4	37 55 15	2011	Wet	March	--	51,976.9	51,972.2	4.6	0.0%	51,972.2	4.6	0.0%	51,972.2	4.6	0.0%	51,971.1	5.8	0.0%	51,971.1	5.8	0.0%	51,971.1	5.8	0.0%
ME 4	37 55 15	2011	Wet	April	--	24,790.5	24,785.9	4.6	0.0%	24,785.9	4.6	0.0%	24,784.7	5.8	0.0%	24,784.7	5.8	0.0%	24,784.7	5.8	0.0%	24,783.6	6.9	0.0%
ME 4	37 55 15	2011	Wet	May	--	11,378.0	11,369.4	8.6	0.1%	11,368.6	9.4	0.1%	11,367.7	10.3	0.1%	11,366.9	11.1	0.1%	11,366.0	12.0	0.1%	11,365.0	13.0	0.1%
ME 4	37 55 15	2011	Wet	June	--	7,051.9	7,038.9	13.0	0.2%	7,037.6	14.2	0.2%	7,036.3	15.5	0.2%	7,035.1	16.8	0.2%	7,033.8	18.1	0.3%	7,032.5	19.3	0.3%
ME 4	37 55 15	2011	Wet	July	--	1,828.1	1,815.5	12.6	0.7%	1,814.2	13.9	0.8%	1,813.0	15.2	0.8%	1,811.8	16.3	0.9%	1,810.5	17.6	1.0%	1,809.3	18.9	1.0%
ME 4	37 55 15	2011	Wet	August	--	775.5	764.9	10.6	1.4%	763.8	11.7	1.5%	762.8	12.8	1.6%	761.7	13.8	1.8%	760.6	14.9	1.9%	759.6	15.9	2.1%
ME 4	37 55 15	2011	Wet	September	Used in Summary Table Analysis	432.2	422.6	9.5	2.2%	421.7	10.5	2.4%	420.7	11.5	2.7%	419.8	12.4	2.9%	418.8	13.4	3.1%	417.8	14.3	3.3%
ME 4	37 55 15	2012	Below Normal	October	Used in Summary Table Analysis	4,536.7	4,528.9	7.8	0.2%	4,528.2	8.4	0.2%	4,527.4	9.3	0.2%	4,526.6	10.1	0.2%	4,525.9	10.8	0.2%	4,525.1	11.6	0.3%
ME 4	37 55 15	2012	Below Normal	November	Used in Summary Table Analysis	8,228.0	8,221.9	6.1	0.1%	8,221.3	6.7	0.1%	8,220.7	7.3	0.1%	8,220.0	8.0	0.1%	8,219.4	8.6	0.1%	8,218.9	9.1	0.1%
ME 4	37 55 15	2012	Below Normal	December	--	5,179.2	5,173.8	5.3	0.1%	5,173.4	5.8	0.1%	5,172.8	6.4	0.1%	5,172.3	6.8	0.1%	5,171.8	7.4	0.1%	5,171.3	7.9	0.2%
ME 4	37 55 15	2012	Below Normal	January	--	20,086.8	20,082.2	4.6	0.0%	20,081.0	5.8	0.0%	20,081.0	5.8	0.0%	20,079.9	6.9	0.0%	20,079.9	6.9	0.0%	20,079.9	6.9	0.0%
ME 4	37 55 15	2012	Below Normal	February	--	18,204.9	18,200.2	4.6	0.0%	18,200.2	4.6	0.0%	18,200.2	4.6	0.0%	18,199.1	5.8	0.0%	18,199.1	5.8	0.0%	18,197.9	6.9	0.0%
ME 4	37 55 15	2012	Below Normal	March	--	45,391.2	45,386.6	4.6	0.0%	45,386.6	4.6	0.0%	45,385.4	5.8	0.0%	45,385.4	5.8	0.0%	45,385.4	5.8	0.0%	45,384.3	6.9	0.0%
ME 4	37 55 15	2012	Below Normal	April	--	26,847.2	26,842.6	4.6	0.0%	26,842.6	4.6	0.0%	26,842.6	4.6	0.0%	26,841.4	5.8	0.0%	26,841.4	5.8	0.0%	26,841.4	5.8	0.0%
ME 4	37 55 15	2012	Below Normal	May	--	7,480.0	7,471.3	8.7	0.1%	7,470.5	9.5	0.1%	7,469.6	10.4	0.1%	7,468.8	11.2	0.2%	7,467.9	12.0	0.2%	7,467.1	12.8	0.2%
ME 4	37 55 15	2012	Below Normal	June	--	5,511.1	5,497.9	13.2	0.2%	5,496.5	14.6	0.3%	5,495.3	15.9	0.3%	5,494.0	17.1	0.3%	5,492.6	18.5	0.3%	5,491.3	19.8	0.4%
ME 4	37 55 15	2012	Below Normal	July	--	2,221.1	2,208.8	12.3	0.6%	2,207.6	13.4	0.6%	2,206.4	14.7	0.7%	2,205.1	16.0	0.7%	2,203.9	17.1	0.8%	2,202.8	18.3	0.8%
ME 4	37 55 15	2012	Below Normal	August	--	387.6	377.8	9.8	2.5%	376.8	10.7	2.8%	375.9	11.7	3.0%	374.9	12.7	3.3%	373.9	13.6	3.5%	373.0	14.6	3.8%
ME 4	37 55 15	2012	Below Normal	September	Used in Summary Table Analysis	247.9	239.3	8.6	3.5%	238.5	9.4	3.8%	237.6	10.3	4.1%	236.8	11.1	4.5%	235.9	12.0	4.8%	235.1	12.8	5.2%
ME 4	37 55 15	2013	Below Normal	October	Used in Summary Table Analysis	1,908.8	1,901.4	7.4	0.4%	1,900.7	8.1	0.4%	1,899.9	8.9	0.5%	1,899.2	9.6	0.5%	1,898.4	10.4	0.5%	1,897.7	11.1	0.6%
ME 4	37 55 15	2013	Below Normal	November	Used in Summary Table Analysis	14,666.7	14,660.9	5.8	0.0%	14,660.9	5.8	0.0%	14,659.7	6.9	0.0%	14,659.7	6.9	0.0%	14,658.6	8.1	0.1%	14,658.6	8.1	0.1%
ME 4	37 55 15	2013	Below Normal	December	--	59,950.2	59,944.4	5.8	0.0%	59,943.3	6.9	0.0%	59,943.3	6.9	0.0%	59,943.3	6.9	0.0%	59,942.1	8.1	0.0%	59,942.1	8.1	0.0%
ME 4	37 55 15	2013	Below Normal	January	--	22,188.7	22,184.0	4.6	0.0%	22,184.0	4.6	0.0%	22,184.0	4.6	0.0%	22,182.9	5.8	0.0%	22,182.9	5.8	0.0%	22,181.7	6.9	0.0%
ME 4	37 55 15	2013	Below Normal	February	--	8,839.8	8,835.4	4.4	0.0%	8,835.0	4.9	0.1%	8,834.6	5.2	0.1%	8,834.1	5.7	0.1%	8,833.7	6.1	0.1%	8,833.2	6.6	0.1%
ME 4	37 55 15	2013	Below Normal	March	--	10,321.3	10,317.1	4.2	0.0%	10,316.7	4.6	0.0%	10,316.3	5.0	0.0%	10,315.9	5.4	0.1%	10,315.4	5.9	0.1%	10,315.0	6.3	0.1%
ME 4	37 55 15	2013	Below Normal	April	--	8,288.4	8,280.3	8.1	0.1%	8,279.5	8.9	0.1%	8,278.6	9.8	0.1%	8,277.8	10.6	0.1%	8,277.0	11.5	0.1%	8,276.2	12.3	0.1%
ME 4	37 55 15	2013	Below Normal	May	--	4,427.4	4,417.6	9.8	0.2%	4,416.6	10.9	0.2%	4,415.6	11.8	0.3%	4,414.6	12.8	0.3%	4,413.7	13.8	0.3%	4,412.6	14.8	0.3%
ME 4	37 55 15	2013	Below Normal	June	--	2,109.4	2,097.5	11.9	0.6%	2,096.3	13.1	0.6%	2,095.1	14.2	0.7%	2,094.0	15.4	0.7%	2,092.8	16.6	0.8%	2,091.7	17.7	0.8%
ME 4	37 55 15	2013	Below Normal	July	--	717.8	706.5	11.3	1.6%	705.3	12.4	1.7%	704.2	13.6	1.9%	703.1	14.7	2.0%	702.0	15.8	2.2%	700.8	16.9	2.4%
ME 4	37 55 15	2013	Below Normal	August	--	339.4	328.9	10.5	3.1%	327.8	11.5	3.4%	326.8	12.6	3.7%	325.7	13.6	4.0%	324.7	14.7	4.3%	323.6	15.7	4.6%
ME 4	37 55 15	2013	Below Normal	September	Used in Summary Table Analysis	4,781.3	4,770.4	10.9	0.2%	4,769.3	11.9	0.2%	4,768.3	13.0	0.3%	4,767.1	14.1	0.3%	4,766.1	15.2	0.3%	4,765.0	16.2	0.3%
ME 4	37 55 15	2014	Critical	October	Used in Summary Table Analysis	281.2	273.4	7.7	2.8%	272.7	8.5	3.0%	271.9	9.3	3.3%	271.1	10.0	3.6%	270.4	10.8	3.8%	269.6	11.6	4.1%
ME 4	37 55 15	2014	Critical	November	Used in Summary Table Analysis	1,535.5	1,529.4	6.1	0.4%	1,528.8	6.7	0.4%	1,528.1	7.4	0.5%	1,527.5	8.0	0.5%	1,527.0	8.6	0.6%	1,526.3	9.3	0.6%
ME 4	37 55 15	2014	Critical	December	--	1,588.5	1,583.1	5.4	0.3%	1,582.5	6.0	0.4%	1,581.9	6.6	0.4%	1,581.5	7.1	0.4%	1,580.9	7.6	0.5%	1,580.3	8.2	0.5%
ME 4	37 55 15	2014	Critical	January	--	2,818.9	2,814.0	4.9	0.2%	2,813.5	5.3	0.2%	2,813.1	5.8	0.2%	2,812.6	6.3	0.2%	2,812.0	6.8	0.2%	2,811.6	7.3	0.3%
ME 4	37 55 15	2014	Critical	February	--	15,745.4	15,740.7	4.6	0.0%	15,739.6	5.8	0.0%	15,739.6	5.8	0.0%	15,738.4	6.9	0.0%	15,738.4	6.9	0.0%	15,738.4	6.9	0.0%
ME 4	37 55 15	2014	Critical	March	--	31,475.7	31,471.1	4.6	0.0%	31,471.1	4.6	0.0%	31,469.9	5.8	0.0%	31,469.9	5.8	0.0%	31,469.9	5.8	0.0%	31,468.8	6.9	0.0%
ME 4	37 55 15	2014	Critical	April	--	12,986.1	12,978.0	8.1	0.1%	12,976.9	9.3	0.1%	12,975.7	10.4	0.1%	12,975.7	10.4	0.1%	12,974.5	11.6	0.1%	12,973.4	12.7	0.1%
ME 4	37 55 15	2014	Critical	May	--	5,185.9	5,175.5	10.4	0.2%	5,174.4	11.5	0.2%	5,173.4	12.5	0.2%	5,172.3	13.5	0.3%	5,171.3	14.6	0.3%	5,170.3	15.6	0.3%
ME 4	37 55 15	2014	Critical	June	--	1,197.1	1,182.9	14.2	1.2%	1,181.5	15.6	1.3%	1,180.1	17.0	1.4%	1,178.6	18.5	1.5%	1,177.2	19.9	1.7%	1,175.8	21.3	1.8%
ME 4	37 55 15	2014	Critical	July	--	545.6	532.7	12.9	2.4%	531.4	14.2	2.6%	530.1	15.5	2.8%	528.8	16.7	3.1%	527.5	18.0	3.3%	526.3	19.3	3.5%
ME 4	37 55 15	2014	Critical	August	--	347.3	335.2	12.2	3.5%	334.0	13.4	3.9%	332.7	14.6	4.2%	331.5	15.8	4.6%	330.3	17.0	4.9%	329.1	18.2	5.3%
ME 4	37 55 15	2014	Critical	September	Used in Summary Table Analysis	2,571.3	2,559.5	11.8	0.5%	2,558.3	13.0	0.5%	2,557.1	14.2	0.6%	2,555.9	15.4	0.6%	2,554.7	16.6	0.6%	2,553.6	17.7	0.7%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	37 55 15	2015	Dry	October	Used in Summary Table Analysis	11,353.0	11,344.2	8.8	0.1%	11,343.3	9.7	0.1%	11,342.5	10.5	0.1%	11,340.9	12.2	0.1%	11,340.0	13.0	0.1%	11,339.1	13.9	0.1%
ME 4	37 55 15	2015	Dry	November	Used in Summary Table Analysis	9,030.1	9,023.4	6.7	0.1%	9,022.7	7.4	0.1%	9,022.0	8.1	0.1%	9,021.3	8.8	0.1%	9,020.6	9.5	0.1%	9,019.9	10.2	0.1%
ME 4	37 55 15	2015	Dry	December	--	32,583.3	32,577.5	5.8	0.0%	32,577.5	5.8	0.0%	32,576.4	6.9	0.0%	32,576.4	6.9	0.0%	32,575.2	8.1	0.0%	32,575.2	8.1	0.0%
ME 4	37 55 15	2015	Dry	January	--	14,572.9	14,567.1	5.8	0.0%	14,567.1	5.8	0.0%	14,566.0	6.9	0.0%	14,566.0	6.9	0.0%	14,566.0	6.9	0.0%	14,564.8	8.1	0.1%
ME 4	37 55 15	2015	Dry	February	--	27,221.1	27,216.4	4.6	0.0%	27,216.4	4.6	0.0%	27,215.3	5.8	0.0%	27,215.3	5.8	0.0%	27,214.1	6.9	0.0%	27,214.1	6.9	0.0%
ME 4	37 55 15	2015	Dry	March	--	11,567.9	11,563.7	4.3	0.0%	11,563.3	4.6	0.0%	11,562.8	5.1	0.0%	11,562.4	5.6	0.0%	11,562.0	5.9	0.1%	11,561.6	6.4	0.1%
ME 4	37 55 15	2015	Dry	April	--	8,378.0	8,369.3	8.7	0.1%	8,368.5	9.5	0.1%	8,367.6	10.4	0.1%	8,366.8	11.2	0.1%	8,365.9	12.2	0.1%	8,365.0	13.0	0.2%
ME 4	37 55 15	2015	Dry	May	--	1,509.0	1,498.8	10.2	0.7%	1,497.8	11.2	0.7%	1,496.8	12.3	0.8%	1,495.7	13.3	0.9%	1,494.7	14.4	1.0%	1,493.6	15.4	1.0%
ME 4	37 55 15	2015	Dry	June	--	652.3	639.2	13.1	2.0%	637.8	14.5	2.2%	636.5	15.8	2.4%	635.2	17.1	2.6%	633.9	18.4	2.8%	632.6	19.7	3.0%
ME 4	37 55 15	2015	Dry	July	--	268.3	255.7	12.6	4.7%	254.5	13.9	5.2%	253.2	15.1	5.6%	251.9	16.4	6.1%	250.7	17.7	6.6%	249.4	18.9	7.0%
ME 4	37 55 15	2015	Dry	August	--	165.8	153.8	12.1	7.3%	152.5	13.3	8.0%	151.3	14.5	8.7%	150.1	15.7	9.5%	148.9	16.9	10.2%	147.7	18.1	10.9%
ME 4	37 55 15	2015	Dry	September	Used in Summary Table Analysis	120.3	109.6	10.7	8.9%	108.6	11.7	9.8%	107.5	12.8	10.6%	106.4	13.9	11.5%	105.4	15.0	12.4%	104.3	16.0	13.3%
ME 4	37 55 15	2016	Above Normal	October	Used in Summary Table Analysis	85.8	76.7	9.0	10.5%	75.8	10.0	11.6%	74.9	10.9	12.7%	74.6	11.2	13.1%	73.8	11.9	13.9%	72.5	13.2	15.4%
ME 4	37 55 15	2016	Above Normal	November	Used in Summary Table Analysis	3,858.2	3,851.4	6.8	0.2%	3,850.7	7.5	0.2%	3,850.0	8.2	0.2%	3,849.3	8.9	0.2%	3,848.6	9.6	0.2%	3,847.9	10.3	0.3%
ME 4	37 55 15	2016	Above Normal	December	--	36,579.9	36,574.1	5.8	0.0%	36,572.9	6.9	0.0%	36,572.9	6.9	0.0%	36,571.8	8.1	0.0%	36,571.8	8.1	0.0%	36,570.6	9.3	0.0%
ME 4	37 55 15	2016	Above Normal	January	--	57,275.5	57,269.7	5.8	0.0%	57,269.7	5.8	0.0%	57,268.5	6.9	0.0%	57,268.5	6.9	0.0%	57,267.4	8.1	0.0%	57,267.4	8.1	0.0%
ME 4	37 55 15	2016	Above Normal	February	--	24,261.6	24,256.9	4.6	0.0%	24,256.9	4.6	0.0%	24,256.9	4.6	0.0%	24,255.8	5.8	0.0%	24,255.8	5.8	0.0%	24,254.6	6.9	0.0%
ME 4	37 55 15	2016	Above Normal	March	--	41,758.1	41,753.5	4.6	0.0%	41,753.5	4.6	0.0%	41,753.5	4.6	0.0%	41,752.3	5.8	0.0%	41,752.3	5.8	0.0%	41,751.2	6.9	0.0%
ME 4	37 55 15	2016	Above Normal	April	--	18,532.4	18,527.8	4.6	0.0%	18,527.8	4.6	0.0%	18,527.8	4.6	0.0%	18,526.6	5.8	0.0%	18,526.6	5.8	0.0%	18,526.6	5.8	0.0%
ME 4	37 55 15	2016	Above Normal	May	--	5,213.4	5,208.3	5.1	0.1%	5,207.8	5.7	0.1%	5,207.3	6.1	0.1%	5,206.7	6.7	0.1%	5,206.3	7.2	0.1%	5,205.7	7.8	0.1%
ME 4	37 55 15	2016	Above Normal	June	--	1,508.4	1,498.1	10.3	0.7%	1,497.2	11.2	0.7%	1,496.2	12.3	0.8%	1,495.1	13.3	0.9%	1,494.1	14.4	1.0%	1,493.1	15.4	1.0%
ME 4	37 55 15	2016	Above Normal	July	--	821.9	810.8	11.2	1.4%	809.7	12.3	1.5%	808.6	13.4	1.6%	807.4	14.5	1.8%	806.3	15.6	1.9%	805.2	16.7	2.0%
ME 4	37 55 15	2016	Above Normal	August	--	490.5	479.8	10.7	2.2%	478.7	11.8	2.4%	477.6	12.9	2.6%	476.5	14.0	2.8%	475.5	15.0	3.1%	474.4	16.1	3.3%
ME 4	37 55 15	2016	Above Normal	September	Used in Summary Table Analysis	327.0	317.6	9.4	2.9%	316.6	10.4	3.2%	315.7	11.3	3.5%	314.7	12.3	3.8%	313.8	13.2	4.0%	312.8	14.2	4.3%
ME 4	37 55 15	2017	Wet	October	Used in Summary Table Analysis	18,268.5	18,260.4	8.1	0.0%	18,260.4	8.1	0.0%	18,259.3	9.3	0.1%	18,258.1	10.4	0.1%	18,258.1	10.4	0.1%	18,256.9	11.6	0.1%
ME 4	37 55 15	2017	Wet	November	Used in Summary Table Analysis	18,805.6	18,799.8	5.8	0.0%	18,799.8	5.8	0.0%	18,798.6	6.9	0.0%	18,798.6	6.9	0.0%	18,797.5	8.1	0.0%	18,797.5	8.1	0.0%
ME 4	37 55 15	2017	Wet	December	--	24,083.3	24,078.7	4.6	0.0%	24,077.5	5.8	0.0%	24,077.5	5.8	0.0%	24,076.4	6.9	0.0%	24,076.4	6.9	0.0%	24,075.2	8.1	0.0%
ME 4	37 55 15	2017	Wet	January	--	106,814.8	106,810.2	4.6	0.0%	106,810.2	4.6	0.0%	106,809.0	5.8	0.0%	106,809.0	5.8	0.0%	106,807.9	6.9	0.0%	106,807.9	6.9	0.0%
ME 4	37 55 15	2017	Wet	February	--	81,788.2	81,783.6	4.6	0.0%	81,783.6	4.6	0.0%	81,782.4	5.8	0.0%	81,782.4	5.8	0.0%	81,781.3	6.9	0.0%	81,781.3	6.9	0.0%
ME 4	37 55 15	2017	Wet	March	--	27,258.1	27,254.6	3.5	0.0%	27,253.5	4.6	0.0%	27,253.5	4.6	0.0%	27,253.5	4.6	0.0%	27,252.3	5.8	0.0%	27,252.3	5.8	0.0%
ME 4	37 55 15	2017	Wet	April	--	22,919.0	22,915.5	3.5	0.0%	22,915.5	3.5	0.0%	22,914.4	4.6	0.0%	22,914.4	4.6	0.0%	22,914.4	4.6	0.0%	22,913.2	5.8	0.0%
ME 4	37 55 15	2017	Wet	May	--	6,272.3	6,267.0	5.3	0.1%	6,266.6	5.8	0.1%	6,266.0	6.4	0.1%	6,265.4	6.9	0.1%	6,264.9	7.4	0.1%	6,264.4	8.0	0.1%
ME 4	37 55 15	2017	Wet	June	--	2,113.9	2,103.4	10.5	0.5%	2,102.3	11.6	0.5%	2,101.3	12.6	0.6%	2,100.2	13.7	0.6%	2,099.2	14.7	0.7%	2,098.1	15.7	0.7%
ME 4	37 55 15	2017	Wet	July	--	932.5	921.3	11.3	1.2%	920.2	12.4	1.3%	919.0	13.5	1.4%	917.9	14.7	1.6%	916.8	15.8	1.7%	915.6	16.9	1.8%
ME 4	37 55 15	2017	Wet	August	--	504.8	494.0	10.8	2.1%	493.0	11.9	2.4%	491.9	13.0	2.6%	490.8	14.0	2.8%	489.7	15.1	3.0%	488.6	16.2	3.2%
ME 4	37 55 15	2017	Wet	September	Used in Summary Table Analysis	321.3	311.5	9.9	3.1%	310.5	10.8	3.4%	309.5	11.8	3.7%	308.5	12.8	4.0%	307.6	13.8	4.3%	306.6	14.8	4.6%
ME 4	37 55 15	2018	Above Normal	October	Used in Summary Table Analysis	274.2	267.3	6.8	2.5%	266.2	8.0	2.9%	265.3	8.9	3.2%	264.3	9.9	3.6%	263.4	10.8	3.9%	262.6	11.6	4.2%
ME 4	37 55 15	2018	Above Normal	November	Used in Summary Table Analysis	10,769.2	10,763.3	5.9	0.1%	10,762.7	6.5	0.1%	10,762.0	7.2	0.1%	10,761.5	7.8	0.1%	10,760.9	8.3	0.1%	10,760.3	8.9	0.1%
ME 4	37 55 15	2018	Above Normal	December	--	5,444.4	5,439.4	5.1	0.1%	5,438.9	5.6	0.1%	5,438.3	6.1	0.1%	5,437.8	6.6	0.1%	5,437.4	7.1	0.1%	5,436.8	7.6	0.1%
ME 4	37 55 15	2018	Above Normal	January	--	17,741.9	17,737.3	4.6	0.0%	17,737.3	4.6	0.0%	17,736.1	5.8	0.0%	17,736.1	5.8	0.0%	17,736.1	5.8	0.0%	17,735.0	6.9	0.0%
ME 4	37 55 15	2018	Above Normal	February	--	7,596.2	7,592.1	4.1	0.1%	7,591.7	4.5	0.1%	7,591.2	5.0	0.1%	7,590.9	5.3	0.1%	7,590.4	5.8	0.1%	7,590.0	6.1	0.1%
ME 4	37 55 15	2018	Above Normal	March	--	20,674.8	20,671.3	3.5	0.0%	20,671.3	3.5	0.0%	20,670.1	4.6	0.0%	20,670.1	4.6	0.0%	20,670.1	4.6	0.0%	20,669.0	5.8	0.0%
ME 4	37 55 15	2018	Above Normal	April	--	32,172.5	32,167.8	4.6	0.0%	32,167.8	4.6	0.0%	32,167.8	4.6	0.0%	32,167.8	4.6	0.0%	32,166.7	5.8	0.0%	32,166.7	5.8	0.0%
ME 4	37 55 15	2018	Above Normal	May	--	6,987.8	6,979.6	8.2	0.1%	6,978.8	9.0	0.1%	6,978.0	9.8	0.1%	6,977.2	10.6	0.2%	6,976.4	11.5	0.2%	6,975.6	12.3	0.2%
ME 4	37 55 15	2018	Above Normal	June	--	1,912.8	1,902.3	10.5	0.6%	1,901.2	11.7	0.6%	1,900.1	12.7	0.7%	1,899.1	13.8	0.7%	1,898.0	14.8	0.8%	1,897.0	15.9	0.8%
ME 4	37 55 15	2018	Above Normal	July	--	780.1	768.8	11.3	1.4%	767.7	12.4	1.6%	766.6	13.5	1.7%	765.4	14.6	1.9%	764.3	15.7	2.0%	763.2	16.9	2.2%
ME 4	37 55 15	2018	Above Normal	August	--	441.4	431.0	10.3	2.3%	430.0	11.4	2.6%	428.9	12.4	2.8%	427.9	13.4	3.0%	426.9	14.5	3.3%	425.8	15.5	3.5%
ME 4	37 55 15	2018	Above Normal	September	Used in Summary Table Analysis	299.0	289.1	9.8	3.3%	288.1	10.8	3.6%	287.1	11.8	4.0%	286.2	12.8	4.3%	285.2	13.8	4.6%	284.2	14.8	4.9%
ME 4	37 55 15	2019	Below Normal	October	Used in Summary Table Analysis	207.2	199.6	7.6	3.7%	198.8	8.4	4.0%	198.1	9.1	4.4%	197.3	9.9	4.8%	196.6	10.6	5.1%	195.9	11.3	5.5%
ME 4	37 55 15	2019	Below Normal	November	Used in Summary Table Analysis	6,609.0	6,603.1	5.9	0.1%	6,602.5	6.5	0.1%	6,601.9	7.2	0.1%	6,601.3	7.8	0.1%	6,600.7	8.3	0.1%	6,600.1	8.9	0.1%
ME 4	37 55 15	2019	Below Normal	December	--	14,641.2	14,635.4	5.8	0.0%	14,635.4	5.8	0.0%	14,634.3	6.9	0.0%	14,634.3	6.9	0.0%	14,634.3	6.9	0.0%	14,633.1	8.1	0.1%
ME 4	37 55 15	2019	Below Normal	January	--	35,169.0	35,164.4	4.6	0.0%	35,164.4	4.6	0.0%	35,164.4	4.6	0.0%	35,163.2	5.8	0.0%	35,163.2	5.8	0.0%	35,162.0	6.9	0.0%
ME 4	37 55 15	2019	Below Normal	February	--	141,863.4	141,863.4	0.0	0.0%	141,863.4	0.0	0.0%	141,863.4	0.0	0.0%	141,863.4	0.0	0.0%	141,863.4	0.0	0.0%	141,863.4	0.0	0.0%
ME 4	37 55 15	2019	Below Normal	March	--	42,292.8	42,289.4	3.5	0.0%	42,289.4	3.5	0.0%	42,288.2	4.6	0.0%	42,288.2	4.6	0.0%	42,288.2	4.6	0.0%	42,287.0	5.8	0.0%
ME 4	37 55 15	2019	Below Normal	April	--	15,265.0	15,261.6	3.5	0.0%	15,260.4	4.6	0.0%	15,260.4	4.6	0.0%	15,260.4	4.6	0.0%	15,259.3	5.8	0.0%	15,259.3	5.8	0.0%
ME 4	37 55 15	2019	Below Normal	May	--	16,901.6	16,893.5	8.1	0.0%	16,892.4	9.3	0.1%	16,891.2	10.4	0.1%	16,890.0	11.6	0.1%	16,890.0	11.6	0.1%	16,888.9	12.7	0.1%
ME 4	37 55 15	2019	Below Normal	June	--	4,243.2	4,231.7	11.5	0.3%	4,230.6	12.6	0.3%	4,229.5	13.7	0.3%	4,228.4	14.8	0.3%	4,227.2	16.0	0.4%	4,226.0	17.1	0.4%
ME 4	37 55 15	2019	Below Normal	July	--	1,359.3	1,348.0	11.2	0.8%	1,346.9	12.4	0.9%	1,345.7	13.5	1.0%	1,344.7	14.6	1.1%	1,343.5	15.7	1.2%	1,342.4	16.9	1.2%
ME 4	37 55 15	2019	Below Normal	August	--	594.8	584.1	10.7	1.8%	583.0	11.7	2.0%	582.0	12.8	2.2%	580.9	13.9	2.3%	579.8	14.9	2.5%	578.8	16.0	2.7%
ME 4	37 55 15	2019	Below Normal	September	Used in Summary Table Analysis	461.4	451.6	9.8	2.1%	450.6	10.8	2.3%	449.6	11.8	2.6%	448.6	12.8	2.8%	447.6	13.8	3.0%	446.6	14.7	3.2%
ME 4	37 55 15	2020	Dry	October	Used in Summary Table Analysis	355.0	347.8	7.2	2.0%	347.1	8.0	2.2%	346.4	8.7	2.4%	345.6	9.4	2.6%	344.9	10.1	2.9%	344.2	10.9	3.1%
ME 4	37 55 15	2020	Dry	November	Used in Summary Table Analysis	317.5	311.9	5.6	1.8%	311.3	6.1	1.9%	310.8	6.7	2.1%	310.2	7.3	2.3%	309.6	7.8	2.5%	309.1	8.4	2.7%
ME 4	37 55 15	2020	Dry	December	--	13,247.7	13,243.1	4.6	0.0%	13,241.9	5.8	0.0%	13,241.9	5.8	0.0%	13,241.9	5.8	0.0%	13,240.7	6.9	0.1%	13,240.7	6.9	0.1%
ME 4	37 55 15	2020	Dry	January	--	22,300.9	22,296.3	4.6	0.0%	22,296.3	4.6	0.0%	22,295.1	5.8	0.0%	22,295.1	5.8	0.0%	22,294.0	6.9	0.0%	22,294.0	6.9	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	37 55 15	2020	Dry	February	--	7,413.8	7,409.6	4.2	0.1%	7,409.1	4.6	0.1%	7,408.8	5.0	0.1%	7,408.3	5.4	0.1%	7,407.9	5.9	0.1%	7,407.5	6.3	0.1%
ME 4	37 55 15	2020	Dry	March	--	7,238.9	7,235.0	3.9	0.1%	7,234.6	4.3	0.1%	7,234.1	4.7	0.1%	7,233.8	5.1	0.1%	7,233.3	5.6	0.1%	7,233.0	5.9	0.1%
ME 4	37 55 15	2020	Dry	April	--	5,477.1	5,468.5	8.6	0.2%	5,467.7	9.4	0.2%	5,466.8	10.3	0.2%	5,466.0	11.1	0.2%	5,465.0	12.0	0.2%	5,464.2	12.8	0.2%
ME 4	37 55 15	2020	Dry	May	--	7,369.3	7,359.0	10.3	0.1%	7,358.1	11.2	0.2%	7,357.1	12.3	0.2%	7,356.0	13.3	0.2%	7,355.0	14.4	0.2%	7,353.9	15.4	0.2%
ME 4	37 55 15	2020	Dry	June	--	2,104.6	2,091.1	13.5	0.6%	2,089.8	14.8	0.7%	2,088.4	16.2	0.8%	2,087.0	17.6	0.8%	2,085.6	19.0	0.9%	2,084.4	20.3	1.0%
ME 4	37 55 15	2020	Dry	July	--	795.6	782.5	13.1	1.6%	781.2	14.4	1.8%	779.9	15.7	2.0%	778.6	17.0	2.1%	777.3	18.3	2.3%	776.0	19.6	2.5%
ME 4	37 55 15	2020	Dry	August	--	398.3	385.5	12.8	3.2%	384.2	14.1	3.5%	382.9	15.3	3.9%	381.6	16.6	4.2%	380.4	17.9	4.5%	379.1	19.2	4.8%
ME 4	37 55 15	2020	Dry	September	Used in Summary Table Analysis	247.8	236.5	11.3	4.6%	235.4	12.4	5.0%	234.2	13.6	5.5%	233.1	14.7	5.9%	232.0	15.8	6.4%	230.8	16.9	6.8%
ME 4	36 55 16	2000	Above Normal	October	Used in Summary Table Analysis	814.6	806.9	7.7	0.9%	806.1	8.5	1.0%	805.4	9.3	1.1%	804.6	10.0	1.2%	803.8	10.8	1.3%	803.1	11.6	1.4%
ME 4	36 55 16	2000	Above Normal	November	Used in Summary Table Analysis	12,093.8	12,088.0	5.8	0.0%	12,086.8	6.9	0.1%	12,086.8	6.9	0.1%	12,085.6	8.1	0.1%	12,085.6	8.1	0.1%	12,084.5	9.3	0.1%
ME 4	36 55 16	2000	Above Normal	December	--	10,797.9	10,792.7	5.2	0.0%	10,792.2	5.7	0.1%	10,791.7	6.3	0.1%	10,791.2	6.7	0.1%	10,790.6	7.3	0.1%	10,790.2	7.8	0.1%
ME 4	36 55 16	2000	Above Normal	January	--	28,534.7	28,530.1	4.6	0.0%	28,528.9	5.8	0.0%	28,528.9	5.8	0.0%	28,528.9	5.8	0.0%	28,527.8	6.9	0.0%	28,527.8	6.9	0.0%
ME 4	36 55 16	2000	Above Normal	February	--	37,015.0	37,010.4	4.6	0.0%	37,010.4	4.6	0.0%	37,009.3	5.8	0.0%	37,009.3	5.8	0.0%	37,008.1	6.9	0.0%	37,008.1	6.9	0.0%
ME 4	36 55 16	2000	Above Normal	March	--	18,309.0	18,304.4	4.6	0.0%	18,304.4	4.6	0.0%	18,303.2	5.8	0.0%	18,303.2	5.8	0.0%	18,303.2	5.8	0.0%	18,302.1	6.9	0.0%
ME 4	36 55 16	2000	Above Normal	April	--	12,307.9	12,304.4	3.5	0.0%	12,304.4	3.5	0.0%	12,303.2	4.6	0.0%	12,303.2	4.6	0.0%	12,303.2	4.6	0.0%	12,302.1	5.8	0.0%
ME 4	36 55 16	2000	Above Normal	May	--	7,089.7	7,081.1	8.6	0.1%	7,080.3	9.4	0.1%	7,079.5	10.2	0.1%	7,078.6	11.1	0.2%	7,077.8	11.9	0.2%	7,076.9	12.8	0.2%
ME 4	36 55 16	2000	Above Normal	June	--	2,609.5	2,596.8	12.7	0.5%	2,595.5	14.0	0.5%	2,594.2	15.3	0.6%	2,592.9	16.6	0.6%	2,591.7	17.8	0.7%	2,590.4	19.1	0.7%
ME 4	36 55 16	2000	Above Normal	July	--	990.8	979.4	11.4	1.1%	978.3	12.5	1.3%	977.1	13.6	1.4%	976.0	14.8	1.5%	974.9	15.9	1.6%	973.7	17.1	1.7%
ME 4	36 55 16	2000	Above Normal	August	--	520.7	510.1	10.6	2.0%	509.0	11.7	2.2%	508.0	12.8	2.4%	506.9	13.8	2.7%	505.9	14.9	2.9%	504.8	15.9	3.1%
ME 4	36 55 16	2000	Above Normal	September	Used in Summary Table Analysis	294.3	284.9	9.3	3.2%	284.0	10.3	3.5%	283.1	11.2	3.8%	282.2	12.1	4.1%	281.2	13.0	4.4%	280.3	14.0	4.8%
ME 4	36 55 16	2001	Dry	October	Used in Summary Table Analysis	3,809.5	3,801.9	7.6	0.2%	3,801.2	8.3	0.2%	3,800.3	9.1	0.2%	3,799.5	10.0	0.3%	3,798.8	10.6	0.3%	3,798.0	11.5	0.3%
ME 4	36 55 16	2001	Dry	November	Used in Summary Table Analysis	6,115.0	6,109.0	6.0	0.1%	6,108.4	6.6	0.1%	6,107.8	7.3	0.1%	6,107.2	7.9	0.1%	6,106.6	8.4	0.1%	6,105.9	9.1	0.1%
ME 4	36 55 16	2001	Dry	December	--	8,829.5	8,824.2	5.3	0.1%	8,823.7	5.8	0.1%	8,823.1	6.4	0.1%	8,822.7	6.8	0.1%	8,822.1	7.4	0.1%	8,821.5	8.0	0.1%
ME 4	36 55 16	2001	Dry	January	--	12,773.1	12,768.5	4.6	0.0%	12,768.5	4.6	0.0%	12,768.5	4.6	0.0%	12,767.4	5.8	0.0%	12,767.4	5.8	0.0%	12,766.2	6.9	0.1%
ME 4	36 55 16	2001	Dry	February	--	17,460.6	17,457.2	3.5	0.0%	17,456.0	4.6	0.0%	17,456.0	4.6	0.0%	17,454.9	5.8	0.0%	17,454.9	5.8	0.0%	17,454.9	5.8	0.0%
ME 4	36 55 16	2001	Dry	March	--	12,291.7	12,287.0	4.6	0.0%	12,287.0	4.6	0.0%	12,287.0	4.6	0.0%	12,285.9	5.8	0.0%	12,285.9	5.8	0.0%	12,285.9	5.8	0.0%
ME 4	36 55 16	2001	Dry	April	--	10,966.1	10,957.4	8.7	0.1%	10,956.5	9.6	0.1%	10,955.6	10.5	0.1%	10,954.7	11.3	0.1%	10,953.8	12.3	0.1%	10,953.0	13.1	0.1%
ME 4	36 55 16	2001	Dry	May	--	2,637.0	2,626.7	10.3	0.4%	2,625.7	11.3	0.4%	2,624.7	12.4	0.5%	2,623.7	13.3	0.5%	2,622.7	14.4	0.5%	2,621.6	15.4	0.6%
ME 4	36 55 16	2001	Dry	June	--	2,644.4	2,630.3	14.1	0.5%	2,628.9	15.5	0.6%	2,627.4	17.0	0.6%	2,626.0	18.4	0.7%	2,624.7	19.8	0.7%	2,623.3	21.2	0.8%
ME 4	36 55 16	2001	Dry	July	--	718.2	705.2	13.1	1.8%	703.9	14.4	2.0%	702.6	15.7	2.2%	701.3	17.0	2.4%	700.0	18.3	2.5%	698.7	19.6	2.7%
ME 4	36 55 16	2001	Dry	August	--	171.8	159.2	12.6	7.4%	157.9	13.9	8.1%	156.6	15.2	8.8%	155.4	16.4	9.6%	154.1	17.7	10.3%	152.8	19.0	11.0%
ME 4	36 55 16	2001	Dry	September	Used in Summary Table Analysis	94.6	83.4	11.2	11.8%	82.3	12.3	13.0%	81.2	13.4	14.2%	80.0	14.5	15.4%	78.9	15.7	16.6%	77.8	16.8	17.7%
ME 4	36 55 16	2002	Below Normal	October	Used in Summary Table Analysis	264.1	254.9	9.2	3.5%	254.0	10.1	3.8%	253.0	11.1	4.2%	252.1	12.0	4.5%	251.2	12.9	4.9%	250.2	13.9	5.2%
ME 4	36 55 16	2002	Below Normal	November	Used in Summary Table Analysis	12,013.9	12,005.8	8.1	0.1%	12,005.8	8.1	0.1%	12,004.6	9.3	0.1%	12,004.6	9.3	0.1%	12,003.5	10.4	0.1%	12,002.3	11.6	0.1%
ME 4	36 55 16	2002	Below Normal	December	--	35,645.8	35,638.9	6.9	0.0%	35,638.9	6.9	0.0%	35,637.7	8.1	0.0%	35,636.6	9.3	0.0%	35,636.6	9.3	0.0%	35,635.4	10.4	0.0%
ME 4	36 55 16	2002	Below Normal	January	--	30,854.2	30,848.4	5.8	0.0%	30,848.4	5.8	0.0%	30,847.2	6.9	0.0%	30,847.2	6.9	0.0%	30,846.1	8.1	0.0%	30,846.1	8.1	0.0%
ME 4	36 55 16	2002	Below Normal	February	--	24,663.2	24,658.6	4.6	0.0%	24,657.4	5.8	0.0%	24,657.4	5.8	0.0%	24,656.3	6.9	0.0%	24,656.3	6.9	0.0%	24,655.1	8.1	0.0%
ME 4	36 55 16	2002	Below Normal	March	--	17,768.5	17,763.9	4.6	0.0%	17,762.7	5.8	0.0%	17,762.7	5.8	0.0%	17,761.6	6.9	0.0%	17,761.6	6.9	0.0%	17,760.4	8.1	0.0%
ME 4	36 55 16	2002	Below Normal	April	--	9,920.8	9,912.2	8.7	0.1%	9,911.2	9.6	0.1%	9,910.3	10.5	0.1%	9,909.4	11.5	0.1%	9,908.6	12.3	0.1%	9,907.6	13.2	0.1%
ME 4	36 55 16	2002	Below Normal	May	--	3,317.9	3,307.6	10.3	0.3%	3,306.6	11.3	0.3%	3,305.6	12.4	0.4%	3,304.5	13.4	0.4%	3,303.5	14.5	0.4%	3,302.4	15.5	0.5%
ME 4	36 55 16	2002	Below Normal	June	--	853.3	841.6	11.7	1.4%	840.4	12.8	1.5%	839.3	14.0	1.6%	838.1	15.2	1.8%	836.9	16.3	1.9%	835.8	17.5	2.0%
ME 4	36 55 16	2002	Below Normal	July	--	361.7	350.0	11.7	3.2%	348.8	12.9	3.6%	347.6	14.1	3.9%	346.4	15.2	4.2%	345.3	16.4	4.5%	344.1	17.6	4.9%
ME 4	36 55 16	2002	Below Normal	August	--	226.2	215.3	10.9	4.8%	214.2	12.0	5.3%	213.1	13.1	5.8%	212.0	14.2	6.3%	210.9	15.3	6.8%	209.8	16.4	7.3%
ME 4	36 55 16	2002	Below Normal	September	Used in Summary Table Analysis	163.0	152.8	10.3	6.3%	151.8	11.3	6.9%	150.7	12.3	7.5%	149.7	13.3	8.2%	148.7	14.4	8.8%	147.7	15.4	9.4%
ME 4	36 55 16	2003	Wet	October	Used in Summary Table Analysis	128.0	119.8	8.3	6.4%	119.0	9.1	7.1%	118.1	9.9	7.7%	117.3	10.8	8.4%	116.5	11.6	9.0%	115.6	12.4	9.7%
ME 4	36 55 16	2003	Wet	November	Used in Summary Table Analysis	895.0	888.4	6.6	0.7%	887.8	7.2	0.8%	887.1	7.9	0.9%	886.4	8.6	1.0%	885.8	9.2	1.0%	885.1	9.9	1.1%
ME 4	36 55 16	2003	Wet	December	--	56,730.3	56,724.5	5.8	0.0%	56,724.5	5.8	0.0%	56,723.4	6.9	0.0%	56,723.4	6.9	0.0%	56,722.2	8.1	0.0%	56,722.2	8.1	0.0%
ME 4	36 55 16	2003	Wet	January	--	31,512.7	31,508.1	4.6	0.0%	31,506.9	5.8	0.0%	31,506.9	5.8	0.0%	31,505.8	6.9	0.0%	31,505.8	6.9	0.0%	31,504.6	8.1	0.0%
ME 4	36 55 16	2003	Wet	February	--	20,343.8	20,339.1	4.6	0.0%	20,339.1	4.6	0.0%	20,338.0	5.8	0.0%	20,338.0	5.8	0.0%	20,338.0	5.8	0.0%	20,336.8	6.9	0.0%
ME 4	36 55 16	2003	Wet	March	--	24,018.5	24,013.9	4.6	0.0%	24,013.9	4.6	0.0%	24,013.9	4.6	0.0%	24,012.7	5.8	0.0%	24,012.7	5.8	0.0%	24,011.6	6.9	0.0%
ME 4	36 55 16	2003	Wet	April	--	42,876.2	42,871.5	4.6	0.0%	42,871.5	4.6	0.0%	42,871.5	4.6	0.0%	42,870.4	5.8	0.0%	42,870.4	5.8	0.0%	42,870.4	5.8	0.0%
ME 4	36 55 16	2003	Wet	May	--	12,219.9	12,210.6	9.3	0.1%	12,209.5	10.4	0.1%	12,209.5	10.4	0.1%	12,208.3	11.6	0.1%	12,207.2	12.7	0.1%	12,206.0	13.9	0.1%
ME 4	36 55 16	2003	Wet	June	--	3,165.5	3,154.1	11.5	0.4%	3,153.0	12.5	0.4%	3,151.9	13.7	0.4%	3,150.7	14.8	0.5%	3,149.7	15.9	0.5%	3,148.5	17.0	0.5%
ME 4	36 55 16	2003	Wet	July	--	1,472.9	1,461.2	11.7	0.8%	1,460.1	12.8	0.9%	1,458.9	14.0	1.0%	1,457.8	15.2	1.0%	1,456.6	16.3	1.1%	1,455.4	17.5	1.2%
ME 4	36 55 16	2003	Wet	August	--	758.9	747.8	11.2	1.5%	746.7	12.3	1.6%	745.6	13.4	1.8%	744.4	14.5	1.9%	743.3	15.7	2.1%	742.1	16.8	2.2%
ME 4	36 55 16	2003	Wet	September	Used in Summary Table Analysis	456.9	447.4	9.5	2.1%	446.5	10.4	2.3%	445.5	11.4	2.5%	444.6	12.3	2.7%	443.6	13.3	2.9%	442.7	14.2	3.1%
ME 4	36 55 16	2004	Wet	October	Used in Summary Table Analysis	323.9	316.1	7.7	2.4%	315.4	8.5	2.6%	314.6	9.3	2.9%	313.8	10.0	3.1%	313.0	10.8	3.3%	312.2	11.6	3.6%
ME 4	36 55 16	2004	Wet	November	Used in Summary Table Analysis	5,794.2	5,788.1	6.1	0.1%	5,787.4	6.8	0.1%	5,786.8	7.4	0.1%	5,786.2	8.0	0.1%	5,785.5	8.7	0.1%	5,785.0	9.3	0.2%
ME 4	36 55 16	2004	Wet	December	--	36,273.1	36,267.4	5.8	0.0%	36,266.2	6.9	0.0%	36,266.2	6.9	0.0%	36,266.2	6.9	0.0%	36,265.0	8.1	0.0%	36,265.0	8.1	0.0%
ME 4	36 55 16	2004	Wet	January	--	31,447.9	31,443.3	4.6	0.0%	31,443.3	4.6	0.0%	31,442.1	5.8	0.0%	31,442.1	5.8	0.0%	31,442.1	5.8	0.0%	31,441.0	6.9	0.0%
ME 4	36 55 16	2004	Wet	February	--	38,211.8	38,207.2	4.6	0.0%	38,207.2	4.6	0.0%	38,206.0	5.8	0.0%	38,206.0	5.8	0.0%	38,204.9	6.9	0.0%	38,204.9	6.9	0.0%
ME 4	36 55 16	2004	Wet	March	--	16,519.7	16,515.0	4.6	0.0%	16,515.0	4.6	0.0%	16,515.0	4.6	0.0%	16,513.9	5.8	0.0%	16,513.9	5.8	0.0%	16,513.9	5.8	0.0%
ME 4	36 55 16	2004	Wet	April	--	9,447.1	9,443.2	3.9	0.0%	9,442.7	4.4	0.0%	9,442.4	4.7	0.1%	9,441.9	5.2	0.1%	9,441.6	5.6	0.1%	9,441.1	6.0	0.1%
ME 4	36 55 16	2004	Wet	May	--	3,417.4	3,408.8	8.6	0.3%	3,407.9	9.5	0.3%	3,407.1	10.3	0.3%	3,406.3	11.1	0.3%	3,405.3	12.0	0.4%	3,404.5	12.8	0.4%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 55 16	2004	Wet	June	--	691.3	680.5	10.8	1.6%	679.5	11.9	1.7%	678.4	12.9	1.9%	677.3	14.0	2.0%	676.3	15.1	2.2%	675.2	16.1	2.3%
ME 4	36 55 16	2004	Wet	July	--	355.2	343.8	11.4	3.2%	342.7	12.5	3.5%	341.5	13.7	3.9%	340.4	14.8	4.2%	339.3	16.0	4.5%	338.1	17.1	4.8%
ME 4	36 55 16	2004	Wet	August	--	224.3	213.6	10.7	4.8%	212.6	11.7	5.2%	211.5	12.8	5.7%	210.4	13.9	6.2%	209.4	15.0	6.7%	208.3	16.0	7.1%
ME 4	36 55 16	2004	Wet	September	Used in Summary Table Analysis	161.4	151.4	10.1	6.2%	150.4	11.1	6.9%	149.4	12.1	7.5%	148.4	13.1	8.1%	147.3	14.1	8.7%	146.3	15.1	9.4%
ME 4	36 55 16	2005	Above Normal	October	Used in Summary Table Analysis	7,671.2	7,663.3	7.9	0.1%	7,662.5	8.7	0.1%	7,661.7	9.5	0.1%	7,660.9	10.3	0.1%	7,660.1	11.1	0.1%	7,659.4	11.8	0.2%
ME 4	36 55 16	2005	Above Normal	November	Used in Summary Table Analysis	2,255.4	2,249.3	6.1	0.3%	2,248.6	6.8	0.3%	2,248.0	7.4	0.3%	2,247.5	8.0	0.4%	2,246.8	8.7	0.4%	2,246.2	9.3	0.4%
ME 4	36 55 16	2005	Above Normal	December	--	20,995.4	20,990.7	4.6	0.0%	20,989.6	5.8	0.0%	20,989.6	5.8	0.0%	20,988.4	6.9	0.0%	20,988.4	6.9	0.0%	20,987.3	8.1	0.0%
ME 4	36 55 16	2005	Above Normal	January	--	22,361.1	22,356.5	4.6	0.0%	22,355.3	5.8	0.0%	22,355.3	5.8	0.0%	22,354.2	6.9	0.0%	22,354.2	6.9	0.0%	22,354.2	6.9	0.0%
ME 4	36 55 16	2005	Above Normal	February	--	14,006.9	14,002.3	4.6	0.0%	14,002.3	4.6	0.0%	14,002.3	4.6	0.0%	14,001.2	5.8	0.0%	14,001.2	5.8	0.0%	14,001.2	5.8	0.0%
ME 4	36 55 16	2005	Above Normal	March	--	28,548.6	28,545.1	3.5	0.0%	28,544.0	4.6	0.0%	28,544.0	4.6	0.0%	28,544.0	4.6	0.0%	28,542.8	5.8	0.0%	28,542.8	5.8	0.0%
ME 4	36 55 16	2005	Above Normal	April	--	21,434.0	21,429.4	4.6	0.0%	21,429.4	4.6	0.0%	21,428.2	5.8	0.0%	21,428.2	5.8	0.0%	21,428.2	5.8	0.0%	21,427.1	6.9	0.0%
ME 4	36 55 16	2005	Above Normal	May	--	19,555.6	19,547.5	8.1	0.0%	19,546.3	9.3	0.0%	19,545.1	10.4	0.1%	19,544.0	11.6	0.1%	19,544.0	11.6	0.1%	19,542.8	12.7	0.1%
ME 4	36 55 16	2005	Above Normal	June	--	15,855.3	15,841.4	13.9	0.1%	15,840.3	15.0	0.1%	15,839.1	16.2	0.1%	15,838.0	17.4	0.1%	15,836.8	18.5	0.1%	15,835.6	19.7	0.1%
ME 4	36 55 16	2005	Above Normal	July	--	2,864.0	2,852.2	11.8	0.4%	2,850.9	13.1	0.5%	2,849.8	14.2	0.5%	2,848.6	15.4	0.5%	2,847.5	16.6	0.6%	2,846.3	17.7	0.6%
ME 4	36 55 16	2005	Above Normal	August	--	981.8	971.1	10.7	1.1%	970.0	11.7	1.2%	969.0	12.8	1.3%	967.9	13.9	1.4%	966.8	14.9	1.5%	965.8	16.0	1.6%
ME 4	36 55 16	2005	Above Normal	September	Used in Summary Table Analysis	523.3	514.0	9.3	1.8%	513.1	10.3	2.0%	512.1	11.2	2.1%	511.2	12.1	2.3%	510.3	13.1	2.5%	509.3	14.0	2.7%
ME 4	36 55 16	2006	Wet	October	Used in Summary Table Analysis	632.9	625.5	7.5	1.2%	624.7	8.2	1.3%	624.0	9.0	1.4%	623.2	9.7	1.5%	622.5	10.5	1.7%	621.7	11.2	1.8%
ME 4	36 55 16	2006	Wet	November	Used in Summary Table Analysis	9,291.6	9,285.8	5.8	0.1%	9,285.2	6.4	0.1%	9,284.6	6.9	0.1%	9,284.0	7.5	0.1%	9,283.3	8.2	0.1%	9,282.8	8.8	0.1%
ME 4	36 55 16	2006	Wet	December	--	43,451.4	43,446.8	4.6	0.0%	43,445.6	5.8	0.0%	43,445.6	5.8	0.0%	43,444.4	6.9	0.0%	43,444.4	6.9	0.0%	43,444.4	6.9	0.0%
ME 4	36 55 16	2006	Wet	January	--	46,256.9	46,252.3	4.6	0.0%	46,251.2	5.8	0.0%	46,251.2	5.8	0.0%	46,250.0	6.9	0.0%	46,250.0	6.9	0.0%	46,250.0	6.9	0.0%
ME 4	36 55 16	2006	Wet	February	--	26,601.9	26,597.2	4.6	0.0%	26,596.1	5.8	0.0%	26,596.1	5.8	0.0%	26,596.1	5.8	0.0%	26,594.9	6.9	0.0%	26,594.9	6.9	0.0%
ME 4	36 55 16	2006	Wet	March	--	47,126.2	47,121.5	4.6	0.0%	47,121.5	4.6	0.0%	47,120.4	5.8	0.0%	47,120.4	5.8	0.0%	47,120.4	5.8	0.0%	47,119.2	6.9	0.0%
ME 4	36 55 16	2006	Wet	April	--	30,415.5	30,412.0	3.5	0.0%	30,412.0	3.5	0.0%	30,410.9	4.6	0.0%	30,410.9	4.6	0.0%	30,410.9	4.6	0.0%	30,409.7	5.8	0.0%
ME 4	36 55 16	2006	Wet	May	--	14,200.2	14,194.4	5.8	0.0%	14,194.4	5.8	0.0%	14,193.3	6.9	0.0%	14,193.3	6.9	0.0%	14,193.3	6.9	0.0%	14,192.1	8.1	0.1%
ME 4	36 55 16	2006	Wet	June	--	3,546.8	3,536.0	10.8	0.3%	3,535.0	11.8	0.3%	3,533.9	12.8	0.4%	3,532.8	14.0	0.4%	3,531.7	15.0	0.4%	3,530.7	16.1	0.5%
ME 4	36 55 16	2006	Wet	July	--	1,277.8	1,266.6	11.2	0.9%	1,265.4	12.4	1.0%	1,264.2	13.5	1.1%	1,263.1	14.7	1.2%	1,262.0	15.7	1.2%	1,260.9	16.9	1.3%
ME 4	36 55 16	2006	Wet	August	--	663.9	653.0	10.9	1.6%	651.9	12.0	1.8%	650.8	13.1	2.0%	649.7	14.2	2.1%	648.6	15.3	2.3%	647.5	16.4	2.5%
ME 4	36 55 16	2006	Wet	September	Used in Summary Table Analysis	424.9	415.5	9.4	2.2%	414.6	10.4	2.4%	413.6	11.3	2.7%	412.7	12.3	2.9%	411.7	13.2	3.1%	410.8	14.2	3.3%
ME 4	36 55 16	2007	Above Normal	October	Used in Summary Table Analysis	273.4	265.8	7.6	2.8%	265.0	8.4	3.1%	264.3	9.1	3.3%	263.5	9.9	3.6%	262.8	10.6	3.9%	262.0	11.4	4.2%
ME 4	36 55 16	2007	Above Normal	November	Used in Summary Table Analysis	8,653.9	8,647.9	6.0	0.1%	8,647.3	6.6	0.1%	8,646.6	7.3	0.1%	8,646.1	7.9	0.1%	8,645.5	8.4	0.1%	8,644.9	9.0	0.1%
ME 4	36 55 16	2007	Above Normal	December	--	20,385.4	20,379.6	5.8	0.0%	20,379.6	5.8	0.0%	20,378.5	6.9	0.0%	20,378.5	6.9	0.0%	20,377.3	8.1	0.0%	20,377.3	8.1	0.0%
ME 4	36 55 16	2007	Above Normal	January	--	10,245.1	10,240.3	4.9	0.0%	10,239.8	5.3	0.1%	10,239.4	5.8	0.1%	10,238.9	6.3	0.1%	10,238.4	6.7	0.1%	10,238.0	7.2	0.1%
ME 4	36 55 16	2007	Above Normal	February	--	30,544.0	30,539.4	4.6	0.0%	30,538.2	5.8	0.0%	30,538.2	5.8	0.0%	30,537.0	6.9	0.0%	30,537.0	6.9	0.0%	30,537.0	6.9	0.0%
ME 4	36 55 16	2007	Above Normal	March	--	13,097.2	13,092.6	4.6	0.0%	13,092.6	4.6	0.0%	13,092.6	4.6	0.0%	13,091.4	5.8	0.0%	13,091.4	5.8	0.0%	13,090.3	6.9	0.1%
ME 4	36 55 16	2007	Above Normal	April	--	11,530.1	11,521.6	8.4	0.1%	11,520.8	9.3	0.1%	11,520.0	10.1	0.1%	11,519.1	11.0	0.1%	11,518.3	11.8	0.1%	11,517.5	12.6	0.1%
ME 4	36 55 16	2007	Above Normal	May	--	4,138.0	4,127.9	10.1	0.2%	4,127.0	11.0	0.3%	4,125.9	12.0	0.3%	4,124.9	13.1	0.3%	4,124.0	14.0	0.3%	4,122.9	15.0	0.4%
ME 4	36 55 16	2007	Above Normal	June	--	1,497.2	1,485.2	12.0	0.8%	1,483.9	13.3	0.9%	1,482.8	14.5	1.0%	1,481.6	15.6	1.0%	1,480.3	16.9	1.1%	1,479.2	18.1	1.2%
ME 4	36 55 16	2007	Above Normal	July	--	495.5	483.5	12.0	2.4%	482.3	13.2	2.7%	481.1	14.4	2.9%	479.9	15.6	3.1%	478.7	16.8	3.4%	477.5	18.0	3.6%
ME 4	36 55 16	2007	Above Normal	August	--	222.2	211.4	10.7	4.8%	210.4	11.8	5.3%	209.3	12.9	5.8%	208.2	13.9	6.3%	207.2	15.0	6.8%	206.1	16.1	7.2%
ME 4	36 55 16	2007	Above Normal	September	Used in Summary Table Analysis	149.8	139.8	10.1	6.7%	138.8	11.1	7.4%	137.7	12.1	8.1%	136.7	13.1	8.7%	135.7	14.1	9.4%	134.7	15.1	10.1%
ME 4	36 55 16	2008	Dry	October	Used in Summary Table Analysis	3,429.2	3,421.1	8.1	0.2%	3,420.3	8.9	0.3%	3,419.4	9.7	0.3%	3,418.6	10.5	0.3%	3,417.8	11.3	0.3%	3,417.0	12.2	0.4%
ME 4	36 55 16	2008	Dry	November	Used in Summary Table Analysis	3,270.7	3,264.5	6.3	0.2%	3,263.8	6.9	0.2%	3,263.2	7.5	0.2%	3,262.6	8.1	0.2%	3,261.9	8.8	0.3%	3,261.3	9.4	0.3%
ME 4	36 55 16	2008	Dry	December	--	23,093.8	23,088.0	5.8	0.0%	23,088.0	5.8	0.0%	23,086.8	6.9	0.0%	23,086.8	6.9	0.0%	23,085.6	8.1	0.0%	23,085.6	8.1	0.0%
ME 4	36 55 16	2008	Dry	January	--	37,500.0	37,495.4	4.6	0.0%	37,494.2	5.8	0.0%	37,494.2	5.8	0.0%	37,493.1	6.9	0.0%	37,493.1	6.9	0.0%	37,493.1	6.9	0.0%
ME 4	36 55 16	2008	Dry	February	--	26,263.9	26,259.3	4.6	0.0%	26,259.3	4.6	0.0%	26,258.1	5.8	0.0%	26,258.1	5.8	0.0%	26,258.1	5.8	0.0%	26,256.9	6.9	0.0%
ME 4	36 55 16	2008	Dry	March	--	11,791.7	11,787.0	4.6	0.0%	11,787.0	4.6	0.0%	11,785.9	5.8	0.0%	11,785.9	5.8	0.0%	11,785.9	5.8	0.0%	11,784.7	6.9	0.1%
ME 4	36 55 16	2008	Dry	April	--	9,014.1	9,005.6	8.6	0.1%	9,004.6	9.5	0.1%	9,003.8	10.3	0.1%	9,002.9	11.2	0.1%	9,002.1	12.0	0.1%	9,001.3	12.8	0.1%
ME 4	36 55 16	2008	Dry	May	--	1,360.2	1,351.0	9.1	0.7%	1,350.1	10.1	0.7%	1,349.2	11.0	0.8%	1,348.3	11.9	0.9%	1,347.3	12.8	0.9%	1,346.5	13.7	1.0%
ME 4	36 55 16	2008	Dry	June	--	437.2	424.1	13.1	3.0%	422.8	14.4	3.3%	421.5	15.7	3.6%	420.2	17.0	3.9%	418.9	18.3	4.2%	417.6	19.6	4.5%
ME 4	36 55 16	2008	Dry	July	--	255.4	242.7	12.7	5.0%	241.4	14.0	5.5%	240.1	15.3	6.0%	238.9	16.6	6.5%	237.6	17.8	7.0%	236.3	19.1	7.5%
ME 4	36 55 16	2008	Dry	August	--	178.8	166.5	12.3	6.9%	165.2	13.5	7.6%	164.0	14.8	8.3%	162.8	16.0	8.9%	161.6	17.2	9.6%	160.3	18.4	10.3%
ME 4	36 55 16	2008	Dry	September	Used in Summary Table Analysis	140.4	128.7	11.7	8.4%	127.5	12.9	9.2%	126.4	14.1	10.0%	125.2	15.3	10.9%	124.0	16.4	11.7%	122.8	17.6	12.5%
ME 4	36 55 16	2009	Critical	October	Used in Summary Table Analysis	923.1	914.0	9.1	1.0%	913.1	10.0	1.1%	912.2	10.9	1.2%	911.3	11.9	1.3%	910.3	12.8	1.4%	909.4	13.7	1.5%
ME 4	36 55 16	2009	Critical	November	Used in Summary Table Analysis	5,503.7	5,496.6	7.1	0.1%	5,495.9	7.8	0.1%	5,495.3	8.4	0.2%	5,494.6	9.1	0.2%	5,493.9	9.8	0.2%	5,493.2	10.5	0.2%
ME 4	36 55 16	2009	Critical	December	--	12,149.3	12,143.5	5.8	0.0%	12,142.4	6.9	0.1%	12,142.4	6.9	0.1%	12,141.2	8.1	0.1%	12,141.2	8.1	0.1%	12,140.0	9.3	0.1%
ME 4	36 55 16	2009	Critical	January	--	8,792.2	8,786.7	5.6	0.1%	8,786.1	6.1	0.1%	8,785.5	6.7	0.1%	8,785.0	7.3	0.1%	8,784.4	7.9	0.1%	8,783.9	8.3	0.1%
ME 4	36 55 16	2009	Critical	February	--	22,601.9	22,597.2	4.6	0.0%	22,596.1	5.8	0.0%	22,596.1	5.8	0.0%	22,594.9	6.9	0.0%	22,594.9	6.9	0.0%	22,593.8	8.1	0.0%
ME 4	36 55 16	2009	Critical	March	--	21,112.3	21,107.6	4.6	0.0%	21,107.6	4.6	0.0%	21,106.5	5.8	0.0%	21,106.5	5.8	0.0%	21,105.3	6.9	0.0%	21,105.3	6.9	0.0%
ME 4	36 55 16	2009	Critical	April	--	10,096.1	10,087.2	8.9	0.1%	10,086.2	9.8	0.1%	10,085.4	10.6	0.1%	10,084.6	11.5	0.1%	10,083.7	12.4	0.1%	10,082.8	13.3	0.1%
ME 4	36 55 16	2009	Critical	May	--	15,578.7	15,568.3	10.4	0.1%	15,567.1	11.6	0.1%	15,566.0	12.7	0.1%	15,564.8	13.9	0.1%	15,563.7	15.0	0.1%	15,562.5	16.2	0.1%
ME 4	36 55 16	2009	Critical	June	--	3,159.7	3,145.8	13.9	0.4%	3,144.4	15.3	0.5%	3,143.1	16.7	0.5%	3,141.7	18.1	0.6%	3,140.3	19.4	0.6%	3,139.0	20.7	0.7%
ME 4	36 55 16	2009	Critical	July	--	1,262.2	1,249.2	13.0	1.0%	1,247.9	14.2	1.1%	1,246.6	15.5	1.2%	1,245.4	16.8	1.3%	1,244.1	18.1	1.4%	1,242.8	19.3	1.5%
ME 4	36 55 16	2009	Critical	August	--	668.0	655.6	12.4	1.9%	654.3	13.6	2.0%	653.1	14.9	2.2%	651.9	16.1	2.4%	650.6	17.3	2.6%	649.4	18.6	2.8%
ME 4	36 55 16	2009	Critical	September	Used in Summary Table Analysis	389.3	378.3	11.0	2.8%	377.2	12.1	3.1%	376.1	13.2	3.4%	375.0	14.3	3.7%	373.9	15.3	3.9%	372.9	16.4	4.2%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 55 16	2010	Below Normal	October	Used in Summary Table Analysis	6,087.3	6,078.0	9.3	0.2%	6,077.1	10.2	0.2%	6,076.2	11.1	0.2%	6,075.2	12.0	0.2%	6,074.3	13.0	0.2%	6,073.4	13.9	0.2%
ME 4	36 55 16	2010	Below Normal	November	Used in Summary Table Analysis	8,285.4	8,278.1	7.3	0.1%	8,277.4	8.0	0.1%	8,276.7	8.7	0.1%	8,276.0	9.4	0.1%	8,275.2	10.2	0.1%	8,274.5	10.9	0.1%
ME 4	36 55 16	2010	Below Normal	December	--	12,346.1	12,340.3	5.8	0.0%	12,339.1	6.9	0.1%	12,339.1	6.9	0.1%	12,338.0	8.1	0.1%	12,336.8	9.3	0.1%	12,336.8	9.3	0.1%
ME 4	36 55 16	2010	Below Normal	January	--	36,206.0	36,200.2	5.8	0.0%	36,200.2	5.8	0.0%	36,199.1	6.9	0.0%	36,199.1	6.9	0.0%	36,197.9	8.1	0.0%	36,197.9	8.1	0.0%
ME 4	36 55 16	2010	Below Normal	February	--	27,237.3	27,232.6	4.6	0.0%	27,232.6	4.6	0.0%	27,231.5	5.8	0.0%	27,231.5	5.8	0.0%	27,230.3	6.9	0.0%	27,230.3	6.9	0.0%
ME 4	36 55 16	2010	Below Normal	March	--	28,831.0	28,826.4	4.6	0.0%	28,825.2	5.8	0.0%	28,825.2	5.8	0.0%	28,824.1	6.9	0.0%	28,824.1	6.9	0.0%	28,824.1	6.9	0.0%
ME 4	36 55 16	2010	Below Normal	April	--	40,002.3	39,997.7	4.6	0.0%	39,996.5	5.8	0.0%	39,996.5	5.8	0.0%	39,996.5	5.8	0.0%	39,995.4	6.9	0.0%	39,995.4	6.9	0.0%
ME 4	36 55 16	2010	Below Normal	May	--	20,260.4	20,251.2	9.3	0.0%	20,250.0	10.4	0.1%	20,250.0	10.4	0.1%	20,248.8	11.6	0.1%	20,247.7	12.7	0.1%	20,246.5	13.9	0.1%
ME 4	36 55 16	2010	Below Normal	June	--	9,343.6	9,330.2	13.4	0.1%	9,328.9	14.7	0.2%	9,327.5	16.1	0.2%	9,326.3	17.4	0.2%	9,324.9	18.8	0.2%	9,323.6	20.0	0.2%
ME 4	36 55 16	2010	Below Normal	July	--	1,454.1	1,442.1	11.9	0.8%	1,440.9	13.2	0.9%	1,439.7	14.4	1.0%	1,438.5	15.5	1.1%	1,437.3	16.8	1.2%	1,436.1	17.9	1.2%
ME 4	36 55 16	2010	Below Normal	August	--	567.8	556.8	11.0	1.9%	555.7	12.1	2.1%	554.6	13.2	2.3%	553.5	14.3	2.5%	552.5	15.3	2.7%	551.4	16.4	2.9%
ME 4	36 55 16	2010	Below Normal	September	Used in Summary Table Analysis	649.9	639.5	10.3	1.6%	638.5	11.4	1.7%	637.5	12.4	1.9%	636.4	13.4	2.1%	635.4	14.5	2.2%	634.4	15.5	2.4%
ME 4	36 55 16	2011	Wet	October	Used in Summary Table Analysis	9,628.8	9,621.1	7.8	0.1%	9,620.4	8.4	0.1%	9,619.6	9.3	0.1%	9,618.8	10.1	0.1%	9,617.9	10.9	0.1%	9,617.2	11.6	0.1%
ME 4	36 55 16	2011	Wet	November	Used in Summary Table Analysis	14,215.3	14,209.5	5.8	0.0%	14,208.3	6.9	0.0%	14,208.3	6.9	0.0%	14,207.2	8.1	0.1%	14,207.2	8.1	0.1%	14,206.0	9.3	0.1%
ME 4	36 55 16	2011	Wet	December	--	33,681.7	33,677.1	4.6	0.0%	33,675.9	5.8	0.0%	33,675.9	5.8	0.0%	33,674.8	6.9	0.0%	33,674.8	6.9	0.0%	33,673.6	8.1	0.0%
ME 4	36 55 16	2011	Wet	January	--	14,152.8	14,148.1	4.6	0.0%	14,148.1	4.6	0.0%	14,147.0	5.8	0.0%	14,147.0	5.8	0.0%	14,147.0	5.8	0.0%	14,145.8	6.9	0.0%
ME 4	36 55 16	2011	Wet	February	--	20,763.9	20,759.3	4.6	0.0%	20,759.3	4.6	0.0%	20,759.3	4.6	0.0%	20,758.1	5.8	0.0%	20,758.1	5.8	0.0%	20,756.9	6.9	0.0%
ME 4	36 55 16	2011	Wet	March	--	51,994.2	51,989.6	4.6	0.0%	51,989.6	4.6	0.0%	51,989.6	4.6	0.0%	51,988.4	5.8	0.0%	51,988.4	5.8	0.0%	51,987.3	6.9	0.0%
ME 4	36 55 16	2011	Wet	April	--	24,796.3	24,792.8	3.5	0.0%	24,791.7	4.6	0.0%	24,791.7	4.6	0.0%	24,790.5	5.8	0.0%	24,790.5	5.8	0.0%	24,790.5	5.8	0.0%
ME 4	36 55 16	2011	Wet	May	--	11,381.0	11,372.5	8.6	0.1%	11,371.5	9.5	0.1%	11,370.7	10.3	0.1%	11,369.8	11.2	0.1%	11,368.9	12.2	0.1%	11,368.1	13.0	0.1%
ME 4	36 55 16	2011	Wet	June	--	7,054.7	7,041.8	13.0	0.2%	7,040.4	14.4	0.2%	7,039.1	15.6	0.2%	7,037.8	16.9	0.2%	7,036.6	18.2	0.3%	7,035.2	19.6	0.3%
ME 4	36 55 16	2011	Wet	July	--	1,828.5	1,815.6	12.8	0.7%	1,814.4	14.1	0.8%	1,813.1	15.4	0.8%	1,811.8	16.7	0.9%	1,810.5	17.9	1.0%	1,809.3	19.2	1.1%
ME 4	36 55 16	2011	Wet	August	--	776.0	765.1	10.8	1.4%	764.1	11.9	1.5%	763.0	13.0	1.7%	761.9	14.1	1.8%	760.8	15.2	2.0%	759.7	16.2	2.1%
ME 4	36 55 16	2011	Wet	September	Used in Summary Table Analysis	432.5	422.8	9.8	2.3%	421.8	10.7	2.5%	420.8	11.7	2.7%	419.8	12.7	2.9%	418.9	13.7	3.2%	417.9	14.6	3.4%
ME 4	36 55 16	2012	Below Normal	October	Used in Summary Table Analysis	4,539.2	4,531.4	7.9	0.2%	4,530.6	8.7	0.2%	4,529.7	9.5	0.2%	4,528.9	10.3	0.2%	4,528.2	11.0	0.2%	4,527.4	11.8	0.3%
ME 4	36 55 16	2012	Below Normal	November	Used in Summary Table Analysis	8,233.7	8,227.4	6.3	0.1%	8,226.9	6.8	0.1%	8,226.2	7.5	0.1%	8,225.6	8.1	0.1%	8,224.9	8.8	0.1%	8,224.3	9.4	0.1%
ME 4	36 55 16	2012	Below Normal	December	--	5,181.6	5,176.3	5.3	0.1%	5,175.7	5.9	0.1%	5,175.1	6.5	0.1%	5,174.7	6.9	0.1%	5,174.1	7.5	0.1%	5,173.5	8.1	0.2%
ME 4	36 55 16	2012	Below Normal	January	--	20,104.2	20,098.4	5.8	0.0%	20,098.4	5.8	0.0%	20,098.4	5.8	0.0%	20,097.2	6.9	0.0%	20,097.2	6.9	0.0%	20,096.1	8.1	0.0%
ME 4	36 55 16	2012	Below Normal	February	--	18,209.5	18,204.9	4.6	0.0%	18,204.9	4.6	0.0%	18,204.9	4.6	0.0%	18,203.7	5.8	0.0%	18,203.7	5.8	0.0%	18,203.7	5.8	0.0%
ME 4	36 55 16	2012	Below Normal	March	--	45,410.9	45,406.3	4.6	0.0%	45,406.3	4.6	0.0%	45,406.3	4.6	0.0%	45,405.1	5.8	0.0%	45,405.1	5.8	0.0%	45,405.1	5.8	0.0%
ME 4	36 55 16	2012	Below Normal	April	--	26,855.3	26,850.7	4.6	0.0%	26,850.7	4.6	0.0%	26,849.5	5.8	0.0%	26,849.5	5.8	0.0%	26,849.5	5.8	0.0%	26,848.4	6.9	0.0%
ME 4	36 55 16	2012	Below Normal	May	--	7,482.1	7,473.4	8.7	0.1%	7,472.5	9.6	0.1%	7,471.6	10.4	0.1%	7,470.7	11.3	0.2%	7,469.9	12.2	0.2%	7,469.1	13.0	0.2%
ME 4	36 55 16	2012	Below Normal	June	--	5,513.9	5,500.6	13.3	0.2%	5,499.3	14.6	0.3%	5,497.9	16.0	0.3%	5,496.6	17.2	0.3%	5,495.3	18.6	0.3%	5,494.0	19.9	0.4%
ME 4	36 55 16	2012	Below Normal	July	--	2,222.7	2,210.3	12.4	0.6%	2,209.1	13.5	0.6%	2,207.9	14.8	0.7%	2,206.6	16.1	0.7%	2,205.4	17.2	0.8%	2,204.2	18.5	0.8%
ME 4	36 55 16	2012	Below Normal	August	--	387.9	377.9	10.0	2.6%	376.9	10.9	2.8%	375.9	11.9	3.1%	374.9	12.9	3.3%	374.0	13.9	3.6%	373.0	14.9	3.8%
ME 4	36 55 16	2012	Below Normal	September	Used in Summary Table Analysis	248.2	239.5	8.8	3.5%	238.6	9.7	3.9%	237.7	10.5	4.2%	236.8	11.4	4.6%	235.9	12.3	5.0%	235.1	13.2	5.3%
ME 4	36 55 16	2013	Below Normal	October	Used in Summary Table Analysis	1,910.4	1,902.9	7.5	0.4%	1,902.1	8.3	0.4%	1,901.3	9.1	0.5%	1,900.6	9.8	0.5%	1,899.8	10.6	0.6%	1,899.1	11.3	0.6%
ME 4	36 55 16	2013	Below Normal	November	Used in Summary Table Analysis	14,677.1	14,671.3	5.8	0.0%	14,671.3	5.8	0.0%	14,670.1	6.9	0.0%	14,670.1	6.9	0.0%	14,669.0	8.1	0.1%	14,669.0	8.1	0.1%
ME 4	36 55 16	2013	Below Normal	December	--	59,974.5	59,968.8	5.8	0.0%	59,968.8	5.8	0.0%	59,967.6	6.9	0.0%	59,967.6	6.9	0.0%	59,966.4	8.1	0.0%	59,966.4	8.1	0.0%
ME 4	36 55 16	2013	Below Normal	January	--	22,196.8	22,192.1	4.6	0.0%	22,192.1	4.6	0.0%	22,191.0	5.8	0.0%	22,191.0	5.8	0.0%	22,189.8	6.9	0.0%	22,189.8	6.9	0.0%
ME 4	36 55 16	2013	Below Normal	February	--	8,843.3	8,838.9	4.4	0.0%	8,838.4	4.9	0.1%	8,838.0	5.3	0.1%	8,837.5	5.8	0.1%	8,837.2	6.1	0.1%	8,836.7	6.6	0.1%
ME 4	36 55 16	2013	Below Normal	March	--	10,326.4	10,322.1	4.3	0.0%	10,321.8	4.6	0.0%	10,321.3	5.1	0.0%	10,320.8	5.6	0.1%	10,320.4	6.0	0.1%	10,320.0	6.4	0.1%
ME 4	36 55 16	2013	Below Normal	April	--	8,289.9	8,281.6	8.3	0.1%	8,280.8	9.1	0.1%	8,280.0	10.0	0.1%	8,279.2	10.8	0.1%	8,278.4	11.6	0.1%	8,277.4	12.5	0.2%
ME 4	36 55 16	2013	Below Normal	May	--	4,429.4	4,419.4	10.0	0.2%	4,418.4	11.0	0.2%	4,417.5	11.9	0.3%	4,416.4	13.0	0.3%	4,415.5	13.9	0.3%	4,414.5	14.9	0.3%
ME 4	36 55 16	2013	Below Normal	June	--	2,109.8	2,097.9	11.9	0.6%	2,096.8	13.1	0.6%	2,095.5	14.4	0.7%	2,094.3	15.5	0.7%	2,093.2	16.7	0.8%	2,091.9	17.9	0.9%
ME 4	36 55 16	2013	Below Normal	July	--	717.9	706.4	11.5	1.6%	705.3	12.7	1.8%	704.1	13.8	1.9%	703.0	15.0	2.1%	701.8	16.1	2.2%	700.7	17.2	2.4%
ME 4	36 55 16	2013	Below Normal	August	--	339.6	328.9	10.7	3.1%	327.8	11.8	3.5%	326.7	12.8	3.8%	325.7	13.9	4.1%	324.6	15.0	4.4%	323.6	16.0	4.7%
ME 4	36 55 16	2013	Below Normal	September	Used in Summary Table Analysis	4,783.8	4,772.8	11.0	0.2%	4,771.6	12.2	0.3%	4,770.6	13.2	0.3%	4,769.4	14.4	0.3%	4,768.4	15.4	0.3%	4,767.2	16.6	0.3%
ME 4	36 55 16	2014	Critical	October	Used in Summary Table Analysis	281.1	273.1	8.0	2.8%	272.3	8.8	3.1%	271.5	9.5	3.4%	270.7	10.3	3.7%	269.9	11.1	4.0%	269.2	11.9	4.2%
ME 4	36 55 16	2014	Critical	November	Used in Summary Table Analysis	1,536.8	1,530.6	6.3	0.4%	1,529.9	6.9	0.5%	1,529.2	7.6	0.5%	1,528.6	8.2	0.5%	1,527.9	8.9	0.6%	1,527.3	9.5	0.6%
ME 4	36 55 16	2014	Critical	December	--	1,589.1	1,583.4	5.7	0.4%	1,583.0	6.1	0.4%	1,582.4	6.7	0.4%	1,581.8	7.3	0.5%	1,581.3	7.9	0.5%	1,580.7	8.4	0.5%
ME 4	36 55 16	2014	Critical	January	--	2,820.1	2,815.2	5.0	0.2%	2,814.7	5.4	0.2%	2,814.2	5.9	0.2%	2,813.7	6.5	0.2%	2,813.2	6.9	0.2%	2,812.7	7.4	0.3%
ME 4	36 55 16	2014	Critical	February	--	15,748.8	15,744.2	4.6	0.0%	15,744.2	4.6	0.0%	15,743.1	5.8	0.0%	15,743.1	5.8	0.0%	15,743.1	5.8	0.0%	15,741.9	6.9	0.0%
ME 4	36 55 16	2014	Critical	March	--	31,481.5	31,476.9	4.6	0.0%	31,476.9	4.6	0.0%	31,475.7	5.8	0.0%	31,475.7	5.8	0.0%	31,474.5	6.9	0.0%	31,474.5	6.9	0.0%
ME 4	36 55 16	2014	Critical	April	--	12,988.4	12,980.3	8.1	0.1%	12,979.2	9.3	0.1%	12,978.0	10.4	0.1%	12,976.9	11.6	0.1%	12,976.9	11.6	0.1%	12,975.7	12.7	0.1%
ME 4	36 55 16	2014	Critical	May	--	5,187.3	5,176.7	10.5	0.2%	5,175.7	11.6	0.2%	5,174.7	12.6	0.2%	5,173.5	13.8	0.3%	5,172.5	14.8	0.3%	5,171.4	15.9	0.3%
ME 4	36 55 16	2014	Critical	June	--	1,197.6	1,183.2	14.4	1.2%	1,181.7	15.9	1.3%	1,180.3	17.2	1.4%	1,178.8	18.8	1.6%	1,177.4	20.1	1.7%	1,176.0	21.5	1.8%
ME 4	36 55 16	2014	Critical	July	--	545.7	532.5	13.1	2.4%	531.2	14.4	2.6%	529.9	15.8	2.9%	528.6	17.1	3.1%	527.3	18.4	3.4%	526.0	19.6	3.6%
ME 4	36 55 16	2014	Critical	August	--	347.5	335.1	12.4	3.6%	333.9	13.7	3.9%	332.6	14.9	4.3%	331.4	16.1	4.6%	330.1	17.4	5.0%	328.9	18.6	5.4%
ME 4	36 55 16	2014	Critical	September	Used in Summary Table Analysis	2,572.3	2,560.2	12.2	0.5%	2,559.0	13.3	0.5%	2,557.8	14.6	0.6%	2,556.6	15.7	0.6%	2,555.4	16.9	0.7%	2,554.2	18.2	0.7%
ME 4	36 55 16	2015	Dry	October	Used in Summary Table Analysis	11,358.0	11,349.0	9.0	0.1%	11,348.0	10.0	0.1%	11,347.1	10.9	0.1%	11,345.5	12.5	0.1%	11,344.7	13.3	0.1%	11,343.8	14.2	0.1%
ME 4	36 55 16	2015	Dry	November	Used in Summary Table Analysis	9,035.6	9,028.7	6.9	0.1%	9,028.0	7.6	0.1%	9,027.3	8.3	0.1%	9,026.6	9.0	0.1%	9,025.9	9.7	0.1%	9,025.2	10.4	0.1%
ME 4	36 55 16	2015	Dry	December	--	32,605.3	32,599.5	5.8	0.0%	32,598.4	6.9	0.0%	32,598.4	6.9	0.0%	32,597.2	8.1	0.0%	32,597.2	8.1	0.0%	32,596.1	9.3	0.0%
ME 4	36 55 16	2015	Dry	January	--	14,576.4	14,570.6	5.8	0.0%	14,570.6	5.8	0.0%	14,569.4	6.9	0.0%	14,569.4	6.9	0.0%	14,568.3	8.1	0.1%	14,568.3	8.1	0.1%

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Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 55 16	2015	Dry	February	--	27,229.2	27,224.5	4.6	0.0%	27,223.4	5.8	0.0%	27,223.4	5.8	0.0%	27,223.4	5.8	0.0%	27,222.2	6.9	0.0%	27,222.2	6.9	0.0%
ME 4	36 55 16	2015	Dry	March	--	11,570.0	11,565.6	4.4	0.0%	11,565.3	4.7	0.0%	11,564.8	5.2	0.0%	11,564.4	5.7	0.0%	11,563.9	6.1	0.1%	11,563.4	6.6	0.1%
ME 4	36 55 16	2015	Dry	April	--	8,383.6	8,374.9	8.7	0.1%	8,374.0	9.6	0.1%	8,373.1	10.4	0.1%	8,372.2	11.3	0.1%	8,371.4	12.2	0.1%	8,370.5	13.1	0.2%
ME 4	36 55 16	2015	Dry	May	--	1,509.1	1,498.7	10.4	0.7%	1,497.8	11.3	0.8%	1,496.8	12.4	0.8%	1,495.7	13.4	0.9%	1,494.7	14.5	1.0%	1,493.6	15.5	1.0%
ME 4	36 55 16	2015	Dry	June	--	652.4	639.1	13.3	2.0%	637.8	14.6	2.2%	636.4	16.0	2.4%	635.1	17.3	2.7%	633.8	18.6	2.9%	632.5	19.9	3.1%
ME 4	36 55 16	2015	Dry	July	--	268.4	255.6	12.9	4.8%	254.3	14.1	5.3%	253.0	15.4	5.7%	251.7	16.7	6.2%	250.4	18.0	6.7%	249.2	19.3	7.2%
ME 4	36 55 16	2015	Dry	August	--	166.0	153.6	12.3	7.4%	152.4	13.6	8.2%	151.2	14.8	8.9%	149.9	16.0	9.7%	148.7	17.3	10.4%	147.5	18.5	11.1%
ME 4	36 55 16	2015	Dry	September	Used in Summary Table Analysis	120.3	109.4	11.0	9.1%	108.3	12.0	10.0%	107.2	13.1	10.9%	106.1	14.2	11.8%	105.0	15.3	12.7%	103.9	16.4	13.7%
ME 4	36 55 16	2016	Above Normal	October	Used in Summary Table Analysis	85.7	76.5	9.3	10.8%	75.5	10.2	11.9%	74.6	11.2	13.0%	74.2	11.5	13.4%	73.4	12.3	14.3%	72.1	13.6	15.9%
ME 4	36 55 16	2016	Above Normal	November	Used in Summary Table Analysis	3,862.8	3,855.8	7.1	0.2%	3,855.1	7.8	0.2%	3,854.4	8.4	0.2%	3,853.7	9.1	0.2%	3,852.9	10.0	0.3%	3,852.2	10.6	0.3%
ME 4	36 55 16	2016	Above Normal	December	--	36,605.3	36,598.4	6.9	0.0%	36,598.4	6.9	0.0%	36,597.2	8.1	0.0%	36,597.2	8.1	0.0%	36,596.1	9.3	0.0%	36,594.9	10.4	0.0%
ME 4	36 55 16	2016	Above Normal	January	--	57,302.1	57,297.5	4.6	0.0%	57,296.3	5.8	0.0%	57,296.3	5.8	0.0%	57,295.1	6.9	0.0%	57,294.0	8.1	0.0%	57,294.0	8.1	0.0%
ME 4	36 55 16	2016	Above Normal	February	--	24,267.4	24,261.6	5.8	0.0%	24,261.6	5.8	0.0%	24,261.6	5.8	0.0%	24,260.4	6.9	0.0%	24,260.4	6.9	0.0%	24,259.3	8.1	0.0%
ME 4	36 55 16	2016	Above Normal	March	--	41,770.8	41,766.2	4.6	0.0%	41,765.0	5.8	0.0%	41,765.0	5.8	0.0%	41,763.9	6.9	0.0%	41,763.9	6.9	0.0%	41,763.9	6.9	0.0%
ME 4	36 55 16	2016	Above Normal	April	--	18,535.9	18,532.4	3.5	0.0%	18,531.3	4.6	0.0%	18,531.3	4.6	0.0%	18,530.1	5.8	0.0%	18,530.1	5.8	0.0%	18,530.1	5.8	0.0%
ME 4	36 55 16	2016	Above Normal	May	--	5,214.9	5,209.7	5.2	0.1%	5,209.1	5.8	0.1%	5,208.7	6.3	0.1%	5,208.1	6.8	0.1%	5,207.5	7.4	0.1%	5,207.1	7.9	0.2%
ME 4	36 55 16	2016	Above Normal	June	--	1,509.0	1,498.6	10.4	0.7%	1,497.6	11.5	0.8%	1,496.6	12.4	0.8%	1,495.6	13.4	0.9%	1,494.6	14.5	1.0%	1,493.5	15.5	1.0%
ME 4	36 55 16	2016	Above Normal	July	--	822.4	811.1	11.3	1.4%	809.9	12.5	1.5%	808.8	13.6	1.7%	807.7	14.7	1.8%	806.5	15.9	1.9%	805.4	17.0	2.1%
ME 4	36 55 16	2016	Above Normal	August	--	490.9	480.0	11.0	2.2%	478.9	12.1	2.5%	477.8	13.2	2.7%	476.7	14.3	2.9%	475.6	15.4	3.1%	474.5	16.5	3.4%
ME 4	36 55 16	2016	Above Normal	September	Used in Summary Table Analysis	327.3	317.7	9.7	3.0%	316.7	10.6	3.2%	315.7	11.6	3.5%	314.7	12.6	3.8%	313.8	13.6	4.1%	312.8	14.5	4.4%
ME 4	36 55 16	2017	Wet	October	Used in Summary Table Analysis	18,277.8	18,269.7	8.1	0.0%	18,268.5	9.3	0.1%	18,268.5	9.3	0.1%	18,267.4	10.4	0.1%	18,266.2	11.6	0.1%	18,266.2	11.6	0.1%
ME 4	36 55 16	2017	Wet	November	Used in Summary Table Analysis	18,817.1	18,811.3	5.8	0.0%	18,810.2	6.9	0.0%	18,810.2	6.9	0.0%	18,809.0	8.1	0.0%	18,809.0	8.1	0.0%	18,807.9	9.3	0.0%
ME 4	36 55 16	2017	Wet	December	--	24,100.7	24,096.1	4.6	0.0%	24,094.9	5.8	0.0%	24,094.9	5.8	0.0%	24,093.8	6.9	0.0%	24,093.8	6.9	0.0%	24,092.6	8.1	0.0%
ME 4	36 55 16	2017	Wet	January	--	106,866.9	106,861.1	5.8	0.0%	106,861.1	5.8	0.0%	106,861.1	5.8	0.0%	106,860.0	6.9	0.0%	106,860.0	6.9	0.0%	106,858.8	8.1	0.0%
ME 4	36 55 16	2017	Wet	February	--	81,818.3	81,813.7	4.6	0.0%	81,813.7	4.6	0.0%	81,812.5	5.8	0.0%	81,812.5	5.8	0.0%	81,811.3	6.9	0.0%	81,811.3	6.9	0.0%
ME 4	36 55 16	2017	Wet	March	--	27,268.5	27,265.0	3.5	0.0%	27,263.9	4.6	0.0%	27,263.9	4.6	0.0%	27,263.9	4.6	0.0%	27,262.7	5.8	0.0%	27,262.7	5.8	0.0%
ME 4	36 55 16	2017	Wet	April	--	22,929.4	22,925.9	3.5	0.0%	22,925.9	3.5	0.0%	22,924.8	4.6	0.0%	22,924.8	4.6	0.0%	22,924.8	4.6	0.0%	22,923.6	5.8	0.0%
ME 4	36 55 16	2017	Wet	May	--	6,273.3	6,267.9	5.3	0.1%	6,267.4	5.9	0.1%	6,266.8	6.5	0.1%	6,266.2	7.1	0.1%	6,265.7	7.5	0.1%	6,265.2	8.1	0.1%
ME 4	36 55 16	2017	Wet	June	--	2,115.4	2,104.9	10.5	0.5%	2,103.8	11.6	0.5%	2,102.7	12.7	0.6%	2,101.6	13.8	0.7%	2,100.6	14.8	0.7%	2,099.5	15.9	0.7%
ME 4	36 55 16	2017	Wet	July	--	933.4	921.9	11.4	1.2%	920.8	12.6	1.3%	919.6	13.7	1.5%	918.5	14.9	1.6%	917.4	16.0	1.7%	916.2	17.2	1.8%
ME 4	36 55 16	2017	Wet	August	--	505.5	494.5	11.0	2.2%	493.4	12.1	2.4%	492.3	13.2	2.6%	491.2	14.3	2.8%	490.1	15.4	3.0%	489.0	16.5	3.3%
ME 4	36 55 16	2017	Wet	September	Used in Summary Table Analysis	321.8	311.8	10.1	3.1%	310.8	11.1	3.4%	309.7	12.1	3.8%	308.7	13.1	4.1%	307.7	14.1	4.4%	306.7	15.1	4.7%
ME 4	36 55 16	2018	Above Normal	October	Used in Summary Table Analysis	274.6	267.5	7.0	2.6%	266.4	8.2	3.0%	265.5	9.1	3.3%	264.4	10.2	3.7%	263.5	11.1	4.0%	262.7	11.9	4.3%
ME 4	36 55 16	2018	Above Normal	November	Used in Summary Table Analysis	10,780.4	10,774.3	6.1	0.1%	10,773.7	6.7	0.1%	10,773.0	7.4	0.1%	10,772.5	8.0	0.1%	10,771.9	8.6	0.1%	10,771.2	9.3	0.1%
ME 4	36 55 16	2018	Above Normal	December	--	5,445.5	5,440.3	5.2	0.1%	5,439.7	5.8	0.1%	5,439.2	6.3	0.1%	5,438.7	6.8	0.1%	5,438.2	7.3	0.1%	5,437.6	7.9	0.1%
ME 4	36 55 16	2018	Above Normal	January	--	17,761.6	17,756.9	4.6	0.0%	17,756.9	4.6	0.0%	17,755.8	5.8	0.0%	17,755.8	5.8	0.0%	17,755.8	5.8	0.0%	17,754.6	6.9	0.0%
ME 4	36 55 16	2018	Above Normal	February	--	7,597.1	7,592.9	4.2	0.1%	7,592.5	4.6	0.1%	7,592.1	5.0	0.1%	7,591.7	5.4	0.1%	7,591.2	5.9	0.1%	7,590.9	6.3	0.1%
ME 4	36 55 16	2018	Above Normal	March	--	20,687.5	20,684.0	3.5	0.0%	20,682.9	4.6	0.0%	20,682.9	4.6	0.0%	20,682.9	4.6	0.0%	20,681.7	5.8	0.0%	20,681.7	5.8	0.0%
ME 4	36 55 16	2018	Above Normal	April	--	32,187.5	32,182.9	4.6	0.0%	32,182.9	4.6	0.0%	32,182.9	4.6	0.0%	32,181.7	5.8	0.0%	32,181.7	5.8	0.0%	32,181.7	5.8	0.0%
ME 4	36 55 16	2018	Above Normal	May	--	6,988.8	6,980.4	8.3	0.1%	6,979.6	9.1	0.1%	6,978.8	10.0	0.1%	6,978.0	10.8	0.2%	6,977.2	11.6	0.2%	6,976.3	12.5	0.2%
ME 4	36 55 16	2018	Above Normal	June	--	1,913.4	1,902.8	10.6	0.6%	1,901.7	11.7	0.6%	1,900.6	12.8	0.7%	1,899.5	13.9	0.7%	1,898.5	14.9	0.8%	1,897.5	16.0	0.8%
ME 4	36 55 16	2018	Above Normal	July	--	780.6	769.2	11.4	1.5%	768.0	12.6	1.6%	766.9	13.7	1.8%	765.7	14.9	1.9%	764.6	16.0	2.1%	763.4	17.2	2.2%
ME 4	36 55 16	2018	Above Normal	August	--	441.8	431.2	10.5	2.4%	430.2	11.6	2.6%	429.1	12.7	2.9%	428.1	13.7	3.1%	427.0	14.8	3.3%	425.9	15.8	3.6%
ME 4	36 55 16	2018	Above Normal	September	Used in Summary Table Analysis	299.3	289.2	10.1	3.4%	288.2	11.1	3.7%	287.2	12.1	4.0%	286.2	13.1	4.4%	285.2	14.1	4.7%	284.2	15.1	5.1%
ME 4	36 55 16	2019	Below Normal	October	Used in Summary Table Analysis	207.3	199.5	7.8	3.8%	198.7	8.6	4.1%	198.0	9.3	4.5%	197.2	10.2	4.9%	196.5	10.9	5.2%	195.7	11.6	5.6%
ME 4	36 55 16	2019	Below Normal	November	Used in Summary Table Analysis	6,616.2	6,610.1	6.1	0.1%	6,609.5	6.7	0.1%	6,608.8	7.4	0.1%	6,608.2	8.0	0.1%	6,607.6	8.6	0.1%	6,606.9	9.3	0.1%
ME 4	36 55 16	2019	Below Normal	December	--	14,653.9	14,648.1	5.8	0.0%	14,648.1	5.8	0.0%	14,647.0	6.9	0.0%	14,647.0	6.9	0.0%	14,645.8	8.1	0.1%	14,645.8	8.1	0.1%
ME 4	36 55 16	2019	Below Normal	January	--	35,195.6	35,191.0	4.6	0.0%	35,189.8	5.8	0.0%	35,189.8	5.8	0.0%	35,189.8	5.8	0.0%	35,188.7	6.9	0.0%	35,188.7	6.9	0.0%
ME 4	36 55 16	2019	Below Normal	February	--	141,898.1	141,886.6	11.6	0.0%	141,886.6	11.6	0.0%	141,886.6	11.6	0.0%	141,886.6	11.6	0.0%	141,886.6	11.6	0.0%	141,886.6	11.6	0.0%
ME 4	36 55 16	2019	Below Normal	March	--	42,309.0	42,304.4	4.6	0.0%	42,304.4	4.6	0.0%	42,303.2	5.8	0.0%	42,303.2	5.8	0.0%	42,303.2	5.8	0.0%	42,302.1	6.9	0.0%
ME 4	36 55 16	2019	Below Normal	April	--	15,269.7	15,266.2	3.5	0.0%	15,265.0	4.6	0.0%	15,265.0	4.6	0.0%	15,265.0	4.6	0.0%	15,263.9	5.8	0.0%	15,263.9	5.8	0.0%
ME 4	36 55 16	2019	Below Normal	May	--	16,922.5	16,913.2	9.3	0.1%	16,913.2	9.3	0.1%	16,912.0	10.4	0.1%	16,910.9	11.6	0.1%	16,909.7	12.7	0.1%	16,909.7	12.7	0.1%
ME 4	36 55 16	2019	Below Normal	June	--	4,243.6	4,232.1	11.6	0.3%	4,230.9	12.7	0.3%	4,229.7	13.9	0.3%	4,228.6	15.0	0.4%	4,227.4	16.2	0.4%	4,226.3	17.4	0.4%
ME 4	36 55 16	2019	Below Normal	July	--	1,360.2	1,348.7	11.5	0.8%	1,347.6	12.6	0.9%	1,346.4	13.8	1.0%	1,345.3	14.9	1.1%	1,344.1	16.1	1.2%	1,342.9	17.2	1.3%
ME 4	36 55 16	2019	Below Normal	August	--	595.4	584.6	10.9	1.8%	583.5	12.0	2.0%	582.4	13.0	2.2%	581.3	14.1	2.4%	580.2	15.2	2.6%	579.1	16.3	2.7%
ME 4	36 55 16	2019	Below Normal	September	Used in Summary Table Analysis	461.8	451.8	10.0	2.2%	450.8	11.1	2.4%	449.8	12.1	2.6%	448.8	13.0	2.8%	447.8	14.1	3.0%	446.8	15.1	3.3%
ME 4	36 55 16	2020	Dry	October	Used in Summary Table Analysis	355.3	347.8	7.4	2.1%	347.1	8.2	2.3%	346.3	8.9	2.5%	345.6	9.7	2.7%	344.8	10.4	2.9%	344.1	11.2	3.1%
ME 4	36 55 16	2020	Dry	November	Used in Summary Table Analysis	318.2	312.4	5.8	1.8%	311.8	6.4	2.0%	311.2	6.9	2.2%	310.6	7.5	2.4%	310.1	8.1	2.5%	309.5	8.7	2.7%
ME 4	36 55 16	2020	Dry	December	--	13,266.2	13,261.6	4.6	0.0%	13,260.4	5.8	0.0%	13,260.4	5.8	0.0%	13,260.4	5.8	0.0%	13,259.3	6.9	0.1%	13,259.3	6.9	0.1%
ME 4	36 55 16	2020	Dry	January	--	22,316.0	22,311.3	4.6	0.0%	22,310.2	5.8	0.0%	22,310.2	5.8	0.0%	22,310.2	5.8	0.0%	22,309.0	6.9	0.0%	22,309.0	6.9	0.0%
ME 4	36 55 16	2020	Dry	February	--	7,414.6	7,410.3	4.3	0.1%	7,409.8	4.7	0.1%	7,409.4	5.2	0.1%	7,408.9	5.7	0.1%	7,408.6	6.0	0.1%	7,408.1	6.5	0.1%
ME 4	36 55 16	2020	Dry	March	--	7,241.4	7,237.4	4.1	0.1%	7,237.0	4.4	0.1%	7,236.6	4.9	0.1%	7,236.2	5.2	0.1%	7,235.8	5.7	0.1%	7,235.4	6.0	0.1%
ME 4	36 55 16	2020	Dry	April	--	5,480.0	5,471.3	8.7	0.2%	5,470.5	9.5	0.2%	5,469.6	10.4	0.2%	5,468.6	11.3	0.2%	5,467.8	12.2	0.2%	5,466.9	13.1	0.2%
ME 4	36 55 16	2020	Dry	May	--	7,372.9	7,362.5	10.4	0.1%	7,361.5	11.5	0.2%	7,360.4	12.5	0.2%	7,359.4	13.5	0.2%	7,358.3	14.6	0.2%	7,357.3	15.6	0.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 55 16	2020	Dry	June	--	2,104.6	2,091.0	13.7	0.6%	2,089.6	15.0	0.7%	2,088.2	16.4	0.8%	2,086.9	17.7	0.8%	2,085.5	19.1	0.9%	2,084.1	20.5	1.0%
ME 4	36 55 16	2020	Dry	July	--	795.9	782.6	13.3	1.7%	781.2	14.7	1.8%	779.9	16.0	2.0%	778.6	17.3	2.2%	777.2	18.6	2.3%	775.9	20.0	2.5%
ME 4	36 55 16	2020	Dry	August	--	398.5	385.4	13.1	3.3%	384.1	14.4	3.6%	382.8	15.7	3.9%	381.5	17.0	4.3%	380.2	18.3	4.6%	378.9	19.6	4.9%
ME 4	36 55 16	2020	Dry	September	Used in Summary Table Analysis	247.9	236.4	11.6	4.7%	235.2	12.7	5.1%	234.1	13.9	5.6%	232.9	15.0	6.1%	231.7	16.2	6.5%	230.6	17.4	7.0%
ME 4	36 54 17	2000	Above Normal	October	Used in Summary Table Analysis	815.5	807.7	7.8	1.0%	807.0	8.5	1.0%	806.2	9.3	1.1%	805.4	10.1	1.2%	804.7	10.9	1.3%	803.9	11.6	1.4%
ME 4	36 54 17	2000	Above Normal	November	Used in Summary Table Analysis	12,111.1	12,105.3	5.8	0.0%	12,104.2	6.9	0.1%	12,104.2	6.9	0.1%	12,103.0	8.1	0.1%	12,103.0	8.1	0.1%	12,101.9	9.3	0.1%
ME 4	36 54 17	2000	Above Normal	December	--	10,807.3	10,802.1	5.2	0.0%	10,801.5	5.8	0.1%	10,801.0	6.3	0.1%	10,800.5	6.8	0.1%	10,800.0	7.3	0.1%	10,799.4	7.9	0.1%
ME 4	36 54 17	2000	Above Normal	January	--	28,564.8	28,559.0	5.8	0.0%	28,559.0	5.8	0.0%	28,559.0	5.8	0.0%	28,557.9	6.9	0.0%	28,557.9	6.9	0.0%	28,556.7	8.1	0.0%
ME 4	36 54 17	2000	Above Normal	February	--	37,034.7	37,030.1	4.6	0.0%	37,030.1	4.6	0.0%	37,028.9	5.8	0.0%	37,028.9	5.8	0.0%	37,028.9	5.8	0.0%	37,027.8	6.9	0.0%
ME 4	36 54 17	2000	Above Normal	March	--	18,314.8	18,311.3	3.5	0.0%	18,310.2	4.6	0.0%	18,310.2	4.6	0.0%	18,310.2	4.6	0.0%	18,309.0	5.8	0.0%	18,309.0	5.8	0.0%
ME 4	36 54 17	2000	Above Normal	April	--	12,313.7	12,309.0	4.6	0.0%	12,309.0	4.6	0.0%	12,309.0	4.6	0.0%	12,307.9	5.8	0.0%	12,307.9	5.8	0.0%	12,307.9	5.8	0.0%
ME 4	36 54 17	2000	Above Normal	May	--	7,093.6	7,085.1	8.6	0.1%	7,084.3	9.4	0.1%	7,083.3	10.3	0.1%	7,082.5	11.1	0.2%	7,081.6	12.0	0.2%	7,080.8	12.8	0.2%
ME 4	36 54 17	2000	Above Normal	June	--	2,611.0	2,598.3	12.7	0.5%	2,597.0	14.0	0.5%	2,595.7	15.3	0.6%	2,594.4	16.6	0.6%	2,593.2	17.8	0.7%	2,591.9	19.1	0.7%
ME 4	36 54 17	2000	Above Normal	July	--	991.4	980.0	11.4	1.2%	978.9	12.6	1.3%	977.7	13.7	1.4%	976.6	14.8	1.5%	975.5	16.0	1.6%	974.3	17.1	1.7%
ME 4	36 54 17	2000	Above Normal	August	--	521.4	510.7	10.7	2.0%	509.6	11.7	2.3%	508.6	12.8	2.5%	507.5	13.9	2.7%	506.4	14.9	2.9%	505.4	16.0	3.1%
ME 4	36 54 17	2000	Above Normal	September	Used in Summary Table Analysis	294.7	285.4	9.4	3.2%	284.4	10.3	3.5%	283.5	11.2	3.8%	282.6	12.2	4.1%	281.6	13.1	4.4%	280.7	14.1	4.8%
ME 4	36 54 17	2001	Dry	October	Used in Summary Table Analysis	3,813.4	3,805.8	7.6	0.2%	3,805.0	8.4	0.2%	3,804.3	9.1	0.2%	3,803.5	10.0	0.3%	3,802.8	10.6	0.3%	3,802.0	11.5	0.3%
ME 4	36 54 17	2001	Dry	November	Used in Summary Table Analysis	6,121.6	6,115.5	6.1	0.1%	6,114.9	6.7	0.1%	6,114.2	7.4	0.1%	6,113.7	8.0	0.1%	6,113.1	8.6	0.1%	6,112.4	9.3	0.2%
ME 4	36 54 17	2001	Dry	December	--	8,836.1	8,830.8	5.3	0.1%	8,830.3	5.8	0.1%	8,829.7	6.4	0.1%	8,829.2	6.9	0.1%	8,828.7	7.4	0.1%	8,828.1	8.0	0.1%
ME 4	36 54 17	2001	Dry	January	--	12,785.9	12,781.3	4.6	0.0%	12,781.3	4.6	0.0%	12,780.1	5.8	0.0%	12,780.1	5.8	0.0%	12,780.1	5.8	0.0%	12,778.9	6.9	0.1%
ME 4	36 54 17	2001	Dry	February	--	17,468.8	17,465.3	3.5	0.0%	17,464.1	4.6	0.0%	17,464.1	4.6	0.0%	17,463.0	5.8	0.0%	17,463.0	5.8	0.0%	17,463.0	5.8	0.0%
ME 4	36 54 17	2001	Dry	March	--	12,296.3	12,291.7	4.6	0.0%	12,291.7	4.6	0.0%	12,290.5	5.8	0.0%	12,290.5	5.8	0.0%	12,290.5	5.8	0.0%	12,289.4	6.9	0.1%
ME 4	36 54 17	2001	Dry	April	--	10,970.6	10,961.8	8.8	0.1%	10,961.0	9.6	0.1%	10,960.1	10.5	0.1%	10,959.1	11.5	0.1%	10,958.3	12.3	0.1%	10,957.4	13.2	0.1%
ME 4	36 54 17	2001	Dry	May	--	2,637.3	2,626.9	10.4	0.4%	2,625.8	11.5	0.4%	2,624.8	12.5	0.5%	2,623.7	13.5	0.5%	2,622.7	14.6	0.6%	2,621.6	15.6	0.6%
ME 4	36 54 17	2001	Dry	June	--	2,647.1	2,633.0	14.1	0.5%	2,631.5	15.6	0.6%	2,630.1	17.0	0.6%	2,628.7	18.4	0.7%	2,627.3	19.8	0.7%	2,625.9	21.2	0.8%
ME 4	36 54 17	2001	Dry	July	--	718.4	705.3	13.1	1.8%	704.0	14.4	2.0%	702.7	15.7	2.2%	701.4	17.0	2.4%	700.1	18.3	2.6%	698.8	19.6	2.7%
ME 4	36 54 17	2001	Dry	August	--	172.1	159.4	12.7	7.4%	158.2	13.9	8.1%	156.9	15.2	8.8%	155.6	16.5	9.6%	154.4	17.8	10.3%	153.1	19.0	11.1%
ME 4	36 54 17	2001	Dry	September	Used in Summary Table Analysis	94.9	83.7	11.2	11.8%	82.6	12.3	13.0%	81.4	13.5	14.2%	80.3	14.6	15.4%	79.2	15.7	16.6%	78.1	16.9	17.8%
ME 4	36 54 17	2002	Below Normal	October	Used in Summary Table Analysis	264.5	255.3	9.2	3.5%	254.3	10.2	3.9%	253.4	11.1	4.2%	252.4	12.1	4.6%	251.5	13.0	4.9%	250.6	13.9	5.3%
ME 4	36 54 17	2002	Below Normal	November	Used in Summary Table Analysis	12,022.0	12,015.0	6.9	0.1%	12,013.9	8.1	0.1%	12,013.9	8.1	0.1%	12,012.7	9.3	0.1%	12,011.6	10.4	0.1%	12,011.6	10.4	0.1%
ME 4	36 54 17	2002	Below Normal	December	--	35,672.5	35,665.5	6.9	0.0%	35,665.5	6.9	0.0%	35,664.4	8.1	0.0%	35,663.2	9.3	0.0%	35,663.2	9.3	0.0%	35,662.0	10.4	0.0%
ME 4	36 54 17	2002	Below Normal	January	--	30,871.5	30,865.7	5.8	0.0%	30,864.6	6.9	0.0%	30,864.6	6.9	0.0%	30,863.4	8.1	0.0%	30,863.4	8.1	0.0%	30,862.3	9.3	0.0%
ME 4	36 54 17	2002	Below Normal	February	--	24,673.6	24,669.0	4.6	0.0%	24,667.8	5.8	0.0%	24,667.8	5.8	0.0%	24,666.7	6.9	0.0%	24,666.7	6.9	0.0%	24,665.5	8.1	0.0%
ME 4	36 54 17	2002	Below Normal	March	--	17,776.6	17,772.0	4.6	0.0%	17,770.8	5.8	0.0%	17,770.8	5.8	0.0%	17,769.7	6.9	0.0%	17,769.7	6.9	0.0%	17,768.5	8.1	0.0%
ME 4	36 54 17	2002	Below Normal	April	--	9,924.1	9,915.3	8.8	0.1%	9,914.4	9.7	0.1%	9,913.5	10.5	0.1%	9,912.6	11.5	0.1%	9,911.7	12.4	0.1%	9,910.9	13.2	0.1%
ME 4	36 54 17	2002	Below Normal	May	--	3,319.1	3,308.8	10.3	0.3%	3,307.8	11.3	0.3%	3,306.7	12.4	0.4%	3,305.7	13.4	0.4%	3,304.6	14.5	0.4%	3,303.6	15.5	0.5%
ME 4	36 54 17	2002	Below Normal	June	--	853.7	842.0	11.7	1.4%	840.8	12.9	1.5%	839.7	14.0	1.6%	838.5	15.2	1.8%	837.3	16.4	1.9%	836.1	17.5	2.1%
ME 4	36 54 17	2002	Below Normal	July	--	362.1	350.3	11.8	3.2%	349.1	12.9	3.6%	348.0	14.1	3.9%	346.8	15.3	4.2%	345.6	16.5	4.5%	344.4	17.6	4.9%
ME 4	36 54 17	2002	Below Normal	August	--	226.6	215.7	11.0	4.8%	214.6	12.1	5.3%	213.5	13.2	5.8%	212.3	14.3	6.3%	211.3	15.4	6.8%	210.2	16.5	7.3%
ME 4	36 54 17	2002	Below Normal	September	Used in Summary Table Analysis	163.4	153.1	10.3	6.3%	152.1	11.3	6.9%	151.1	12.4	7.6%	150.0	13.4	8.2%	149.0	14.4	8.8%	148.0	15.5	9.5%
ME 4	36 54 17	2003	Wet	October	Used in Summary Table Analysis	128.4	120.1	8.3	6.5%	119.3	9.1	7.1%	118.4	10.0	7.8%	117.6	10.8	8.4%	116.7	11.7	9.1%	115.9	12.5	9.7%
ME 4	36 54 17	2003	Wet	November	Used in Summary Table Analysis	895.6	889.0	6.6	0.7%	888.3	7.3	0.8%	887.6	8.0	0.9%	887.0	8.6	1.0%	886.3	9.3	1.0%	885.6	10.0	1.1%
ME 4	36 54 17	2003	Wet	December	--	56,792.8	56,787.0	5.8	0.0%	56,785.9	6.9	0.0%	56,785.9	6.9	0.0%	56,784.7	8.1	0.0%	56,784.7	8.1	0.0%	56,783.6	9.3	0.0%
ME 4	36 54 17	2003	Wet	January	--	31,526.6	31,520.8	5.8	0.0%	31,520.8	5.8	0.0%	31,519.7	6.9	0.0%	31,519.7	6.9	0.0%	31,518.5	8.1	0.0%	31,518.5	8.1	0.0%
ME 4	36 54 17	2003	Wet	February	--	20,351.9	20,347.2	4.6	0.0%	20,346.1	5.8	0.0%	20,346.1	5.8	0.0%	20,344.9	6.9	0.0%	20,344.9	6.9	0.0%	20,343.8	8.1	0.0%
ME 4	36 54 17	2003	Wet	March	--	24,030.1	24,025.5	4.6	0.0%	24,024.3	5.8	0.0%	24,024.3	5.8	0.0%	24,024.3	5.8	0.0%	24,023.1	6.9	0.0%	24,023.1	6.9	0.0%
ME 4	36 54 17	2003	Wet	April	--	42,902.8	42,898.1	4.6	0.0%	42,898.1	4.6	0.0%	42,897.0	5.8	0.0%	42,897.0	5.8	0.0%	42,897.0	5.8	0.0%	42,895.8	6.9	0.0%
ME 4	36 54 17	2003	Wet	May	--	12,223.4	12,214.1	9.3	0.1%	12,214.1	9.3	0.1%	12,213.0	10.4	0.1%	12,211.8	11.6	0.1%	12,210.6	12.7	0.1%	12,210.6	12.7	0.1%
ME 4	36 54 17	2003	Wet	June	--	3,166.4	3,155.0	11.5	0.4%	3,153.9	12.5	0.4%	3,152.8	13.7	0.4%	3,151.6	14.8	0.5%	3,150.6	15.9	0.5%	3,149.4	17.0	0.5%
ME 4	36 54 17	2003	Wet	July	--	1,473.7	1,462.0	11.7	0.8%	1,460.9	12.8	0.9%	1,459.7	14.0	1.0%	1,458.6	15.2	1.0%	1,457.4	16.3	1.1%	1,456.3	17.5	1.2%
ME 4	36 54 17	2003	Wet	August	--	759.6	748.4	11.2	1.5%	747.3	12.3	1.6%	746.2	13.4	1.8%	745.0	14.6	1.9%	743.9	15.7	2.1%	742.8	16.9	2.2%
ME 4	36 54 17	2003	Wet	September	Used in Summary Table Analysis	457.5	448.0	9.5	2.1%	447.0	10.5	2.3%	446.0	11.4	2.5%	445.1	12.4	2.7%	444.1	13.3	2.9%	443.2	14.3	3.1%
ME 4	36 54 17	2004	Wet	October	Used in Summary Table Analysis	324.4	316.6	7.8	2.4%	315.8	8.5	2.6%	315.0	9.3	2.9%	314.3	10.1	3.1%	313.5	10.9	3.4%	312.7	11.7	3.6%
ME 4	36 54 17	2004	Wet	November	Used in Summary Table Analysis	5,801.2	5,795.0	6.1	0.1%	5,794.3	6.8	0.1%	5,793.8	7.4	0.1%	5,793.1	8.1	0.1%	5,792.5	8.7	0.1%	5,791.8	9.4	0.2%
ME 4	36 54 17	2004	Wet	December	--	36,304.4	36,298.6	5.8	0.0%	36,298.6	5.8	0.0%	36,297.5	6.9	0.0%	36,297.5	6.9	0.0%	36,297.5	6.9	0.0%	36,296.3	8.1	0.0%
ME 4	36 54 17	2004	Wet	January	--	31,469.9	31,465.3	4.6	0.0%	31,465.3	4.6	0.0%	31,464.1	5.8	0.0%	31,464.1	5.8	0.0%	31,464.1	5.8	0.0%	31,463.0	6.9	0.0%
ME 4	36 54 17	2004	Wet	February	--	38,232.6	38,228.0	4.6	0.0%	38,228.0	4.6	0.0%	38,228.0	4.6	0.0%	38,226.9	5.8	0.0%	38,226.9	5.8	0.0%	38,225.7	6.9	0.0%
ME 4	36 54 17	2004	Wet	March	--	16,524.3	16,519.7	4.6	0.0%	16,519.7	4.6	0.0%	16,518.5	5.8	0.0%	16,518.5	5.8	0.0%	16,518.5	5.8	0.0%	16,517.4	6.9	0.0%
ME 4	36 54 17	2004	Wet	April	--	9,450.0	9,446.1	3.9	0.0%	9,445.7	4.3	0.0%	9,445.3	4.7	0.1%	9,444.9	5.1	0.1%	9,444.4	5.6	0.1%	9,444.1	5.9	0.1%
ME 4	36 54 17	2004	Wet	May	--	3,419.6	3,411.0	8.6	0.3%	3,410.2	9.4	0.3%	3,409.3	10.3	0.3%	3,408.4	11.1	0.3%	3,407.5	12.0	0.4%	3,406.7	12.8	0.4%
ME 4	36 54 17	2004	Wet	June	--	691.7	680.9	10.8	1.6%	679.8	11.9	1.7%	678.8	13.0	1.9%	677.7	14.1	2.0%	676.6	15.1	2.2%	675.5	16.2	2.3%
ME 4	36 54 17	2004	Wet	July	--	355.8	344.3	11.4	3.2%	343.2	12.6	3.5%	342.0	13.7	3.9%	340.9	14.9	4.2%	339.7	16.0	4.5%	338.6	17.2	4.8%
ME 4	36 54 17	2004	Wet	August	--	224.7	214.0	10.7	4.8%	213.0	11.8	5.2%	211.9	12.9	5.7%	210.8	13.9	6.2%	209.7	15.0	6.7%	208.6	16.1	7.2%
ME 4	36 54 17	2004	Wet	September	Used in Summary Table Analysis	161.8	151.7	10.1	6.3%	150.7	11.1	6.9%	149.7	12.1	7.5%	148.7	13.1	8.1%	147.6	14.2	8.8%	146.6	15.2	9.4%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 54 17	2005	Above Normal	October	Used in Summary Table Analysis	7,680.2	7,672.3	7.9	0.1%	7,671.5	8.7	0.1%	7,670.7	9.5	0.1%	7,670.0	10.2	0.1%	7,669.2	11.0	0.1%	7,668.4	11.8	0.2%
ME 4	36 54 17	2005	Above Normal	November	Used in Summary Table Analysis	2,256.6	2,250.3	6.3	0.3%	2,249.8	6.8	0.3%	2,249.1	7.5	0.3%	2,248.5	8.1	0.4%	2,247.9	8.7	0.4%	2,247.2	9.4	0.4%
ME 4	36 54 17	2005	Above Normal	December	--	21,022.0	21,017.4	4.6	0.0%	21,016.2	5.8	0.0%	21,016.2	5.8	0.0%	21,015.0	6.9	0.0%	21,015.0	6.9	0.0%	21,013.9	8.1	0.0%
ME 4	36 54 17	2005	Above Normal	January	--	22,381.9	22,377.3	4.6	0.0%	22,376.2	5.8	0.0%	22,376.2	5.8	0.0%	22,376.2	5.8	0.0%	22,375.0	6.9	0.0%	22,375.0	6.9	0.0%
ME 4	36 54 17	2005	Above Normal	February	--	14,011.6	14,006.9	4.6	0.0%	14,006.9	4.6	0.0%	14,005.8	5.8	0.0%	14,005.8	5.8	0.0%	14,004.6	6.9	0.0%	14,004.6	6.9	0.0%
ME 4	36 54 17	2005	Above Normal	March	--	28,564.8	28,561.3	3.5	0.0%	28,560.2	4.6	0.0%	28,560.2	4.6	0.0%	28,560.2	4.6	0.0%	28,559.0	5.8	0.0%	28,559.0	5.8	0.0%
ME 4	36 54 17	2005	Above Normal	April	--	21,444.4	21,439.8	4.6	0.0%	21,439.8	4.6	0.0%	21,439.8	4.6	0.0%	21,438.7	5.8	0.0%	21,438.7	5.8	0.0%	21,438.7	5.8	0.0%
ME 4	36 54 17	2005	Above Normal	May	--	19,568.3	19,560.2	8.1	0.0%	19,559.0	9.3	0.0%	19,557.9	10.4	0.1%	19,556.7	11.6	0.1%	19,556.7	11.6	0.1%	19,555.6	12.7	0.1%
ME 4	36 54 17	2005	Above Normal	June	--	15,870.4	15,856.5	13.9	0.1%	15,855.3	15.0	0.1%	15,854.2	16.2	0.1%	15,853.0	17.4	0.1%	15,851.9	18.5	0.1%	15,850.7	19.7	0.1%
ME 4	36 54 17	2005	Above Normal	July	--	2,864.2	2,852.3	11.9	0.4%	2,851.2	13.1	0.5%	2,850.0	14.2	0.5%	2,848.8	15.4	0.5%	2,847.6	16.7	0.6%	2,846.4	17.8	0.6%
ME 4	36 54 17	2005	Above Normal	August	--	982.5	971.8	10.7	1.1%	970.7	11.8	1.2%	969.7	12.9	1.3%	968.6	13.9	1.4%	967.5	15.0	1.5%	966.5	16.0	1.6%
ME 4	36 54 17	2005	Above Normal	September	Used in Summary Table Analysis	524.0	514.6	9.4	1.8%	513.7	10.3	2.0%	512.7	11.3	2.1%	511.8	12.2	2.3%	510.8	13.1	2.5%	509.9	14.1	2.7%
ME 4	36 54 17	2006	Wet	October	Used in Summary Table Analysis	633.7	626.2	7.5	1.2%	625.4	8.3	1.3%	624.7	9.0	1.4%	623.9	9.8	1.5%	623.1	10.5	1.7%	622.4	11.3	1.8%
ME 4	36 54 17	2006	Wet	November	Used in Summary Table Analysis	9,303.7	9,297.8	5.9	0.1%	9,297.2	6.5	0.1%	9,296.5	7.2	0.1%	9,295.9	7.8	0.1%	9,295.4	8.3	0.1%	9,294.8	8.9	0.1%
ME 4	36 54 17	2006	Wet	December	--	43,491.9	43,486.1	5.8	0.0%	43,486.1	5.8	0.0%	43,485.0	6.9	0.0%	43,485.0	6.9	0.0%	43,485.0	6.9	0.0%	43,483.8	8.1	0.0%
ME 4	36 54 17	2006	Wet	January	--	46,294.0	46,289.4	4.6	0.0%	46,288.2	5.8	0.0%	46,288.2	5.8	0.0%	46,287.0	6.9	0.0%	46,287.0	6.9	0.0%	46,285.9	8.1	0.0%
ME 4	36 54 17	2006	Wet	February	--	26,618.1	26,613.4	4.6	0.0%	26,613.4	4.6	0.0%	26,612.3	5.8	0.0%	26,612.3	5.8	0.0%	26,611.1	6.9	0.0%	26,611.1	6.9	0.0%
ME 4	36 54 17	2006	Wet	March	--	47,155.1	47,150.5	4.6	0.0%	47,150.5	4.6	0.0%	47,150.5	4.6	0.0%	47,149.3	5.8	0.0%	47,149.3	5.8	0.0%	47,148.1	6.9	0.0%
ME 4	36 54 17	2006	Wet	April	--	30,428.2	30,423.6	4.6	0.0%	30,423.6	4.6	0.0%	30,423.6	4.6	0.0%	30,422.5	5.8	0.0%	30,422.5	5.8	0.0%	30,422.5	5.8	0.0%
ME 4	36 54 17	2006	Wet	May	--	14,207.2	14,201.4	5.8	0.0%	14,201.4	5.8	0.0%	14,201.4	5.8	0.0%	14,200.2	6.9	0.0%	14,200.2	6.9	0.0%	14,199.1	8.1	0.1%
ME 4	36 54 17	2006	Wet	June	--	3,547.7	3,536.9	10.8	0.3%	3,535.8	11.9	0.3%	3,534.7	13.0	0.4%	3,533.7	14.0	0.4%	3,532.5	15.2	0.4%	3,531.5	16.2	0.5%
ME 4	36 54 17	2006	Wet	July	--	1,278.8	1,267.5	11.3	0.9%	1,266.3	12.5	1.0%	1,265.2	13.7	1.1%	1,264.0	14.8	1.2%	1,263.0	15.9	1.2%	1,261.8	17.0	1.3%
ME 4	36 54 17	2006	Wet	August	--	664.7	653.8	10.9	1.6%	652.7	12.0	1.8%	651.6	13.1	2.0%	650.5	14.2	2.1%	649.4	15.3	2.3%	648.3	16.4	2.5%
ME 4	36 54 17	2006	Wet	September	Used in Summary Table Analysis	425.7	416.2	9.5	2.2%	415.2	10.4	2.5%	414.3	11.4	2.7%	413.3	12.3	2.9%	412.4	13.3	3.1%	411.4	14.2	3.3%
ME 4	36 54 17	2007	Above Normal	October	Used in Summary Table Analysis	273.9	266.3	7.7	2.8%	265.5	8.4	3.1%	264.8	9.2	3.4%	264.0	9.9	3.6%	263.2	10.7	3.9%	262.5	11.5	4.2%
ME 4	36 54 17	2007	Above Normal	November	Used in Summary Table Analysis	8,664.6	8,658.4	6.1	0.1%	8,657.9	6.7	0.1%	8,657.3	7.3	0.1%	8,656.6	8.0	0.1%	8,656.0	8.6	0.1%	8,655.4	9.1	0.1%
ME 4	36 54 17	2007	Above Normal	December	--	20,407.4	20,401.6	5.8	0.0%	20,401.6	5.8	0.0%	20,400.5	6.9	0.0%	20,400.5	6.9	0.0%	20,399.3	8.1	0.0%	20,399.3	8.1	0.0%
ME 4	36 54 17	2007	Above Normal	January	--	10,251.0	10,246.2	4.9	0.0%	10,245.7	5.3	0.1%	10,245.3	5.8	0.1%	10,244.8	6.3	0.1%	10,244.2	6.8	0.1%	10,243.8	7.3	0.1%
ME 4	36 54 17	2007	Above Normal	February	--	30,568.3	30,563.7	4.6	0.0%	30,563.7	4.6	0.0%	30,562.5	5.8	0.0%	30,562.5	5.8	0.0%	30,561.3	6.9	0.0%	30,561.3	6.9	0.0%
ME 4	36 54 17	2007	Above Normal	March	--	13,101.9	13,097.2	4.6	0.0%	13,097.2	4.6	0.0%	13,096.1	5.8	0.0%	13,096.1	5.8	0.0%	13,096.1	5.8	0.0%	13,094.9	6.9	0.1%
ME 4	36 54 17	2007	Above Normal	April	--	11,534.3	11,525.8	8.4	0.1%	11,525.0	9.3	0.1%	11,524.1	10.2	0.1%	11,523.3	11.0	0.1%	11,522.5	11.8	0.1%	11,521.5	12.7	0.1%
ME 4	36 54 17	2007	Above Normal	May	--	4,139.7	4,129.7	10.0	0.2%	4,128.7	11.0	0.3%	4,127.8	11.9	0.3%	4,126.7	13.0	0.3%	4,125.7	14.0	0.3%	4,124.8	14.9	0.4%
ME 4	36 54 17	2007	Above Normal	June	--	1,498.4	1,486.3	12.0	0.8%	1,485.1	13.3	0.9%	1,483.9	14.5	1.0%	1,482.6	15.7	1.1%	1,481.5	16.9	1.1%	1,480.3	18.1	1.2%
ME 4	36 54 17	2007	Above Normal	July	--	495.9	483.8	12.0	2.4%	482.6	13.2	2.7%	481.4	14.4	2.9%	480.2	15.6	3.2%	479.0	16.8	3.4%	477.8	18.0	3.6%
ME 4	36 54 17	2007	Above Normal	August	--	222.7	211.9	10.8	4.8%	210.8	11.9	5.3%	209.7	12.9	5.8%	208.7	14.0	6.3%	207.6	15.1	6.8%	206.5	16.1	7.3%
ME 4	36 54 17	2007	Above Normal	September	Used in Summary Table Analysis	150.3	140.2	10.1	6.7%	139.1	11.1	7.4%	138.1	12.2	8.1%	137.1	13.1	8.7%	136.1	14.2	9.4%	135.1	15.2	10.1%
ME 4	36 54 17	2008	Dry	October	Used in Summary Table Analysis	3,432.9	3,424.8	8.1	0.2%	3,424.0	8.9	0.3%	3,423.1	9.7	0.3%	3,422.3	10.5	0.3%	3,421.4	11.5	0.3%	3,420.6	12.3	0.4%
ME 4	36 54 17	2008	Dry	November	Used in Summary Table Analysis	3,274.2	3,267.9	6.3	0.2%	3,267.4	6.8	0.2%	3,266.7	7.5	0.2%	3,266.1	8.1	0.2%	3,265.5	8.7	0.3%	3,264.8	9.4	0.3%
ME 4	36 54 17	2008	Dry	December	--	23,122.7	23,116.9	5.8	0.0%	23,115.7	6.9	0.0%	23,115.7	6.9	0.0%	23,114.6	8.1	0.0%	23,114.6	8.1	0.0%	23,113.4	9.3	0.0%
ME 4	36 54 17	2008	Dry	January	--	37,527.8	37,522.0	5.8	0.0%	37,522.0	5.8	0.0%	37,522.0	5.8	0.0%	37,520.8	6.9	0.0%	37,520.8	6.9	0.0%	37,519.7	8.1	0.0%
ME 4	36 54 17	2008	Dry	February	--	26,270.8	26,266.2	4.6	0.0%	26,266.2	4.6	0.0%	26,266.2	4.6	0.0%	26,265.0	5.8	0.0%	26,265.0	5.8	0.0%	26,263.9	6.9	0.0%
ME 4	36 54 17	2008	Dry	March	--	11,795.1	11,790.5	4.6	0.0%	11,790.5	4.6	0.0%	11,789.4	5.8	0.0%	11,789.4	5.8	0.0%	11,789.4	5.8	0.0%	11,788.2	6.9	0.1%
ME 4	36 54 17	2008	Dry	April	--	9,016.7	9,008.1	8.6	0.1%	9,007.3	9.4	0.1%	9,006.4	10.3	0.1%	9,005.6	11.1	0.1%	9,004.6	12.0	0.1%	9,003.8	12.8	0.1%
ME 4	36 54 17	2008	Dry	May	--	1,360.0	1,350.8	9.1	0.7%	1,349.9	10.1	0.7%	1,349.0	11.0	0.8%	1,348.0	11.9	0.9%	1,347.2	12.7	0.9%	1,346.3	13.7	1.0%
ME 4	36 54 17	2008	Dry	June	--	437.7	424.5	13.2	3.0%	423.2	14.5	3.3%	421.9	15.8	3.6%	420.6	17.1	3.9%	419.3	18.4	4.2%	418.0	19.7	4.5%
ME 4	36 54 17	2008	Dry	July	--	255.8	243.0	12.8	5.0%	241.7	14.1	5.5%	240.4	15.4	6.0%	239.1	16.6	6.5%	237.9	17.9	7.0%	236.6	19.2	7.5%
ME 4	36 54 17	2008	Dry	August	--	179.1	166.7	12.4	6.9%	165.5	13.6	7.6%	164.3	14.8	8.3%	163.1	16.1	9.0%	161.8	17.3	9.7%	160.6	18.5	10.3%
ME 4	36 54 17	2008	Dry	September	Used in Summary Table Analysis	140.8	129.0	11.8	8.4%	127.8	13.0	9.2%	126.6	14.2	10.1%	125.4	15.3	10.9%	124.2	16.5	11.7%	123.1	17.7	12.6%
ME 4	36 54 17	2009	Critical	October	Used in Summary Table Analysis	923.7	914.6	9.2	1.0%	913.6	10.1	1.1%	912.7	11.0	1.2%	911.8	11.9	1.3%	910.9	12.8	1.4%	910.0	13.8	1.5%
ME 4	36 54 17	2009	Critical	November	Used in Summary Table Analysis	5,510.5	5,503.5	7.1	0.1%	5,502.8	7.8	0.1%	5,502.1	8.4	0.2%	5,501.3	9.3	0.2%	5,500.6	10.0	0.2%	5,499.9	10.6	0.2%
ME 4	36 54 17	2009	Critical	December	--	12,164.4	12,158.6	5.8	0.0%	12,157.4	6.9	0.1%	12,156.3	8.1	0.1%	12,156.3	8.1	0.1%	12,155.1	9.3	0.1%	12,155.1	9.3	0.1%
ME 4	36 54 17	2009	Critical	January	--	8,796.3	8,790.7	5.6	0.1%	8,790.2	6.1	0.1%	8,789.6	6.7	0.1%	8,789.0	7.3	0.1%	8,788.5	7.8	0.1%	8,788.0	8.3	0.1%
ME 4	36 54 17	2009	Critical	February	--	22,613.4	22,608.8	4.6	0.0%	22,608.8	4.6	0.0%	22,607.6	5.8	0.0%	22,607.6	5.8	0.0%	22,606.5	6.9	0.0%	22,606.5	6.9	0.0%
ME 4	36 54 17	2009	Critical	March	--	21,121.5	21,116.9	4.6	0.0%	21,116.9	4.6	0.0%	21,115.7	5.8	0.0%	21,115.7	5.8	0.0%	21,115.7	5.8	0.0%	21,114.6	6.9	0.0%
ME 4	36 54 17	2009	Critical	April	--	10,097.3	10,088.4	8.9	0.1%	10,087.6	9.7	0.1%	10,086.7	10.6	0.1%	10,085.9	11.5	0.1%	10,085.0	12.4	0.1%	10,084.0	13.3	0.1%
ME 4	36 54 17	2009	Critical	May	--	15,583.3	15,572.9	10.4	0.1%	15,571.8	11.6	0.1%	15,570.6	12.7	0.1%	15,569.4	13.9	0.1%	15,568.3	15.0	0.1%	15,567.1	16.2	0.1%
ME 4	36 54 17	2009	Critical	June	--	3,160.5	3,146.6	13.9	0.4%	3,145.3	15.3	0.5%	3,143.9	16.7	0.5%	3,142.4	18.2	0.6%	3,141.1	19.4	0.6%	3,139.7	20.8	0.7%
ME 4	36 54 17	2009	Critical	July	--	1,262.7	1,249.8	13.0	1.0%	1,248.4	14.4	1.1%	1,247.1	15.6	1.2%	1,245.8	16.9	1.3%	1,244.6	18.2	1.4%	1,243.3	19.4	1.5%
ME 4	36 54 17	2009	Critical	August	--	668.5	656.0	12.5	1.9%	654.8	13.7	2.0%	653.6	14.9	2.2%	652.3	16.2	2.4%	651.1	17.4	2.6%	649.8	18.6	2.8%
ME 4	36 54 17	2009	Critical	September	Used in Summary Table Analysis	389.7	378.7	11.0	2.8%	377.6	12.1	3.1%	376.5	13.2	3.4%	375.3	14.3	3.7%	374.3	15.4	4.0%	373.2	16.5	4.2%
ME 4	36 54 17	2010	Below Normal	October	Used in Summary Table Analysis	6,088.1	6,078.8	9.3	0.2%	6,077.9	10.2	0.2%	6,077.0	11.1	0.2%	6,076.0	12.0	0.2%	6,075.1	13.0	0.2%	6,074.2	13.9	0.2%
ME 4	36 54 17	2010	Below Normal	November	Used in Summary Table Analysis	8,290.2	8,282.9	7.3	0.1%	8,282.1	8.1	0.1%	8,281.4	8.8	0.1%	8,280.7	9.5	0.1%	8,279.9	10.3	0.1%	8,279.2	11.0	0.1%
ME 4	36 54 17	2010	Below Normal	December	--	12,355.3	12,349.5	5.8	0.0%	12,348.4	6.9	0.1%	12,348.4	6.9	0.1%	12,347.2	8.1	0.1%	12,347.2	8.1	0.1%	12,346.1	9.3	0.1%
ME 4	36 54 17	2010	Below Normal	January	--	36,238.4	36,232.6	5.8	0.0%	36,231.5	6.9	0.0%	36,231.5	6.9	0.0%	36,230.3	8.1	0.0%	36,230.3	8.1	0.0%	36,229.2	9.3	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 54 17	2010	Below Normal	February	--	27,247.7	27,241.9	5.8	0.0%	27,241.9	5.8	0.0%	27,240.7	6.9	0.0%	27,240.7	6.9	0.0%	27,240.7	6.9	0.0%	27,239.6	8.1	0.0%
ME 4	36 54 17	2010	Below Normal	March	--	28,839.1	28,834.5	4.6	0.0%	28,833.3	5.8	0.0%	28,833.3	5.8	0.0%	28,833.3	5.8	0.0%	28,832.2	6.9	0.0%	28,832.2	6.9	0.0%
ME 4	36 54 17	2010	Below Normal	April	--	40,017.4	40,012.7	4.6	0.0%	40,012.7	4.6	0.0%	40,011.6	5.8	0.0%	40,011.6	5.8	0.0%	40,010.4	6.9	0.0%	40,010.4	6.9	0.0%
ME 4	36 54 17	2010	Below Normal	May	--	20,272.0	20,262.7	9.3	0.0%	20,262.7	9.3	0.0%	20,261.6	10.4	0.1%	20,260.4	11.6	0.1%	20,259.3	12.7	0.1%	20,258.1	13.9	0.1%
ME 4	36 54 17	2010	Below Normal	June	--	9,352.8	9,339.5	13.3	0.1%	9,338.1	14.7	0.2%	9,336.8	16.0	0.2%	9,335.4	17.4	0.2%	9,334.1	18.6	0.2%	9,332.8	20.0	0.2%
ME 4	36 54 17	2010	Below Normal	July	--	1,454.7	1,442.7	12.0	0.8%	1,441.6	13.2	0.9%	1,440.3	14.5	1.0%	1,439.1	15.6	1.1%	1,437.8	16.9	1.2%	1,436.7	18.1	1.2%
ME 4	36 54 17	2010	Below Normal	August	--	568.6	557.5	11.1	1.9%	556.4	12.1	2.1%	555.3	13.3	2.3%	554.2	14.4	2.5%	553.2	15.4	2.7%	552.1	16.5	2.9%
ME 4	36 54 17	2010	Below Normal	September	Used in Summary Table Analysis	650.6	640.2	10.4	1.6%	639.2	11.4	1.8%	638.1	12.5	1.9%	637.1	13.5	2.1%	636.0	14.5	2.2%	635.0	15.6	2.4%
ME 4	36 54 17	2011	Wet	October	Used in Summary Table Analysis	9,635.8	9,628.0	7.8	0.1%	9,627.2	8.6	0.1%	9,626.5	9.3	0.1%	9,625.7	10.1	0.1%	9,624.9	10.9	0.1%	9,624.1	11.7	0.1%
ME 4	36 54 17	2011	Wet	November	Used in Summary Table Analysis	14,223.4	14,217.6	5.8	0.0%	14,216.4	6.9	0.0%	14,216.4	6.9	0.0%	14,215.3	8.1	0.1%	14,215.3	8.1	0.1%	14,214.1	9.3	0.1%
ME 4	36 54 17	2011	Wet	December	--	33,715.3	33,709.5	5.8	0.0%	33,709.5	5.8	0.0%	33,708.3	6.9	0.0%	33,708.3	6.9	0.0%	33,707.2	8.1	0.0%	33,707.2	8.1	0.0%
ME 4	36 54 17	2011	Wet	January	--	14,159.7	14,155.1	4.6	0.0%	14,153.9	5.8	0.0%	14,153.9	5.8	0.0%	14,153.9	5.8	0.0%	14,152.8	6.9	0.0%	14,152.8	6.9	0.0%
ME 4	36 54 17	2011	Wet	February	--	20,770.8	20,766.2	4.6	0.0%	20,765.0	5.8	0.0%	20,765.0	5.8	0.0%	20,765.0	5.8	0.0%	20,763.9	6.9	0.0%	20,763.9	6.9	0.0%
ME 4	36 54 17	2011	Wet	March	--	52,016.2	52,011.6	4.6	0.0%	52,011.6	4.6	0.0%	52,010.4	5.8	0.0%	52,010.4	5.8	0.0%	52,010.4	5.8	0.0%	52,009.3	6.9	0.0%
ME 4	36 54 17	2011	Wet	April	--	24,804.4	24,799.8	4.6	0.0%	24,799.8	4.6	0.0%	24,799.8	4.6	0.0%	24,798.6	5.8	0.0%	24,798.6	5.8	0.0%	24,798.6	5.8	0.0%
ME 4	36 54 17	2011	Wet	May	--	11,385.0	11,376.4	8.6	0.1%	11,375.5	9.5	0.1%	11,374.5	10.4	0.1%	11,373.7	11.2	0.1%	11,372.8	12.2	0.1%	11,371.9	13.1	0.1%
ME 4	36 54 17	2011	Wet	June	--	7,058.4	7,045.4	13.1	0.2%	7,044.1	14.4	0.2%	7,042.7	15.7	0.2%	7,041.4	17.0	0.2%	7,040.2	18.3	0.3%	7,038.9	19.6	0.3%
ME 4	36 54 17	2011	Wet	July	--	1,828.8	1,816.0	12.8	0.7%	1,814.7	14.1	0.8%	1,813.4	15.4	0.8%	1,812.2	16.7	0.9%	1,810.9	17.9	1.0%	1,809.6	19.2	1.1%
ME 4	36 54 17	2011	Wet	August	--	776.6	765.7	10.9	1.4%	764.6	12.0	1.5%	763.5	13.1	1.7%	762.4	14.1	1.8%	761.3	15.2	2.0%	760.3	16.3	2.1%
ME 4	36 54 17	2011	Wet	September	Used in Summary Table Analysis	433.1	423.2	9.8	2.3%	422.3	10.8	2.5%	421.3	11.8	2.7%	420.3	12.7	2.9%	419.3	13.7	3.2%	418.3	14.7	3.4%
ME 4	36 54 17	2012	Below Normal	October	Used in Summary Table Analysis	4,542.7	4,534.8	7.9	0.2%	4,534.0	8.7	0.2%	4,533.2	9.5	0.2%	4,532.4	10.3	0.2%	4,531.6	11.1	0.2%	4,530.8	11.9	0.3%
ME 4	36 54 17	2012	Below Normal	November	Used in Summary Table Analysis	8,241.0	8,234.7	6.3	0.1%	8,234.1	6.8	0.1%	8,233.4	7.5	0.1%	8,232.9	8.1	0.1%	8,232.2	8.8	0.1%	8,231.6	9.4	0.1%
ME 4	36 54 17	2012	Below Normal	December	--	5,184.8	5,179.4	5.4	0.1%	5,178.8	6.0	0.1%	5,178.4	6.5	0.1%	5,177.8	7.1	0.1%	5,177.2	7.6	0.1%	5,176.6	8.2	0.2%
ME 4	36 54 17	2012	Below Normal	January	--	20,125.0	20,120.4	4.6	0.0%	20,119.2	5.8	0.0%	20,119.2	5.8	0.0%	20,118.1	6.9	0.0%	20,118.1	6.9	0.0%	20,118.1	6.9	0.0%
ME 4	36 54 17	2012	Below Normal	February	--	18,216.4	18,211.8	4.6	0.0%	18,211.8	4.6	0.0%	18,210.6	5.8	0.0%	18,210.6	5.8	0.0%	18,209.5	6.9	0.0%	18,209.5	6.9	0.0%
ME 4	36 54 17	2012	Below Normal	March	--	45,436.3	45,431.7	4.6	0.0%	45,431.7	4.6	0.0%	45,430.6	5.8	0.0%	45,430.6	5.8	0.0%	45,430.6	5.8	0.0%	45,429.4	6.9	0.0%
ME 4	36 54 17	2012	Below Normal	April	--	26,864.6	26,860.0	4.6	0.0%	26,860.0	4.6	0.0%	26,860.0	4.6	0.0%	26,858.8	5.8	0.0%	26,858.8	5.8	0.0%	26,858.8	5.8	0.0%
ME 4	36 54 17	2012	Below Normal	May	--	7,484.6	7,475.9	8.7	0.1%	7,475.0	9.6	0.1%	7,474.1	10.5	0.1%	7,473.1	11.5	0.2%	7,472.5	12.2	0.2%	7,471.6	13.0	0.2%
ME 4	36 54 17	2012	Below Normal	June	--	5,517.5	5,504.2	13.3	0.2%	5,502.8	14.7	0.3%	5,501.5	16.0	0.3%	5,500.1	17.4	0.3%	5,498.8	18.6	0.3%	5,497.5	20.0	0.4%
ME 4	36 54 17	2012	Below Normal	July	--	2,224.9	2,212.4	12.5	0.6%	2,211.2	13.7	0.6%	2,210.0	14.9	0.7%	2,208.7	16.2	0.7%	2,207.4	17.5	0.8%	2,206.3	18.6	0.8%
ME 4	36 54 17	2012	Below Normal	August	--	388.2	378.2	10.0	2.6%	377.2	11.0	2.8%	376.2	12.0	3.1%	375.3	13.0	3.3%	374.3	14.0	3.6%	373.3	14.9	3.8%
ME 4	36 54 17	2012	Below Normal	September	Used in Summary Table Analysis	248.7	239.9	8.8	3.5%	239.0	9.7	3.9%	238.1	10.6	4.3%	237.2	11.5	4.6%	236.4	12.3	5.0%	235.5	13.2	5.3%
ME 4	36 54 17	2013	Below Normal	October	Used in Summary Table Analysis	1,912.6	1,905.0	7.6	0.4%	1,904.2	8.4	0.4%	1,903.5	9.1	0.5%	1,902.7	10.0	0.5%	1,901.9	10.8	0.6%	1,901.2	11.5	0.6%
ME 4	36 54 17	2013	Below Normal	November	Used in Summary Table Analysis	14,691.0	14,685.2	5.8	0.0%	14,684.0	6.9	0.0%	14,684.0	6.9	0.0%	14,682.9	8.1	0.1%	14,682.9	8.1	0.1%	14,681.7	9.3	0.1%
ME 4	36 54 17	2013	Below Normal	December	--	60,004.6	59,998.8	5.8	0.0%	59,998.8	5.8	0.0%	59,997.7	6.9	0.0%	59,997.7	6.9	0.0%	59,996.5	8.1	0.0%	59,996.5	8.1	0.0%
ME 4	36 54 17	2013	Below Normal	January	--	22,206.0	22,201.4	4.6	0.0%	22,201.4	4.6	0.0%	22,200.2	5.8	0.0%	22,200.2	5.8	0.0%	22,200.2	5.8	0.0%	22,199.1	6.9	0.0%
ME 4	36 54 17	2013	Below Normal	February	--	8,847.8	8,843.4	4.4	0.0%	8,842.9	4.9	0.1%	8,842.5	5.3	0.1%	8,842.0	5.8	0.1%	8,841.6	6.3	0.1%	8,841.1	6.7	0.1%
ME 4	36 54 17	2013	Below Normal	March	--	10,333.0	10,328.6	4.4	0.0%	10,328.1	4.9	0.0%	10,327.8	5.2	0.1%	10,327.3	5.7	0.1%	10,326.9	6.1	0.1%	10,326.4	6.6	0.1%
ME 4	36 54 17	2013	Below Normal	April	--	8,291.9	8,283.6	8.3	0.1%	8,282.8	9.1	0.1%	8,281.9	10.0	0.1%	8,281.1	10.8	0.1%	8,280.3	11.6	0.1%	8,279.5	12.4	0.1%
ME 4	36 54 17	2013	Below Normal	May	--	4,431.9	4,421.9	10.1	0.2%	4,420.9	11.0	0.2%	4,419.9	12.0	0.3%	4,418.9	13.1	0.3%	4,417.9	14.0	0.3%	4,416.9	15.0	0.3%
ME 4	36 54 17	2013	Below Normal	June	--	2,110.6	2,098.6	12.0	0.6%	2,097.5	13.2	0.6%	2,096.3	14.4	0.7%	2,095.0	15.6	0.7%	2,093.9	16.8	0.8%	2,092.7	17.9	0.8%
ME 4	36 54 17	2013	Below Normal	July	--	718.1	706.6	11.5	1.6%	705.5	12.7	1.8%	704.3	13.8	1.9%	703.1	15.0	2.1%	702.0	16.1	2.2%	700.8	17.3	2.4%
ME 4	36 54 17	2013	Below Normal	August	--	339.9	329.2	10.7	3.2%	328.1	11.8	3.5%	327.1	12.9	3.8%	326.0	13.9	4.1%	324.9	15.0	4.4%	323.9	16.1	4.7%
ME 4	36 54 17	2013	Below Normal	September	Used in Summary Table Analysis	4,787.4	4,776.3	11.1	0.2%	4,775.2	12.2	0.3%	4,774.1	13.3	0.3%	4,773.0	14.4	0.3%	4,771.9	15.5	0.3%	4,770.7	16.7	0.3%
ME 4	36 54 17	2014	Critical	October	Used in Summary Table Analysis	281.0	273.0	8.0	2.8%	272.2	8.8	3.1%	271.4	9.6	3.4%	270.6	10.4	3.7%	269.8	11.2	4.0%	269.1	11.9	4.3%
ME 4	36 54 17	2014	Critical	November	Used in Summary Table Analysis	1,538.7	1,532.3	6.4	0.4%	1,531.6	7.1	0.5%	1,531.0	7.6	0.5%	1,530.3	8.3	0.5%	1,529.6	9.0	0.6%	1,529.1	9.6	0.6%
ME 4	36 54 17	2014	Critical	December	--	1,590.0	1,584.5	5.6	0.3%	1,583.9	6.1	0.4%	1,583.3	6.7	0.4%	1,582.8	7.3	0.5%	1,582.2	7.9	0.5%	1,581.6	8.4	0.5%
ME 4	36 54 17	2014	Critical	January	--	2,822.0	2,817.0	5.0	0.2%	2,816.6	5.4	0.2%	2,816.1	5.9	0.2%	2,815.5	6.5	0.2%	2,815.0	6.9	0.2%	2,814.5	7.5	0.3%
ME 4	36 54 17	2014	Critical	February	--	15,754.6	15,750.0	4.6	0.0%	15,750.0	4.6	0.0%	15,750.0	4.6	0.0%	15,748.8	5.8	0.0%	15,748.8	5.8	0.0%	15,747.7	6.9	0.0%
ME 4	36 54 17	2014	Critical	March	--	31,489.6	31,485.0	4.6	0.0%	31,485.0	4.6	0.0%	31,483.8	5.8	0.0%	31,483.8	5.8	0.0%	31,482.6	6.9	0.0%	31,482.6	6.9	0.0%
ME 4	36 54 17	2014	Critical	April	--	12,991.9	12,982.6	9.3	0.1%	12,981.5	10.4	0.1%	12,981.5	10.4	0.1%	12,980.3	11.6	0.1%	12,979.2	12.7	0.1%	12,978.0	13.9	0.1%
ME 4	36 54 17	2014	Critical	May	--	5,188.9	5,178.4	10.5	0.2%	5,177.3	11.6	0.2%	5,176.3	12.6	0.2%	5,175.2	13.7	0.3%	5,174.2	14.7	0.3%	5,173.0	15.9	0.3%
ME 4	36 54 17	2014	Critical	June	--	1,198.1	1,183.7	14.5	1.2%	1,182.3	15.9	1.3%	1,180.9	17.2	1.4%	1,179.4	18.8	1.6%	1,178.0	20.1	1.7%	1,176.5	21.6	1.8%
ME 4	36 54 17	2014	Critical	July	--	545.9	532.8	13.2	2.4%	531.4	14.5	2.7%	530.1	15.8	2.9%	528.8	17.1	3.1%	527.5	18.4	3.4%	526.2	19.7	3.6%
ME 4	36 54 17	2014	Critical	August	--	347.9	335.4	12.5	3.6%	334.1	13.7	3.9%	332.9	15.0	4.3%	331.6	16.2	4.7%	330.4	17.5	5.0%	329.2	18.7	5.4%
ME 4	36 54 17	2014	Critical	September	Used in Summary Table Analysis	2,573.8	2,561.7	12.2	0.5%	2,560.5	13.3	0.5%	2,559.3	14.6	0.6%	2,558.1	15.7	0.6%	2,556.9	16.9	0.7%	2,555.7	18.2	0.7%
ME 4	36 54 17	2015	Dry	October	Used in Summary Table Analysis	11,364.8	11,355.6	9.3	0.1%	11,354.7	10.1	0.1%	11,353.8	11.0	0.1%	11,352.2	12.6	0.1%	11,351.3	13.5	0.1%	11,350.3	14.5	0.1%
ME 4	36 54 17	2015	Dry	November	Used in Summary Table Analysis	9,042.7	9,035.8	6.9	0.1%	9,035.0	7.8	0.1%	9,034.3	8.4	0.1%	9,033.6	9.1	0.1%	9,032.9	9.8	0.1%	9,032.2	10.5	0.1%
ME 4	36 54 17	2015	Dry	December	--	32,631.9	32,626.2	5.8	0.0%	32,625.0	6.9	0.0%	32,625.0	6.9	0.0%	32,623.8	8.1	0.0%	32,623.8	8.1	0.0%	32,622.7	9.3	0.0%
ME 4	36 54 17	2015	Dry	January	--	14,581.0	14,575.2	5.8	0.0%	14,574.1	6.9	0.0%	14,574.1	6.9	0.0%	14,574.1	6.9	0.0%	14,572.9	8.1	0.1%	14,572.9	8.1	0.1%
ME 4	36 54 17	2015	Dry	February	--	27,239.6	27,235.0	4.6	0.0%	27,235.0	4.6	0.0%	27,233.8	5.8	0.0%	27,233.8	5.8	0.0%	27,232.6	6.9	0.0%	27,232.6	6.9	0.0%
ME 4	36 54 17	2015	Dry	March	--	11,572.7	11,568.4	4.3	0.0%	11,567.9	4.7	0.0%	11,567.5	5.2	0.0%	11,567.0	5.7	0.0%	11,566.6	6.1	0.1%	11,566.2	6.5	0.1%
ME 4	36 54 17	2015	Dry	April	--	8,390.5	8,381.8	8.7	0.1%	8,380.9	9.6	0.1%	8,380.1	10.4	0.1%	8,379.2	11.3	0.1%	8,378.2	12.3	0.1%	8,377.4	13.1	0.2%
ME 4	36 54 17	2015	Dry	May	--	1,509.3	1,498.8	10.4	0.7%	1,497.8	11.5	0.8%	1,496.8	12.5	0.8%	1,495.7	13.5	0.9%	1,494.7	14.6	1.0%	1,493.6	15.6	1.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 54 17	2015	Dry	June	--	652.6	639.3	13.3	2.0%	637.9	14.7	2.2%	636.6	16.0	2.5%	635.3	17.3	2.7%	633.9	18.7	2.9%	632.6	20.0	3.1%
ME 4	36 54 17	2015	Dry	July	--	268.6	255.7	12.9	4.8%	254.4	14.2	5.3%	253.1	15.5	5.8%	251.8	16.8	6.2%	250.5	18.0	6.7%	249.2	19.3	7.2%
ME 4	36 54 17	2015	Dry	August	--	166.2	153.8	12.4	7.5%	152.6	13.6	8.2%	151.4	14.9	8.9%	150.1	16.1	9.7%	148.9	17.3	10.4%	147.7	18.6	11.2%
ME 4	36 54 17	2015	Dry	September	Used in Summary Table Analysis	120.5	109.5	11.0	9.1%	108.4	12.1	10.0%	107.3	13.2	11.0%	106.2	14.3	11.9%	105.1	15.4	12.8%	104.0	16.5	13.7%
ME 4	36 54 17	2016	Above Normal	October	Used in Summary Table Analysis	85.8	76.5	9.3	10.8%	75.5	10.3	12.0%	74.6	11.2	13.1%	74.2	11.6	13.5%	73.5	12.4	14.4%	72.2	13.7	15.9%
ME 4	36 54 17	2016	Above Normal	November	Used in Summary Table Analysis	3,868.8	3,861.7	7.1	0.2%	3,861.0	7.8	0.2%	3,860.3	8.4	0.2%	3,859.5	9.3	0.2%	3,858.8	10.0	0.3%	3,858.1	10.6	0.3%
ME 4	36 54 17	2016	Above Normal	December	--	36,636.6	36,629.6	6.9	0.0%	36,629.6	6.9	0.0%	36,628.5	8.1	0.0%	36,627.3	9.3	0.0%	36,627.3	9.3	0.0%	36,626.2	10.4	0.0%
ME 4	36 54 17	2016	Above Normal	January	--	57,335.6	57,329.9	5.8	0.0%	57,329.9	5.8	0.0%	57,328.7	6.9	0.0%	57,327.5	8.1	0.0%	57,327.5	8.1	0.0%	57,326.4	9.3	0.0%
ME 4	36 54 17	2016	Above Normal	February	--	24,273.1	24,268.5	4.6	0.0%	24,267.4	5.8	0.0%	24,267.4	5.8	0.0%	24,266.2	6.9	0.0%	24,266.2	6.9	0.0%	24,265.0	8.1	0.0%
ME 4	36 54 17	2016	Above Normal	March	--	41,785.9	41,781.3	4.6	0.0%	41,781.3	4.6	0.0%	41,780.1	5.8	0.0%	41,780.1	5.8	0.0%	41,780.1	5.8	0.0%	41,778.9	6.9	0.0%
ME 4	36 54 17	2016	Above Normal	April	--	18,540.5	18,537.0	3.5	0.0%	18,535.9	4.6	0.0%	18,535.9	4.6	0.0%	18,534.7	5.8	0.0%	18,534.7	5.8	0.0%	18,534.7	5.8	0.0%
ME 4	36 54 17	2016	Above Normal	May	--	5,216.6	5,211.3	5.2	0.1%	5,210.8	5.8	0.1%	5,210.2	6.4	0.1%	5,209.7	6.8	0.1%	5,209.1	7.4	0.1%	5,208.6	8.0	0.2%
ME 4	36 54 17	2016	Above Normal	June	--	1,509.6	1,499.2	10.4	0.7%	1,498.1	11.5	0.8%	1,497.1	12.5	0.8%	1,496.1	13.5	0.9%	1,495.0	14.6	1.0%	1,494.0	15.6	1.0%
ME 4	36 54 17	2016	Above Normal	July	--	822.9	811.5	11.4	1.4%	810.4	12.5	1.5%	809.3	13.6	1.7%	808.1	14.8	1.8%	807.0	15.9	1.9%	805.9	17.0	2.1%
ME 4	36 54 17	2016	Above Normal	August	--	491.4	480.4	11.0	2.2%	479.3	12.1	2.5%	478.2	13.2	2.7%	477.1	14.3	2.9%	476.0	15.4	3.1%	474.9	16.5	3.4%
ME 4	36 54 17	2016	Above Normal	September	Used in Summary Table Analysis	327.7	318.0	9.7	3.0%	317.0	10.7	3.3%	316.1	11.7	3.6%	315.1	12.7	3.9%	314.1	13.6	4.2%	313.1	14.6	4.5%
ME 4	36 54 17	2017	Wet	October	Used in Summary Table Analysis	18,289.4	18,282.4	6.9	0.0%	18,281.3	8.1	0.0%	18,280.1	9.3	0.1%	18,280.1	9.3	0.1%	18,278.9	10.4	0.1%	18,277.8	11.6	0.1%
ME 4	36 54 17	2017	Wet	November	Used in Summary Table Analysis	18,831.0	18,824.1	6.9	0.0%	18,824.1	6.9	0.0%	18,822.9	8.1	0.0%	18,822.9	8.1	0.0%	18,821.8	9.3	0.0%	18,821.8	9.3	0.0%
ME 4	36 54 17	2017	Wet	December	--	24,121.5	24,116.9	4.6	0.0%	24,115.7	5.8	0.0%	24,115.7	5.8	0.0%	24,114.6	6.9	0.0%	24,114.6	6.9	0.0%	24,114.6	6.9	0.0%
ME 4	36 54 17	2017	Wet	January	--	106,928.2	106,923.6	4.6	0.0%	106,923.6	4.6	0.0%	106,922.5	5.8	0.0%	106,922.5	5.8	0.0%	106,921.3	6.9	0.0%	106,921.3	6.9	0.0%
ME 4	36 54 17	2017	Wet	February	--	81,856.5	81,851.9	4.6	0.0%	81,850.7	5.8	0.0%	81,850.7	5.8	0.0%	81,849.5	6.9	0.0%	81,849.5	6.9	0.0%	81,849.5	6.9	0.0%
ME 4	36 54 17	2017	Wet	March	--	27,281.3	27,276.6	4.6	0.0%	27,276.6	4.6	0.0%	27,276.6	4.6	0.0%	27,275.5	5.8	0.0%	27,275.5	5.8	0.0%	27,274.3	6.9	0.0%
ME 4	36 54 17	2017	Wet	April	--	22,942.1	22,938.7	3.5	0.0%	22,938.7	3.5	0.0%	22,937.5	4.6	0.0%	22,937.5	4.6	0.0%	22,936.3	5.8	0.0%	22,936.3	5.8	0.0%
ME 4	36 54 17	2017	Wet	May	--	6,273.8	6,268.5	5.3	0.1%	6,267.9	5.9	0.1%	6,267.4	6.5	0.1%	6,266.9	6.9	0.1%	6,266.3	7.5	0.1%	6,265.7	8.1	0.1%
ME 4	36 54 17	2017	Wet	June	--	2,116.9	2,106.4	10.5	0.5%	2,105.3	11.6	0.5%	2,104.2	12.7	0.6%	2,103.1	13.8	0.7%	2,102.1	14.8	0.7%	2,101.0	15.9	0.7%
ME 4	36 54 17	2017	Wet	July	--	934.2	922.7	11.5	1.2%	921.6	12.6	1.4%	920.4	13.8	1.5%	919.3	14.9	1.6%	918.1	16.1	1.7%	917.0	17.2	1.8%
ME 4	36 54 17	2017	Wet	August	--	506.3	495.2	11.1	2.2%	494.1	12.2	2.4%	493.0	13.3	2.6%	491.9	14.4	2.8%	490.8	15.5	3.1%	489.7	16.6	3.3%
ME 4	36 54 17	2017	Wet	September	Used in Summary Table Analysis	322.4	312.3	10.1	3.1%	311.3	11.1	3.5%	310.2	12.2	3.8%	309.2	13.2	4.1%	308.2	14.2	4.4%	307.2	15.2	4.7%
ME 4	36 54 17	2018	Above Normal	October	Used in Summary Table Analysis	275.1	268.0	7.1	2.6%	266.9	8.3	3.0%	265.9	9.2	3.3%	264.9	10.2	3.7%	264.0	11.1	4.0%	263.2	11.9	4.3%
ME 4	36 54 17	2018	Above Normal	November	Used in Summary Table Analysis	10,794.3	10,788.2	6.1	0.1%	10,787.6	6.7	0.1%	10,787.0	7.3	0.1%	10,786.3	8.0	0.1%	10,785.8	8.6	0.1%	10,785.1	9.3	0.1%
ME 4	36 54 17	2018	Above Normal	December	--	5,446.6	5,441.4	5.2	0.1%	5,441.0	5.7	0.1%	5,440.4	6.3	0.1%	5,439.8	6.8	0.1%	5,439.4	7.3	0.1%	5,438.8	7.9	0.1%
ME 4	36 54 17	2018	Above Normal	January	--	17,785.9	17,781.3	4.6	0.0%	17,781.3	4.6	0.0%	17,780.1	5.8	0.0%	17,780.1	5.8	0.0%	17,778.9	6.9	0.0%	17,778.9	6.9	0.0%
ME 4	36 54 17	2018	Above Normal	February	--	7,598.4	7,594.2	4.2	0.1%	7,593.8	4.6	0.1%	7,593.3	5.1	0.1%	7,592.9	5.4	0.1%	7,592.5	5.9	0.1%	7,592.0	6.4	0.1%
ME 4	36 54 17	2018	Above Normal	March	--	20,703.7	20,699.1	4.6	0.0%	20,699.1	4.6	0.0%	20,699.1	4.6	0.0%	20,697.9	5.8	0.0%	20,697.9	5.8	0.0%	20,697.9	5.8	0.0%
ME 4	36 54 17	2018	Above Normal	April	--	32,206.0	32,201.4	4.6	0.0%	32,201.4	4.6	0.0%	32,201.4	4.6	0.0%	32,200.2	5.8	0.0%	32,200.2	5.8	0.0%	32,200.2	5.8	0.0%
ME 4	36 54 17	2018	Above Normal	May	--	6,989.6	6,981.3	8.3	0.1%	6,980.4	9.1	0.1%	6,979.6	10.0	0.1%	6,978.8	10.8	0.2%	6,978.0	11.6	0.2%	6,977.1	12.5	0.2%
ME 4	36 54 17	2018	Above Normal	June	--	1,914.1	1,903.4	10.8	0.6%	1,902.3	11.8	0.6%	1,901.3	12.8	0.7%	1,900.2	13.9	0.7%	1,899.1	15.0	0.8%	1,898.0	16.1	0.8%
ME 4	36 54 17	2018	Above Normal	July	--	781.2	769.7	11.5	1.5%	768.6	12.6	1.6%	767.5	13.8	1.8%	766.3	14.9	1.9%	765.2	16.1	2.1%	764.0	17.2	2.2%
ME 4	36 54 17	2018	Above Normal	August	--	442.3	431.7	10.6	2.4%	430.7	11.7	2.6%	429.6	12.7	2.9%	428.6	13.8	3.1%	427.5	14.8	3.4%	426.4	15.9	3.6%
ME 4	36 54 17	2018	Above Normal	September	Used in Summary Table Analysis	299.7	289.6	10.1	3.4%	288.6	11.1	3.7%	287.6	12.2	4.1%	286.6	13.2	4.4%	285.6	14.2	4.7%	284.5	15.2	5.1%
ME 4	36 54 17	2019	Below Normal	October	Used in Summary Table Analysis	207.6	199.8	7.8	3.8%	199.0	8.6	4.2%	198.2	9.4	4.5%	197.4	10.2	4.9%	196.7	10.9	5.3%	195.9	11.7	5.6%
ME 4	36 54 17	2019	Below Normal	November	Used in Summary Table Analysis	6,625.3	6,619.1	6.3	0.1%	6,618.5	6.8	0.1%	6,617.9	7.4	0.1%	6,617.2	8.1	0.1%	6,616.7	8.7	0.1%	6,616.0	9.4	0.1%
ME 4	36 54 17	2019	Below Normal	December	--	14,669.0	14,664.4	4.6	0.0%	14,663.2	5.8	0.0%	14,663.2	5.8	0.0%	14,662.0	6.9	0.0%	14,662.0	6.9	0.0%	14,660.9	8.1	0.1%
ME 4	36 54 17	2019	Below Normal	January	--	35,226.9	35,222.2	4.6	0.0%	35,222.2	4.6	0.0%	35,222.2	4.6	0.0%	35,221.1	5.8	0.0%	35,221.1	5.8	0.0%	35,219.9	6.9	0.0%
ME 4	36 54 17	2019	Below Normal	February	--	141,932.9	141,921.3	11.6	0.0%	141,921.3	11.6	0.0%	141,921.3	11.6	0.0%	141,921.3	11.6	0.0%	141,921.3	11.6	0.0%	141,921.3	11.6	0.0%
ME 4	36 54 17	2019	Below Normal	March	--	42,327.5	42,324.1	3.5	0.0%	42,322.9	4.6	0.0%	42,322.9	4.6	0.0%	42,321.8	5.8	0.0%	42,321.8	5.8	0.0%	42,321.8	5.8	0.0%
ME 4	36 54 17	2019	Below Normal	April	--	15,275.5	15,270.8	4.6	0.0%	15,270.8	4.6	0.0%	15,270.8	4.6	0.0%	15,269.7	5.8	0.0%	15,269.7	5.8	0.0%	15,269.7	5.8	0.0%
ME 4	36 54 17	2019	Below Normal	May	--	16,946.8	16,938.7	8.1	0.0%	16,937.5	9.3	0.1%	16,936.3	10.4	0.1%	16,935.2	11.6	0.1%	16,934.0	12.7	0.1%	16,934.0	12.7	0.1%
ME 4	36 54 17	2019	Below Normal	June	--	4,243.8	4,232.2	11.6	0.3%	4,231.0	12.7	0.3%	4,229.9	13.9	0.3%	4,228.7	15.0	0.4%	4,227.4	16.3	0.4%	4,226.3	17.5	0.4%
ME 4	36 54 17	2019	Below Normal	July	--	1,361.1	1,349.5	11.6	0.9%	1,348.4	12.7	0.9%	1,347.3	13.8	1.0%	1,346.2	14.9	1.1%	1,345.0	16.1	1.2%	1,343.9	17.2	1.3%
ME 4	36 54 17	2019	Below Normal	August	--	596.2	585.3	10.9	1.8%	584.2	12.0	2.0%	583.1	13.1	2.2%	582.0	14.2	2.4%	580.9	15.3	2.6%	579.8	16.4	2.7%
ME 4	36 54 17	2019	Below Normal	September	Used in Summary Table Analysis	462.4	452.3	10.1	2.2%	451.3	11.1	2.4%	450.3	12.1	2.6%	449.3	13.1	2.8%	448.2	14.1	3.1%	447.2	15.1	3.3%
ME 4	36 54 17	2020	Dry	October	Used in Summary Table Analysis	355.6	348.1	7.5	2.1%	347.3	8.2	2.3%	346.6	9.0	2.5%	345.8	9.7	2.7%	345.1	10.5	2.9%	344.3	11.2	3.2%
ME 4	36 54 17	2020	Dry	November	Used in Summary Table Analysis	319.1	313.3	5.8	1.8%	312.7	6.4	2.0%	312.1	7.0	2.2%	311.5	7.6	2.4%	310.9	8.2	2.6%	310.3	8.8	2.7%
ME 4	36 54 17	2020	Dry	December	--	13,289.4	13,284.7	4.6	0.0%	13,283.6	5.8	0.0%	13,283.6	5.8	0.0%	13,282.4	6.9	0.1%	13,282.4	6.9	0.1%	13,281.3	8.1	0.1%
ME 4	36 54 17	2020	Dry	January	--	22,334.5	22,328.7	5.8	0.0%	22,328.7	5.8	0.0%	22,328.7	5.8	0.0%	22,327.5	6.9	0.0%	22,327.5	6.9	0.0%	22,326.4	8.1	0.0%
ME 4	36 54 17	2020	Dry	February	--	7,415.5	7,411.2	4.3	0.1%	7,410.8	4.7	0.1%	7,410.3	5.2	0.1%	7,409.8	5.7	0.1%	7,409.4	6.1	0.1%	7,409.0	6.5	0.1%
ME 4	36 54 17	2020	Dry	March	--	7,244.8	7,240.7	4.1	0.1%	7,240.4	4.4	0.1%	7,239.9	4.9	0.1%	7,239.5	5.3	0.1%	7,239.1	5.7	0.1%	7,238.7	6.1	0.1%
ME 4	36 54 17	2020	Dry	April	--	5,483.6	5,474.9	8.7	0.2%	5,474.0	9.6	0.2%	5,473.1	10.4	0.2%	5,472.2	11.3	0.2%	5,471.4	12.2	0.2%	5,470.5	13.1	0.2%
ME 4	36 54 17	2020	Dry	May	--	7,377.5	7,367.1	10.4	0.1%	7,366.1	11.5	0.2%	7,365.0	12.5	0.2%	7,364.0	13.5	0.2%	7,363.0	14.6	0.2%	7,361.9	15.6	0.2%
ME 4	36 54 17	2020	Dry	June	--	2,104.7	2,091.0	13.8	0.7%	2,089.6	15.2	0.7%	2,088.2	16.6	0.8%	2,086.8	17.9	0.9%	2,085.5	19.2	0.9%	2,084.1	20.6	1.0%
ME 4	36 54 17	2020	Dry	July	--	796.3	782.9	13.4	1.7%	781.6	14.7	1.8%	780.2	16.0	2.0%	778.9	17.4	2.2%	777.6	18.7	2.4%	776.2	20.0	2.5%
ME 4	36 54 17	2020	Dry	August	--	398.9	385.8	13.1	3.3%	384.5	14.4	3.6%	383.2	15.7	3.9%	381.8	17.0	4.3%	380.5	18.3	4.6%	379.2	19.7	4.9%
ME 4	36 54 17	2020	Dry	September	Used in Summary Table Analysis	248.3	236.6	11.6	4.7%	235.5	12.8	5.2%	234.3	14.0	5.6%	233.2	15.1	6.1%	232.0	16.3	6.6%	230.8	17.4	7.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 53 18	2000	Above Normal	October	Used in Summary Table Analysis	816.4	808.6	7.9	1.0%	807.8	8.7	1.1%	807.0	9.5	1.2%	806.2	10.3	1.3%	805.4	11.0	1.4%	804.6	11.8	1.4%
ME 4	36 53 18	2000	Above Normal	November	Used in Summary Table Analysis	12,135.4	12,129.6	5.8	0.0%	12,128.5	6.9	0.1%	12,128.5	6.9	0.1%	12,127.3	8.1	0.1%	12,127.3	8.1	0.1%	12,126.2	9.3	0.1%
ME 4	36 53 18	2000	Above Normal	December	--	10,819.6	10,814.4	5.2	0.0%	10,813.8	5.8	0.1%	10,813.2	6.4	0.1%	10,812.7	6.8	0.1%	10,812.2	7.4	0.1%	10,811.6	8.0	0.1%
ME 4	36 53 18	2000	Above Normal	January	--	28,605.3	28,600.7	4.6	0.0%	28,599.5	5.8	0.0%	28,599.5	5.8	0.0%	28,598.4	6.9	0.0%	28,598.4	6.9	0.0%	28,598.4	6.9	0.0%
ME 4	36 53 18	2000	Above Normal	February	--	37,060.2	37,055.6	4.6	0.0%	37,055.6	4.6	0.0%	37,054.4	5.8	0.0%	37,054.4	5.8	0.0%	37,054.4	5.8	0.0%	37,053.2	6.9	0.0%
ME 4	36 53 18	2000	Above Normal	March	--	18,321.8	18,317.1	4.6	0.0%	18,317.1	4.6	0.0%	18,317.1	4.6	0.0%	18,316.0	5.8	0.0%	18,316.0	5.8	0.0%	18,316.0	5.8	0.0%
ME 4	36 53 18	2000	Above Normal	April	--	12,318.3	12,314.8	3.5	0.0%	12,313.7	4.6	0.0%	12,313.7	4.6	0.0%	12,313.7	4.6	0.0%	12,312.5	5.8	0.0%	12,312.5	5.8	0.0%
ME 4	36 53 18	2000	Above Normal	May	--	7,097.8	7,089.4	8.4	0.1%	7,088.4	9.4	0.1%	7,087.6	10.2	0.1%	7,086.7	11.1	0.2%	7,085.9	11.9	0.2%	7,085.0	12.8	0.2%
ME 4	36 53 18	2000	Above Normal	June	--	2,612.2	2,599.4	12.7	0.5%	2,598.1	14.0	0.5%	2,596.8	15.4	0.6%	2,595.6	16.6	0.6%	2,594.3	17.8	0.7%	2,592.9	19.2	0.7%
ME 4	36 53 18	2000	Above Normal	July	--	991.7	980.2	11.5	1.2%	979.1	12.7	1.3%	977.9	13.8	1.4%	976.8	15.0	1.5%	975.6	16.1	1.6%	974.5	17.3	1.7%
ME 4	36 53 18	2000	Above Normal	August	--	521.8	511.0	10.8	2.1%	510.0	11.9	2.3%	508.9	12.9	2.5%	507.8	14.0	2.7%	506.8	15.1	2.9%	505.7	16.2	3.1%
ME 4	36 53 18	2000	Above Normal	September	Used in Summary Table Analysis	295.2	285.7	9.5	3.2%	284.7	10.4	3.5%	283.8	11.4	3.9%	282.8	12.3	4.2%	281.9	13.3	4.5%	280.9	14.2	4.8%
ME 4	36 53 18	2001	Dry	October	Used in Summary Table Analysis	3,818.6	3,810.9	7.8	0.2%	3,810.2	8.4	0.2%	3,809.4	9.3	0.2%	3,808.6	10.1	0.3%	3,807.9	10.8	0.3%	3,807.1	11.6	0.3%
ME 4	36 53 18	2001	Dry	November	Used in Summary Table Analysis	6,130.3	6,124.1	6.3	0.1%	6,123.5	6.8	0.1%	6,122.8	7.5	0.1%	6,122.2	8.1	0.1%	6,121.6	8.7	0.1%	6,120.9	9.4	0.2%
ME 4	36 53 18	2001	Dry	December	--	8,844.7	8,839.4	5.3	0.1%	8,838.8	5.9	0.1%	8,838.2	6.5	0.1%	8,837.7	6.9	0.1%	8,837.2	7.5	0.1%	8,836.6	8.1	0.1%
ME 4	36 53 18	2001	Dry	January	--	12,803.2	12,798.6	4.6	0.0%	12,798.6	4.6	0.0%	12,797.5	5.8	0.0%	12,797.5	5.8	0.0%	12,796.3	6.9	0.1%	12,796.3	6.9	0.1%
ME 4	36 53 18	2001	Dry	February	--	17,479.2	17,474.5	4.6	0.0%	17,474.5	4.6	0.0%	17,474.5	4.6	0.0%	17,473.4	5.8	0.0%	17,473.4	5.8	0.0%	17,472.2	6.9	0.0%
ME 4	36 53 18	2001	Dry	March	--	12,299.8	12,296.3	3.5	0.0%	12,296.3	3.5	0.0%	12,295.1	4.6	0.0%	12,295.1	4.6	0.0%	12,294.0	5.8	0.0%	12,294.0	5.8	0.0%
ME 4	36 53 18	2001	Dry	April	--	10,975.6	10,966.7	8.9	0.1%	10,965.9	9.7	0.1%	10,964.9	10.6	0.1%	10,964.1	11.5	0.1%	10,963.2	12.4	0.1%	10,962.3	13.3	0.1%
ME 4	36 53 18	2001	Dry	May	--	2,636.5	2,625.9	10.5	0.4%	2,624.9	11.6	0.4%	2,623.8	12.6	0.5%	2,622.9	13.5	0.5%	2,621.9	14.6	0.6%	2,620.7	15.7	0.6%
ME 4	36 53 18	2001	Dry	June	--	2,650.2	2,636.1	14.1	0.5%	2,634.6	15.6	0.6%	2,633.2	17.0	0.6%	2,631.8	18.4	0.7%	2,630.3	19.9	0.8%	2,628.9	21.3	0.8%
ME 4	36 53 18	2001	Dry	July	--	718.2	704.9	13.2	1.8%	703.6	14.5	2.0%	702.3	15.9	2.2%	701.0	17.2	2.4%	699.6	18.5	2.6%	698.3	19.8	2.8%
ME 4	36 53 18	2001	Dry	August	--	172.3	159.5	12.8	7.4%	158.2	14.1	8.2%	156.9	15.4	8.9%	155.7	16.7	9.7%	154.4	18.0	10.4%	153.1	19.2	11.2%
ME 4	36 53 18	2001	Dry	September	Used in Summary Table Analysis	95.3	83.9	11.4	11.9%	82.8	12.5	13.1%	81.6	13.7	14.3%	80.5	14.8	15.6%	79.3	16.0	16.7%	78.2	17.1	17.9%
ME 4	36 53 18	2002	Below Normal	October	Used in Summary Table Analysis	265.0	255.6	9.4	3.6%	254.6	10.4	3.9%	253.7	11.3	4.3%	252.7	12.3	4.6%	251.8	13.2	5.0%	250.8	14.2	5.3%
ME 4	36 53 18	2002	Below Normal	November	Used in Summary Table Analysis	12,033.6	12,026.6	6.9	0.1%	12,025.5	8.1	0.1%	12,025.5	8.1	0.1%	12,024.3	9.3	0.1%	12,024.3	9.3	0.1%	12,023.1	10.4	0.1%
ME 4	36 53 18	2002	Below Normal	December	--	35,708.3	35,702.5	5.8	0.0%	35,701.4	6.9	0.0%	35,700.2	8.1	0.0%	35,700.2	8.1	0.0%	35,699.1	9.3	0.0%	35,699.1	9.3	0.0%
ME 4	36 53 18	2002	Below Normal	January	--	30,893.5	30,887.7	5.8	0.0%	30,887.7	5.8	0.0%	30,886.6	6.9	0.0%	30,885.4	8.1	0.0%	30,885.4	8.1	0.0%	30,885.4	8.1	0.0%
ME 4	36 53 18	2002	Below Normal	February	--	24,686.3	24,681.7	4.6	0.0%	24,680.6	5.8	0.0%	24,680.6	5.8	0.0%	24,679.4	6.9	0.0%	24,679.4	6.9	0.0%	24,678.2	8.1	0.0%
ME 4	36 53 18	2002	Below Normal	March	--	17,785.9	17,781.3	4.6	0.0%	17,780.1	5.8	0.0%	17,780.1	5.8	0.0%	17,780.1	5.8	0.0%	17,778.9	6.9	0.0%	17,778.9	6.9	0.0%
ME 4	36 53 18	2002	Below Normal	April	--	9,927.1	9,918.2	8.9	0.1%	9,917.4	9.7	0.1%	9,916.4	10.6	0.1%	9,915.5	11.6	0.1%	9,914.6	12.5	0.1%	9,913.8	13.3	0.1%
ME 4	36 53 18	2002	Below Normal	May	--	3,319.7	3,309.3	10.4	0.3%	3,308.2	11.5	0.3%	3,307.2	12.5	0.4%	3,306.1	13.5	0.4%	3,305.1	14.6	0.4%	3,304.1	15.6	0.5%
ME 4	36 53 18	2002	Below Normal	June	--	853.7	841.9	11.8	1.4%	840.7	13.0	1.5%	839.5	14.1	1.7%	838.4	15.3	1.8%	837.2	16.5	1.9%	836.0	17.7	2.1%
ME 4	36 53 18	2002	Below Normal	July	--	362.3	350.4	11.9	3.3%	349.2	13.1	3.6%	348.0	14.2	3.9%	346.8	15.5	4.3%	345.6	16.6	4.6%	344.4	17.8	4.9%
ME 4	36 53 18	2002	Below Normal	August	--	227.0	216.0	11.1	4.9%	214.8	12.2	5.4%	213.7	13.3	5.9%	212.6	14.4	6.4%	211.5	15.5	6.8%	210.4	16.7	7.3%
ME 4	36 53 18	2002	Below Normal	September	Used in Summary Table Analysis	163.8	153.4	10.4	6.4%	152.4	11.5	7.0%	151.3	12.5	7.7%	150.3	13.6	8.3%	149.2	14.6	8.9%	148.2	15.7	9.6%
ME 4	36 53 18	2003	Wet	October	Used in Summary Table Analysis	128.8	120.4	8.4	6.6%	119.5	9.3	7.2%	118.7	10.2	7.9%	117.8	11.0	8.5%	117.0	11.9	9.2%	116.1	12.7	9.9%
ME 4	36 53 18	2003	Wet	November	Used in Summary Table Analysis	896.3	889.6	6.8	0.8%	888.9	7.4	0.8%	888.2	8.1	0.9%	887.5	8.8	1.0%	886.8	9.5	1.1%	886.1	10.2	1.1%
ME 4	36 53 18	2003	Wet	December	--	56,880.8	56,875.0	5.8	0.0%	56,875.0	5.8	0.0%	56,873.8	6.9	0.0%	56,873.8	6.9	0.0%	56,872.7	8.1	0.0%	56,872.7	8.1	0.0%
ME 4	36 53 18	2003	Wet	January	--	31,542.8	31,537.0	5.8	0.0%	31,537.0	5.8	0.0%	31,535.9	6.9	0.0%	31,535.9	6.9	0.0%	31,534.7	8.1	0.0%	31,534.7	8.1	0.0%
ME 4	36 53 18	2003	Wet	February	--	20,358.8	20,354.2	4.6	0.0%	20,354.2	4.6	0.0%	20,354.2	4.6	0.0%	20,353.0	5.8	0.0%	20,353.0	5.8	0.0%	20,351.9	6.9	0.0%
ME 4	36 53 18	2003	Wet	March	--	24,042.8	24,038.2	4.6	0.0%	24,038.2	4.6	0.0%	24,038.2	4.6	0.0%	24,037.0	5.8	0.0%	24,037.0	5.8	0.0%	24,035.9	6.9	0.0%
ME 4	36 53 18	2003	Wet	April	--	42,937.5	42,934.0	3.5	0.0%	42,932.9	4.6	0.0%	42,932.9	4.6	0.0%	42,932.9	4.6	0.0%	42,931.7	5.8	0.0%	42,931.7	5.8	0.0%
ME 4	36 53 18	2003	Wet	May	--	12,226.9	12,217.6	9.3	0.1%	12,216.4	10.4	0.1%	12,216.4	10.4	0.1%	12,215.3	11.6	0.1%	12,214.1	12.7	0.1%	12,213.0	13.9	0.1%
ME 4	36 53 18	2003	Wet	June	--	3,166.6	3,155.0	11.6	0.4%	3,153.9	12.6	0.4%	3,152.8	13.8	0.4%	3,151.6	14.9	0.5%	3,150.5	16.1	0.5%	3,149.4	17.1	0.5%
ME 4	36 53 18	2003	Wet	July	--	1,474.2	1,462.4	11.8	0.8%	1,461.2	13.0	0.9%	1,460.1	14.1	1.0%	1,458.9	15.3	1.0%	1,457.6	16.6	1.1%	1,456.5	17.7	1.2%
ME 4	36 53 18	2003	Wet	August	--	760.2	748.8	11.3	1.5%	747.7	12.5	1.6%	746.6	13.6	1.8%	745.4	14.8	1.9%	744.3	15.9	2.1%	743.1	17.1	2.2%
ME 4	36 53 18	2003	Wet	September	Used in Summary Table Analysis	458.0	448.3	9.7	2.1%	447.4	10.6	2.3%	446.4	11.6	2.5%	445.4	12.5	2.7%	444.5	13.5	3.0%	443.5	14.5	3.2%
ME 4	36 53 18	2004	Wet	October	Used in Summary Table Analysis	324.9	317.0	7.9	2.4%	316.2	8.7	2.7%	315.4	9.5	2.9%	314.6	10.3	3.2%	313.8	11.1	3.4%	313.0	11.9	3.7%
ME 4	36 53 18	2004	Wet	November	Used in Summary Table Analysis	5,810.8	5,804.4	6.4	0.1%	5,803.8	6.9	0.1%	5,803.1	7.6	0.1%	5,802.5	8.2	0.1%	5,801.9	8.9	0.2%	5,801.3	9.5	0.2%
ME 4	36 53 18	2004	Wet	December	--	36,348.4	36,342.6	5.8	0.0%	36,342.6	5.8	0.0%	36,341.4	6.9	0.0%	36,341.4	6.9	0.0%	36,341.4	6.9	0.0%	36,340.3	8.1	0.0%
ME 4	36 53 18	2004	Wet	January	--	31,500.0	31,494.2	5.8	0.0%	31,494.2	5.8	0.0%	31,493.1	6.9	0.0%	31,493.1	6.9	0.0%	31,493.1	6.9	0.0%	31,491.9	8.1	0.0%
ME 4	36 53 18	2004	Wet	February	--	38,260.4	38,255.8	4.6	0.0%	38,255.8	4.6	0.0%	38,254.6	5.8	0.0%	38,254.6	5.8	0.0%	38,254.6	5.8	0.0%	38,253.5	6.9	0.0%
ME 4	36 53 18	2004	Wet	March	--	16,527.8	16,523.1	4.6	0.0%	16,523.1	4.6	0.0%	16,522.0	5.8	0.0%	16,522.0	5.8	0.0%	16,520.8	6.9	0.0%	16,520.8	6.9	0.0%
ME 4	36 53 18	2004	Wet	April	--	9,452.7	9,448.6	4.1	0.0%	9,448.3	4.4	0.0%	9,447.8	4.9	0.1%	9,447.3	5.3	0.1%	9,447.0	5.7	0.1%	9,446.5	6.1	0.1%
ME 4	36 53 18	2004	Wet	May	--	3,421.8	3,413.1	8.7	0.3%	3,412.2	9.6	0.3%	3,411.3	10.4	0.3%	3,410.4	11.3	0.3%	3,409.6	12.2	0.4%	3,408.8	13.0	0.4%
ME 4	36 53 18	2004	Wet	June	--	691.7	680.8	10.9	1.6%	679.7	12.0	1.7%	678.6	13.0	1.9%	677.5	14.1	2.0%	676.5	15.2	2.2%	675.4	16.3	2.4%
ME 4	36 53 18	2004	Wet	July	--	356.1	344.6	11.6	3.2%	343.4	12.7	3.6%	342.3	13.9	3.9%	341.1	15.0	4.2%	340.0	16.2	4.5%	338.8	17.3	4.9%
ME 4	36 53 18	2004	Wet	August	--	225.1	214.3	10.9	4.8%	213.2	11.9	5.3%	212.1	13.0	5.8%	211.0	14.1	6.3%	209.9	15.2	6.7%	208.9	16.3	7.2%
ME 4	36 53 18	2004	Wet	September	Used in Summary Table Analysis	162.2	151.9	10.3	6.3%	150.9	11.3	7.0%	149.9	12.3	7.6%	148.8	13.3	8.2%	147.8	14.4	8.9%	146.8	15.4	9.5%
ME 4	36 53 18	2005	Above Normal	October	Used in Summary Table Analysis	7,692.8	7,684.8	8.0	0.1%	7,684.0	8.8	0.1%	7,683.2	9.6	0.1%	7,682.4	10.4	0.1%	7,681.6	11.2	0.1%	7,680.8	12.0	0.2%
ME 4	36 53 18	2005	Above Normal	November	Used in Summary Table Analysis	2,257.6	2,251.4	6.3	0.3%	2,250.7	6.9	0.3%	2,250.1	7.5	0.3%	2,249.4	8.2	0.4%	2,248.8	8.8	0.4%	2,248.1	9.5	0.4%
ME 4	36 53 18	2005	Above Normal	December	--	21,059.0	21,054.4	4.6	0.0%	21,053.2	5.8	0.0%	21,053.2	5.8	0.0%	21,052.1	6.9	0.0%	21,052.1	6.9	0.0%	21,050.9	8.1	0.0%
ME 4	36 53 18	2005	Above Normal	January	--	22,410.9	22,405.1	5.8	0.0%	22,405.1	5.8	0.0%	22,403.9	6.9	0.0%	22,403.9	6.9	0.0%	22,403.9	6.9	0.0%	22,402.8	8.1	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 53 18	2005	Above Normal	February	--	14,015.0	14,010.4	4.6	0.0%	14,010.4	4.6	0.0%	14,009.3	5.8	0.0%	14,009.3	5.8	0.0%	14,009.3	5.8	0.0%	14,008.1	6.9	0.0%
ME 4	36 53 18	2005	Above Normal	March	--	28,585.6	28,582.2	3.5	0.0%	28,581.0	4.6	0.0%	28,581.0	4.6	0.0%	28,581.0	4.6	0.0%	28,579.9	5.8	0.0%	28,579.9	5.8	0.0%
ME 4	36 53 18	2005	Above Normal	April	--	21,457.2	21,453.7	3.5	0.0%	21,452.5	4.6	0.0%	21,452.5	4.6	0.0%	21,452.5	4.6	0.0%	21,451.4	5.8	0.0%	21,451.4	5.8	0.0%
ME 4	36 53 18	2005	Above Normal	May	--	19,584.5	19,576.4	8.1	0.0%	19,575.2	9.3	0.0%	19,574.1	10.4	0.1%	19,572.9	11.6	0.1%	19,572.9	11.6	0.1%	19,571.8	12.7	0.1%
ME 4	36 53 18	2005	Above Normal	June	--	15,890.0	15,876.2	13.9	0.1%	15,875.0	15.0	0.1%	15,873.8	16.2	0.1%	15,872.7	17.4	0.1%	15,871.5	18.5	0.1%	15,870.4	19.7	0.1%
ME 4	36 53 18	2005	Above Normal	July	--	2,863.4	2,851.5	11.9	0.4%	2,850.2	13.2	0.5%	2,849.1	14.4	0.5%	2,847.9	15.5	0.5%	2,846.6	16.8	0.6%	2,845.5	17.9	0.6%
ME 4	36 53 18	2005	Above Normal	August	--	983.0	972.2	10.8	1.1%	971.1	11.9	1.2%	970.0	13.0	1.3%	968.9	14.1	1.4%	967.8	15.2	1.5%	966.8	16.2	1.6%
ME 4	36 53 18	2005	Above Normal	September	Used in Summary Table Analysis	524.6	515.1	9.5	1.8%	514.1	10.5	2.0%	513.1	11.4	2.2%	512.2	12.3	2.4%	511.3	13.3	2.5%	510.3	14.3	2.7%
ME 4	36 53 18	2006	Wet	October	Used in Summary Table Analysis	634.5	626.8	7.6	1.2%	626.1	8.4	1.3%	625.3	9.2	1.4%	624.6	9.9	1.6%	623.8	10.7	1.7%	623.0	11.5	1.8%
ME 4	36 53 18	2006	Wet	November	Used in Summary Table Analysis	9,320.4	9,314.4	6.0	0.1%	9,313.8	6.6	0.1%	9,313.2	7.2	0.1%	9,312.6	7.8	0.1%	9,311.9	8.4	0.1%	9,311.3	9.0	0.1%
ME 4	36 53 18	2006	Wet	December	--	43,547.5	43,542.8	4.6	0.0%	43,541.7	5.8	0.0%	43,541.7	5.8	0.0%	43,540.5	6.9	0.0%	43,540.5	6.9	0.0%	43,539.4	8.1	0.0%
ME 4	36 53 18	2006	Wet	January	--	46,343.8	46,339.1	4.6	0.0%	46,338.0	5.8	0.0%	46,338.0	5.8	0.0%	46,336.8	6.9	0.0%	46,336.8	6.9	0.0%	46,335.6	8.1	0.0%
ME 4	36 53 18	2006	Wet	February	--	26,637.7	26,633.1	4.6	0.0%	26,633.1	4.6	0.0%	26,631.9	5.8	0.0%	26,631.9	5.8	0.0%	26,631.9	5.8	0.0%	26,630.8	6.9	0.0%
ME 4	36 53 18	2006	Wet	March	--	47,194.4	47,189.8	4.6	0.0%	47,189.8	4.6	0.0%	47,188.7	5.8	0.0%	47,188.7	5.8	0.0%	47,187.5	6.9	0.0%	47,187.5	6.9	0.0%
ME 4	36 53 18	2006	Wet	April	--	30,442.1	30,437.5	4.6	0.0%	30,437.5	4.6	0.0%	30,437.5	4.6	0.0%	30,436.3	5.8	0.0%	30,436.3	5.8	0.0%	30,436.3	5.8	0.0%
ME 4	36 53 18	2006	Wet	May	--	14,215.3	14,209.5	5.8	0.0%	14,209.5	5.8	0.0%	14,208.3	6.9	0.0%	14,208.3	6.9	0.0%	14,207.2	8.1	0.1%	14,207.2	8.1	0.1%
ME 4	36 53 18	2006	Wet	June	--	3,547.6	3,536.7	10.9	0.3%	3,535.6	11.9	0.3%	3,534.6	13.0	0.4%	3,533.4	14.1	0.4%	3,532.4	15.2	0.4%	3,531.4	16.2	0.5%
ME 4	36 53 18	2006	Wet	July	--	1,279.4	1,267.9	11.5	0.9%	1,266.8	12.6	1.0%	1,265.6	13.8	1.1%	1,264.5	14.9	1.2%	1,263.4	16.0	1.2%	1,262.3	17.1	1.3%
ME 4	36 53 18	2006	Wet	August	--	665.5	654.5	11.0	1.7%	653.3	12.2	1.8%	652.2	13.3	2.0%	651.1	14.4	2.2%	650.0	15.5	2.3%	648.9	16.6	2.5%
ME 4	36 53 18	2006	Wet	September	Used in Summary Table Analysis	426.4	416.7	9.6	2.3%	415.8	10.6	2.5%	414.8	11.6	2.7%	413.8	12.5	2.9%	412.9	13.5	3.2%	411.9	14.4	3.4%
ME 4	36 53 18	2007	Above Normal	October	Used in Summary Table Analysis	274.5	266.7	7.8	2.8%	265.9	8.5	3.1%	265.2	9.3	3.4%	264.4	10.1	3.7%	263.6	10.9	4.0%	262.8	11.7	4.2%
ME 4	36 53 18	2007	Above Normal	November	Used in Summary Table Analysis	8,679.3	8,673.0	6.3	0.1%	8,672.5	6.8	0.1%	8,671.8	7.5	0.1%	8,671.2	8.1	0.1%	8,670.5	8.8	0.1%	8,669.9	9.4	0.1%
ME 4	36 53 18	2007	Above Normal	December	--	20,437.5	20,431.7	5.8	0.0%	20,431.7	5.8	0.0%	20,430.6	6.9	0.0%	20,430.6	6.9	0.0%	20,429.4	8.1	0.0%	20,429.4	8.1	0.0%
ME 4	36 53 18	2007	Above Normal	January	--	10,258.0	10,253.1	4.9	0.0%	10,252.5	5.4	0.1%	10,252.1	5.9	0.1%	10,251.6	6.4	0.1%	10,251.2	6.8	0.1%	10,250.6	7.4	0.1%
ME 4	36 53 18	2007	Above Normal	February	--	30,601.9	30,597.2	4.6	0.0%	30,597.2	4.6	0.0%	30,596.1	5.8	0.0%	30,596.1	5.8	0.0%	30,594.9	6.9	0.0%	30,594.9	6.9	0.0%
ME 4	36 53 18	2007	Above Normal	March	--	13,106.5	13,101.9	4.6	0.0%	13,101.9	4.6	0.0%	13,100.7	5.8	0.0%	13,100.7	5.8	0.0%	13,099.5	6.9	0.1%	13,099.5	6.9	0.1%
ME 4	36 53 18	2007	Above Normal	April	--	11,538.7	11,530.1	8.6	0.1%	11,529.3	9.4	0.1%	11,528.5	10.2	0.1%	11,527.5	11.1	0.1%	11,526.7	11.9	0.1%	11,525.9	12.7	0.1%
ME 4	36 53 18	2007	Above Normal	May	--	4,141.2	4,131.1	10.1	0.2%	4,130.2	11.0	0.3%	4,129.2	12.0	0.3%	4,128.1	13.1	0.3%	4,127.1	14.1	0.3%	4,126.2	15.0	0.4%
ME 4	36 53 18	2007	Above Normal	June	--	1,499.3	1,487.3	12.0	0.8%	1,486.0	13.3	0.9%	1,484.8	14.5	1.0%	1,483.6	15.7	1.0%	1,482.4	16.9	1.1%	1,481.1	18.2	1.2%
ME 4	36 53 18	2007	Above Normal	July	--	496.0	483.8	12.1	2.4%	482.6	13.4	2.7%	481.4	14.6	2.9%	480.2	15.8	3.2%	479.0	17.0	3.4%	477.8	18.2	3.7%
ME 4	36 53 18	2007	Above Normal	August	--	223.1	212.2	10.9	4.9%	211.1	12.0	5.4%	210.0	13.1	5.9%	208.9	14.2	6.3%	207.8	15.2	6.8%	206.7	16.3	7.3%
ME 4	36 53 18	2007	Above Normal	September	Used in Summary Table Analysis	150.7	140.5	10.2	6.8%	139.5	11.3	7.5%	138.4	12.3	8.2%	137.4	13.3	8.8%	136.4	14.3	9.5%	135.4	15.4	10.2%
ME 4	36 53 18	2008	Dry	October	Used in Summary Table Analysis	3,437.8	3,429.6	8.2	0.2%	3,428.8	9.0	0.3%	3,427.9	10.0	0.3%	3,427.1	10.8	0.3%	3,426.3	11.6	0.3%	3,425.5	12.4	0.4%
ME 4	36 53 18	2008	Dry	November	Used in Summary Table Analysis	3,278.8	3,272.5	6.4	0.2%	3,271.9	6.9	0.2%	3,271.2	7.6	0.2%	3,270.6	8.2	0.3%	3,269.9	8.9	0.3%	3,269.3	9.5	0.3%
ME 4	36 53 18	2008	Dry	December	--	23,162.0	23,156.3	5.8	0.0%	23,156.3	5.8	0.0%	23,155.1	6.9	0.0%	23,155.1	6.9	0.0%	23,153.9	8.1	0.0%	23,153.9	8.1	0.0%
ME 4	36 53 18	2008	Dry	January	--	37,564.8	37,559.0	5.8	0.0%	37,559.0	5.8	0.0%	37,559.0	5.8	0.0%	37,557.9	6.9	0.0%	37,557.9	6.9	0.0%	37,556.7	8.1	0.0%
ME 4	36 53 18	2008	Dry	February	--	26,278.9	26,274.3	4.6	0.0%	26,273.1	5.8	0.0%	26,273.1	5.8	0.0%	26,273.1	5.8	0.0%	26,272.0	6.9	0.0%	26,272.0	6.9	0.0%
ME 4	36 53 18	2008	Dry	March	--	11,797.5	11,794.0	3.5	0.0%	11,792.8	4.6	0.0%	11,792.8	4.6	0.0%	11,792.8	4.6	0.0%	11,791.7	5.8	0.0%	11,791.7	5.8	0.0%
ME 4	36 53 18	2008	Dry	April	--	9,019.0	9,010.4	8.6	0.1%	9,009.5	9.5	0.1%	9,008.7	10.3	0.1%	9,007.8	11.2	0.1%	9,006.9	12.0	0.1%	9,006.0	13.0	0.1%
ME 4	36 53 18	2008	Dry	May	--	1,358.8	1,349.5	9.3	0.7%	1,348.7	10.1	0.7%	1,347.8	11.0	0.8%	1,346.9	11.9	0.9%	1,345.9	12.8	0.9%	1,345.0	13.8	1.0%
ME 4	36 53 18	2008	Dry	June	--	437.8	424.6	13.3	3.0%	423.3	14.6	3.3%	422.0	15.9	3.6%	420.6	17.2	3.9%	419.3	18.5	4.2%	418.0	19.8	4.5%
ME 4	36 53 18	2008	Dry	July	--	256.0	243.0	12.9	5.1%	241.7	14.2	5.6%	240.5	15.5	6.1%	239.2	16.8	6.6%	237.9	18.1	7.1%	236.6	19.4	7.6%
ME 4	36 53 18	2008	Dry	August	--	179.4	166.9	12.5	7.0%	165.7	13.8	7.7%	164.4	15.0	8.4%	163.2	16.2	9.1%	161.9	17.5	9.7%	160.7	18.7	10.4%
ME 4	36 53 18	2008	Dry	September	Used in Summary Table Analysis	141.1	129.1	11.9	8.5%	127.9	13.1	9.3%	126.7	14.3	10.2%	125.5	15.5	11.0%	124.3	16.7	11.9%	123.1	17.9	12.7%
ME 4	36 53 18	2009	Critical	October	Used in Summary Table Analysis	924.4	915.1	9.3	1.0%	914.2	10.3	1.1%	913.2	11.2	1.2%	912.3	12.1	1.3%	911.4	13.1	1.4%	910.4	14.0	1.5%
ME 4	36 53 18	2009	Critical	November	Used in Summary Table Analysis	5,519.9	5,512.6	7.3	0.1%	5,511.9	8.0	0.1%	5,511.2	8.7	0.2%	5,510.4	9.5	0.2%	5,509.7	10.2	0.2%	5,509.0	10.9	0.2%
ME 4	36 53 18	2009	Critical	December	--	12,184.0	12,178.2	5.8	0.0%	12,177.1	6.9	0.1%	12,177.1	6.9	0.1%	12,175.9	8.1	0.1%	12,175.9	8.1	0.1%	12,174.8	9.3	0.1%
ME 4	36 53 18	2009	Critical	January	--	8,801.3	8,795.6	5.7	0.1%	8,795.0	6.3	0.1%	8,794.4	6.8	0.1%	8,793.9	7.4	0.1%	8,793.3	8.0	0.1%	8,792.7	8.6	0.1%
ME 4	36 53 18	2009	Critical	February	--	22,629.6	22,625.0	4.6	0.0%	22,625.0	4.6	0.0%	22,623.8	5.8	0.0%	22,623.8	5.8	0.0%	22,622.7	6.9	0.0%	22,622.7	6.9	0.0%
ME 4	36 53 18	2009	Critical	March	--	21,133.1	21,128.5	4.6	0.0%	21,128.5	4.6	0.0%	21,127.3	5.8	0.0%	21,127.3	5.8	0.0%	21,126.2	6.9	0.0%	21,126.2	6.9	0.0%
ME 4	36 53 18	2009	Critical	April	--	10,097.6	10,088.5	9.0	0.1%	10,087.7	9.8	0.1%	10,086.8	10.8	0.1%	10,086.0	11.6	0.1%	10,085.1	12.5	0.1%	10,084.1	13.4	0.1%
ME 4	36 53 18	2009	Critical	May	--	15,589.1	15,578.7	10.4	0.1%	15,577.5	11.6	0.1%	15,576.4	12.7	0.1%	15,575.2	13.9	0.1%	15,574.1	15.0	0.1%	15,572.9	16.2	0.1%
ME 4	36 53 18	2009	Critical	June	--	3,160.4	3,146.5	13.9	0.4%	3,145.1	15.3	0.5%	3,143.6	16.8	0.5%	3,142.2	18.2	0.6%	3,140.9	19.6	0.6%	3,139.5	20.9	0.7%
ME 4	36 53 18	2009	Critical	July	--	1,262.8	1,249.8	13.1	1.0%	1,248.5	14.4	1.1%	1,247.1	15.7	1.2%	1,245.8	17.0	1.3%	1,244.6	18.3	1.4%	1,243.3	19.6	1.5%
ME 4	36 53 18	2009	Critical	August	--	668.9	656.2	12.6	1.9%	655.0	13.9	2.1%	653.7	15.1	2.3%	652.5	16.4	2.5%	651.2	17.6	2.6%	650.0	18.9	2.8%
ME 4	36 53 18	2009	Critical	September	Used in Summary Table Analysis	390.0	378.8	11.2	2.9%	377.7	12.3	3.2%	376.6	13.4	3.4%	375.5	14.5	3.7%	374.4	15.6	4.0%	373.3	16.7	4.3%
ME 4	36 53 18	2010	Below Normal	October	Used in Summary Table Analysis	6,088.9	6,079.4	9.5	0.2%	6,078.5	10.4	0.2%	6,077.5	11.3	0.2%	6,076.6	12.3	0.2%	6,075.7	13.2	0.2%	6,074.8	14.1	0.2%
ME 4	36 53 18	2010	Below Normal	November	Used in Summary Table Analysis	8,296.1	8,288.5	7.5	0.1%	8,287.8	8.2	0.1%	8,287.0	9.0	0.1%	8,286.3	9.7	0.1%	8,285.6	10.4	0.1%	8,284.8	11.2	0.1%
ME 4	36 53 18	2010	Below Normal	December	--	12,368.1	12,362.3	5.8	0.0%	12,361.1	6.9	0.1%	12,361.1	6.9	0.1%	12,360.0	8.1	0.1%	12,360.0	8.1	0.1%	12,358.8	9.3	0.1%
ME 4	36 53 18	2010	Below Normal	January	--	36,282.4	36,276.6	5.8	0.0%	36,276.6	5.8	0.0%	36,275.5	6.9	0.0%	36,275.5	6.9	0.0%	36,274.3	8.1	0.0%	36,274.3	8.1	0.0%
ME 4	36 53 18	2010	Below Normal	February	--	27,258.1	27,253.5	4.6	0.0%	27,252.3	5.8	0.0%	27,252.3	5.8	0.0%	27,251.2	6.9	0.0%	27,251.2	6.9	0.0%	27,251.2	6.9	0.0%
ME 4	36 53 18	2010	Below Normal	March	--	28,848.4	28,843.8	4.6	0.0%	28,843.8	4.6	0.0%	28,842.6	5.8	0.0%	28,842.6	5.8	0.0%	28,841.4	6.9	0.0%	28,841.4	6.9	0.0%
ME 4	36 53 18	2010	Below Normal	April	--	40,035.9	40,031.3	4.6	0.0%	40,031.3	4.6	0.0%	40,030.1	5.8	0.0%	40,030.1	5.8	0.0%	40,030.1	5.8	0.0%	40,028.9	6.9	0.0%
ME 4	36 53 18	2010	Below Normal	May	--	20,287.0	20,277.8	9.3	0.0%	20,276.6	10.4	0.1%	20,275.5	11.6	0.1%	20,274.3	12.7	0.1%	20,274.3	12.7	0.1%	20,273.1	13.9	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 53 18	2010	Below Normal	June	--	9,364.5	9,350.9	13.5	0.1%	9,349.7	14.8	0.2%	9,348.3	16.2	0.2%	9,347.0	17.5	0.2%	9,345.6	18.9	0.2%	9,344.2	20.3	0.2%
ME 4	36 53 18	2010	Below Normal	July	--	1,454.6	1,442.6	12.0	0.8%	1,441.3	13.3	0.9%	1,440.0	14.6	1.0%	1,438.9	15.7	1.1%	1,437.6	17.0	1.2%	1,436.5	18.2	1.2%
ME 4	36 53 18	2010	Below Normal	August	--	569.1	557.9	11.2	2.0%	556.8	12.3	2.2%	555.7	13.4	2.4%	554.6	14.5	2.6%	553.5	15.6	2.7%	552.4	16.7	2.9%
ME 4	36 53 18	2010	Below Normal	September	Used in Summary Table Analysis	651.3	640.8	10.5	1.6%	639.7	11.6	1.8%	638.6	12.6	1.9%	637.6	13.7	2.1%	636.5	14.7	2.3%	635.5	15.8	2.4%
ME 4	36 53 18	2011	Wet	October	Used in Summary Table Analysis	9,645.1	9,637.3	7.9	0.1%	9,636.5	8.7	0.1%	9,635.6	9.5	0.1%	9,634.8	10.3	0.1%	9,634.0	11.1	0.1%	9,633.2	11.9	0.1%
ME 4	36 53 18	2011	Wet	November	Used in Summary Table Analysis	14,233.8	14,228.0	5.8	0.0%	14,226.9	6.9	0.0%	14,225.7	8.1	0.1%	14,225.7	8.1	0.1%	14,224.5	9.3	0.1%	14,224.5	9.3	0.1%
ME 4	36 53 18	2011	Wet	December	--	33,760.4	33,754.6	5.8	0.0%	33,754.6	5.8	0.0%	33,753.5	6.9	0.0%	33,753.5	6.9	0.0%	33,752.3	8.1	0.0%	33,752.3	8.1	0.0%
ME 4	36 53 18	2011	Wet	January	--	14,166.7	14,162.0	4.6	0.0%	14,162.0	4.6	0.0%	14,160.9	5.8	0.0%	14,160.9	5.8	0.0%	14,159.7	6.9	0.0%	14,159.7	6.9	0.0%
ME 4	36 53 18	2011	Wet	February	--	20,777.8	20,773.1	4.6	0.0%	20,773.1	4.6	0.0%	20,772.0	5.8	0.0%	20,772.0	5.8	0.0%	20,770.8	6.9	0.0%	20,770.8	6.9	0.0%
ME 4	36 53 18	2011	Wet	March	--	52,045.1	52,040.5	4.6	0.0%	52,040.5	4.6	0.0%	52,039.4	5.8	0.0%	52,039.4	5.8	0.0%	52,038.2	6.9	0.0%	52,038.2	6.9	0.0%
ME 4	36 53 18	2011	Wet	April	--	24,812.5	24,809.0	3.5	0.0%	24,807.9	4.6	0.0%	24,807.9	4.6	0.0%	24,807.9	4.6	0.0%	24,806.7	5.8	0.0%	24,806.7	5.8	0.0%
ME 4	36 53 18	2011	Wet	May	--	11,388.5	11,380.0	8.6	0.1%	11,379.1	9.5	0.1%	11,378.1	10.4	0.1%	11,377.2	11.3	0.1%	11,376.4	12.2	0.1%	11,375.5	13.1	0.1%
ME 4	36 53 18	2011	Wet	June	--	7,062.4	7,049.2	13.2	0.2%	7,047.9	14.5	0.2%	7,046.5	15.9	0.2%	7,045.3	17.1	0.2%	7,044.0	18.4	0.3%	7,042.7	19.7	0.3%
ME 4	36 53 18	2011	Wet	July	--	1,828.5	1,815.5	13.0	0.7%	1,814.2	14.2	0.8%	1,813.0	15.5	0.8%	1,811.7	16.8	0.9%	1,810.4	18.1	1.0%	1,809.0	19.4	1.1%
ME 4	36 53 18	2011	Wet	August	--	776.9	765.9	11.0	1.4%	764.8	12.1	1.6%	763.7	13.2	1.7%	762.6	14.3	1.8%	761.5	15.4	2.0%	760.4	16.5	2.1%
ME 4	36 53 18	2011	Wet	September	Used in Summary Table Analysis	433.5	423.6	9.9	2.3%	422.6	10.9	2.5%	421.6	11.9	2.8%	420.6	12.9	3.0%	419.6	13.9	3.2%	418.6	14.9	3.4%
ME 4	36 53 18	2012	Below Normal	October	Used in Summary Table Analysis	4,547.2	4,539.2	8.0	0.2%	4,538.4	8.8	0.2%	4,537.6	9.6	0.2%	4,536.8	10.4	0.2%	4,536.0	11.2	0.2%	4,535.2	12.0	0.3%
ME 4	36 53 18	2012	Below Normal	November	Used in Summary Table Analysis	8,250.8	8,244.3	6.5	0.1%	8,243.8	7.1	0.1%	8,243.1	7.8	0.1%	8,242.5	8.3	0.1%	8,241.8	9.0	0.1%	8,241.1	9.7	0.1%
ME 4	36 53 18	2012	Below Normal	December	--	5,188.5	5,183.1	5.4	0.1%	5,182.5	6.0	0.1%	5,181.9	6.6	0.1%	5,181.4	7.2	0.1%	5,180.9	7.6	0.1%	5,180.3	8.2	0.2%
ME 4	36 53 18	2012	Below Normal	January	--	20,153.9	20,149.3	4.6	0.0%	20,149.3	4.6	0.0%	20,148.1	5.8	0.0%	20,148.1	5.8	0.0%	20,147.0	6.9	0.0%	20,147.0	6.9	0.0%
ME 4	36 53 18	2012	Below Normal	February	--	18,223.4	18,218.8	4.6	0.0%	18,218.8	4.6	0.0%	18,217.6	5.8	0.0%	18,217.6	5.8	0.0%	18,217.6	5.8	0.0%	18,216.4	6.9	0.0%
ME 4	36 53 18	2012	Below Normal	March	--	45,471.1	45,466.4	4.6	0.0%	45,465.3	5.8	0.0%	45,465.3	5.8	0.0%	45,465.3	5.8	0.0%	45,464.1	6.9	0.0%	45,464.1	6.9	0.0%
ME 4	36 53 18	2012	Below Normal	April	--	26,875.0	26,871.5	3.5	0.0%	26,870.4	4.6	0.0%	26,870.4	4.6	0.0%	26,870.4	4.6	0.0%	26,869.2	5.8	0.0%	26,869.2	5.8	0.0%
ME 4	36 53 18	2012	Below Normal	May	--	7,486.3	7,477.5	8.8	0.1%	7,476.6	9.7	0.1%	7,475.8	10.5	0.1%	7,474.9	11.5	0.2%	7,474.1	12.3	0.2%	7,473.3	13.1	0.2%
ME 4	36 53 18	2012	Below Normal	June	--	5,521.4	5,508.1	13.3	0.2%	5,506.7	14.7	0.3%	5,505.3	16.1	0.3%	5,504.1	17.4	0.3%	5,502.7	18.8	0.3%	5,501.4	20.0	0.4%
ME 4	36 53 18	2012	Below Normal	July	--	2,227.1	2,214.6	12.5	0.6%	2,213.3	13.8	0.6%	2,212.0	15.0	0.7%	2,210.8	16.3	0.7%	2,209.6	17.5	0.8%	2,208.3	18.8	0.8%
ME 4	36 53 18	2012	Below Normal	August	--	388.3	378.2	10.1	2.6%	377.2	11.1	2.9%	376.2	12.1	3.1%	375.2	13.1	3.4%	374.2	14.1	3.6%	373.2	15.1	3.9%
ME 4	36 53 18	2012	Below Normal	September	Used in Summary Table Analysis	249.1	240.2	8.9	3.6%	239.3	9.8	3.9%	238.4	10.7	4.3%	237.5	11.6	4.7%	236.6	12.5	5.0%	235.7	13.4	5.4%
ME 4	36 53 18	2013	Below Normal	October	Used in Summary Table Analysis	1,915.5	1,907.8	7.8	0.4%	1,906.9	8.6	0.4%	1,906.1	9.4	0.5%	1,905.4	10.1	0.5%	1,904.6	10.9	0.6%	1,903.8	11.7	0.6%
ME 4	36 53 18	2013	Below Normal	November	Used in Summary Table Analysis	14,709.5	14,703.7	5.8	0.0%	14,702.5	6.9	0.0%	14,702.5	6.9	0.0%	14,701.4	8.1	0.1%	14,701.4	8.1	0.1%	14,700.2	9.3	0.1%
ME 4	36 53 18	2013	Below Normal	December	--	60,046.3	60,040.5	5.8	0.0%	60,040.5	5.8	0.0%	60,039.4	6.9	0.0%	60,039.4	6.9	0.0%	60,038.2	8.1	0.0%	60,038.2	8.1	0.0%
ME 4	36 53 18	2013	Below Normal	January	--	22,216.4	22,211.8	4.6	0.0%	22,211.8	4.6	0.0%	22,211.8	4.6	0.0%	22,210.6	5.8	0.0%	22,210.6	5.8	0.0%	22,209.5	6.9	0.0%
ME 4	36 53 18	2013	Below Normal	February	--	8,852.4	8,847.9	4.5	0.1%	8,847.5	5.0	0.1%	8,847.0	5.4	0.1%	8,846.5	5.9	0.1%	8,846.2	6.3	0.1%	8,845.7	6.7	0.1%
ME 4	36 53 18	2013	Below Normal	March	--	10,340.9	10,336.5	4.4	0.0%	10,336.1	4.7	0.0%	10,335.6	5.2	0.1%	10,335.2	5.7	0.1%	10,334.7	6.1	0.1%	10,334.3	6.6	0.1%
ME 4	36 53 18	2013	Below Normal	April	--	8,293.5	8,285.2	8.3	0.1%	8,284.4	9.1	0.1%	8,283.6	10.0	0.1%	8,282.6	10.9	0.1%	8,281.8	11.7	0.1%	8,281.0	12.5	0.2%
ME 4	36 53 18	2013	Below Normal	May	--	4,434.6	4,424.5	10.1	0.2%	4,423.5	11.1	0.3%	4,422.5	12.2	0.3%	4,421.5	13.1	0.3%	4,420.5	14.1	0.3%	4,419.4	15.2	0.3%
ME 4	36 53 18	2013	Below Normal	June	--	2,111.0	2,099.0	12.0	0.6%	2,097.8	13.2	0.6%	2,096.5	14.5	0.7%	2,095.4	15.6	0.7%	2,094.2	16.8	0.8%	2,092.9	18.1	0.9%
ME 4	36 53 18	2013	Below Normal	July	--	718.0	706.4	11.7	1.6%	705.2	12.8	1.8%	704.1	14.0	1.9%	702.9	15.1	2.1%	701.7	16.3	2.3%	700.6	17.5	2.4%
ME 4	36 53 18	2013	Below Normal	August	--	340.2	329.4	10.9	3.2%	328.3	11.9	3.5%	327.2	13.0	3.8%	326.1	14.1	4.1%	325.0	15.2	4.5%	323.9	16.3	4.8%
ME 4	36 53 18	2013	Below Normal	September	Used in Summary Table Analysis	4,792.1	4,780.9	11.2	0.2%	4,779.7	12.4	0.3%	4,778.7	13.4	0.3%	4,777.5	14.6	0.3%	4,776.4	15.7	0.3%	4,775.3	16.8	0.4%
ME 4	36 53 18	2014	Critical	October	Used in Summary Table Analysis	280.5	272.4	8.1	2.9%	271.6	8.9	3.2%	270.8	9.7	3.5%	270.0	10.5	3.8%	269.2	11.4	4.1%	268.4	12.1	4.3%
ME 4	36 53 18	2014	Critical	November	Used in Summary Table Analysis	1,541.0	1,534.5	6.5	0.4%	1,533.8	7.2	0.5%	1,533.1	7.9	0.5%	1,532.5	8.4	0.5%	1,531.8	9.1	0.6%	1,531.1	9.8	0.6%
ME 4	36 53 18	2014	Critical	December	--	1,591.2	1,585.4	5.8	0.4%	1,584.8	6.4	0.4%	1,584.4	6.8	0.4%	1,583.8	7.4	0.5%	1,583.2	8.0	0.5%	1,582.6	8.6	0.5%
ME 4	36 53 18	2014	Critical	January	--	2,824.4	2,819.3	5.1	0.2%	2,818.8	5.7	0.2%	2,818.3	6.1	0.2%	2,817.7	6.7	0.2%	2,817.2	7.2	0.3%	2,816.8	7.6	0.3%
ME 4	36 53 18	2014	Critical	February	--	15,762.7	15,758.1	4.6	0.0%	15,758.1	4.6	0.0%	15,756.9	5.8	0.0%	15,756.9	5.8	0.0%	15,755.8	6.9	0.0%	15,755.8	6.9	0.0%
ME 4	36 53 18	2014	Critical	March	--	31,498.8	31,494.2	4.6	0.0%	31,494.2	4.6	0.0%	31,493.1	5.8	0.0%	31,493.1	5.8	0.0%	31,493.1	5.8	0.0%	31,491.9	6.9	0.0%
ME 4	36 53 18	2014	Critical	April	--	12,994.2	12,985.0	9.3	0.1%	12,983.8	10.4	0.1%	12,983.8	10.4	0.1%	12,982.6	11.6	0.1%	12,981.5	12.7	0.1%	12,980.3	13.9	0.1%
ME 4	36 53 18	2014	Critical	May	--	5,190.3	5,179.7	10.5	0.2%	5,178.7	11.6	0.2%	5,177.5	12.7	0.2%	5,176.5	13.8	0.3%	5,175.5	14.8	0.3%	5,174.4	15.9	0.3%
ME 4	36 53 18	2014	Critical	June	--	1,198.4	1,183.9	14.5	1.2%	1,182.4	16.0	1.3%	1,181.0	17.4	1.4%	1,179.5	18.9	1.6%	1,178.1	20.3	1.7%	1,176.6	21.8	1.8%
ME 4	36 53 18	2014	Critical	July	--	546.0	532.7	13.3	2.4%	531.3	14.6	2.7%	530.0	16.0	2.9%	528.7	17.3	3.2%	527.4	18.6	3.4%	526.1	19.9	3.6%
ME 4	36 53 18	2014	Critical	August	--	348.2	335.6	12.6	3.6%	334.3	13.9	4.0%	333.0	15.1	4.3%	331.8	16.4	4.7%	330.5	17.7	5.1%	329.3	18.9	5.4%
ME 4	36 53 18	2014	Critical	September	Used in Summary Table Analysis	2,575.9	2,563.7	12.3	0.5%	2,562.4	13.5	0.5%	2,561.2	14.7	0.6%	2,560.0	16.0	0.6%	2,558.7	17.2	0.7%	2,557.5	18.4	0.7%
ME 4	36 53 18	2015	Dry	October	Used in Summary Table Analysis	11,373.6	11,364.4	9.3	0.1%	11,363.4	10.2	0.1%	11,362.5	11.1	0.1%	11,360.9	12.7	0.1%	11,360.0	13.7	0.1%	11,359.0	14.6	0.1%
ME 4	36 53 18	2015	Dry	November	Used in Summary Table Analysis	9,051.9	9,044.7	7.2	0.1%	9,044.0	7.9	0.1%	9,043.3	8.6	0.1%	9,042.6	9.3	0.1%	9,041.9	10.0	0.1%	9,041.1	10.8	0.1%
ME 4	36 53 18	2015	Dry	December	--	32,669.0	32,663.2	5.8	0.0%	32,662.0	6.9	0.0%	32,662.0	6.9	0.0%	32,660.9	8.1	0.0%	32,659.7	9.3	0.0%	32,659.7	9.3	0.0%
ME 4	36 53 18	2015	Dry	January	--	14,584.5	14,579.9	4.6	0.0%	14,578.7	5.8	0.0%	14,578.7	5.8	0.0%	14,577.5	6.9	0.0%	14,577.5	6.9	0.0%	14,576.4	8.1	0.1%
ME 4	36 53 18	2015	Dry	February	--	27,253.5	27,248.8	4.6	0.0%	27,247.7	5.8	0.0%	27,247.7	5.8	0.0%	27,246.5	6.9	0.0%	27,246.5	6.9	0.0%	27,246.5	6.9	0.0%
ME 4	36 53 18	2015	Dry	March	--	11,575.2	11,570.4	4.9	0.0%	11,569.9	5.3	0.0%	11,569.6	5.7	0.0%	11,569.1	6.1	0.1%	11,568.6	6.6	0.1%	11,568.2	7.1	0.1%
ME 4	36 53 18	2015	Dry	April	--	8,399.3	8,390.4	8.9	0.1%	8,389.6	9.7	0.1%	8,388.7	10.6	0.1%	8,387.8	11.5	0.1%	8,386.9	12.4	0.1%	8,386.0	13.3	0.2%
ME 4	36 53 18	2015	Dry	May	--	1,508.6	1,498.1	10.4	0.7%	1,497.1	11.5	0.8%	1,496.1	12.5	0.8%	1,495.0	13.5	0.9%	1,494.0	14.6	1.0%	1,492.9	15.6	1.0%
ME 4	36 53 18	2015	Dry	June	--	652.5	639.0	13.4	2.1%	637.7	14.8	2.3%	636.3	16.1	2.5%	635.0	17.5	2.7%	633.7	18.8	2.9%	632.3	20.1	3.1%
ME 4	36 53 18	2015	Dry	July	--	268.6	255.6	13.0	4.9%	254.3	14.3	5.3%	253.0	15.6	5.8%	251.7	16.9	6.3%	250.4	18.2	6.8%	249.1	19.5	7.3%
ME 4	36 53 18	2015	Dry	August	--	166.5	154.0	12.5	7.5%	152.7	13.8	8.3%	151.5	15.0	9.0%	150.2	16.3	9.8%	149.0	17.5	10.5%	147.7	18.8	11.3%
ME 4	36 53 18	2015	Dry	September	Used in Summary Table Analysis	120.7	109.5	11.2	9.3%	108.4	12.3	10.2%	107.3	13.4	11.1%	106.2	14.5	12.0%	105.0	15.6	13.0%	103.9	16.8	13.9%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 53 18	2016	Above Normal	October	Used in Summary Table Analysis	86.0	76.5	9.5	11.0%	75.6	10.4	12.1%	74.6	11.4	13.3%	74.2	11.8	13.7%	73.4	12.6	14.6%	72.1	13.9	16.2%
ME 4	36 53 18	2016	Above Normal	November	Used in Summary Table Analysis	3,877.1	3,869.9	7.2	0.2%	3,869.2	7.9	0.2%	3,868.5	8.6	0.2%	3,867.7	9.4	0.2%	3,867.0	10.1	0.3%	3,866.2	10.9	0.3%
ME 4	36 53 18	2016	Above Normal	December	--	36,679.4	36,673.6	5.8	0.0%	36,672.5	6.9	0.0%	36,672.5	6.9	0.0%	36,671.3	8.1	0.0%	36,670.1	9.3	0.0%	36,670.1	9.3	0.0%
ME 4	36 53 18	2016	Above Normal	January	--	57,379.6	57,373.8	5.8	0.0%	57,373.8	5.8	0.0%	57,372.7	6.9	0.0%	57,372.7	6.9	0.0%	57,371.5	8.1	0.0%	57,371.5	8.1	0.0%
ME 4	36 53 18	2016	Above Normal	February	--	24,277.8	24,273.1	4.6	0.0%	24,273.1	4.6	0.0%	24,272.0	5.8	0.0%	24,272.0	5.8	0.0%	24,270.8	6.9	0.0%	24,270.8	6.9	0.0%
ME 4	36 53 18	2016	Above Normal	March	--	41,805.6	41,800.9	4.6	0.0%	41,800.9	4.6	0.0%	41,799.8	5.8	0.0%	41,799.8	5.8	0.0%	41,798.6	6.9	0.0%	41,798.6	6.9	0.0%
ME 4	36 53 18	2016	Above Normal	April	--	18,545.1	18,540.5	4.6	0.0%	18,540.5	4.6	0.0%	18,539.4	5.8	0.0%	18,539.4	5.8	0.0%	18,539.4	5.8	0.0%	18,538.2	6.9	0.0%
ME 4	36 53 18	2016	Above Normal	May	--	5,217.5	5,212.2	5.3	0.1%	5,211.7	5.8	0.1%	5,211.1	6.4	0.1%	5,210.5	6.9	0.1%	5,210.0	7.5	0.1%	5,209.5	8.0	0.2%
ME 4	36 53 18	2016	Above Normal	June	--	1,509.6	1,499.2	10.4	0.7%	1,498.1	11.5	0.8%	1,497.1	12.5	0.8%	1,496.1	13.5	0.9%	1,495.0	14.6	1.0%	1,494.0	15.6	1.0%
ME 4	36 53 18	2016	Above Normal	July	--	823.2	811.7	11.5	1.4%	810.6	12.6	1.5%	809.5	13.8	1.7%	808.3	14.9	1.8%	807.2	16.1	2.0%	806.0	17.2	2.1%
ME 4	36 53 18	2016	Above Normal	August	--	491.9	480.7	11.1	2.3%	479.6	12.3	2.5%	478.5	13.4	2.7%	477.4	14.5	2.9%	476.3	15.6	3.2%	475.2	16.7	3.4%
ME 4	36 53 18	2016	Above Normal	September	Used in Summary Table Analysis	328.2	318.4	9.8	3.0%	317.4	10.8	3.3%	316.4	11.8	3.6%	315.4	12.8	3.9%	314.4	13.8	4.2%	313.4	14.8	4.5%
ME 4	36 53 18	2017	Wet	October	Used in Summary Table Analysis	18,306.7	18,298.6	8.1	0.0%	18,297.5	9.3	0.1%	18,297.5	9.3	0.1%	18,296.3	10.4	0.1%	18,295.1	11.6	0.1%	18,294.0	12.7	0.1%
ME 4	36 53 18	2017	Wet	November	Used in Summary Table Analysis	18,848.4	18,842.6	5.8	0.0%	18,841.4	6.9	0.0%	18,841.4	6.9	0.0%	18,840.3	8.1	0.0%	18,840.3	8.1	0.0%	18,839.1	9.3	0.0%
ME 4	36 53 18	2017	Wet	December	--	24,150.5	24,145.8	4.6	0.0%	24,144.7	5.8	0.0%	24,144.7	5.8	0.0%	24,143.5	6.9	0.0%	24,143.5	6.9	0.0%	24,142.4	8.1	0.0%
ME 4	36 53 18	2017	Wet	January	--	107,015.0	107,009.3	5.8	0.0%	107,009.3	5.8	0.0%	107,009.3	5.8	0.0%	107,008.1	6.9	0.0%	107,008.1	6.9	0.0%	107,006.9	8.1	0.0%
ME 4	36 53 18	2017	Wet	February	--	81,905.1	81,900.5	4.6	0.0%	81,899.3	5.8	0.0%	81,899.3	5.8	0.0%	81,898.1	6.9	0.0%	81,898.1	6.9	0.0%	81,898.1	6.9	0.0%
ME 4	36 53 18	2017	Wet	March	--	27,295.1	27,290.5	4.6	0.0%	27,290.5	4.6	0.0%	27,290.5	4.6	0.0%	27,289.4	5.8	0.0%	27,289.4	5.8	0.0%	27,288.2	6.9	0.0%
ME 4	36 53 18	2017	Wet	April	--	22,958.3	22,953.7	4.6	0.0%	22,953.7	4.6	0.0%	22,953.7	4.6	0.0%	22,952.5	5.8	0.0%	22,952.5	5.8	0.0%	22,952.5	5.8	0.0%
ME 4	36 53 18	2017	Wet	May	--	6,273.0	6,267.7	5.3	0.1%	6,267.1	5.9	0.1%	6,266.6	6.5	0.1%	6,266.0	7.1	0.1%	6,265.4	7.6	0.1%	6,264.9	8.1	0.1%
ME 4	36 53 18	2017	Wet	June	--	2,118.3	2,107.6	10.6	0.5%	2,106.6	11.7	0.6%	2,105.4	12.8	0.6%	2,104.4	13.9	0.7%	2,103.4	14.9	0.7%	2,102.2	16.1	0.8%
ME 4	36 53 18	2017	Wet	July	--	934.8	923.3	11.6	1.2%	922.1	12.7	1.4%	921.0	13.9	1.5%	919.8	15.1	1.6%	918.6	16.2	1.7%	917.5	17.4	1.9%
ME 4	36 53 18	2017	Wet	August	--	507.0	495.9	11.2	2.2%	494.7	12.3	2.4%	493.6	13.4	2.6%	492.5	14.5	2.9%	491.4	15.6	3.1%	490.3	16.7	3.3%
ME 4	36 53 18	2017	Wet	September	Used in Summary Table Analysis	323.0	312.7	10.3	3.2%	311.7	11.3	3.5%	310.7	12.3	3.8%	309.7	13.3	4.1%	308.7	14.3	4.4%	307.6	15.4	4.8%
ME 4	36 53 18	2018	Above Normal	October	Used in Summary Table Analysis	275.8	268.6	7.2	2.6%	267.4	8.4	3.0%	266.4	9.3	3.4%	265.4	10.4	3.8%	264.4	11.3	4.1%	263.6	12.1	4.4%
ME 4	36 53 18	2018	Above Normal	November	Used in Summary Table Analysis	10,813.9	10,807.6	6.3	0.1%	10,806.9	6.9	0.1%	10,806.4	7.5	0.1%	10,805.7	8.2	0.1%	10,805.1	8.8	0.1%	10,804.4	9.5	0.1%
ME 4	36 53 18	2018	Above Normal	December	--	5,447.6	5,442.2	5.3	0.1%	5,441.8	5.8	0.1%	5,441.2	6.4	0.1%	5,440.6	6.9	0.1%	5,440.2	7.4	0.1%	5,439.6	8.0	0.1%
ME 4	36 53 18	2018	Above Normal	January	--	17,819.4	17,814.8	4.6	0.0%	17,814.8	4.6	0.0%	17,813.7	5.8	0.0%	17,813.7	5.8	0.0%	17,812.5	6.9	0.0%	17,812.5	6.9	0.0%
ME 4	36 53 18	2018	Above Normal	February	--	7,598.8	7,594.6	4.3	0.1%	7,594.1	4.7	0.1%	7,593.8	5.1	0.1%	7,593.3	5.6	0.1%	7,592.8	6.0	0.1%	7,592.4	6.5	0.1%
ME 4	36 53 18	2018	Above Normal	March	--	20,724.5	20,721.1	3.5	0.0%	20,719.9	4.6	0.0%	20,719.9	4.6	0.0%	20,718.8	5.8	0.0%	20,718.8	5.8	0.0%	20,718.8	5.8	0.0%
ME 4	36 53 18	2018	Above Normal	April	--	32,230.3	32,226.9	3.5	0.0%	32,225.7	4.6	0.0%	32,225.7	4.6	0.0%	32,225.7	4.6	0.0%	32,224.5	5.8	0.0%	32,224.5	5.8	0.0%
ME 4	36 53 18	2018	Above Normal	May	--	6,989.1	6,980.8	8.3	0.1%	6,979.9	9.3	0.1%	6,979.1	10.1	0.1%	6,978.2	10.9	0.2%	6,977.4	11.7	0.2%	6,976.6	12.5	0.2%
ME 4	36 53 18	2018	Above Normal	June	--	1,914.2	1,903.5	10.8	0.6%	1,902.4	11.8	0.6%	1,901.3	13.0	0.7%	1,900.2	14.0	0.7%	1,899.2	15.0	0.8%	1,898.0	16.2	0.8%
ME 4	36 53 18	2018	Above Normal	July	--	781.7	770.1	11.6	1.5%	768.9	12.7	1.6%	767.8	13.9	1.8%	766.6	15.1	1.9%	765.5	16.2	2.1%	764.3	17.4	2.2%
ME 4	36 53 18	2018	Above Normal	August	--	442.9	432.2	10.7	2.4%	431.1	11.8	2.7%	430.0	12.9	2.9%	429.0	13.9	3.1%	427.9	15.0	3.4%	426.8	16.1	3.6%
ME 4	36 53 18	2018	Above Normal	September	Used in Summary Table Analysis	300.3	290.0	10.2	3.4%	289.0	11.3	3.8%	288.0	12.3	4.1%	286.9	13.3	4.4%	285.9	14.4	4.8%	284.9	15.4	5.1%
ME 4	36 53 18	2019	Below Normal	October	Used in Summary Table Analysis	208.0	200.0	8.0	3.8%	199.2	8.8	4.2%	198.4	9.5	4.6%	197.6	10.4	5.0%	196.9	11.1	5.3%	196.1	11.9	5.7%
ME 4	36 53 18	2019	Below Normal	November	Used in Summary Table Analysis	6,638.0	6,631.7	6.3	0.1%	6,631.0	6.9	0.1%	6,630.4	7.5	0.1%	6,629.7	8.2	0.1%	6,629.2	8.8	0.1%	6,628.6	9.4	0.1%
ME 4	36 53 18	2019	Below Normal	December	--	14,691.0	14,685.2	5.8	0.0%	14,685.2	5.8	0.0%	14,684.0	6.9	0.0%	14,684.0	6.9	0.0%	14,682.9	8.1	0.1%	14,682.9	8.1	0.1%
ME 4	36 53 18	2019	Below Normal	January	--	35,272.0	35,266.2	5.8	0.0%	35,266.2	5.8	0.0%	35,266.2	5.8	0.0%	35,265.0	6.9	0.0%	35,265.0	6.9	0.0%	35,263.9	8.1	0.0%
ME 4	36 53 18	2019	Below Normal	February	--	141,979.2	141,967.6	11.6	0.0%	141,967.6	11.6	0.0%	141,967.6	11.6	0.0%	141,967.6	11.6	0.0%	141,967.6	11.6	0.0%	141,967.6	11.6	0.0%
ME 4	36 53 18	2019	Below Normal	March	--	42,349.5	42,346.1	3.5	0.0%	42,344.9	4.6	0.0%	42,344.9	4.6	0.0%	42,344.9	4.6	0.0%	42,343.8	5.8	0.0%	42,343.8	5.8	0.0%
ME 4	36 53 18	2019	Below Normal	April	--	15,280.1	15,276.6	3.5	0.0%	15,275.5	4.6	0.0%	15,275.5	4.6	0.0%	15,275.5	4.6	0.0%	15,274.3	5.8	0.0%	15,274.3	5.8	0.0%
ME 4	36 53 18	2019	Below Normal	May	--	16,980.3	16,971.1	9.3	0.1%	16,971.1	9.3	0.1%	16,969.9	10.4	0.1%	16,968.8	11.6	0.1%	16,967.6	12.7	0.1%	16,966.4	13.9	0.1%
ME 4	36 53 18	2019	Below Normal	June	--	4,242.6	4,230.9	11.7	0.3%	4,229.7	12.8	0.3%	4,228.6	14.0	0.3%	4,227.4	15.2	0.4%	4,226.3	16.3	0.4%	4,225.1	17.5	0.4%
ME 4	36 53 18	2019	Below Normal	July	--	1,361.7	1,350.1	11.6	0.8%	1,349.0	12.7	0.9%	1,347.8	13.9	1.0%	1,346.6	15.0	1.1%	1,345.5	16.2	1.2%	1,344.2	17.5	1.3%
ME 4	36 53 18	2019	Below Normal	August	--	596.9	585.8	11.0	1.8%	584.7	12.1	2.0%	583.6	13.2	2.2%	582.5	14.3	2.4%	581.4	15.5	2.6%	580.3	16.6	2.8%
ME 4	36 53 18	2019	Below Normal	September	Used in Summary Table Analysis	462.9	452.7	10.2	2.2%	451.7	11.2	2.4%	450.6	12.3	2.7%	449.7	13.3	2.9%	448.6	14.3	3.1%	447.6	15.3	3.3%
ME 4	36 53 18	2020	Dry	October	Used in Summary Table Analysis	355.9	348.3	7.6	2.1%	347.5	8.4	2.4%	346.8	9.1	2.6%	346.0	9.9	2.8%	345.2	10.7	3.0%	344.5	11.4	3.2%
ME 4	36 53 18	2020	Dry	November	Used in Summary Table Analysis	320.3	314.4	5.9	1.8%	313.8	6.5	2.0%	313.2	7.1	2.2%	312.6	7.7	2.4%	312.0	8.3	2.6%	311.4	8.9	2.8%
ME 4	36 53 18	2020	Dry	December	--	13,321.8	13,316.0	5.8	0.0%	13,316.0	5.8	0.0%	13,314.8	6.9	0.1%	13,314.8	6.9	0.1%	13,314.8	6.9	0.1%	13,313.7	8.1	0.1%
ME 4	36 53 18	2020	Dry	January	--	22,358.8	22,354.2	4.6	0.0%	22,353.0	5.8	0.0%	22,353.0	5.8	0.0%	22,351.9	6.9	0.0%	22,351.9	6.9	0.0%	22,350.7	8.1	0.0%
ME 4	36 53 18	2020	Dry	February	--	7,415.4	7,411.0	4.4	0.1%	7,410.5	4.9	0.1%	7,410.1	5.3	0.1%	7,409.6	5.8	0.1%	7,409.1	6.3	0.1%	7,408.7	6.7	0.1%
ME 4	36 53 18	2020	Dry	March	--	7,248.6	7,244.4	4.2	0.1%	7,244.0	4.6	0.1%	7,243.6	5.0	0.1%	7,243.2	5.4	0.1%	7,242.7	5.9	0.1%	7,242.4	6.3	0.1%
ME 4	36 53 18	2020	Dry	April	--	5,487.8	5,479.2	8.7	0.2%	5,478.2	9.6	0.2%	5,477.3	10.5	0.2%	5,476.5	11.3	0.2%	5,475.6	12.3	0.2%	5,474.8	13.1	0.2%
ME 4	36 53 18	2020	Dry	May	--	7,383.3	7,372.9	10.4	0.1%	7,371.9	11.5	0.2%	7,370.7	12.6	0.2%	7,369.7	13.7	0.2%	7,368.6	14.7	0.2%	7,367.6	15.7	0.2%
ME 4	36 53 18	2020	Dry	June	--	2,104.2	2,090.3	13.9	0.7%	2,088.9	15.3	0.7%	2,087.5	16.7	0.8%	2,086.1	18.1	0.9%	2,084.7	19.4	0.9%	2,083.3	20.8	1.0%
ME 4	36 53 18	2020	Dry	July	--	796.5	783.0	13.5	1.7%	781.6	14.8	1.9%	780.3	16.2	2.0%	778.9	17.5	2.2%	777.6	18.9	2.4%	776.2	20.2	2.5%
ME 4	36 53 18	2020	Dry	August	--	399.2	386.0	13.3	3.3%	384.7	14.6	3.7%	383.3	15.9	4.0%	382.0	17.2	4.3%	380.7	18.5	4.6%	379.4	19.9	5.0%
ME 4	36 53 18	2020	Dry	September	Used in Summary Table Analysis	248.6	236.9	11.8	4.7%	235.7	13.0	5.2%	234.5	14.1	5.7%	233.3	15.3	6.2%	232.2	16.5	6.6%	231.0	17.7	7.1%
ME 4	35 53 19	2000	Above Normal	October	Used in Summary Table Analysis	817.3	809.1	8.1	1.0%	808.3	8.9	1.1%	807.5	9.7	1.2%	806.7	10.6	1.3%	805.9	11.4	1.4%	805.1	12.2	1.5%
ME 4	35 53 19	2000	Above Normal	November	Used in Summary Table Analysis	12,153.9	12,147.0	6.9	0.1%	12,145.8	8.1	0.1%	12,145.8	8.1	0.1%	12,144.7	9.3	0.1%	12,144.7	9.3	0.1%	12,143.5	10.4	0.1%
ME 4	35 53 19	2000	Above Normal	December	--	10,829.3	10,823.8	5.4	0.1%	10,823.3	6.0	0.1%	10,822.7	6.6	0.1%	10,822.1	7.2	0.1%	10,821.6	7.6	0.1%	10,821.1	8.2	0.1%
ME 4	35 53 19	2000	Above Normal	January	--	28,635.4	28,630.8	4.6	0.0%	28,629.6	5.8	0.0%	28,629.6	5.8	0.0%	28,628.5	6.9	0.0%	28,628.5	6.9	0.0%	28,628.5	6.9	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	35 53 19	2000	Above Normal	February	--	37,079.9	37,075.2	4.6	0.0%	37,075.2	4.6	0.0%	37,075.2	4.6	0.0%	37,074.1	5.8	0.0%	37,074.1	5.8	0.0%	37,072.9	6.9	0.0%
ME 4	35 53 19	2000	Above Normal	March	--	18,328.7	18,324.1	4.6	0.0%	18,324.1	4.6	0.0%	18,322.9	5.8	0.0%	18,322.9	5.8	0.0%	18,322.9	5.8	0.0%	18,321.8	6.9	0.0%
ME 4	35 53 19	2000	Above Normal	April	--	12,322.9	12,319.4	3.5	0.0%	12,319.4	3.5	0.0%	12,318.3	4.6	0.0%	12,318.3	4.6	0.0%	12,317.1	5.8	0.0%	12,317.1	5.8	0.0%
ME 4	35 53 19	2000	Above Normal	May	--	7,102.0	7,093.3	8.7	0.1%	7,092.5	9.5	0.1%	7,091.6	10.4	0.1%	7,090.7	11.2	0.2%	7,089.8	12.2	0.2%	7,089.0	13.0	0.2%
ME 4	35 53 19	2000	Above Normal	June	--	2,613.8	2,600.8	13.0	0.5%	2,599.5	14.2	0.5%	2,598.3	15.5	0.6%	2,597.0	16.8	0.6%	2,595.7	18.1	0.7%	2,594.4	19.3	0.7%
ME 4	35 53 19	2000	Above Normal	July	--	992.4	980.7	11.7	1.2%	979.5	12.8	1.3%	978.4	14.0	1.4%	977.2	15.2	1.5%	976.0	16.4	1.6%	974.9	17.5	1.8%
ME 4	35 53 19	2000	Above Normal	August	--	522.5	511.5	11.0	2.1%	510.4	12.1	2.3%	509.3	13.2	2.5%	508.2	14.3	2.7%	507.1	15.4	2.9%	506.0	16.5	3.2%
ME 4	35 53 19	2000	Above Normal	September	Used in Summary Table Analysis	295.6	285.9	9.7	3.3%	284.9	10.7	3.6%	284.0	11.6	3.9%	283.0	12.6	4.3%	282.0	13.6	4.6%	281.0	14.5	4.9%
ME 4	35 53 19	2001	Dry	October	Used in Summary Table Analysis	3,822.6	3,814.6	8.0	0.2%	3,813.8	8.8	0.2%	3,813.1	9.5	0.2%	3,812.3	10.3	0.3%	3,811.5	11.1	0.3%	3,810.6	11.9	0.3%
ME 4	35 53 19	2001	Dry	November	Used in Summary Table Analysis	6,136.9	6,130.4	6.5	0.1%	6,129.9	7.1	0.1%	6,129.2	7.8	0.1%	6,128.6	8.3	0.1%	6,127.9	9.0	0.1%	6,127.3	9.6	0.2%
ME 4	35 53 19	2001	Dry	December	--	8,851.4	8,845.8	5.6	0.1%	8,845.4	6.0	0.1%	8,844.8	6.6	0.1%	8,844.2	7.2	0.1%	8,843.6	7.8	0.1%	8,843.1	8.3	0.1%
ME 4	35 53 19	2001	Dry	January	--	12,816.0	12,811.3	4.6	0.0%	12,811.3	4.6	0.0%	12,810.2	5.8	0.0%	12,810.2	5.8	0.0%	12,809.0	6.9	0.1%	12,809.0	6.9	0.1%
ME 4	35 53 19	2001	Dry	February	--	17,487.3	17,482.6	4.6	0.0%	17,482.6	4.6	0.0%	17,482.6	4.6	0.0%	17,481.5	5.8	0.0%	17,481.5	5.8	0.0%	17,480.3	6.9	0.0%
ME 4	35 53 19	2001	Dry	March	--	12,304.4	12,300.9	3.5	0.0%	12,299.8	4.6	0.0%	12,299.8	4.6	0.0%	12,299.8	4.6	0.0%	12,298.6	5.8	0.0%	12,298.6	5.8	0.0%
ME 4	35 53 19	2001	Dry	April	--	10,980.1	10,971.2	8.9	0.1%	10,970.3	9.8	0.1%	10,969.4	10.6	0.1%	10,968.5	11.6	0.1%	10,967.6	12.5	0.1%	10,966.8	13.3	0.1%
ME 4	35 53 19	2001	Dry	May	--	2,636.6	2,626.0	10.5	0.4%	2,625.0	11.6	0.4%	2,624.0	12.6	0.5%	2,622.9	13.7	0.5%	2,621.9	14.7	0.6%	2,620.8	15.7	0.6%
ME 4	35 53 19	2001	Dry	June	--	2,653.0	2,638.7	14.4	0.5%	2,637.2	15.9	0.6%	2,635.8	17.2	0.7%	2,634.3	18.8	0.7%	2,632.9	20.1	0.8%	2,631.5	21.5	0.8%
ME 4	35 53 19	2001	Dry	July	--	718.3	704.9	13.4	1.9%	703.5	14.8	2.1%	702.2	16.1	2.2%	700.8	17.5	2.4%	699.5	18.8	2.6%	698.2	20.2	2.8%
ME 4	35 53 19	2001	Dry	August	--	172.7	159.6	13.1	7.6%	158.3	14.4	8.3%	157.0	15.7	9.1%	155.7	17.0	9.9%	154.4	18.3	10.6%	153.1	19.6	11.4%
ME 4	35 53 19	2001	Dry	September	Used in Summary Table Analysis	95.6	83.9	11.6	12.2%	82.8	12.8	13.4%	81.6	14.0	14.6%	80.4	15.2	15.9%	79.2	16.3	17.1%	78.1	17.5	18.3%
ME 4	35 53 19	2002	Below Normal	October	Used in Summary Table Analysis	265.3	255.7	9.7	3.6%	254.7	10.6	4.0%	253.7	11.6	4.4%	252.7	12.7	4.8%	251.7	13.6	5.1%	250.8	14.6	5.5%
ME 4	35 53 19	2002	Below Normal	November	Used in Summary Table Analysis	12,042.8	12,034.7	8.1	0.1%	12,034.7	8.1	0.1%	12,033.6	9.3	0.1%	12,032.4	10.4	0.1%	12,032.4	10.4	0.1%	12,031.3	11.6	0.1%
ME 4	35 53 19	2002	Below Normal	December	--	35,736.1	35,729.2	6.9	0.0%	35,728.0	8.1	0.0%	35,728.0	8.1	0.0%	35,726.9	9.3	0.0%	35,726.9	9.3	0.0%	35,725.7	10.4	0.0%
ME 4	35 53 19	2002	Below Normal	January	--	30,910.9	30,905.1	5.8	0.0%	30,903.9	6.9	0.0%	30,903.9	6.9	0.0%	30,902.8	8.1	0.0%	30,902.8	8.1	0.0%	30,901.6	9.3	0.0%
ME 4	35 53 19	2002	Below Normal	February	--	24,696.8	24,692.1	4.6	0.0%	24,691.0	5.8	0.0%	24,691.0	5.8	0.0%	24,689.8	6.9	0.0%	24,689.8	6.9	0.0%	24,688.7	8.1	0.0%
ME 4	35 53 19	2002	Below Normal	March	--	17,794.0	17,789.4	4.6	0.0%	17,789.4	4.6	0.0%	17,788.2	5.8	0.0%	17,788.2	5.8	0.0%	17,787.0	6.9	0.0%	17,787.0	6.9	0.0%
ME 4	35 53 19	2002	Below Normal	April	--	9,930.3	9,921.4	8.9	0.1%	9,920.6	9.7	0.1%	9,919.7	10.6	0.1%	9,918.8	11.6	0.1%	9,917.8	12.5	0.1%	9,916.9	13.4	0.1%
ME 4	35 53 19	2002	Below Normal	May	--	3,320.8	3,310.4	10.4	0.3%	3,309.4	11.5	0.3%	3,308.2	12.6	0.4%	3,307.2	13.7	0.4%	3,306.1	14.7	0.4%	3,305.1	15.7	0.5%
ME 4	35 53 19	2002	Below Normal	June	--	854.2	842.2	11.9	1.4%	841.0	13.1	1.5%	839.8	14.3	1.7%	838.6	15.5	1.8%	837.5	16.7	2.0%	836.3	17.9	2.1%
ME 4	35 53 19	2002	Below Normal	July	--	362.7	350.6	12.1	3.3%	349.4	13.3	3.7%	348.2	14.5	4.0%	346.9	15.7	4.3%	345.7	16.9	4.7%	344.5	18.1	5.0%
ME 4	35 53 19	2002	Below Normal	August	--	227.5	216.2	11.3	5.0%	215.0	12.5	5.5%	213.9	13.6	6.0%	212.7	14.7	6.5%	211.6	15.9	7.0%	210.5	17.0	7.5%
ME 4	35 53 19	2002	Below Normal	September	Used in Summary Table Analysis	164.2	153.5	10.7	6.5%	152.4	11.7	7.2%	151.4	12.8	7.8%	150.3	13.9	8.5%	149.2	15.0	9.1%	148.1	16.0	9.8%
ME 4	35 53 19	2003	Wet	October	Used in Summary Table Analysis	129.1	120.4	8.7	6.7%	119.5	9.6	7.4%	118.7	10.4	8.1%	117.8	11.3	8.8%	116.9	12.2	9.4%	116.0	13.1	10.1%
ME 4	35 53 19	2003	Wet	November	Used in Summary Table Analysis	896.8	889.8	7.0	0.8%	889.1	7.7	0.9%	888.4	8.4	0.9%	887.7	9.1	1.0%	887.0	9.8	1.1%	886.3	10.5	1.2%
ME 4	35 53 19	2003	Wet	December	--	56,945.6	56,938.7	6.9	0.0%	56,938.7	6.9	0.0%	56,937.5	8.1	0.0%	56,937.5	8.1	0.0%	56,936.3	9.3	0.0%	56,936.3	9.3	0.0%
ME 4	35 53 19	2003	Wet	January	--	31,555.6	31,550.9	4.6	0.0%	31,549.8	5.8	0.0%	31,549.8	5.8	0.0%	31,548.6	6.9	0.0%	31,548.6	6.9	0.0%	31,547.5	8.1	0.0%
ME 4	35 53 19	2003	Wet	February	--	20,366.9	20,361.1	5.8	0.0%	20,361.1	5.8	0.0%	20,361.1	5.8	0.0%	20,360.0	6.9	0.0%	20,360.0	6.9	0.0%	20,358.8	8.1	0.0%
ME 4	35 53 19	2003	Wet	March	--	24,054.4	24,049.8	4.6	0.0%	24,048.6	5.8	0.0%	24,048.6	5.8	0.0%	24,047.5	6.9	0.0%	24,047.5	6.9	0.0%	24,047.5	6.9	0.0%
ME 4	35 53 19	2003	Wet	April	--	42,965.3	42,960.6	4.6	0.0%	42,959.5	5.8	0.0%	42,959.5	5.8	0.0%	42,959.5	5.8	0.0%	42,958.3	6.9	0.0%	42,958.3	6.9	0.0%
ME 4	35 53 19	2003	Wet	May	--	12,230.3	12,222.2	8.1	0.1%	12,221.1	9.3	0.1%	12,219.9	10.4	0.1%	12,218.8	11.6	0.1%	12,217.6	12.7	0.1%	12,217.6	12.7	0.1%
ME 4	35 53 19	2003	Wet	June	--	3,167.6	3,155.9	11.7	0.4%	3,154.9	12.7	0.4%	3,153.7	13.9	0.4%	3,152.5	15.0	0.5%	3,151.4	16.2	0.5%	3,150.2	17.4	0.5%
ME 4	35 53 19	2003	Wet	July	--	1,475.1	1,463.2	11.9	0.8%	1,461.9	13.2	0.9%	1,460.8	14.4	1.0%	1,459.5	15.6	1.1%	1,458.3	16.8	1.1%	1,457.2	17.9	1.2%
ME 4	35 53 19	2003	Wet	August	--	760.9	749.3	11.6	1.5%	748.2	12.7	1.7%	747.1	13.9	1.8%	745.9	15.1	2.0%	744.7	16.2	2.1%	743.5	17.4	2.3%
ME 4	35 53 19	2003	Wet	September	Used in Summary Table Analysis	458.5	448.7	9.9	2.2%	447.7	10.9	2.4%	446.7	11.9	2.6%	445.7	12.8	2.8%	444.7	13.8	3.0%	443.7	14.8	3.2%
ME 4	35 53 19	2004	Wet	October	Used in Summary Table Analysis	325.4	317.3	8.1	2.5%	316.4	8.9	2.7%	315.6	9.7	3.0%	314.8	10.6	3.2%	314.0	11.4	3.5%	313.2	12.2	3.7%
ME 4	35 53 19	2004	Wet	November	Used in Summary Table Analysis	5,817.7	5,811.2	6.5	0.1%	5,810.5	7.2	0.1%	5,809.8	7.9	0.1%	5,809.3	8.4	0.1%	5,808.6	9.1	0.2%	5,807.9	9.8	0.2%
ME 4	35 53 19	2004	Wet	December	--	36,380.8	36,375.0	5.8	0.0%	36,375.0	5.8	0.0%	36,373.8	6.9	0.0%	36,373.8	6.9	0.0%	36,372.7	8.1	0.0%	36,372.7	8.1	0.0%
ME 4	35 53 19	2004	Wet	January	--	31,522.0	31,517.4	4.6	0.0%	31,516.2	5.8	0.0%	31,516.2	5.8	0.0%	31,515.0	6.9	0.0%	31,515.0	6.9	0.0%	31,513.9	8.1	0.0%
ME 4	35 53 19	2004	Wet	February	--	38,282.4	38,277.8	4.6	0.0%	38,276.6	5.8	0.0%	38,276.6	5.8	0.0%	38,276.6	5.8	0.0%	38,275.5	6.9	0.0%	38,275.5	6.9	0.0%
ME 4	35 53 19	2004	Wet	March	--	16,531.3	16,527.8	3.5	0.0%	16,526.6	4.6	0.0%	16,526.6	4.6	0.0%	16,525.5	5.8	0.0%	16,525.5	5.8	0.0%	16,525.5	5.8	0.0%
ME 4	35 53 19	2004	Wet	April	--	9,455.7	9,451.6	4.1	0.0%	9,451.2	4.5	0.0%	9,450.8	4.9	0.1%	9,450.3	5.3	0.1%	9,449.9	5.8	0.1%	9,449.5	6.1	0.1%
ME 4	35 53 19	2004	Wet	May	--	3,424.1	3,415.4	8.7	0.3%	3,414.5	9.6	0.3%	3,413.5	10.5	0.3%	3,412.7	11.3	0.3%	3,411.8	12.3	0.4%	3,411.0	13.1	0.4%
ME 4	35 53 19	2004	Wet	June	--	692.1	681.1	11.0	1.6%	680.1	12.1	1.7%	679.0	13.2	1.9%	677.9	14.3	2.1%	676.8	15.4	2.2%	675.7	16.4	2.4%
ME 4	35 53 19	2004	Wet	July	--	356.7	344.9	11.7	3.3%	343.8	12.9	3.6%	342.6	14.1	3.9%	341.4	15.3	4.3%	340.2	16.4	4.6%	339.1	17.6	4.9%
ME 4	35 53 19	2004	Wet	August	--	225.6	214.5	11.1	4.9%	213.4	12.2	5.4%	212.3	13.3	5.9%	211.2	14.4	6.4%	210.1	15.5	6.9%	209.0	16.6	7.4%
ME 4	35 53 19	2004	Wet	September	Used in Summary Table Analysis	162.5	152.0	10.5	6.4%	150.9	11.5	7.1%	149.9	12.6	7.7%	148.9	13.6	8.4%	147.8	14.7	9.0%	146.7	15.7	9.7%
ME 4	35 53 19	2005	Above Normal	October	Used in Summary Table Analysis	7,702.0	7,693.8	8.2	0.1%	7,692.9	9.0	0.1%	7,692.1	9.8	0.1%	7,691.2	10.8	0.1%	7,690.4	11.6	0.2%	7,689.6	12.4	0.2%
ME 4	35 53 19	2005	Above Normal	November	Used in Summary Table Analysis	2,258.8	2,252.3	6.5	0.3%	2,251.7	7.1	0.3%	2,251.0	7.8	0.3%	2,250.3	8.4	0.4%	2,249.8	9.0	0.4%	2,249.1	9.7	0.4%
ME 4	35 53 19	2005	Above Normal	December	--	21,086.8	21,081.0	5.8	0.0%	21,079.9	6.9	0.0%	21,079.9	6.9	0.0%	21,078.7	8.1	0.0%	21,078.7	8.1	0.0%	21,077.5	9.3	0.0%
ME 4	35 53 19	2005	Above Normal	January	--	22,431.7	22,427.1	4.6	0.0%	22,425.9	5.8	0.0%	22,425.9	5.8	0.0%	22,424.8	6.9	0.0%	22,424.8	6.9	0.0%	22,424.8	6.9	0.0%
ME 4	35 53 19	2005	Above Normal	February	--	14,018.5	14,015.0	3.5	0.0%	14,013.9	4.6	0.0%	14,013.9	4.6	0.0%	14,012.7	5.8	0.0%	14,012.7	5.8	0.0%	14,012.7	5.8	0.0%
ME 4	35 53 19	2005	Above Normal	March	--	28,603.0	28,598.4	4.6	0.0%	28,598.4	4.6	0.0%	28,597.2	5.8	0.0%	28,597.2	5.8	0.0%	28,596.1	6.9	0.0%	28,596.1	6.9	0.0%
ME 4	35 53 19	2005	Above Normal	April	--	21,468.8	21,464.1	4.6	0.0%	21,464.1	4.6	0.0%	21,463.0	5.8	0.0%	21,463.0	5.8	0.0%	21,463.0	5.8	0.0%	21,461.8	6.9	0.0%
ME 4	35 53 19	2005	Above Normal	May	--	19,598.4	19,589.1	9.3	0.0%	19,588.0	10.4	0.1%	19,586.8	11.6	0.1%	19,586.8	11.6	0.1%	19,585.6	12.7	0.1%	19,584.5	13.9	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	35 53 19	2005	Above Normal	June	--	15,905.1	15,891.2	13.9	0.1%	15,890.0	15.0	0.1%	15,888.9	16.2	0.1%	15,887.7	17.4	0.1%	15,886.6	18.5	0.1%	15,885.4	19.7	0.1%
ME 4	35 53 19	2005	Above Normal	July	--	2,863.9	2,851.7	12.2	0.4%	2,850.5	13.4	0.5%	2,849.3	14.6	0.5%	2,848.0	15.9	0.6%	2,846.9	17.0	0.6%	2,845.6	18.3	0.6%
ME 4	35 53 19	2005	Above Normal	August	--	983.9	972.8	11.0	1.1%	971.7	12.1	1.2%	970.6	13.2	1.3%	969.5	14.3	1.5%	968.4	15.4	1.6%	967.3	16.5	1.7%
ME 4	35 53 19	2005	Above Normal	September	Used in Summary Table Analysis	525.3	515.6	9.7	1.8%	514.6	10.7	2.0%	513.6	11.7	2.2%	512.7	12.6	2.4%	511.7	13.6	2.6%	510.7	14.6	2.8%
ME 4	35 53 19	2006	Wet	October	Used in Summary Table Analysis	635.2	627.4	7.8	1.2%	626.6	8.6	1.4%	625.8	9.4	1.5%	625.0	10.2	1.6%	624.2	11.0	1.7%	623.5	11.8	1.9%
ME 4	35 53 19	2006	Wet	November	Used in Summary Table Analysis	9,332.6	9,326.4	6.3	0.1%	9,325.8	6.8	0.1%	9,325.2	7.4	0.1%	9,324.5	8.1	0.1%	9,324.0	8.7	0.1%	9,323.4	9.3	0.1%
ME 4	35 53 19	2006	Wet	December	--	43,589.1	43,583.3	5.8	0.0%	43,583.3	5.8	0.0%	43,582.2	6.9	0.0%	43,582.2	6.9	0.0%	43,581.0	8.1	0.0%	43,581.0	8.1	0.0%
ME 4	35 53 19	2006	Wet	January	--	46,380.8	46,376.2	4.6	0.0%	46,375.0	5.8	0.0%	46,375.0	5.8	0.0%	46,373.8	6.9	0.0%	46,373.8	6.9	0.0%	46,372.7	8.1	0.0%
ME 4	35 53 19	2006	Wet	February	--	26,653.9	26,649.3	4.6	0.0%	26,649.3	4.6	0.0%	26,648.1	5.8	0.0%	26,648.1	5.8	0.0%	26,648.1	5.8	0.0%	26,647.0	6.9	0.0%
ME 4	35 53 19	2006	Wet	March	--	47,223.4	47,219.9	3.5	0.0%	47,218.8	4.6	0.0%	47,218.8	4.6	0.0%	47,217.6	5.8	0.0%	47,217.6	5.8	0.0%	47,217.6	5.8	0.0%
ME 4	35 53 19	2006	Wet	April	--	30,453.7	30,450.2	3.5	0.0%	30,449.1	4.6	0.0%	30,449.1	4.6	0.0%	30,449.1	4.6	0.0%	30,447.9	5.8	0.0%	30,447.9	5.8	0.0%
ME 4	35 53 19	2006	Wet	May	--	14,222.2	14,216.4	5.8	0.0%	14,216.4	5.8	0.0%	14,215.3	6.9	0.0%	14,215.3	6.9	0.0%	14,214.1	8.1	0.1%	14,214.1	8.1	0.1%
ME 4	35 53 19	2006	Wet	June	--	3,548.6	3,537.6	11.0	0.3%	3,536.6	12.0	0.3%	3,535.5	13.1	0.4%	3,534.4	14.2	0.4%	3,533.3	15.3	0.4%	3,532.2	16.4	0.5%
ME 4	35 53 19	2006	Wet	July	--	1,280.4	1,268.9	11.6	0.9%	1,267.7	12.7	1.0%	1,266.6	13.9	1.1%	1,265.4	15.0	1.2%	1,264.2	16.2	1.3%	1,263.1	17.4	1.4%
ME 4	35 53 19	2006	Wet	August	--	666.4	655.2	11.2	1.7%	654.1	12.4	1.9%	652.9	13.5	2.0%	651.7	14.7	2.2%	650.6	15.8	2.4%	649.5	16.9	2.5%
ME 4	35 53 19	2006	Wet	September	Used in Summary Table Analysis	427.1	417.3	9.8	2.3%	416.3	10.8	2.5%	415.3	11.8	2.8%	414.3	12.8	3.0%	413.3	13.8	3.2%	412.3	14.8	3.5%
ME 4	35 53 19	2007	Above Normal	October	Used in Summary Table Analysis	275.0	267.0	8.0	2.9%	266.2	8.8	3.2%	265.4	9.6	3.5%	264.6	10.4	3.8%	263.8	11.2	4.1%	263.0	12.0	4.4%
ME 4	35 53 19	2007	Above Normal	November	Used in Summary Table Analysis	8,689.9	8,683.6	6.4	0.1%	8,682.9	7.1	0.1%	8,682.3	7.6	0.1%	8,681.6	8.3	0.1%	8,681.0	8.9	0.1%	8,680.3	9.6	0.1%
ME 4	35 53 19	2007	Above Normal	December	--	20,459.5	20,453.7	5.8	0.0%	20,453.7	5.8	0.0%	20,452.5	6.9	0.0%	20,452.5	6.9	0.0%	20,451.4	8.1	0.0%	20,451.4	8.1	0.0%
ME 4	35 53 19	2007	Above Normal	January	--	10,264.0	10,259.0	5.0	0.0%	10,258.6	5.4	0.1%	10,258.1	5.9	0.1%	10,257.5	6.5	0.1%	10,257.1	6.9	0.1%	10,256.5	7.5	0.1%
ME 4	35 53 19	2007	Above Normal	February	--	30,627.3	30,622.7	4.6	0.0%	30,621.5	5.8	0.0%	30,621.5	5.8	0.0%	30,620.4	6.9	0.0%	30,620.4	6.9	0.0%	30,620.4	6.9	0.0%
ME 4	35 53 19	2007	Above Normal	March	--	13,111.1	13,106.5	4.6	0.0%	13,106.5	4.6	0.0%	13,105.3	5.8	0.0%	13,105.3	5.8	0.0%	13,104.2	6.9	0.1%	13,104.2	6.9	0.1%
ME 4	35 53 19	2007	Above Normal	April	--	11,542.8	11,534.3	8.6	0.1%	11,533.4	9.4	0.1%	11,532.6	10.2	0.1%	11,531.7	11.1	0.1%	11,530.9	11.9	0.1%	11,530.0	12.8	0.1%
ME 4	35 53 19	2007	Above Normal	May	--	4,143.2	4,133.0	10.2	0.2%	4,132.1	11.1	0.3%	4,131.0	12.2	0.3%	4,130.0	13.2	0.3%	4,128.9	14.2	0.3%	4,128.0	15.2	0.4%
ME 4	35 53 19	2007	Above Normal	June	--	1,500.6	1,488.3	12.3	0.8%	1,487.2	13.4	0.9%	1,485.9	14.7	1.0%	1,484.6	16.0	1.1%	1,483.4	17.1	1.1%	1,482.2	18.4	1.2%
ME 4	35 53 19	2007	Above Normal	July	--	496.4	484.1	12.3	2.5%	482.8	13.6	2.7%	481.6	14.8	3.0%	480.4	16.0	3.2%	479.1	17.2	3.5%	477.9	18.5	3.7%
ME 4	35 53 19	2007	Above Normal	August	--	223.6	212.4	11.1	5.0%	211.3	12.2	5.5%	210.2	13.3	6.0%	209.1	14.4	6.5%	208.0	15.5	6.9%	206.9	16.6	7.4%
ME 4	35 53 19	2007	Above Normal	September	Used in Summary Table Analysis	151.2	140.7	10.5	6.9%	139.6	11.5	7.6%	138.6	12.6	8.3%	137.5	13.6	9.0%	136.5	14.7	9.7%	135.4	15.7	10.4%
ME 4	35 53 19	2008	Dry	October	Used in Summary Table Analysis	3,441.6	3,433.1	8.4	0.2%	3,432.2	9.4	0.3%	3,431.4	10.2	0.3%	3,430.4	11.1	0.3%	3,429.6	11.9	0.3%	3,428.8	12.7	0.4%
ME 4	35 53 19	2008	Dry	November	Used in Summary Table Analysis	3,282.4	3,275.9	6.5	0.2%	3,275.2	7.2	0.2%	3,274.5	7.9	0.2%	3,273.8	8.6	0.3%	3,273.3	9.1	0.3%	3,272.6	9.8	0.3%
ME 4	35 53 19	2008	Dry	December	--	23,191.0	23,185.2	5.8	0.0%	23,184.0	6.9	0.0%	23,184.0	6.9	0.0%	23,182.9	8.1	0.0%	23,182.9	8.1	0.0%	23,181.7	9.3	0.0%
ME 4	35 53 19	2008	Dry	January	--	37,593.8	37,588.0	5.8	0.0%	37,586.8	6.9	0.0%	37,586.8	6.9	0.0%	37,585.6	8.1	0.0%	37,585.6	8.1	0.0%	37,584.5	9.3	0.0%
ME 4	35 53 19	2008	Dry	February	--	26,285.9	26,281.3	4.6	0.0%	26,280.1	5.8	0.0%	26,280.1	5.8	0.0%	26,280.1	5.8	0.0%	26,278.9	6.9	0.0%	26,278.9	6.9	0.0%
ME 4	35 53 19	2008	Dry	March	--	11,800.9	11,796.3	4.6	0.0%	11,796.3	4.6	0.0%	11,796.3	4.6	0.0%	11,795.1	5.8	0.0%	11,795.1	5.8	0.0%	11,795.1	5.8	0.0%
ME 4	35 53 19	2008	Dry	April	--	9,021.6	9,013.0	8.7	0.1%	9,012.0	9.6	0.1%	9,011.2	10.4	0.1%	9,010.3	11.3	0.1%	9,009.5	12.2	0.1%	9,008.6	13.1	0.1%
ME 4	35 53 19	2008	Dry	May	--	1,358.7	1,349.3	9.4	0.7%	1,348.4	10.3	0.8%	1,347.5	11.2	0.8%	1,346.5	12.2	0.9%	1,345.6	13.1	1.0%	1,344.7	14.0	1.0%
ME 4	35 53 19	2008	Dry	June	--	438.3	424.9	13.4	3.1%	423.6	14.7	3.4%	422.2	16.1	3.7%	420.9	17.4	4.0%	419.6	18.7	4.3%	418.3	20.0	4.6%
ME 4	35 53 19	2008	Dry	July	--	256.3	243.1	13.2	5.1%	241.8	14.5	5.6%	240.5	15.8	6.2%	239.2	17.1	6.7%	237.9	18.4	7.2%	236.6	19.7	7.7%
ME 4	35 53 19	2008	Dry	August	--	179.7	166.9	12.8	7.1%	165.7	14.0	7.8%	164.4	15.3	8.5%	163.1	16.6	9.2%	161.9	17.9	9.9%	160.6	19.1	10.6%
ME 4	35 53 19	2008	Dry	September	Used in Summary Table Analysis	141.3	129.1	12.2	8.7%	127.8	13.5	9.5%	126.6	14.7	10.4%	125.4	15.9	11.3%	124.2	17.1	12.1%	123.0	18.4	13.0%
ME 4	35 53 19	2009	Critical	October	Used in Summary Table Analysis	924.9	915.3	9.6	1.0%	914.4	10.6	1.1%	913.4	11.5	1.2%	912.4	12.5	1.4%	911.5	13.5	1.5%	910.5	14.4	1.6%
ME 4	35 53 19	2009	Critical	November	Used in Summary Table Analysis	5,526.6	5,519.2	7.4	0.1%	5,518.5	8.1	0.1%	5,517.7	8.9	0.2%	5,517.0	9.6	0.2%	5,516.2	10.4	0.2%	5,515.5	11.1	0.2%
ME 4	35 53 19	2009	Critical	December	--	12,199.1	12,192.1	6.9	0.1%	12,192.1	6.9	0.1%	12,191.0	8.1	0.1%	12,191.0	8.1	0.1%	12,189.8	9.3	0.1%	12,189.8	9.3	0.1%
ME 4	35 53 19	2009	Critical	January	--	8,805.6	8,799.8	5.8	0.1%	8,799.2	6.4	0.1%	8,798.6	6.9	0.1%	8,798.0	7.5	0.1%	8,797.5	8.1	0.1%	8,796.9	8.7	0.1%
ME 4	35 53 19	2009	Critical	February	--	22,642.4	22,637.7	4.6	0.0%	22,636.6	5.8	0.0%	22,636.6	5.8	0.0%	22,636.6	5.8	0.0%	22,635.4	6.9	0.0%	22,635.4	6.9	0.0%
ME 4	35 53 19	2009	Critical	March	--	21,142.4	21,137.7	4.6	0.0%	21,137.7	4.6	0.0%	21,136.6	5.8	0.0%	21,136.6	5.8	0.0%	21,136.6	5.8	0.0%	21,135.4	6.9	0.0%
ME 4	35 53 19	2009	Critical	April	--	10,099.0	10,089.9	9.0	0.1%	10,089.0	10.0	0.1%	10,088.1	10.9	0.1%	10,087.3	11.7	0.1%	10,086.3	12.6	0.1%	10,085.4	13.5	0.1%
ME 4	35 53 19	2009	Critical	May	--	15,593.8	15,583.3	10.4	0.1%	15,582.2	11.6	0.1%	15,581.0	12.7	0.1%	15,579.9	13.9	0.1%	15,578.7	15.0	0.1%	15,577.5	16.2	0.1%
ME 4	35 53 19	2009	Critical	June	--	3,161.2	3,147.1	14.1	0.4%	3,145.7	15.5	0.5%	3,144.3	16.9	0.5%	3,142.8	18.4	0.6%	3,141.4	19.8	0.6%	3,140.0	21.2	0.7%
ME 4	35 53 19	2009	Critical	July	--	1,263.5	1,250.1	13.4	1.1%	1,248.8	14.7	1.2%	1,247.5	16.1	1.3%	1,246.1	17.5	1.4%	1,244.8	18.8	1.5%	1,243.5	20.0	1.6%
ME 4	35 53 19	2009	Critical	August	--	669.4	656.5	12.9	1.9%	655.2	14.2	2.1%	653.9	15.4	2.3%	652.6	16.8	2.5%	651.4	18.0	2.7%	650.1	19.3	2.9%
ME 4	35 53 19	2009	Critical	September	Used in Summary Table Analysis	390.4	378.9	11.5	2.9%	377.8	12.6	3.2%	376.6	13.8	3.5%	375.5	14.9	3.8%	374.4	16.0	4.1%	373.2	17.2	4.4%
ME 4	35 53 19	2010	Below Normal	October	Used in Summary Table Analysis	6,089.8	6,080.0	9.8	0.2%	6,079.1	10.8	0.2%	6,078.0	11.8	0.2%	6,077.1	12.7	0.2%	6,076.2	13.7	0.2%	6,075.1	14.7	0.2%
ME 4	35 53 19	2010	Below Normal	November	Used in Summary Table Analysis	8,300.7	8,293.1	7.6	0.1%	8,292.2	8.4	0.1%	8,291.4	9.3	0.1%	8,290.7	10.0	0.1%	8,289.9	10.8	0.1%	8,289.1	11.6	0.1%
ME 4	35 53 19	2010	Below Normal	December	--	12,378.5	12,371.5	6.9	0.1%	12,370.4	8.1	0.1%	12,370.4	8.1	0.1%	12,369.2	9.3	0.1%	12,369.2	9.3	0.1%	12,368.1	10.4	0.1%
ME 4	35 53 19	2010	Below Normal	January	--	36,316.0	36,310.2	5.8	0.0%	36,309.0	6.9	0.0%	36,309.0	6.9	0.0%	36,307.9	8.1	0.0%	36,307.9	8.1	0.0%	36,306.7	9.3	0.0%
ME 4	35 53 19	2010	Below Normal	February	--	27,268.5	27,262.7	5.8	0.0%	27,262.7	5.8	0.0%	27,261.6	6.9	0.0%	27,261.6	6.9	0.0%	27,260.4	8.1	0.0%	27,260.4	8.1	0.0%
ME 4	35 53 19	2010	Below Normal	March	--	28,856.5	28,851.9	4.6	0.0%	28,851.9	4.6	0.0%	28,850.7	5.8	0.0%	28,850.7	5.8	0.0%	28,849.5	6.9	0.0%	28,849.5	6.9	0.0%
ME 4	35 53 19	2010	Below Normal	April	--	40,052.1	40,047.5	4.6	0.0%	40,046.3	5.8	0.0%	40,046.3	5.8	0.0%	40,045.1	6.9	0.0%	40,045.1	6.9	0.0%	40,044.0	8.1	0.0%
ME 4	35 53 19	2010	Below Normal	May	--	20,298.6	20,289.4	9.3	0.0%	20,288.2	10.4	0.1%	20,288.2	10.4	0.1%	20,287.0	11.6	0.1%	20,285.9	12.7	0.1%	20,284.7	13.9	0.1%
ME 4	35 53 19	2010	Below Normal	June	--	9,373.8	9,360.3	13.5	0.1%	9,358.9	14.9	0.2%	9,357.5	16.3	0.2%	9,356.3	17.6	0.2%	9,354.9	19.0	0.2%	9,353.5	20.4	0.2%
ME 4	35 53 19	2010	Below Normal	July	--	1,455.4	1,443.1	12.4	0.9%	1,441.8	13.7	0.9%	1,440.6	14.8	1.0%	1,439.4	16.1	1.1%	1,438.1	17.4	1.2%	1,436.9	18.5	1.3%
ME 4	35 53 19	2010	Below Normal	August	--	569.9	558.5	11.4	2.0%	557.4	12.5	2.2%	556.3	13.7	2.4%	555.1	14.8	2.6%	554.1	15.8	2.8%	552.9	17.0	3.0%
ME 4	35 53 19	2010	Below Normal	September	Used in Summary Table Analysis	652.0	641.3	10.7	1.6%	640.2	11.8	1.8%	639.1	12.9	2.0%	638.1	14.0	2.1%	637.0	15.0	2.3%	635.9	16.1	2.5%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	35 53 19	2011	Wet	October	Used in Summary Table Analysis	9,652.2	9,644.1	8.1	0.1%	9,643.3	8.9	0.1%	9,642.5	9.7	0.1%	9,641.7	10.5	0.1%	9,640.9	11.3	0.1%	9,640.0	12.2	0.1%
ME 4	35 53 19	2011	Wet	November	Used in Summary Table Analysis	14,241.9	14,235.0	6.9	0.0%	14,235.0	6.9	0.0%	14,233.8	8.1	0.1%	14,233.8	8.1	0.1%	14,232.6	9.3	0.1%	14,232.6	9.3	0.1%
ME 4	35 53 19	2011	Wet	December	--	33,794.0	33,788.2	5.8	0.0%	33,788.2	5.8	0.0%	33,787.0	6.9	0.0%	33,787.0	6.9	0.0%	33,785.9	8.1	0.0%	33,785.9	8.1	0.0%
ME 4	35 53 19	2011	Wet	January	--	14,173.6	14,169.0	4.6	0.0%	14,167.8	5.8	0.0%	14,167.8	5.8	0.0%	14,166.7	6.9	0.0%	14,166.7	6.9	0.0%	14,165.5	8.1	0.1%
ME 4	35 53 19	2011	Wet	February	--	20,784.7	20,780.1	4.6	0.0%	20,778.9	5.8	0.0%	20,778.9	5.8	0.0%	20,777.8	6.9	0.0%	20,777.8	6.9	0.0%	20,777.8	6.9	0.0%
ME 4	35 53 19	2011	Wet	March	--	52,067.1	52,062.5	4.6	0.0%	52,062.5	4.6	0.0%	52,061.3	5.8	0.0%	52,061.3	5.8	0.0%	52,061.3	5.8	0.0%	52,060.2	6.9	0.0%
ME 4	35 53 19	2011	Wet	April	--	24,821.8	24,817.1	4.6	0.0%	24,816.0	5.8	0.0%	24,816.0	5.8	0.0%	24,816.0	5.8	0.0%	24,814.8	6.9	0.0%	24,814.8	6.9	0.0%
ME 4	35 53 19	2011	Wet	May	--	11,392.6	11,383.9	8.7	0.1%	11,383.0	9.6	0.1%	11,382.1	10.5	0.1%	11,381.1	11.5	0.1%	11,380.2	12.4	0.1%	11,379.4	13.2	0.1%
ME 4	35 53 19	2011	Wet	June	--	7,066.1	7,052.9	13.2	0.2%	7,051.5	14.6	0.2%	7,050.2	15.9	0.2%	7,049.0	17.1	0.2%	7,047.6	18.5	0.3%	7,046.3	19.8	0.3%
ME 4	35 53 19	2011	Wet	July	--	1,828.9	1,815.9	13.1	0.7%	1,814.5	14.5	0.8%	1,813.2	15.7	0.9%	1,811.9	17.0	0.9%	1,810.5	18.4	1.0%	1,809.3	19.7	1.1%
ME 4	35 53 19	2011	Wet	August	--	777.5	766.4	11.2	1.4%	765.2	12.3	1.6%	764.1	13.4	1.7%	763.0	14.5	1.9%	761.9	15.7	2.0%	760.8	16.8	2.2%
ME 4	35 53 19	2011	Wet	September	Used in Summary Table Analysis	434.1	423.9	10.2	2.3%	422.9	11.2	2.6%	421.9	12.2	2.8%	420.9	13.2	3.0%	419.8	14.2	3.3%	418.8	15.2	3.5%
ME 4	35 53 19	2012	Below Normal	October	Used in Summary Table Analysis	4,550.8	4,542.5	8.3	0.2%	4,541.7	9.1	0.2%	4,540.9	10.0	0.2%	4,540.0	10.8	0.2%	4,539.2	11.6	0.3%	4,538.4	12.4	0.3%
ME 4	35 53 19	2012	Below Normal	November	Used in Summary Table Analysis	8,258.2	8,251.6	6.6	0.1%	8,250.9	7.3	0.1%	8,250.3	7.9	0.1%	8,249.7	8.6	0.1%	8,249.0	9.3	0.1%	8,248.3	10.0	0.1%
ME 4	35 53 19	2012	Below Normal	December	--	5,191.9	5,186.2	5.7	0.1%	5,185.6	6.3	0.1%	5,185.1	6.8	0.1%	5,184.5	7.4	0.1%	5,184.0	7.9	0.2%	5,183.4	8.4	0.2%
ME 4	35 53 19	2012	Below Normal	January	--	20,175.9	20,171.3	4.6	0.0%	20,170.1	5.8	0.0%	20,170.1	5.8	0.0%	20,169.0	6.9	0.0%	20,169.0	6.9	0.0%	20,167.8	8.1	0.0%
ME 4	35 53 19	2012	Below Normal	February	--	18,230.3	18,225.7	4.6	0.0%	18,224.5	5.8	0.0%	18,224.5	5.8	0.0%	18,223.4	6.9	0.0%	18,223.4	6.9	0.0%	18,223.4	6.9	0.0%
ME 4	35 53 19	2012	Below Normal	March	--	45,496.5	45,491.9	4.6	0.0%	45,491.9	4.6	0.0%	45,490.7	5.8	0.0%	45,490.7	5.8	0.0%	45,490.7	5.8	0.0%	45,489.6	6.9	0.0%
ME 4	35 53 19	2012	Below Normal	April	--	26,885.4	26,880.8	4.6	0.0%	26,880.8	4.6	0.0%	26,879.6	5.8	0.0%	26,879.6	5.8	0.0%	26,879.6	5.8	0.0%	26,878.5	6.9	0.0%
ME 4	35 53 19	2012	Below Normal	May	--	7,488.9	7,480.1	8.8	0.1%	7,479.2	9.7	0.1%	7,478.4	10.5	0.1%	7,477.4	11.5	0.2%	7,476.6	12.3	0.2%	7,475.8	13.1	0.2%
ME 4	35 53 19	2012	Below Normal	June	--	5,525.1	5,511.6	13.5	0.2%	5,510.3	14.8	0.3%	5,508.9	16.2	0.3%	5,507.5	17.6	0.3%	5,506.3	18.9	0.3%	5,504.9	20.3	0.4%
ME 4	35 53 19	2012	Below Normal	July	--	2,229.3	2,216.7	12.6	0.6%	2,215.4	13.9	0.6%	2,214.1	15.2	0.7%	2,212.8	16.4	0.7%	2,211.6	17.7	0.8%	2,210.3	19.0	0.9%
ME 4	35 53 19	2012	Below Normal	August	--	388.8	378.4	10.3	2.7%	377.4	11.3	2.9%	376.4	12.3	3.2%	375.4	13.4	3.4%	374.4	14.4	3.7%	373.4	15.4	4.0%
ME 4	35 53 19	2012	Below Normal	September	Used in Summary Table Analysis	249.6	240.5	9.1	3.7%	239.6	10.0	4.0%	238.7	11.0	4.4%	237.7	11.9	4.8%	236.8	12.8	5.1%	235.9	13.7	5.5%
ME 4	35 53 19	2013	Below Normal	October	Used in Summary Table Analysis	1,917.7	1,909.7	8.0	0.4%	1,909.0	8.7	0.5%	1,908.2	9.5	0.5%	1,907.4	10.3	0.5%	1,906.6	11.1	0.6%	1,905.8	11.9	0.6%
ME 4	35 53 19	2013	Below Normal	November	Used in Summary Table Analysis	14,723.4	14,717.6	5.8	0.0%	14,716.4	6.9	0.0%	14,716.4	6.9	0.0%	14,715.3	8.1	0.1%	14,714.1	9.3	0.1%	14,714.1	9.3	0.1%
ME 4	35 53 19	2013	Below Normal	December	--	60,077.5	60,071.8	5.8	0.0%	60,071.8	5.8	0.0%	60,070.6	6.9	0.0%	60,070.6	6.9	0.0%	60,069.4	8.1	0.0%	60,069.4	8.1	0.0%
ME 4	35 53 19	2013	Below Normal	January	--	22,226.9	22,221.1	5.8	0.0%	22,221.1	5.8	0.0%	22,221.1	5.8	0.0%	22,219.9	6.9	0.0%	22,219.9	6.9	0.0%	22,218.8	8.1	0.0%
ME 4	35 53 19	2013	Below Normal	February	--	8,856.9	8,852.3	4.6	0.1%	8,851.9	5.1	0.1%	8,851.4	5.6	0.1%	8,850.9	6.0	0.1%	8,850.5	6.5	0.1%	8,850.0	6.9	0.1%
ME 4	35 53 19	2013	Below Normal	March	--	10,347.5	10,343.1	4.4	0.0%	10,342.6	4.9	0.0%	10,342.1	5.3	0.1%	10,341.7	5.8	0.1%	10,341.3	6.1	0.1%	10,340.9	6.6	0.1%
ME 4	35 53 19	2013	Below Normal	April	--	8,295.6	8,287.3	8.3	0.1%	8,286.3	9.3	0.1%	8,285.5	10.1	0.1%	8,284.7	10.9	0.1%	8,283.9	11.7	0.1%	8,283.0	12.6	0.2%
ME 4	35 53 19	2013	Below Normal	May	--	4,437.2	4,427.0	10.2	0.2%	4,426.0	11.1	0.3%	4,425.0	12.2	0.3%	4,424.0	13.2	0.3%	4,422.9	14.2	0.3%	4,422.0	15.2	0.3%
ME 4	35 53 19	2013	Below Normal	June	--	2,111.9	2,099.7	12.3	0.6%	2,098.5	13.4	0.6%	2,097.2	14.7	0.7%	2,096.1	15.9	0.8%	2,094.8	17.1	0.8%	2,093.6	18.3	0.9%
ME 4	35 53 19	2013	Below Normal	July	--	718.3	706.5	11.8	1.6%	705.3	13.0	1.8%	704.1	14.2	2.0%	703.0	15.4	2.1%	701.8	16.5	2.3%	700.6	17.7	2.5%
ME 4	35 53 19	2013	Below Normal	August	--	340.6	329.6	11.1	3.2%	328.5	12.2	3.6%	327.3	13.3	3.9%	326.3	14.4	4.2%	325.1	15.5	4.5%	324.0	16.6	4.9%
ME 4	35 53 19	2013	Below Normal	September	Used in Summary Table Analysis	4,795.7	4,784.3	11.5	0.2%	4,783.1	12.6	0.3%	4,781.9	13.8	0.3%	4,780.8	14.9	0.3%	4,779.6	16.1	0.3%	4,778.6	17.1	0.4%
ME 4	35 53 19	2014	Critical	October	Used in Summary Table Analysis	280.5	272.1	8.3	3.0%	271.3	9.2	3.3%	270.5	10.0	3.6%	269.7	10.8	3.9%	268.8	11.7	4.2%	268.0	12.5	4.4%
ME 4	35 53 19	2014	Critical	November	Used in Summary Table Analysis	1,542.7	1,536.1	6.6	0.4%	1,535.4	7.3	0.5%	1,534.7	8.0	0.5%	1,534.0	8.7	0.6%	1,533.3	9.4	0.6%	1,532.8	10.0	0.6%
ME 4	35 53 19	2014	Critical	December	--	1,592.1	1,586.3	5.8	0.4%	1,585.8	6.4	0.4%	1,585.1	7.1	0.4%	1,584.5	7.6	0.5%	1,583.9	8.2	0.5%	1,583.3	8.8	0.6%
ME 4	35 53 19	2014	Critical	January	--	2,826.3	2,821.1	5.2	0.2%	2,820.5	5.8	0.2%	2,820.0	6.3	0.2%	2,819.4	6.8	0.2%	2,819.0	7.3	0.3%	2,818.4	7.9	0.3%
ME 4	35 53 19	2014	Critical	February	--	15,768.5	15,763.9	4.6	0.0%	15,763.9	4.6	0.0%	15,762.7	5.8	0.0%	15,762.7	5.8	0.0%	15,762.7	5.8	0.0%	15,761.6	6.9	0.0%
ME 4	35 53 19	2014	Critical	March	--	31,506.9	31,502.3	4.6	0.0%	31,502.3	4.6	0.0%	31,501.2	5.8	0.0%	31,501.2	5.8	0.0%	31,501.2	5.8	0.0%	31,500.0	6.9	0.0%
ME 4	35 53 19	2014	Critical	April	--	12,997.7	12,988.4	9.3	0.1%	12,987.3	10.4	0.1%	12,986.1	11.6	0.1%	12,986.1	11.6	0.1%	12,985.0	12.7	0.1%	12,983.8	13.9	0.1%
ME 4	35 53 19	2014	Critical	May	--	5,192.1	5,181.5	10.6	0.2%	5,180.4	11.7	0.2%	5,179.3	12.8	0.2%	5,178.2	13.9	0.3%	5,177.2	14.9	0.3%	5,176.0	16.1	0.3%
ME 4	35 53 19	2014	Critical	June	--	1,199.1	1,184.4	14.7	1.2%	1,183.0	16.1	1.3%	1,181.5	17.6	1.5%	1,180.0	19.1	1.6%	1,178.6	20.5	1.7%	1,177.1	22.0	1.8%
ME 4	35 53 19	2014	Critical	July	--	546.3	532.8	13.5	2.5%	531.4	14.9	2.7%	530.1	16.2	3.0%	528.7	17.6	3.2%	527.4	18.9	3.5%	526.1	20.2	3.7%
ME 4	35 53 19	2014	Critical	August	--	348.5	335.7	12.9	3.7%	334.4	14.1	4.1%	333.1	15.4	4.4%	331.8	16.7	4.8%	330.5	18.0	5.2%	329.2	19.3	5.5%
ME 4	35 53 19	2014	Critical	September	Used in Summary Table Analysis	2,577.5	2,564.9	12.6	0.5%	2,563.7	13.9	0.5%	2,562.4	15.2	0.6%	2,561.2	16.3	0.6%	2,560.0	17.6	0.7%	2,558.7	18.9	0.7%
ME 4	35 53 19	2015	Dry	October	Used in Summary Table Analysis	11,380.4	11,370.8	9.6	0.1%	11,369.9	10.5	0.1%	11,369.0	11.5	0.1%	11,367.4	13.1	0.1%	11,366.4	14.0	0.1%	11,365.5	14.9	0.1%
ME 4	35 53 19	2015	Dry	November	Used in Summary Table Analysis	9,059.1	9,051.7	7.4	0.1%	9,050.9	8.2	0.1%	9,050.2	8.9	0.1%	9,049.5	9.6	0.1%	9,048.7	10.4	0.1%	9,048.0	11.1	0.1%
ME 4	35 53 19	2015	Dry	December	--	32,695.6	32,689.8	5.8	0.0%	32,688.7	6.9	0.0%	32,688.7	6.9	0.0%	32,687.5	8.1	0.0%	32,687.5	8.1	0.0%	32,686.3	9.3	0.0%
ME 4	35 53 19	2015	Dry	January	--	14,589.1	14,583.3	5.8	0.0%	14,583.3	5.8	0.0%	14,582.2	6.9	0.0%	14,582.2	6.9	0.0%	14,581.0	8.1	0.1%	14,581.0	8.1	0.1%
ME 4	35 53 19	2015	Dry	February	--	27,263.9	27,259.3	4.6	0.0%	27,259.3	4.6	0.0%	27,258.1	5.8	0.0%	27,258.1	5.8	0.0%	27,256.9	6.9	0.0%	27,256.9	6.9	0.0%
ME 4	35 53 19	2015	Dry	March	--	11,577.5	11,573.0	4.5	0.0%	11,572.6	5.0	0.0%	11,572.2	5.3	0.0%	11,571.8	5.8	0.0%	11,571.3	6.3	0.1%	11,570.8	6.7	0.1%
ME 4	35 53 19	2015	Dry	April	--	8,406.4	8,397.5	8.9	0.1%	8,396.6	9.7	0.1%	8,395.7	10.6	0.1%	8,394.8	11.6	0.1%	8,393.9	12.5	0.1%	8,392.9	13.4	0.2%
ME 4	35 53 19	2015	Dry	May	--	1,508.8	1,498.3	10.5	0.7%	1,497.2	11.6	0.8%	1,496.2	12.6	0.8%	1,495.1	13.7	0.9%	1,494.1	14.7	1.0%	1,492.9	15.9	1.1%
ME 4	35 53 19	2015	Dry	June	--	652.8	639.2	13.6	2.1%	637.8	15.0	2.3%	636.4	16.3	2.5%	635.1	17.7	2.7%	633.7	19.0	2.9%	632.4	20.4	3.1%
ME 4	35 53 19	2015	Dry	July	--	268.8	255.6	13.3	4.9%	254.3	14.6	5.4%	252.9	15.9	5.9%	251.6	17.2	6.4%	250.3	18.6	6.9%	249.0	19.9	7.4%
ME 4	35 53 19	2015	Dry	August	--	166.8	154.0	12.8	7.7%	152.8	14.1	8.4%	151.5	15.3	9.2%	150.2	16.6	10.0%	148.9	17.9	10.7%	147.6	19.2	11.5%
ME 4	35 53 19	2015	Dry	September	Used in Summary Table Analysis	120.9	109.4	11.4	9.4%	108.3	12.6	10.4%	107.2	13.7	11.3%	106.0	14.9	12.3%	104.9	16.0	13.2%	103.7	17.2	14.2%
ME 4	35 53 19	2016	Above Normal	October	Used in Summary Table Analysis	86.1	76.4	9.7	11.2%	75.4	10.7	12.4%	74.5	11.7	13.6%	74.0	12.1	14.1%	73.2	12.9	15.0%	71.9	14.3	16.6%
ME 4	35 53 19	2016	Above Normal	November	Used in Summary Table Analysis	3,883.2	3,875.8	7.4	0.2%	3,875.0	8.2	0.2%	3,874.3	8.9	0.2%	3,873.5	9.7	0.3%	3,872.7	10.5	0.3%	3,872.0	11.2	0.3%
ME 4	35 53 19	2016	Above Normal	December	--	36,711.8	36,704.9	6.9	0.0%	36,703.7	8.1	0.0%	36,703.7	8.1	0.0%	36,702.5	9.3	0.0%	36,702.5	9.3	0.0%	36,701.4	10.4	0.0%
ME 4	35 53 19	2016	Above Normal	January	--	57,414.4	57,408.6	5.8	0.0%	57,407.4	6.9	0.0%	57,407.4	6.9	0.0%	57,406.3	8.1	0.0%	57,405.1	9.3	0.0%	57,405.1	9.3	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	35 53 19	2016	Above Normal	February	--	24,284.7	24,278.9	5.8	0.0%	24,278.9	5.8	0.0%	24,277.8	6.9	0.0%	24,277.8	6.9	0.0%	24,277.8	6.9	0.0%	24,276.6	8.1	0.0%
ME 4	35 53 19	2016	Above Normal	March	--	41,821.8	41,817.1	4.6	0.0%	41,817.1	4.6	0.0%	41,816.0	5.8	0.0%	41,816.0	5.8	0.0%	41,814.8	6.9	0.0%	41,814.8	6.9	0.0%
ME 4	35 53 19	2016	Above Normal	April	--	18,549.8	18,545.1	4.6	0.0%	18,545.1	4.6	0.0%	18,545.1	4.6	0.0%	18,544.0	5.8	0.0%	18,544.0	5.8	0.0%	18,542.8	6.9	0.0%
ME 4	35 53 19	2016	Above Normal	May	--	5,219.3	5,213.9	5.4	0.1%	5,213.4	5.9	0.1%	5,212.8	6.5	0.1%	5,212.3	7.1	0.1%	5,211.7	7.6	0.1%	5,211.1	8.2	0.2%
ME 4	35 53 19	2016	Above Normal	June	--	1,510.3	1,499.8	10.5	0.7%	1,498.7	11.6	0.8%	1,497.7	12.6	0.8%	1,496.6	13.7	0.9%	1,495.6	14.7	1.0%	1,494.6	15.7	1.0%
ME 4	35 53 19	2016	Above Normal	July	--	823.9	812.2	11.7	1.4%	811.1	12.8	1.6%	809.9	14.0	1.7%	808.8	15.1	1.8%	807.6	16.3	2.0%	806.4	17.5	2.1%
ME 4	35 53 19	2016	Above Normal	August	--	492.5	481.1	11.4	2.3%	480.0	12.5	2.5%	478.9	13.6	2.8%	477.7	14.8	3.0%	476.6	15.9	3.2%	475.5	17.0	3.5%
ME 4	35 53 19	2016	Above Normal	September	Used in Summary Table Analysis	328.7	318.6	10.1	3.1%	317.6	11.1	3.4%	316.6	12.1	3.7%	315.6	13.1	4.0%	314.6	14.1	4.3%	313.6	15.2	4.6%
ME 4	35 53 19	2017	Wet	October	Used in Summary Table Analysis	18,319.4	18,310.2	9.3	0.1%	18,310.2	9.3	0.1%	18,309.0	10.4	0.1%	18,307.9	11.6	0.1%	18,307.9	11.6	0.1%	18,306.7	12.7	0.1%
ME 4	35 53 19	2017	Wet	November	Used in Summary Table Analysis	18,862.3	18,856.5	5.8	0.0%	18,855.3	6.9	0.0%	18,855.3	6.9	0.0%	18,854.2	8.1	0.0%	18,854.2	8.1	0.0%	18,853.0	9.3	0.0%
ME 4	35 53 19	2017	Wet	December	--	24,172.5	24,166.7	5.8	0.0%	24,166.7	5.8	0.0%	24,165.5	6.9	0.0%	24,165.5	6.9	0.0%	24,164.4	8.1	0.0%	24,164.4	8.1	0.0%
ME 4	35 53 19	2017	Wet	January	--	107,078.7	107,072.9	5.8	0.0%	107,072.9	5.8	0.0%	107,072.9	5.8	0.0%	107,071.8	6.9	0.0%	107,071.8	6.9	0.0%	107,070.6	8.1	0.0%
ME 4	35 53 19	2017	Wet	February	--	81,942.1	81,937.5	4.6	0.0%	81,937.5	4.6	0.0%	81,936.3	5.8	0.0%	81,936.3	5.8	0.0%	81,935.2	6.9	0.0%	81,935.2	6.9	0.0%
ME 4	35 53 19	2017	Wet	March	--	27,307.9	27,303.2	4.6	0.0%	27,303.2	4.6	0.0%	27,302.1	5.8	0.0%	27,302.1	5.8	0.0%	27,302.1	5.8	0.0%	27,300.9	6.9	0.0%
ME 4	35 53 19	2017	Wet	April	--	22,971.1	22,966.4	4.6	0.0%	22,966.4	4.6	0.0%	22,966.4	4.6	0.0%	22,965.3	5.8	0.0%	22,965.3	5.8	0.0%	22,965.3	5.8	0.0%
ME 4	35 53 19	2017	Wet	May	--	6,274.1	6,268.6	5.4	0.1%	6,268.1	6.0	0.1%	6,267.5	6.6	0.1%	6,266.9	7.2	0.1%	6,266.3	7.8	0.1%	6,265.7	8.3	0.1%
ME 4	35 53 19	2017	Wet	June	--	2,120.1	2,109.4	10.8	0.5%	2,108.3	11.8	0.6%	2,107.2	13.0	0.6%	2,106.1	14.0	0.7%	2,105.0	15.2	0.7%	2,103.9	16.2	0.8%
ME 4	35 53 19	2017	Wet	July	--	935.9	924.1	11.7	1.3%	923.0	12.9	1.4%	921.8	14.1	1.5%	920.6	15.3	1.6%	919.5	16.4	1.8%	918.3	17.6	1.9%
ME 4	35 53 19	2017	Wet	August	--	508.0	496.6	11.4	2.2%	495.4	12.5	2.5%	494.3	13.7	2.7%	493.2	14.8	2.9%	492.0	15.9	3.1%	490.9	17.1	3.4%
ME 4	35 53 19	2017	Wet	September	Used in Summary Table Analysis	323.7	313.2	10.5	3.2%	312.2	11.5	3.6%	311.1	12.6	3.9%	310.1	13.6	4.2%	309.0	14.7	4.5%	308.0	15.7	4.9%
ME 4	35 53 19	2018	Above Normal	October	Used in Summary Table Analysis	276.4	268.9	7.4	2.7%	267.7	8.6	3.1%	266.8	9.6	3.5%	265.7	10.7	3.9%	264.8	11.6	4.2%	263.9	12.5	4.5%
ME 4	35 53 19	2018	Above Normal	November	Used in Summary Table Analysis	10,828.1	10,821.6	6.5	0.1%	10,820.9	7.2	0.1%	10,820.3	7.9	0.1%	10,819.7	8.4	0.1%	10,819.0	9.1	0.1%	10,818.4	9.7	0.1%
ME 4	35 53 19	2018	Above Normal	December	--	5,449.1	5,443.6	5.4	0.1%	5,443.1	6.0	0.1%	5,442.5	6.6	0.1%	5,441.9	7.2	0.1%	5,441.4	7.6	0.1%	5,440.9	8.2	0.2%
ME 4	35 53 19	2018	Above Normal	January	--	17,844.9	17,839.1	5.8	0.0%	17,839.1	5.8	0.0%	17,839.1	5.8	0.0%	17,838.0	6.9	0.0%	17,838.0	6.9	0.0%	17,836.8	8.1	0.0%
ME 4	35 53 19	2018	Above Normal	February	--	7,600.2	7,595.8	4.4	0.1%	7,595.4	4.9	0.1%	7,594.9	5.3	0.1%	7,594.4	5.8	0.1%	7,594.1	6.1	0.1%	7,593.6	6.6	0.1%
ME 4	35 53 19	2018	Above Normal	March	--	20,740.7	20,736.1	4.6	0.0%	20,736.1	4.6	0.0%	20,736.1	4.6	0.0%	20,735.0	5.8	0.0%	20,735.0	5.8	0.0%	20,733.8	6.9	0.0%
ME 4	35 53 19	2018	Above Normal	April	--	32,248.8	32,245.4	3.5	0.0%	32,245.4	3.5	0.0%	32,244.2	4.6	0.0%	32,244.2	4.6	0.0%	32,244.2	4.6	0.0%	32,243.1	5.8	0.0%
ME 4	35 53 19	2018	Above Normal	May	--	6,990.2	6,981.8	8.3	0.1%	6,980.9	9.3	0.1%	6,980.1	10.1	0.1%	6,979.3	10.9	0.2%	6,978.5	11.7	0.2%	6,977.5	12.6	0.2%
ME 4	35 53 19	2018	Above Normal	June	--	1,915.0	1,904.2	10.9	0.6%	1,903.1	11.9	0.6%	1,902.0	13.1	0.7%	1,900.9	14.1	0.7%	1,899.8	15.3	0.8%	1,898.7	16.3	0.9%
ME 4	35 53 19	2018	Above Normal	July	--	782.5	770.7	11.8	1.5%	769.5	12.9	1.7%	768.3	14.1	1.8%	767.2	15.3	2.0%	766.0	16.5	2.1%	764.8	17.7	2.3%
ME 4	35 53 19	2018	Above Normal	August	--	443.6	432.6	10.9	2.5%	431.5	12.0	2.7%	430.5	13.1	3.0%	429.4	14.2	3.2%	428.3	15.3	3.4%	427.2	16.4	3.7%
ME 4	35 53 19	2018	Above Normal	September	Used in Summary Table Analysis	300.8	290.3	10.5	3.5%	289.3	11.5	3.8%	288.2	12.6	4.2%	287.2	13.6	4.5%	286.1	14.7	4.9%	285.1	15.7	5.2%
ME 4	35 53 19	2019	Below Normal	October	Used in Summary Table Analysis	208.3	200.1	8.2	3.9%	199.2	9.0	4.3%	198.5	9.8	4.7%	197.6	10.7	5.1%	196.9	11.4	5.5%	196.1	12.2	5.9%
ME 4	35 53 19	2019	Below Normal	November	Used in Summary Table Analysis	6,647.2	6,640.7	6.5	0.1%	6,640.0	7.2	0.1%	6,639.4	7.9	0.1%	6,638.8	8.4	0.1%	6,638.1	9.1	0.1%	6,637.4	9.8	0.1%
ME 4	35 53 19	2019	Below Normal	December	--	14,707.2	14,701.4	5.8	0.0%	14,700.2	6.9	0.0%	14,700.2	6.9	0.0%	14,699.1	8.1	0.1%	14,699.1	8.1	0.1%	14,697.9	9.3	0.1%
ME 4	35 53 19	2019	Below Normal	January	--	35,304.4	35,299.8	4.6	0.0%	35,298.6	5.8	0.0%	35,298.6	5.8	0.0%	35,297.5	6.9	0.0%	35,297.5	6.9	0.0%	35,296.3	8.1	0.0%
ME 4	35 53 19	2019	Below Normal	February	--	142,013.9	142,002.3	11.6	0.0%	142,002.3	11.6	0.0%	142,002.3	11.6	0.0%	142,002.3	11.6	0.0%	142,002.3	11.6	0.0%	142,002.3	11.6	0.0%
ME 4	35 53 19	2019	Below Normal	March	--	42,368.1	42,364.6	3.5	0.0%	42,363.4	4.6	0.0%	42,363.4	4.6	0.0%	42,362.3	5.8	0.0%	42,362.3	5.8	0.0%	42,362.3	5.8	0.0%
ME 4	35 53 19	2019	Below Normal	April	--	15,285.9	15,282.4	3.5	0.0%	15,281.3	4.6	0.0%	15,281.3	4.6	0.0%	15,281.3	4.6	0.0%	15,280.1	5.8	0.0%	15,280.1	5.8	0.0%
ME 4	35 53 19	2019	Below Normal	May	--	17,005.8	16,996.5	9.3	0.1%	16,995.4	10.4	0.1%	16,994.2	11.6	0.1%	16,994.2	11.6	0.1%	16,993.1	12.7	0.1%	16,991.9	13.9	0.1%
ME 4	35 53 19	2019	Below Normal	June	--	4,243.1	4,231.3	11.8	0.3%	4,230.1	13.0	0.3%	4,228.9	14.1	0.3%	4,227.7	15.4	0.4%	4,226.5	16.6	0.4%	4,225.3	17.7	0.4%
ME 4	35 53 19	2019	Below Normal	July	--	1,362.8	1,351.0	11.8	0.9%	1,349.9	13.0	1.0%	1,348.7	14.1	1.0%	1,347.5	15.4	1.1%	1,346.3	16.6	1.2%	1,345.1	17.7	1.3%
ME 4	35 53 19	2019	Below Normal	August	--	597.8	586.5	11.2	1.9%	585.4	12.4	2.1%	584.3	13.5	2.3%	583.1	14.6	2.4%	582.0	15.7	2.6%	580.9	16.9	2.8%
ME 4	35 53 19	2019	Below Normal	September	Used in Summary Table Analysis	463.6	453.1	10.4	2.3%	452.1	11.5	2.5%	451.0	12.5	2.7%	450.0	13.6	2.9%	449.0	14.6	3.2%	447.9	15.7	3.4%
ME 4	35 53 19	2020	Dry	October	Used in Summary Table Analysis	356.3	348.5	7.8	2.2%	347.7	8.6	2.4%	346.9	9.4	2.6%	346.1	10.2	2.9%	345.3	11.0	3.1%	344.5	11.7	3.3%
ME 4	35 53 19	2020	Dry	November	Used in Summary Table Analysis	321.3	315.2	6.1	1.9%	314.5	6.7	2.1%	313.9	7.3	2.3%	313.3	8.0	2.5%	312.7	8.6	2.7%	312.0	9.2	2.9%
ME 4	35 53 19	2020	Dry	December	--	13,344.9	13,339.1	5.8	0.0%	13,339.1	5.8	0.0%	13,338.0	6.9	0.1%	13,338.0	6.9	0.1%	13,336.8	8.1	0.1%	13,336.8	8.1	0.1%
ME 4	35 53 19	2020	Dry	January	--	22,377.3	22,372.7	4.6	0.0%	22,371.5	5.8	0.0%	22,371.5	5.8	0.0%	22,370.4	6.9	0.0%	22,370.4	6.9	0.0%	22,369.2	8.1	0.0%
ME 4	35 53 19	2020	Dry	February	--	7,416.4	7,411.9	4.5	0.1%	7,411.5	5.0	0.1%	7,411.0	5.4	0.1%	7,410.5	5.9	0.1%	7,410.1	6.4	0.1%	7,409.6	6.8	0.1%
ME 4	35 53 19	2020	Dry	March	--	7,252.1	7,247.8	4.3	0.1%	7,247.3	4.7	0.1%	7,247.0	5.1	0.1%	7,246.5	5.6	0.1%	7,246.1	6.0	0.1%	7,245.6	6.5	0.1%
ME 4	35 53 19	2020	Dry	April	--	5,491.7	5,482.9	8.8	0.2%	5,481.9	9.7	0.2%	5,481.0	10.6	0.2%	5,480.2	11.5	0.2%	5,479.3	12.4	0.2%	5,478.4	13.3	0.2%
ME 4	35 53 19	2020	Dry	May	--	7,388.2	7,377.5	10.6	0.1%	7,376.5	11.7	0.2%	7,375.5	12.7	0.2%	7,374.4	13.8	0.2%	7,373.3	14.9	0.2%	7,372.2	16.0	0.2%
ME 4	35 53 19	2020	Dry	June	--	2,104.3	2,090.3	14.0	0.7%	2,088.9	15.4	0.7%	2,087.5	16.8	0.8%	2,086.1	18.2	0.9%	2,084.7	19.6	0.9%	2,083.3	20.9	1.0%
ME 4	35 53 19	2020	Dry	July	--	797.0	783.2	13.7	1.7%	781.9	15.1	1.9%	780.5	16.5	2.1%	779.1	17.8	2.2%	777.8	19.2	2.4%	776.4	20.6	2.6%
ME 4	35 53 19	2020	Dry	August	--	399.7	386.1	13.5	3.4%	384.8	14.9	3.7%	383.4	16.2	4.1%	382.1	17.6	4.4%	380.7	18.9	4.7%	379.4	20.3	5.1%
ME 4	35 53 19	2020	Dry	September	Used in Summary Table Analysis	249.0	236.9	12.1	4.8%	235.7	13.3	5.3%	234.5	14.5	5.8%	233.3	15.7	6.3%	232.1	16.9	6.8%	230.9	18.1	7.3%
ME 5	33 52 21	2000	Above Normal	October	Used in Summary Table Analysis	821.6	813.2	8.4	1.0%	812.3	9.2	1.1%	811.5	10.1	1.2%	810.7	10.9	1.3%	809.8	11.7	1.4%	809.0	12.6	1.5%
ME 5	33 52 21	2000	Above Normal	November	Used in Summary Table Analysis	12,211.8	12,204.9	6.9	0.1%	12,203.7	8.1	0.1%	12,203.7	8.1	0.1%	12,202.5	9.3	0.1%	12,201.4	10.4	0.1%	12,201.4	10.4	0.1%
ME 5	33 52 21	2000	Above Normal	December	--	10,860.0	10,854.4	5.6	0.1%	10,853.8	6.1	0.1%	10,853.2	6.7	0.1%	10,852.7	7.3	0.1%	10,852.1	7.9	0.1%	10,851.5	8.4	0.1%
ME 5	33 52 21	2000	Above Normal	January	--	28,731.5	28,725.7	5.8	0.0%	28,725.7	5.8	0.0%	28,725.7	5.8	0.0%	28,724.5	6.9	0.0%	28,724.5	6.9	0.0%	28,723.4	8.1	0.0%
ME 5	33 52 21	2000	Above Normal	February	--	37,142.4	37,137.7	4.6	0.0%	37,136.6	5.8	0.0%	37,136.6	5.8	0.0%	37,136.6	5.8	0.0%	37,135.4	6.9	0.0%	37,135.4	6.9	0.0%
ME 5	33 52 21	2000	Above Normal	March	--	18,347.2	18,342.6	4.6	0.0%	18,342.6	4.6	0.0%	18,341.4	5.8	0.0%	18,341.4	5.8	0.0%	18,341.4	5.8	0.0%	18,340.3	6.9	0.0%
ME 5	33 52 21	2000	Above Normal	April	--	12,338.0	12,333.3	4.6	0.0%	12,333.3	4.6	0.0%	12,333.3	4.6	0.0%	12,332.2	5.8	0.0%	12,332.2	5.8	0.0%	12,332.2	5.8	0.0%
ME 5	33 52 21	2000	Above Normal	May	--	7,114.4	7,105.7	8.7	0.1%	7,104.7	9.6	0.1%	7,103.9	10.4	0.1%	7,103.0	11.3	0.2%	7,102.2	12.2	0.2%	7,101.3	13.1	0.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 52 21	2000	Above Normal	June	--	2,619.0	2,606.0	13.0	0.5%	2,604.6	14.4	0.5%	2,603.4	15.6	0.6%	2,602.1	16.9	0.6%	2,600.8	18.2	0.7%	2,599.4	19.6	0.7%
ME 5	33 52 21	2000	Above Normal	July	--	995.4	983.5	11.9	1.2%	982.3	13.1	1.3%	981.1	14.3	1.4%	979.9	15.5	1.6%	978.7	16.7	1.7%	977.5	17.9	1.8%
ME 5	33 52 21	2000	Above Normal	August	--	525.8	514.5	11.2	2.1%	513.4	12.3	2.3%	512.3	13.5	2.6%	511.2	14.6	2.8%	510.0	15.7	3.0%	508.9	16.8	3.2%
ME 5	33 52 21	2000	Above Normal	September	Used in Summary Table Analysis	298.7	288.7	10.0	3.3%	287.7	10.9	3.7%	286.7	11.9	4.0%	285.7	12.9	4.3%	284.7	13.9	4.7%	283.7	14.9	5.0%
ME 5	33 52 21	2001	Dry	October	Used in Summary Table Analysis	3,836.8	3,828.6	8.2	0.2%	3,827.8	9.0	0.2%	3,827.0	9.8	0.3%	3,826.2	10.6	0.3%	3,825.3	11.5	0.3%	3,824.5	12.3	0.3%
ME 5	33 52 21	2001	Dry	November	Used in Summary Table Analysis	6,159.1	6,152.4	6.7	0.1%	6,151.9	7.3	0.1%	6,151.2	8.0	0.1%	6,150.5	8.7	0.1%	6,149.8	9.4	0.2%	6,149.2	10.0	0.2%
ME 5	33 52 21	2001	Dry	December	--	8,873.6	8,867.9	5.7	0.1%	8,867.4	6.3	0.1%	8,866.8	6.8	0.1%	8,866.2	7.4	0.1%	8,865.6	8.0	0.1%	8,865.0	8.6	0.1%
ME 5	33 52 21	2001	Dry	January	--	12,857.6	12,853.0	4.6	0.0%	12,851.9	5.8	0.0%	12,851.9	5.8	0.0%	12,851.9	5.8	0.0%	12,850.7	6.9	0.1%	12,850.7	6.9	0.1%
ME 5	33 52 21	2001	Dry	February	--	17,513.9	17,509.3	4.6	0.0%	17,509.3	4.6	0.0%	17,508.1	5.8	0.0%	17,508.1	5.8	0.0%	17,506.9	6.9	0.0%	17,506.9	6.9	0.0%
ME 5	33 52 21	2001	Dry	March	--	12,318.3	12,313.7	4.6	0.0%	12,313.7	4.6	0.0%	12,312.5	5.8	0.0%	12,312.5	5.8	0.0%	12,312.5	5.8	0.0%	12,311.3	6.9	0.1%
ME 5	33 52 21	2001	Dry	April	--	10,994.3	10,985.3	9.0	0.1%	10,984.4	10.0	0.1%	10,983.6	10.8	0.1%	10,982.6	11.7	0.1%	10,981.7	12.6	0.1%	10,980.8	13.5	0.1%
ME 5	33 52 21	2001	Dry	May	--	2,637.3	2,626.6	10.6	0.4%	2,625.5	11.8	0.4%	2,624.4	12.8	0.5%	2,623.5	13.8	0.5%	2,622.3	14.9	0.6%	2,621.3	16.0	0.6%
ME 5	33 52 21	2001	Dry	June	--	2,662.6	2,648.1	14.5	0.5%	2,646.6	16.0	0.6%	2,645.1	17.5	0.7%	2,643.8	18.9	0.7%	2,642.2	20.4	0.8%	2,640.9	21.8	0.8%
ME 5	33 52 21	2001	Dry	July	--	720.1	706.4	13.7	1.9%	705.0	15.1	2.1%	703.6	16.5	2.3%	702.2	17.8	2.5%	700.9	19.2	2.7%	699.5	20.6	2.9%
ME 5	33 52 21	2001	Dry	August	--	175.3	162.0	13.3	7.6%	160.6	14.7	8.4%	159.3	16.1	9.2%	157.9	17.4	9.9%	156.6	18.7	10.7%	155.3	20.1	11.4%
ME 5	33 52 21	2001	Dry	September	Used in Summary Table Analysis	98.5	86.5	12.0	12.1%	85.3	13.2	13.4%	84.1	14.4	14.6%	82.9	15.6	15.9%	81.7	16.8	17.1%	80.5	18.0	18.3%
ME 5	33 52 21	2002	Below Normal	October	Used in Summary Table Analysis	268.6	258.6	10.0	3.7%	257.5	11.0	4.1%	256.5	12.0	4.5%	255.5	13.1	4.9%	254.5	14.1	5.2%	253.4	15.1	5.6%
ME 5	33 52 21	2002	Below Normal	November	Used in Summary Table Analysis	12,072.9	12,064.8	8.1	0.1%	12,063.7	9.3	0.1%	12,062.5	10.4	0.1%	12,062.5	10.4	0.1%	12,061.3	11.6	0.1%	12,060.2	12.7	0.1%
ME 5	33 52 21	2002	Below Normal	December	--	35,821.8	35,816.0	5.8	0.0%	35,814.8	6.9	0.0%	35,813.7	8.1	0.0%	35,813.7	8.1	0.0%	35,812.5	9.3	0.0%	35,811.3	10.4	0.0%
ME 5	33 52 21	2002	Below Normal	January	--	30,965.3	30,958.3	6.9	0.0%	30,958.3	6.9	0.0%	30,957.2	8.1	0.0%	30,957.2	8.1	0.0%	30,956.0	9.3	0.0%	30,956.0	9.3	0.0%
ME 5	33 52 21	2002	Below Normal	February	--	24,729.2	24,723.4	5.8	0.0%	24,723.4	5.8	0.0%	24,722.2	6.9	0.0%	24,722.2	6.9	0.0%	24,721.1	8.1	0.0%	24,721.1	8.1	0.0%
ME 5	33 52 21	2002	Below Normal	March	--	17,819.4	17,814.8	4.6	0.0%	17,813.7	5.8	0.0%	17,813.7	5.8	0.0%	17,812.5	6.9	0.0%	17,812.5	6.9	0.0%	17,811.3	8.1	0.0%
ME 5	33 52 21	2002	Below Normal	April	--	9,940.0	9,931.0	9.0	0.1%	9,930.1	10.0	0.1%	9,929.2	10.9	0.1%	9,928.2	11.8	0.1%	9,927.3	12.7	0.1%	9,926.4	13.7	0.1%
ME 5	33 52 21	2002	Below Normal	May	--	3,324.7	3,314.0	10.6	0.3%	3,313.0	11.7	0.4%	3,311.9	12.7	0.4%	3,310.8	13.9	0.4%	3,309.7	14.9	0.4%	3,308.7	16.0	0.5%
ME 5	33 52 21	2002	Below Normal	June	--	856.5	844.4	12.1	1.4%	843.2	13.3	1.6%	842.0	14.5	1.7%	840.7	15.8	1.8%	839.5	17.0	2.0%	838.3	18.2	2.1%
ME 5	33 52 21	2002	Below Normal	July	--	365.3	353.0	12.3	3.4%	351.7	13.6	3.7%	350.5	14.8	4.0%	349.2	16.0	4.4%	348.0	17.3	4.7%	346.8	18.5	5.1%
ME 5	33 52 21	2002	Below Normal	August	--	230.6	219.0	11.6	5.0%	217.8	12.8	5.5%	216.6	13.9	6.0%	215.5	15.1	6.6%	214.3	16.3	7.1%	213.1	17.4	7.6%
ME 5	33 52 21	2002	Below Normal	September	Used in Summary Table Analysis	167.2	156.2	11.0	6.6%	155.1	12.1	7.2%	154.0	13.2	7.9%	152.9	14.3	8.6%	151.8	15.4	9.2%	150.7	16.5	9.9%
ME 5	33 52 21	2003	Wet	October	Used in Summary Table Analysis	132.1	123.1	9.0	6.8%	122.2	9.9	7.5%	121.3	10.8	8.2%	120.4	11.7	8.9%	119.5	12.6	9.6%	118.6	13.5	10.2%
ME 5	33 52 21	2003	Wet	November	Used in Summary Table Analysis	900.6	893.3	7.3	0.8%	892.6	8.0	0.9%	891.9	8.7	1.0%	891.1	9.5	1.1%	890.4	10.2	1.1%	889.6	10.9	1.2%
ME 5	33 52 21	2003	Wet	December	--	57,149.3	57,142.4	6.9	0.0%	57,142.4	6.9	0.0%	57,141.2	8.1	0.0%	57,141.2	8.1	0.0%	57,140.0	9.3	0.0%	57,140.0	9.3	0.0%
ME 5	33 52 21	2003	Wet	January	--	31,596.1	31,590.3	5.8	0.0%	31,590.3	5.8	0.0%	31,589.1	6.9	0.0%	31,589.1	6.9	0.0%	31,588.0	8.1	0.0%	31,588.0	8.1	0.0%
ME 5	33 52 21	2003	Wet	February	--	20,387.7	20,383.1	4.6	0.0%	20,381.9	5.8	0.0%	20,381.9	5.8	0.0%	20,381.9	5.8	0.0%	20,380.8	6.9	0.0%	20,380.8	6.9	0.0%
ME 5	33 52 21	2003	Wet	March	--	24,088.0	24,083.3	4.6	0.0%	24,082.2	5.8	0.0%	24,082.2	5.8	0.0%	24,082.2	5.8	0.0%	24,081.0	6.9	0.0%	24,081.0	6.9	0.0%
ME 5	33 52 21	2003	Wet	April	--	43,048.6	43,044.0	4.6	0.0%	43,044.0	4.6	0.0%	43,042.8	5.8	0.0%	43,042.8	5.8	0.0%	43,041.7	6.9	0.0%	43,041.7	6.9	0.0%
ME 5	33 52 21	2003	Wet	May	--	12,240.7	12,231.5	9.3	0.1%	12,231.5	9.3	0.1%	12,230.3	10.4	0.1%	12,229.2	11.6	0.1%	12,228.0	12.7	0.1%	12,226.9	13.9	0.1%
ME 5	33 52 21	2003	Wet	June	--	3,170.3	3,158.4	11.8	0.4%	3,157.4	12.8	0.4%	3,156.1	14.1	0.4%	3,155.1	15.2	0.5%	3,153.9	16.3	0.5%	3,152.8	17.5	0.6%
ME 5	33 52 21	2003	Wet	July	--	1,478.6	1,466.3	12.3	0.8%	1,465.2	13.4	0.9%	1,463.9	14.7	1.0%	1,462.7	15.9	1.1%	1,461.5	17.1	1.2%	1,460.2	18.4	1.2%
ME 5	33 52 21	2003	Wet	August	--	764.4	752.5	11.8	1.5%	751.4	13.0	1.7%	750.2	14.2	1.9%	748.9	15.4	2.0%	747.8	16.6	2.2%	746.6	17.8	2.3%
ME 5	33 52 21	2003	Wet	September	Used in Summary Table Analysis	461.9	451.7	10.2	2.2%	450.7	11.2	2.4%	449.7	12.2	2.6%	448.6	13.2	2.9%	447.6	14.2	3.1%	446.6	15.3	3.3%
ME 5	33 52 21	2004	Wet	October	Used in Summary Table Analysis	328.7	320.3	8.4	2.6%	319.5	9.2	2.8%	318.6	10.1	3.1%	317.8	10.9	3.3%	316.9	11.8	3.6%	316.1	12.6	3.8%
ME 5	33 52 21	2004	Wet	November	Used in Summary Table Analysis	5,841.8	5,835.1	6.7	0.1%	5,834.4	7.4	0.1%	5,833.7	8.1	0.1%	5,833.0	8.8	0.2%	5,832.3	9.5	0.2%	5,831.6	10.2	0.2%
ME 5	33 52 21	2004	Wet	December	--	36,485.0	36,479.2	5.8	0.0%	36,478.0	6.9	0.0%	36,478.0	6.9	0.0%	36,476.9	8.1	0.0%	36,476.9	8.1	0.0%	36,475.7	9.3	0.0%
ME 5	33 52 21	2004	Wet	January	--	31,591.4	31,585.6	5.8	0.0%	31,585.6	5.8	0.0%	31,584.5	6.9	0.0%	31,584.5	6.9	0.0%	31,583.3	8.1	0.0%	31,583.3	8.1	0.0%
ME 5	33 52 21	2004	Wet	February	--	38,349.5	38,343.8	5.8	0.0%	38,343.8	5.8	0.0%	38,343.8	5.8	0.0%	38,342.6	6.9	0.0%	38,342.6	6.9	0.0%	38,341.4	8.1	0.0%
ME 5	33 52 21	2004	Wet	March	--	16,542.8	16,538.2	4.6	0.0%	16,538.2	4.6	0.0%	16,537.0	5.8	0.0%	16,537.0	5.8	0.0%	16,535.9	6.9	0.0%	16,535.9	6.9	0.0%
ME 5	33 52 21	2004	Wet	April	--	9,464.4	9,460.3	4.1	0.0%	9,459.8	4.5	0.0%	9,459.4	5.0	0.1%	9,458.9	5.4	0.1%	9,458.6	5.8	0.1%	9,458.1	6.3	0.1%
ME 5	33 52 21	2004	Wet	May	--	3,431.4	3,422.6	8.8	0.3%	3,421.6	9.7	0.3%	3,420.8	10.5	0.3%	3,419.9	11.5	0.3%	3,419.0	12.4	0.4%	3,418.2	13.2	0.4%
ME 5	33 52 21	2004	Wet	June	--	694.3	683.2	11.1	1.6%	682.1	12.2	1.8%	681.0	13.3	1.9%	679.9	14.4	2.1%	678.8	15.6	2.2%	677.7	16.7	2.4%
ME 5	33 52 21	2004	Wet	July	--	359.7	347.8	12.0	3.3%	346.6	13.2	3.7%	345.4	14.4	4.0%	344.2	15.6	4.3%	343.0	16.7	4.7%	341.8	17.9	5.0%
ME 5	33 52 21	2004	Wet	August	--	228.6	217.2	11.3	5.0%	216.1	12.4	5.4%	215.0	13.6	5.9%	213.9	14.7	6.4%	212.7	15.8	6.9%	211.6	17.0	7.4%
ME 5	33 52 21	2004	Wet	September	Used in Summary Table Analysis	165.4	154.6	10.8	6.5%	153.5	11.8	7.1%	152.5	12.9	7.8%	151.4	14.0	8.4%	150.3	15.1	9.1%	149.2	16.1	9.8%
ME 5	33 52 21	2005	Above Normal	October	Used in Summary Table Analysis	7,733.0	7,724.4	8.6	0.1%	7,723.6	9.4	0.1%	7,722.7	10.3	0.1%	7,721.9	11.1	0.1%	7,720.9	12.0	0.2%	7,720.1	12.8	0.2%
ME 5	33 52 21	2005	Above Normal	November	Used in Summary Table Analysis	2,263.8	2,257.1	6.7	0.3%	2,256.4	7.4	0.3%	2,255.7	8.1	0.4%	2,255.0	8.8	0.4%	2,254.3	9.5	0.4%	2,253.6	10.2	0.4%
ME 5	33 52 21	2005	Above Normal	December	--	21,173.6	21,167.8	5.8	0.0%	21,166.7	6.9	0.0%	21,166.7	6.9	0.0%	21,165.5	8.1	0.0%	21,165.5	8.1	0.0%	21,164.4	9.3	0.0%
ME 5	33 52 21	2005	Above Normal	January	--	22,500.0	22,494.2	5.8	0.0%	22,494.2	5.8	0.0%	22,493.1	6.9	0.0%	22,493.1	6.9	0.0%	22,491.9	8.1	0.0%	22,491.9	8.1	0.0%
ME 5	33 52 21	2005	Above Normal	February	--	14,031.3	14,026.6	4.6	0.0%	14,025.5	5.8	0.0%	14,025.5	5.8	0.0%	14,025.5	5.8	0.0%	14,024.3	6.9	0.0%	14,024.3	6.9	0.0%
ME 5	33 52 21	2005	Above Normal	March	--	28,653.9	28,649.3	4.6	0.0%	28,649.3	4.6	0.0%	28,649.3	4.6	0.0%	28,648.1	5.8	0.0%	28,648.1	5.8	0.0%	28,647.0	6.9	0.0%
ME 5	33 52 21	2005	Above Normal	April	--	21,502.3	21,497.7	4.6	0.0%	21,497.7	4.6	0.0%	21,496.5	5.8	0.0%	21,496.5	5.8	0.0%	21,495.4	6.9	0.0%	21,495.4	6.9	0.0%
ME 5	33 52 21	2005	Above Normal	May	--	19,637.7	19,629.6	8.1	0.0%	19,628.5	9.3	0.0%	19,627.3	10.4	0.1%	19,626.2	11.6	0.1%	19,625.0	12.7	0.1%	19,625.0	12.7	0.1%
ME 5	33 52 21	2005	Above Normal	June	--	15,952.5	15,938.7	13.9	0.1%	15,937.5	15.0	0.1%	15,936.3	16.2	0.1%	15,935.2	17.4	0.1%	15,934.0	18.5	0.1%	15,932.9	19.7	0.1%
ME 5	33 52 21	2005	Above Normal	July	--	2,864.6	2,852.2	12.4	0.4%	2,850.9	13.7	0.5%	2,849.8	14.8	0.5%	2,848.5	16.1	0.6%	2,847.2	17.4	0.6%	2,845.9	18.6	0.7%
ME 5	33 52 21	2005	Above Normal	August	--	987.2	976.0	11.3	1.1%	974.8	12.4	1.3%	973.7	13.5	1.4%	972.6	14.7	1.5%	971.5	15.8	1.6%	970.4	16.9	1.7%
ME 5	33 52 21	2005	Above Normal	September	Used in Summary Table Analysis	528.8	518.8	10.0	1.9%	517.8	11.0	2.1%	516.8	12.0	2.3%	515.8	13.0	2.4%	514.8	14.0	2.6%	513.8	15.0	2.8%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 52 21	2006	Wet	October	Used in Summary Table Analysis	639.2	631.1	8.1	1.3%	630.3	8.9	1.4%	629.5	9.7	1.5%	628.7	10.5	1.6%	627.9	11.4	1.8%	627.1	12.2	1.9%
ME 5	33 52 21	2006	Wet	November	Used in Summary Table Analysis	9,373.0	9,366.7	6.4	0.1%	9,366.0	7.1	0.1%	9,365.4	7.6	0.1%	9,364.7	8.3	0.1%	9,364.1	8.9	0.1%	9,363.4	9.6	0.1%
ME 5	33 52 21	2006	Wet	December	--	43,719.9	43,714.1	5.8	0.0%	43,713.0	6.9	0.0%	43,713.0	6.9	0.0%	43,711.8	8.1	0.0%	43,711.8	8.1	0.0%	43,710.6	9.3	0.0%
ME 5	33 52 21	2006	Wet	January	--	46,497.7	46,491.9	5.8	0.0%	46,491.9	5.8	0.0%	46,490.7	6.9	0.0%	46,490.7	6.9	0.0%	46,489.6	8.1	0.0%	46,489.6	8.1	0.0%
ME 5	33 52 21	2006	Wet	February	--	26,703.7	26,699.1	4.6	0.0%	26,697.9	5.8	0.0%	26,697.9	5.8	0.0%	26,697.9	5.8	0.0%	26,696.8	6.9	0.0%	26,696.8	6.9	0.0%
ME 5	33 52 21	2006	Wet	March	--	47,316.0	47,311.3	4.6	0.0%	47,311.3	4.6	0.0%	47,311.3	4.6	0.0%	47,310.2	5.8	0.0%	47,310.2	5.8	0.0%	47,309.0	6.9	0.0%
ME 5	33 52 21	2006	Wet	April	--	30,489.6	30,485.0	4.6	0.0%	30,485.0	4.6	0.0%	30,483.8	5.8	0.0%	30,483.8	5.8	0.0%	30,483.8	5.8	0.0%	30,482.6	6.9	0.0%
ME 5	33 52 21	2006	Wet	May	--	14,243.1	14,237.3	5.8	0.0%	14,236.1	6.9	0.0%	14,236.1	6.9	0.0%	14,236.1	6.9	0.0%	14,235.0	8.1	0.1%	14,235.0	8.1	0.1%
ME 5	33 52 21	2006	Wet	June	--	3,550.9	3,539.8	11.1	0.3%	3,538.8	12.2	0.3%	3,537.7	13.2	0.4%	3,536.6	14.4	0.4%	3,535.4	15.5	0.4%	3,534.4	16.6	0.5%
ME 5	33 52 21	2006	Wet	July	--	1,284.1	1,272.3	11.8	0.9%	1,271.2	13.0	1.0%	1,270.0	14.1	1.1%	1,268.9	15.3	1.2%	1,267.7	16.4	1.3%	1,266.4	17.7	1.4%
ME 5	33 52 21	2006	Wet	August	--	670.3	658.8	11.5	1.7%	657.7	12.7	1.9%	656.5	13.8	2.1%	655.3	15.0	2.2%	654.2	16.2	2.4%	653.0	17.3	2.6%
ME 5	33 52 21	2006	Wet	September	Used in Summary Table Analysis	430.8	420.7	10.1	2.3%	419.7	11.1	2.6%	418.7	12.1	2.8%	417.7	13.2	3.1%	416.7	14.2	3.3%	415.6	15.2	3.5%
ME 5	33 52 21	2007	Above Normal	October	Used in Summary Table Analysis	278.3	270.1	8.3	3.0%	269.3	9.1	3.3%	268.4	9.9	3.6%	267.6	10.7	3.9%	266.8	11.6	4.2%	266.0	12.4	4.4%
ME 5	33 52 21	2007	Above Normal	November	Used in Summary Table Analysis	8,725.7	8,719.0	6.7	0.1%	8,718.3	7.4	0.1%	8,717.7	8.0	0.1%	8,717.0	8.7	0.1%	8,716.3	9.4	0.1%	8,715.6	10.1	0.1%
ME 5	33 52 21	2007	Above Normal	December	--	20,531.3	20,525.5	5.8	0.0%	20,524.3	6.9	0.0%	20,523.1	8.1	0.0%	20,523.1	8.1	0.0%	20,522.0	9.3	0.0%	20,522.0	9.3	0.0%
ME 5	33 52 21	2007	Above Normal	January	--	10,282.8	10,277.5	5.2	0.1%	10,277.1	5.7	0.1%	10,276.5	6.3	0.1%	10,276.0	6.7	0.1%	10,275.5	7.3	0.1%	10,275.0	7.8	0.1%
ME 5	33 52 21	2007	Above Normal	February	--	30,706.0	30,701.4	4.6	0.0%	30,701.4	4.6	0.0%	30,700.2	5.8	0.0%	30,700.2	5.8	0.0%	30,700.2	5.8	0.0%	30,699.1	6.9	0.0%
ME 5	33 52 21	2007	Above Normal	March	--	13,123.8	13,119.2	4.6	0.0%	13,119.2	4.6	0.0%	13,118.1	5.8	0.0%	13,118.1	5.8	0.0%	13,118.1	5.8	0.0%	13,116.9	6.9	0.1%
ME 5	33 52 21	2007	Above Normal	April	--	11,555.8	11,547.2	8.6	0.1%	11,546.3	9.5	0.1%	11,545.5	10.3	0.1%	11,544.6	11.2	0.1%	11,543.6	12.2	0.1%	11,542.8	13.0	0.1%
ME 5	33 52 21	2007	Above Normal	May	--	4,149.2	4,138.9	10.3	0.2%	4,137.8	11.3	0.3%	4,136.9	12.3	0.3%	4,135.9	13.3	0.3%	4,134.8	14.4	0.3%	4,133.8	15.4	0.4%
ME 5	33 52 21	2007	Above Normal	June	--	1,505.2	1,492.8	12.4	0.8%	1,491.6	13.7	0.9%	1,490.3	14.9	1.0%	1,489.1	16.1	1.1%	1,487.8	17.4	1.2%	1,486.6	18.6	1.2%
ME 5	33 52 21	2007	Above Normal	July	--	498.9	486.4	12.6	2.5%	485.1	13.8	2.8%	483.9	15.1	3.0%	482.6	16.3	3.3%	481.4	17.6	3.5%	480.1	18.8	3.8%
ME 5	33 52 21	2007	Above Normal	August	--	226.7	215.3	11.4	5.0%	214.2	12.5	5.5%	213.0	13.6	6.0%	211.9	14.8	6.5%	210.8	15.9	7.0%	209.6	17.0	7.5%
ME 5	33 52 21	2007	Above Normal	September	Used in Summary Table Analysis	154.3	143.6	10.8	7.0%	142.5	11.8	7.7%	141.4	12.9	8.4%	140.3	14.0	9.1%	139.3	15.1	9.8%	138.2	16.1	10.5%
ME 5	33 52 21	2008	Dry	October	Used in Summary Table Analysis	3,455.2	3,446.4	8.8	0.3%	3,445.5	9.7	0.3%	3,444.7	10.5	0.3%	3,443.8	11.5	0.3%	3,442.9	12.3	0.4%	3,442.0	13.2	0.4%
ME 5	33 52 21	2008	Dry	November	Used in Summary Table Analysis	3,295.4	3,288.5	6.8	0.2%	3,287.8	7.5	0.2%	3,287.2	8.2	0.2%	3,286.5	8.9	0.3%	3,285.8	9.6	0.3%	3,285.1	10.3	0.3%
ME 5	33 52 21	2008	Dry	December	--	23,283.6	23,277.8	5.8	0.0%	23,276.6	6.9	0.0%	23,276.6	6.9	0.0%	23,275.5	8.1	0.0%	23,275.5	8.1	0.0%	23,274.3	9.3	0.0%
ME 5	33 52 21	2008	Dry	January	--	37,681.7	37,675.9	5.8	0.0%	37,674.8	6.9	0.0%	37,674.8	6.9	0.0%	37,673.6	8.1	0.0%	37,673.6	8.1	0.0%	37,672.5	9.3	0.0%
ME 5	33 52 21	2008	Dry	February	--	26,305.6	26,300.9	4.6	0.0%	26,300.9	4.6	0.0%	26,300.9	4.6	0.0%	26,299.8	5.8	0.0%	26,299.8	5.8	0.0%	26,298.6	6.9	0.0%
ME 5	33 52 21	2008	Dry	March	--	11,810.2	11,806.7	3.5	0.0%	11,805.6	4.6	0.0%	11,805.6	4.6	0.0%	11,805.6	4.6	0.0%	11,804.4	5.8	0.0%	11,804.4	5.8	0.0%
ME 5	33 52 21	2008	Dry	April	--	9,029.7	9,020.9	8.8	0.1%	9,020.0	9.7	0.1%	9,019.2	10.5	0.1%	9,018.3	11.5	0.1%	9,017.5	12.3	0.1%	9,016.6	13.2	0.1%
ME 5	33 52 21	2008	Dry	May	--	1,358.4	1,349.0	9.5	0.7%	1,348.0	10.4	0.8%	1,347.1	11.3	0.8%	1,346.2	12.3	0.9%	1,345.3	13.2	1.0%	1,344.3	14.1	1.0%
ME 5	33 52 21	2008	Dry	June	--	440.9	427.3	13.6	3.1%	426.0	15.0	3.4%	424.7	16.3	3.7%	423.3	17.7	4.0%	421.9	19.0	4.3%	420.6	20.3	4.6%
ME 5	33 52 21	2008	Dry	July	--	258.9	245.5	13.4	5.2%	244.1	14.8	5.7%	242.8	16.1	6.2%	241.5	17.5	6.7%	240.1	18.8	7.3%	238.8	20.2	7.8%
ME 5	33 52 21	2008	Dry	August	--	182.5	169.4	13.1	7.2%	168.1	14.4	7.9%	166.8	15.7	8.6%	165.5	17.0	9.3%	164.2	18.3	10.0%	162.9	19.6	10.8%
ME 5	33 52 21	2008	Dry	September	Used in Summary Table Analysis	144.1	131.5	12.6	8.7%	130.3	13.9	9.6%	129.0	15.1	10.5%	127.8	16.4	11.4%	126.5	17.7	12.2%	125.2	18.9	13.1%
ME 5	33 52 21	2009	Critical	October	Used in Summary Table Analysis	928.7	918.8	10.0	1.1%	917.7	11.0	1.2%	916.7	12.0	1.3%	915.7	13.0	1.4%	914.7	14.0	1.5%	913.7	15.0	1.6%
ME 5	33 52 21	2009	Critical	November	Used in Summary Table Analysis	5,550.2	5,542.5	7.8	0.1%	5,541.7	8.6	0.2%	5,540.9	9.4	0.2%	5,540.2	10.1	0.2%	5,539.4	10.9	0.2%	5,538.5	11.7	0.2%
ME 5	33 52 21	2009	Critical	December	--	12,246.5	12,240.7	5.8	0.0%	12,239.6	6.9	0.1%	12,238.4	8.1	0.1%	12,238.4	8.1	0.1%	12,237.3	9.3	0.1%	12,237.3	9.3	0.1%
ME 5	33 52 21	2009	Critical	January	--	8,819.6	8,813.5	6.0	0.1%	8,813.0	6.6	0.1%	8,812.4	7.2	0.1%	8,811.8	7.8	0.1%	8,811.1	8.4	0.1%	8,810.5	9.0	0.1%
ME 5	33 52 21	2009	Critical	February	--	22,682.9	22,678.2	4.6	0.0%	22,677.1	5.8	0.0%	22,677.1	5.8	0.0%	22,675.9	6.9	0.0%	22,675.9	6.9	0.0%	22,674.8	8.1	0.0%
ME 5	33 52 21	2009	Critical	March	--	21,172.5	21,167.8	4.6	0.0%	21,166.7	5.8	0.0%	21,166.7	5.8	0.0%	21,165.5	6.9	0.0%	21,165.5	6.9	0.0%	21,165.5	6.9	0.0%
ME 5	33 52 21	2009	Critical	April	--	10,102.4	10,093.3	9.1	0.1%	10,092.4	10.1	0.1%	10,091.3	11.1	0.1%	10,090.6	11.8	0.1%	10,089.7	12.7	0.1%	10,088.7	13.8	0.1%
ME 5	33 52 21	2009	Critical	May	--	15,610.0	15,598.4	11.6	0.1%	15,597.2	12.7	0.1%	15,596.1	13.9	0.1%	15,594.9	15.0	0.1%	15,593.8	16.2	0.1%	15,592.6	17.4	0.1%
ME 5	33 52 21	2009	Critical	June	--	3,163.8	3,149.4	14.4	0.5%	3,148.0	15.7	0.5%	3,146.5	17.2	0.5%	3,145.1	18.6	0.6%	3,143.6	20.1	0.6%	3,142.2	21.5	0.7%
ME 5	33 52 21	2009	Critical	July	--	1,266.2	1,252.7	13.5	1.1%	1,251.3	14.9	1.2%	1,249.9	16.3	1.3%	1,248.5	17.7	1.4%	1,247.2	19.0	1.5%	1,245.8	20.4	1.6%
ME 5	33 52 21	2009	Critical	August	--	672.5	659.2	13.2	2.0%	657.9	14.5	2.2%	656.6	15.8	2.4%	655.3	17.2	2.6%	654.0	18.5	2.7%	652.7	19.8	2.9%
ME 5	33 52 21	2009	Critical	September	Used in Summary Table Analysis	393.4	381.5	11.8	3.0%	380.3	13.0	3.3%	379.2	14.2	3.6%	378.0	15.4	3.9%	376.8	16.6	4.2%	375.6	17.7	4.5%
ME 5	33 52 21	2010	Below Normal	October	Used in Summary Table Analysis	6,094.2	6,084.0	10.2	0.2%	6,083.0	11.2	0.2%	6,082.1	12.2	0.2%	6,081.0	13.2	0.2%	6,080.0	14.2	0.2%	6,079.1	15.2	0.2%
ME 5	33 52 21	2010	Below Normal	November	Used in Summary Table Analysis	8,316.9	8,308.8	8.1	0.1%	8,308.0	8.9	0.1%	8,307.2	9.7	0.1%	8,306.4	10.5	0.1%	8,305.7	11.2	0.1%	8,304.9	12.0	0.1%
ME 5	33 52 21	2010	Below Normal	December	--	12,409.7	12,402.8	6.9	0.1%	12,402.8	6.9	0.1%	12,401.6	8.1	0.1%	12,400.5	9.3	0.1%	12,400.5	9.3	0.1%	12,399.3	10.4	0.1%
ME 5	33 52 21	2010	Below Normal	January	--	36,421.3	36,414.4	6.9	0.0%	36,414.4	6.9	0.0%	36,413.2	8.1	0.0%	36,413.2	8.1	0.0%	36,412.0	9.3	0.0%	36,412.0	9.3	0.0%
ME 5	33 52 21	2010	Below Normal	February	--	27,297.5	27,291.7	5.8	0.0%	27,290.5	6.9	0.0%	27,290.5	6.9	0.0%	27,290.5	6.9	0.0%	27,289.4	8.1	0.0%	27,289.4	8.1	0.0%
ME 5	33 52 21	2010	Below Normal	March	--	28,881.9	28,877.3	4.6	0.0%	28,876.2	5.8	0.0%	28,876.2	5.8	0.0%	28,876.2	5.8	0.0%	28,875.0	6.9	0.0%	28,875.0	6.9	0.0%
ME 5	33 52 21	2010	Below Normal	April	--	40,098.4	40,093.8	4.6	0.0%	40,093.8	4.6	0.0%	40,092.6	5.8	0.0%	40,092.6	5.8	0.0%	40,091.4	6.9	0.0%	40,091.4	6.9	0.0%
ME 5	33 52 21	2010	Below Normal	May	--	20,334.5	20,325.2	9.3	0.0%	20,324.1	10.4	0.1%	20,324.1	10.4	0.1%	20,322.9	11.6	0.1%	20,321.8	12.7	0.1%	20,320.6	13.9	0.1%
ME 5	33 52 21	2010	Below Normal	June	--	9,402.8	9,389.0	13.8	0.1%	9,387.7	15.0	0.2%	9,386.3	16.4	0.2%	9,385.0	17.8	0.2%	9,383.6	19.2	0.2%	9,382.2	20.6	0.2%
ME 5	33 52 21	2010	Below Normal	July	--	1,457.6	1,445.1	12.5	0.9%	1,443.9	13.8	0.9%	1,442.6	15.0	1.0%	1,441.3	16.3	1.1%	1,440.0	17.6	1.2%	1,438.8	18.9	1.3%
ME 5	33 52 21	2010	Below Normal	August	--	573.4	561.8	11.6	2.0%	560.6	12.8	2.2%	559.4	14.0	2.4%	558.3	15.1	2.6%	557.2	16.2	2.8%	556.0	17.4	3.0%
ME 5	33 52 21	2010	Below Normal	September	Used in Summary Table Analysis	655.8	644.8	11.0	1.7%	643.7	12.1	1.8%	642.6	13.2	2.0%	641.5	14.3	2.2%	640.4	15.4	2.4%	639.3	16.5	2.5%
ME 5	33 52 21	2011	Wet	October	Used in Summary Table Analysis	9,676.0	9,667.7	8.3	0.1%	9,666.9	9.1	0.1%	9,666.0	10.1	0.1%	9,665.2	10.9	0.1%	9,664.4	11.7	0.1%	9,663.5	12.5	0.1%
ME 5	33 52 21	2011	Wet	November	Used in Summary Table Analysis	14,268.5	14,261.6	6.9	0.0%	14,261.6	6.9	0.0%	14,260.4	8.1	0.1%	14,259.3	9.3	0.1%	14,259.3	9.3	0.1%	14,258.1	10.4	0.1%
ME 5	33 52 21	2011	Wet	December	--	33,900.5	33,894.7	5.8	0.0%	33,893.5	6.9	0.0%	33,893.5	6.9	0.0%	33,892.4	8.1	0.0%	33,892.4	8.1	0.0%	33,891.2	9.3	0.0%
ME 5	33 52 21	2011	Wet	January	--	14,193.3	14,187.5	5.8	0.0%	14,187.5	5.8	0.0%	14,186.3	6.9	0.0%	14,186.3	6.9	0.0%	14,186.3	6.9	0.0%	14,185.2	8.1	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 52 21	2011	Wet	February	--	20,804.4	20,799.8	4.6	0.0%	20,798.6	5.8	0.0%	20,798.6	5.8	0.0%	20,797.5	6.9	0.0%	20,797.5	6.9	0.0%	20,796.3	8.1	0.0%
ME 5	33 52 21	2011	Wet	March	--	52,136.6	52,131.9	4.6	0.0%	52,131.9	4.6	0.0%	52,131.9	4.6	0.0%	52,130.8	5.8	0.0%	52,130.8	5.8	0.0%	52,129.6	6.9	0.0%
ME 5	33 52 21	2011	Wet	April	--	24,843.8	24,840.3	3.5	0.0%	24,839.1	4.6	0.0%	24,839.1	4.6	0.0%	24,838.0	5.8	0.0%	24,838.0	5.8	0.0%	24,838.0	5.8	0.0%
ME 5	33 52 21	2011	Wet	May	--	11,403.8	11,394.9	8.9	0.1%	11,394.1	9.7	0.1%	11,393.2	10.6	0.1%	11,392.2	11.6	0.1%	11,391.3	12.5	0.1%	11,390.4	13.4	0.1%
ME 5	33 52 21	2011	Wet	June	--	7,077.7	7,064.4	13.3	0.2%	7,063.0	14.7	0.2%	7,061.6	16.1	0.2%	7,060.3	17.4	0.2%	7,058.9	18.8	0.3%	7,057.6	20.0	0.3%
ME 5	33 52 21	2011	Wet	July	--	1,830.7	1,817.2	13.4	0.7%	1,816.0	14.7	0.8%	1,814.6	16.1	0.9%	1,813.3	17.4	0.9%	1,811.9	18.8	1.0%	1,810.6	20.0	1.1%
ME 5	33 52 21	2011	Wet	August	--	780.6	769.1	11.4	1.5%	768.0	12.6	1.6%	766.8	13.7	1.8%	765.7	14.9	1.9%	764.6	16.0	2.1%	763.4	17.1	2.2%
ME 5	33 52 21	2011	Wet	September	Used in Summary Table Analysis	437.2	426.8	10.4	2.4%	425.8	11.5	2.6%	424.7	12.5	2.9%	423.7	13.5	3.1%	422.6	14.6	3.3%	421.6	15.6	3.6%
ME 5	33 52 21	2012	Below Normal	October	Used in Summary Table Analysis	4,563.5	4,555.0	8.6	0.2%	4,554.2	9.4	0.2%	4,553.4	10.2	0.2%	4,552.4	11.1	0.2%	4,551.6	11.9	0.3%	4,550.8	12.7	0.3%
ME 5	33 52 21	2012	Below Normal	November	Used in Summary Table Analysis	8,283.0	8,276.2	6.8	0.1%	8,275.5	7.5	0.1%	8,274.8	8.2	0.1%	8,274.1	8.9	0.1%	8,273.4	9.6	0.1%	8,272.7	10.3	0.1%
ME 5	33 52 21	2012	Below Normal	December	--	5,203.0	5,197.2	5.8	0.1%	5,196.6	6.4	0.1%	5,196.1	6.9	0.1%	5,195.5	7.5	0.1%	5,194.9	8.1	0.2%	5,194.3	8.7	0.2%
ME 5	33 52 21	2012	Below Normal	January	--	20,245.4	20,240.7	4.6	0.0%	20,239.6	5.8	0.0%	20,239.6	5.8	0.0%	20,238.4	6.9	0.0%	20,238.4	6.9	0.0%	20,237.3	8.1	0.0%
ME 5	33 52 21	2012	Below Normal	February	--	18,250.0	18,245.4	4.6	0.0%	18,244.2	5.8	0.0%	18,244.2	5.8	0.0%	18,243.1	6.9	0.0%	18,243.1	6.9	0.0%	18,241.9	8.1	0.0%
ME 5	33 52 21	2012	Below Normal	March	--	45,577.5	45,572.9	4.6	0.0%	45,572.9	4.6	0.0%	45,571.8	5.8	0.0%	45,571.8	5.8	0.0%	45,570.6	6.9	0.0%	45,570.6	6.9	0.0%
ME 5	33 52 21	2012	Below Normal	April	--	26,914.4	26,909.7	4.6	0.0%	26,909.7	4.6	0.0%	26,908.6	5.8	0.0%	26,908.6	5.8	0.0%	26,907.4	6.9	0.0%	26,907.4	6.9	0.0%
ME 5	33 52 21	2012	Below Normal	May	--	7,495.6	7,486.8	8.8	0.1%	7,485.9	9.7	0.1%	7,485.0	10.6	0.1%	7,484.0	11.6	0.2%	7,483.2	12.4	0.2%	7,482.4	13.2	0.2%
ME 5	33 52 21	2012	Below Normal	June	--	5,536.7	5,523.1	13.5	0.2%	5,521.8	14.9	0.3%	5,520.4	16.3	0.3%	5,519.0	17.7	0.3%	5,517.7	19.0	0.3%	5,516.3	20.4	0.4%
ME 5	33 52 21	2012	Below Normal	July	--	2,236.9	2,224.0	13.0	0.6%	2,222.7	14.2	0.6%	2,221.4	15.5	0.7%	2,220.1	16.8	0.8%	2,218.9	18.1	0.8%	2,217.6	19.3	0.9%
ME 5	33 52 21	2012	Below Normal	August	--	391.2	380.6	10.6	2.7%	379.6	11.6	3.0%	378.6	12.6	3.2%	377.5	13.7	3.5%	376.5	14.7	3.8%	375.5	15.7	4.0%
ME 5	33 52 21	2012	Below Normal	September	Used in Summary Table Analysis	252.7	243.4	9.4	3.7%	242.4	10.3	4.1%	241.5	11.3	4.5%	240.5	12.2	4.8%	239.6	13.1	5.2%	238.7	14.1	5.6%
ME 5	33 52 21	2013	Below Normal	October	Used in Summary Table Analysis	1,926.5	1,918.3	8.2	0.4%	1,917.5	9.0	0.5%	1,916.7	9.8	0.5%	1,915.9	10.6	0.6%	1,915.0	11.5	0.6%	1,914.2	12.3	0.6%
ME 5	33 52 21	2013	Below Normal	November	Used in Summary Table Analysis	14,768.5	14,761.6	6.9	0.0%	14,761.6	6.9	0.0%	14,760.4	8.1	0.1%	14,760.4	8.1	0.1%	14,759.3	9.3	0.1%	14,758.1	10.4	0.1%
ME 5	33 52 21	2013	Below Normal	December	--	60,177.1	60,170.1	6.9	0.0%	60,170.1	6.9	0.0%	60,169.0	8.1	0.0%	60,169.0	8.1	0.0%	60,167.8	9.3	0.0%	60,167.8	9.3	0.0%
ME 5	33 52 21	2013	Below Normal	January	--	22,254.6	22,248.8	5.8	0.0%	22,248.8	5.8	0.0%	22,247.7	6.9	0.0%	22,247.7	6.9	0.0%	22,247.7	6.9	0.0%	22,246.5	8.1	0.0%
ME 5	33 52 21	2013	Below Normal	February	--	8,870.4	8,865.6	4.7	0.1%	8,865.2	5.2	0.1%	8,864.7	5.7	0.1%	8,864.2	6.1	0.1%	8,863.8	6.6	0.1%	8,863.2	7.2	0.1%
ME 5	33 52 21	2013	Below Normal	March	--	10,368.4	10,363.8	4.6	0.0%	10,363.4	5.0	0.0%	10,363.0	5.4	0.1%	10,362.5	5.9	0.1%	10,362.0	6.4	0.1%	10,361.6	6.8	0.1%
ME 5	33 52 21	2013	Below Normal	April	--	8,302.2	8,293.8	8.4	0.1%	8,292.8	9.4	0.1%	8,292.0	10.2	0.1%	8,291.2	11.0	0.1%	8,290.3	11.9	0.1%	8,289.5	12.7	0.2%
ME 5	33 52 21	2013	Below Normal	May	--	4,445.7	4,435.4	10.3	0.2%	4,434.4	11.3	0.3%	4,433.4	12.3	0.3%	4,432.4	13.3	0.3%	4,431.4	14.4	0.3%	4,430.3	15.4	0.3%
ME 5	33 52 21	2013	Below Normal	June	--	2,115.3	2,103.0	12.3	0.6%	2,101.7	13.5	0.6%	2,100.5	14.8	0.7%	2,099.3	16.0	0.8%	2,098.0	17.2	0.8%	2,096.9	18.4	0.9%
ME 5	33 52 21	2013	Below Normal	July	--	720.4	708.4	12.1	1.7%	707.2	13.3	1.8%	705.9	14.5	2.0%	704.7	15.7	2.2%	703.6	16.9	2.3%	702.3	18.1	2.5%
ME 5	33 52 21	2013	Below Normal	August	--	343.4	332.1	11.3	3.3%	331.0	12.4	3.6%	329.8	13.6	4.0%	328.7	14.7	4.3%	327.6	15.8	4.6%	326.5	17.0	4.9%
ME 5	33 52 21	2013	Below Normal	September	Used in Summary Table Analysis	4,808.8	4,797.1	11.7	0.2%	4,795.9	12.8	0.3%	4,794.8	14.0	0.3%	4,793.6	15.2	0.3%	4,792.5	16.3	0.3%	4,791.3	17.5	0.4%
ME 5	33 52 21	2014	Critical	October	Used in Summary Table Analysis	281.7	273.1	8.6	3.1%	272.2	9.5	3.4%	271.4	10.3	3.7%	270.5	11.2	4.0%	269.7	12.0	4.3%	268.8	12.9	4.6%
ME 5	33 52 21	2014	Critical	November	Used in Summary Table Analysis	1,550.2	1,543.3	6.9	0.4%	1,542.6	7.6	0.5%	1,541.9	8.3	0.5%	1,541.2	9.0	0.6%	1,540.5	9.7	0.6%	1,539.8	10.4	0.7%
ME 5	33 52 21	2014	Critical	December	--	1,597.0	1,591.0	6.0	0.4%	1,590.4	6.6	0.4%	1,589.7	7.3	0.5%	1,589.1	7.9	0.5%	1,588.5	8.4	0.5%	1,588.0	9.0	0.6%
ME 5	33 52 21	2014	Critical	January	--	2,833.9	2,828.6	5.3	0.2%	2,828.1	5.8	0.2%	2,827.5	6.4	0.2%	2,827.0	6.9	0.2%	2,826.5	7.4	0.3%	2,825.9	8.0	0.3%
ME 5	33 52 21	2014	Critical	February	--	15,789.4	15,784.7	4.6	0.0%	15,784.7	4.6	0.0%	15,783.6	5.8	0.0%	15,783.6	5.8	0.0%	15,782.4	6.9	0.0%	15,782.4	6.9	0.0%
ME 5	33 52 21	2014	Critical	March	--	31,533.6	31,528.9	4.6	0.0%	31,527.8	5.8	0.0%	31,527.8	5.8	0.0%	31,526.6	6.9	0.0%	31,526.6	6.9	0.0%	31,526.6	6.9	0.0%
ME 5	33 52 21	2014	Critical	April	--	13,005.8	12,996.5	9.3	0.1%	12,995.4	10.4	0.1%	12,995.4	10.4	0.1%	12,994.2	11.6	0.1%	12,993.1	12.7	0.1%	12,991.9	13.9	0.1%
ME 5	33 52 21	2014	Critical	May	--	5,197.9	5,187.2	10.8	0.2%	5,186.0	11.9	0.2%	5,185.0	13.0	0.2%	5,183.9	14.0	0.3%	5,182.8	15.2	0.3%	5,181.7	16.2	0.3%
ME 5	33 52 21	2014	Critical	June	--	1,202.0	1,187.2	14.8	1.2%	1,185.6	16.3	1.4%	1,184.1	17.8	1.5%	1,182.8	19.2	1.6%	1,181.3	20.7	1.7%	1,179.7	22.2	1.8%
ME 5	33 52 21	2014	Critical	July	--	548.6	534.8	13.8	2.5%	533.5	15.2	2.8%	532.1	16.5	3.0%	530.7	17.9	3.3%	529.4	19.3	3.5%	528.0	20.6	3.8%
ME 5	33 52 21	2014	Critical	August	--	351.4	338.3	13.2	3.7%	337.0	14.5	4.1%	335.6	15.8	4.5%	334.3	17.1	4.9%	333.0	18.4	5.2%	331.7	19.7	5.6%
ME 5	33 52 21	2014	Critical	September	Used in Summary Table Analysis	2,584.5	2,571.5	13.0	0.5%	2,570.3	14.2	0.6%	2,569.0	15.5	0.6%	2,567.7	16.8	0.6%	2,566.4	18.1	0.7%	2,565.2	19.3	0.7%
ME 5	33 52 21	2015	Dry	October	Used in Summary Table Analysis	11,403.5	11,393.5	10.0	0.1%	11,392.6	10.9	0.1%	11,391.6	11.9	0.1%	11,389.9	13.5	0.1%	11,388.9	14.6	0.1%	11,388.0	15.5	0.1%
ME 5	33 52 21	2015	Dry	November	Used in Summary Table Analysis	9,082.6	9,075.0	7.6	0.1%	9,074.2	8.4	0.1%	9,073.5	9.1	0.1%	9,072.7	10.0	0.1%	9,071.9	10.8	0.1%	9,071.2	11.5	0.1%
ME 5	33 52 21	2015	Dry	December	--	32,783.6	32,776.6	6.9	0.0%	32,775.5	8.1	0.0%	32,775.5	8.1	0.0%	32,774.3	9.3	0.0%	32,774.3	9.3	0.0%	32,773.1	10.4	0.0%
ME 5	33 52 21	2015	Dry	January	--	14,601.9	14,596.1	5.8	0.0%	14,596.1	5.8	0.0%	14,594.9	6.9	0.0%	14,594.9	6.9	0.0%	14,593.8	8.1	0.1%	14,592.6	9.3	0.1%
ME 5	33 52 21	2015	Dry	February	--	27,298.6	27,294.0	4.6	0.0%	27,292.8	5.8	0.0%	27,292.8	5.8	0.0%	27,291.7	6.9	0.0%	27,291.7	6.9	0.0%	27,290.5	8.1	0.0%
ME 5	33 52 21	2015	Dry	March	--	11,585.6	11,581.0	4.6	0.0%	11,579.9	5.8	0.0%	11,579.9	5.8	0.0%	11,579.9	5.8	0.0%	11,578.7	6.9	0.1%	11,578.7	6.9	0.1%
ME 5	33 52 21	2015	Dry	April	--	8,428.8	8,419.9	8.9	0.1%	8,419.0	9.8	0.1%	8,418.1	10.8	0.1%	8,417.1	11.7	0.1%	8,416.2	12.6	0.1%	8,415.3	13.5	0.2%
ME 5	33 52 21	2015	Dry	May	--	1,509.8	1,499.2	10.6	0.7%	1,498.1	11.7	0.8%	1,497.0	12.8	0.9%	1,495.9	13.9	0.9%	1,494.9	14.9	1.0%	1,493.9	16.0	1.1%
ME 5	33 52 21	2015	Dry	June	--	654.7	641.0	13.8	2.1%	639.6	15.2	2.3%	638.2	16.6	2.5%	636.8	17.9	2.7%	635.5	19.3	2.9%	634.1	20.7	3.2%
ME 5	33 52 21	2015	Dry	July	--	271.1	257.5	13.5	5.0%	256.2	14.9	5.5%	254.8	16.2	6.0%	253.5	17.6	6.5%	252.2	18.9	7.0%	250.8	20.3	7.5%
ME 5	33 52 21	2015	Dry	August	--	169.6	156.5	13.1	7.7%	155.2	14.4	8.5%	153.9	15.7	9.3%	152.6	17.0	10.0%	151.3	18.4	10.8%	149.9	19.7	11.6%
ME 5	33 52 21	2015	Dry	September	Used in Summary Table Analysis	123.4	111.7	11.7	9.5%	110.5	12.9	10.5%	109.3	14.1	11.4%	108.1	15.3	12.4%	106.9	16.5	13.4%	105.8	17.7	14.3%
ME 5	33 52 21	2016	Above Normal	October	Used in Summary Table Analysis	88.6	78.6	10.0	11.3%	77.6	11.0	12.4%	76.6	12.0	13.6%	76.1	12.5	14.1%	75.2	13.4	15.1%	73.9	14.7	16.6%
ME 5	33 52 21	2016	Above Normal	November	Used in Summary Table Analysis	3,904.4	3,896.8	7.6	0.2%	3,895.9	8.4	0.2%	3,895.3	9.1	0.2%	3,894.3	10.1	0.3%	3,893.5	10.9	0.3%	3,892.8	11.6	0.3%
ME 5	33 52 21	2016	Above Normal	December	--	36,814.8	36,807.9	6.9	0.0%	36,806.7	8.1	0.0%	36,805.6	9.3	0.0%	36,805.6	9.3	0.0%	36,804.4	10.4	0.0%	36,804.4	10.4	0.0%
ME 5	33 52 21	2016	Above Normal	January	--	57,519.7	57,512.7	6.9	0.0%	57,512.7	6.9	0.0%	57,511.6	8.1	0.0%	57,511.6	8.1	0.0%	57,510.4	9.3	0.0%	57,510.4	9.3	0.0%
ME 5	33 52 21	2016	Above Normal	February	--	24,299.8	24,295.1	4.6	0.0%	24,295.1	4.6	0.0%	24,294.0	5.8	0.0%	24,294.0	5.8	0.0%	24,292.8	6.9	0.0%	24,292.8	6.9	0.0%
ME 5	33 52 21	2016	Above Normal	March	--	41,870.4	41,865.7	4.6	0.0%	41,865.7	4.6	0.0%	41,864.6	5.8	0.0%	41,864.6	5.8	0.0%	41,863.4	6.9	0.0%	41,863.4	6.9	0.0%
ME 5	33 52 21	2016	Above Normal	April	--	18,562.5	18,557.9	4.6	0.0%	18,557.9	4.6	0.0%	18,557.9	4.6	0.0%	18,556.7	5.8	0.0%	18,556.7	5.8	0.0%	18,555.6	6.9	0.0%
ME 5	33 52 21	2016	Above Normal	May	--	5,224.1	5,218.5	5.6	0.1%	5,217.9	6.1	0.1%	5,217.5	6.6	0.1%	5,216.9	7.2	0.1%	5,216.3	7.8	0.1%	5,215.7	8.3	0.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 52 21	2016	Above Normal	June	--	1,512.8	1,502.2	10.6	0.7%	1,501.2	11.7	0.8%	1,500.1	12.7	0.8%	1,499.0	13.9	0.9%	1,497.9	14.9	1.0%	1,496.9	16.0	1.1%
ME 5	33 52 21	2016	Above Normal	July	--	826.9	815.0	11.9	1.4%	813.9	13.0	1.6%	812.7	14.2	1.7%	811.5	15.4	1.9%	810.3	16.6	2.0%	809.1	17.8	2.1%
ME 5	33 52 21	2016	Above Normal	August	--	495.7	484.1	11.6	2.3%	483.0	12.8	2.6%	481.8	14.0	2.8%	480.6	15.1	3.1%	479.4	16.3	3.3%	478.3	17.5	3.5%
ME 5	33 52 21	2016	Above Normal	September	Used in Summary Table Analysis	331.9	321.5	10.4	3.1%	320.5	11.4	3.4%	319.4	12.5	3.8%	318.4	13.5	4.1%	317.3	14.6	4.4%	316.3	15.6	4.7%
ME 5	33 52 21	2017	Wet	October	Used in Summary Table Analysis	18,360.0	18,351.9	8.1	0.0%	18,350.7	9.3	0.1%	18,349.5	10.4	0.1%	18,348.4	11.6	0.1%	18,348.4	11.6	0.1%	18,347.2	12.7	0.1%
ME 5	33 52 21	2017	Wet	November	Used in Summary Table Analysis	18,906.3	18,900.5	5.8	0.0%	18,899.3	6.9	0.0%	18,899.3	6.9	0.0%	18,898.1	8.1	0.0%	18,897.0	9.3	0.0%	18,897.0	9.3	0.0%
ME 5	33 52 21	2017	Wet	December	--	24,240.7	24,235.0	5.8	0.0%	24,235.0	5.8	0.0%	24,233.8	6.9	0.0%	24,233.8	6.9	0.0%	24,232.6	8.1	0.0%	24,232.6	8.1	0.0%
ME 5	33 52 21	2017	Wet	January	--	107,278.9	107,273.1	5.8	0.0%	107,273.1	5.8	0.0%	107,273.1	5.8	0.0%	107,272.0	6.9	0.0%	107,272.0	6.9	0.0%	107,270.8	8.1	0.0%
ME 5	33 52 21	2017	Wet	February	--	82,056.7	82,052.1	4.6	0.0%	82,052.1	4.6	0.0%	82,050.9	5.8	0.0%	82,050.9	5.8	0.0%	82,049.8	6.9	0.0%	82,049.8	6.9	0.0%
ME 5	33 52 21	2017	Wet	March	--	27,342.6	27,338.0	4.6	0.0%	27,336.8	5.8	0.0%	27,336.8	5.8	0.0%	27,336.8	5.8	0.0%	27,335.6	6.9	0.0%	27,335.6	6.9	0.0%
ME 5	33 52 21	2017	Wet	April	--	23,009.3	23,005.8	3.5	0.0%	23,004.6	4.6	0.0%	23,004.6	4.6	0.0%	23,004.6	4.6	0.0%	23,003.5	5.8	0.0%	23,003.5	5.8	0.0%
ME 5	33 52 21	2017	Wet	May	--	6,274.9	6,269.3	5.6	0.1%	6,268.8	6.1	0.1%	6,268.3	6.6	0.1%	6,267.7	7.2	0.1%	6,267.1	7.8	0.1%	6,266.6	8.3	0.1%
ME 5	33 52 21	2017	Wet	June	--	2,125.5	2,114.6	10.9	0.5%	2,113.5	11.9	0.6%	2,112.4	13.1	0.6%	2,111.3	14.1	0.7%	2,110.2	15.3	0.7%	2,109.1	16.3	0.8%
ME 5	33 52 21	2017	Wet	July	--	939.6	927.7	11.9	1.3%	926.5	13.1	1.4%	925.3	14.3	1.5%	924.1	15.5	1.7%	922.9	16.7	1.8%	921.7	17.9	1.9%
ME 5	33 52 21	2017	Wet	August	--	511.8	500.2	11.6	2.3%	499.1	12.8	2.5%	497.9	14.0	2.7%	496.7	15.1	3.0%	495.6	16.3	3.2%	494.4	17.4	3.4%
ME 5	33 52 21	2017	Wet	September	Used in Summary Table Analysis	327.2	316.4	10.8	3.3%	315.4	11.8	3.6%	314.3	12.9	3.9%	313.2	14.0	4.3%	312.1	15.1	4.6%	311.1	16.1	4.9%
ME 5	33 52 21	2018	Above Normal	October	Used in Summary Table Analysis	279.9	272.2	7.7	2.7%	271.0	8.9	3.2%	270.0	9.9	3.5%	268.9	11.0	3.9%	267.9	12.0	4.3%	267.0	12.9	4.6%
ME 5	33 52 21	2018	Above Normal	November	Used in Summary Table Analysis	10,874.8	10,868.1	6.7	0.1%	10,867.5	7.3	0.1%	10,866.8	8.0	0.1%	10,866.1	8.7	0.1%	10,865.4	9.4	0.1%	10,864.7	10.1	0.1%
ME 5	33 52 21	2018	Above Normal	December	--	5,453.8	5,448.1	5.7	0.1%	5,447.6	6.3	0.1%	5,447.0	6.8	0.1%	5,446.4	7.4	0.1%	5,445.8	8.0	0.1%	5,445.3	8.6	0.2%
ME 5	33 52 21	2018	Above Normal	January	--	17,923.6	17,919.0	4.6	0.0%	17,917.8	5.8	0.0%	17,917.8	5.8	0.0%	17,916.7	6.9	0.0%	17,916.7	6.9	0.0%	17,915.5	8.1	0.0%
ME 5	33 52 21	2018	Above Normal	February	--	7,604.1	7,599.5	4.5	0.1%	7,599.1	5.0	0.1%	7,598.6	5.4	0.1%	7,598.1	5.9	0.1%	7,597.8	6.3	0.1%	7,597.3	6.7	0.1%
ME 5	33 52 21	2018	Above Normal	March	--	20,791.7	20,787.0	4.6	0.0%	20,787.0	4.6	0.0%	20,787.0	4.6	0.0%	20,785.9	5.8	0.0%	20,785.9	5.8	0.0%	20,784.7	6.9	0.0%
ME 5	33 52 21	2018	Above Normal	April	--	32,307.9	32,304.4	3.5	0.0%	32,304.4	3.5	0.0%	32,303.2	4.6	0.0%	32,303.2	4.6	0.0%	32,303.2	4.6	0.0%	32,302.1	5.8	0.0%
ME 5	33 52 21	2018	Above Normal	May	--	6,991.9	6,983.4	8.4	0.1%	6,982.5	9.4	0.1%	6,981.7	10.2	0.1%	6,980.9	11.0	0.2%	6,980.1	11.8	0.2%	6,979.2	12.7	0.2%
ME 5	33 52 21	2018	Above Normal	June	--	1,917.8	1,906.8	11.0	0.6%	1,905.7	12.2	0.6%	1,904.5	13.3	0.7%	1,903.5	14.4	0.7%	1,902.3	15.5	0.8%	1,901.3	16.6	0.9%
ME 5	33 52 21	2018	Above Normal	July	--	785.8	773.8	12.0	1.5%	772.6	13.2	1.7%	771.4	14.4	1.8%	770.2	15.6	2.0%	769.0	16.8	2.1%	767.8	18.0	2.3%
ME 5	33 52 21	2018	Above Normal	August	--	447.0	435.8	11.2	2.5%	434.7	12.3	2.8%	433.6	13.4	3.0%	432.5	14.5	3.3%	431.4	15.7	3.5%	430.2	16.8	3.8%
ME 5	33 52 21	2018	Above Normal	September	Used in Summary Table Analysis	304.1	293.4	10.8	3.5%	292.3	11.8	3.9%	291.2	12.9	4.2%	290.1	14.0	4.6%	289.1	15.1	5.0%	288.0	16.1	5.3%
ME 5	33 52 21	2019	Below Normal	October	Used in Summary Table Analysis	211.1	202.7	8.4	4.0%	201.8	9.3	4.4%	201.0	10.1	4.8%	200.1	11.0	5.2%	199.4	11.8	5.6%	198.5	12.6	6.0%
ME 5	33 52 21	2019	Below Normal	November	Used in Summary Table Analysis	6,678.4	6,671.6	6.7	0.1%	6,670.9	7.4	0.1%	6,670.3	8.1	0.1%	6,669.6	8.8	0.1%	6,668.9	9.5	0.1%	6,668.2	10.2	0.2%
ME 5	33 52 21	2019	Below Normal	December	--	14,758.1	14,752.3	5.8	0.0%	14,752.3	5.8	0.0%	14,751.2	6.9	0.0%	14,751.2	6.9	0.0%	14,750.0	8.1	0.1%	14,750.0	8.1	0.1%
ME 5	33 52 21	2019	Below Normal	January	--	35,407.4	35,402.8	4.6	0.0%	35,401.6	5.8	0.0%	35,401.6	5.8	0.0%	35,401.6	5.8	0.0%	35,400.5	6.9	0.0%	35,400.5	6.9	0.0%
ME 5	33 52 21	2019	Below Normal	February	--	142,118.1	142,118.1	0.0	0.0%	142,118.1	0.0	0.0%	142,118.1	0.0	0.0%	142,118.1	0.0	0.0%	142,118.1	0.0	0.0%	142,106.5	11.6	0.0%
ME 5	33 52 21	2019	Below Normal	March	--	42,421.3	42,417.8	3.5	0.0%	42,416.7	4.6	0.0%	42,416.7	4.6	0.0%	42,415.5	5.8	0.0%	42,415.5	5.8	0.0%	42,415.5	5.8	0.0%
ME 5	33 52 21	2019	Below Normal	April	--	15,300.9	15,296.3	4.6	0.0%	15,296.3	4.6	0.0%	15,296.3	4.6	0.0%	15,295.1	5.8	0.0%	15,295.1	5.8	0.0%	15,294.0	6.9	0.0%
ME 5	33 52 21	2019	Below Normal	May	--	17,083.3	17,075.2	8.1	0.0%	17,074.1	9.3	0.1%	17,072.9	10.4	0.1%	17,071.8	11.6	0.1%	17,070.6	12.7	0.1%	17,070.6	12.7	0.1%
ME 5	33 52 21	2019	Below Normal	June	--	4,243.1	4,231.1	11.9	0.3%	4,230.0	13.1	0.3%	4,228.7	14.4	0.3%	4,227.5	15.5	0.4%	4,226.3	16.8	0.4%	4,225.1	17.9	0.4%
ME 5	33 52 21	2019	Below Normal	July	--	1,366.6	1,354.5	12.0	0.9%	1,353.4	13.2	1.0%	1,352.1	14.5	1.1%	1,350.9	15.6	1.1%	1,349.7	16.9	1.2%	1,348.5	18.1	1.3%
ME 5	33 52 21	2019	Below Normal	August	--	601.5	590.0	11.5	1.9%	588.9	12.6	2.1%	587.7	13.8	2.3%	586.6	14.9	2.5%	585.4	16.1	2.7%	584.2	17.2	2.9%
ME 5	33 52 21	2019	Below Normal	September	Used in Summary Table Analysis	467.0	456.3	10.7	2.3%	455.2	11.8	2.5%	454.1	12.9	2.8%	453.1	13.9	3.0%	452.0	15.0	3.2%	450.9	16.1	3.4%
ME 5	33 52 21	2020	Dry	October	Used in Summary Table Analysis	359.1	351.0	8.1	2.2%	350.2	8.9	2.5%	349.4	9.7	2.7%	348.6	10.5	2.9%	347.8	11.3	3.2%	347.0	12.2	3.4%
ME 5	33 52 21	2020	Dry	November	Used in Summary Table Analysis	326.2	319.8	6.3	1.9%	319.2	7.0	2.1%	318.5	7.6	2.3%	317.9	8.3	2.5%	317.2	8.9	2.7%	316.6	9.6	2.9%
ME 5	33 52 21	2020	Dry	December	--	13,420.1	13,414.4	5.8	0.0%	13,414.4	5.8	0.0%	13,413.2	6.9	0.1%	13,413.2	6.9	0.1%	13,412.0	8.1	0.1%	13,412.0	8.1	0.1%
ME 5	33 52 21	2020	Dry	January	--	22,436.3	22,430.6	5.8	0.0%	22,430.6	5.8	0.0%	22,429.4	6.9	0.0%	22,429.4	6.9	0.0%	22,429.4	6.9	0.0%	22,428.2	8.1	0.0%
ME 5	33 52 21	2020	Dry	February	--	7,418.9	7,414.2	4.6	0.1%	7,413.8	5.1	0.1%	7,413.3	5.6	0.1%	7,412.8	6.0	0.1%	7,412.4	6.5	0.1%	7,411.9	6.9	0.1%
ME 5	33 52 21	2020	Dry	March	--	7,263.2	7,258.9	4.3	0.1%	7,258.4	4.7	0.1%	7,258.0	5.2	0.1%	7,257.6	5.6	0.1%	7,257.2	6.0	0.1%	7,256.7	6.5	0.1%
ME 5	33 52 21	2020	Dry	April	--	5,504.1	5,495.1	8.9	0.2%	5,494.2	9.8	0.2%	5,493.3	10.8	0.2%	5,492.4	11.7	0.2%	5,491.6	12.5	0.2%	5,490.6	13.4	0.2%
ME 5	33 52 21	2020	Dry	May	--	7,404.1	7,393.3	10.8	0.1%	7,392.2	11.8	0.2%	7,391.2	12.8	0.2%	7,390.0	14.0	0.2%	7,389.0	15.0	0.2%	7,388.0	16.1	0.2%
ME 5	33 52 21	2020	Dry	June	--	2,105.4	2,091.2	14.2	0.7%	2,089.8	15.6	0.7%	2,088.4	17.0	0.8%	2,086.9	18.5	0.9%	2,085.5	19.9	0.9%	2,084.1	21.3	1.0%
ME 5	33 52 21	2020	Dry	July	--	799.7	785.7	14.0	1.8%	784.3	15.4	1.9%	782.9	16.8	2.1%	781.5	18.2	2.3%	780.1	19.6	2.5%	778.7	21.0	2.6%
ME 5	33 52 21	2020	Dry	August	--	402.6	388.8	13.8	3.4%	387.4	15.2	3.8%	386.0	16.6	4.1%	384.7	18.0	4.5%	383.3	19.4	4.8%	381.9	20.7	5.2%
ME 5	33 52 21	2020	Dry	September	Used in Summary Table Analysis	252.0	239.5	12.4	4.9%	238.3	13.7	5.4%	237.1	14.9	5.9%	235.8	16.2	6.4%	234.6	17.4	6.9%	233.3	18.6	7.4%
ME 5	33 51 22	2000	Above Normal	October	Used in Summary Table Analysis	822.2	813.8	8.4	1.0%	813.0	9.3	1.1%	812.1	10.1	1.2%	811.3	10.9	1.3%	810.5	11.8	1.4%	809.6	12.6	1.5%
ME 5	33 51 22	2000	Above Normal	November	Used in Summary Table Analysis	12,221.1	12,214.1	6.9	0.1%	12,214.1	6.9	0.1%	12,213.0	8.1	0.1%	12,211.8	9.3	0.1%	12,211.8	9.3	0.1%	12,210.6	10.4	0.1%
ME 5	33 51 22	2000	Above Normal	December	--	10,865.6	10,860.0	5.7	0.1%	10,859.4	6.3	0.1%	10,858.8	6.8	0.1%	10,858.2	7.4	0.1%	10,857.6	8.0	0.1%	10,857.1	8.6	0.1%
ME 5	33 51 22	2000	Above Normal	January	--	28,747.7	28,743.1	4.6	0.0%	28,741.9	5.8	0.0%	28,741.9	5.8	0.0%	28,741.9	5.8	0.0%	28,740.7	6.9	0.0%	28,740.7	6.9	0.0%
ME 5	33 51 22	2000	Above Normal	February	--	37,153.9	37,149.3	4.6	0.0%	37,149.3	4.6	0.0%	37,148.1	5.8	0.0%	37,148.1	5.8	0.0%	37,148.1	5.8	0.0%	37,147.0	6.9	0.0%
ME 5	33 51 22	2000	Above Normal	March	--	18,351.9	18,347.2	4.6	0.0%	18,347.2	4.6	0.0%	18,347.2	4.6	0.0%	18,346.1	5.8	0.0%	18,346.1	5.8	0.0%	18,346.1	5.8	0.0%
ME 5	33 51 22	2000	Above Normal	April	--	12,341.4	12,338.0	3.5	0.0%	12,336.8	4.6	0.0%	12,336.8	4.6	0.0%	12,336.8	4.6	0.0%	12,335.6	5.8	0.0%	12,335.6	5.8	0.0%
ME 5	33 51 22	2000	Above Normal	May	--	7,117.4	7,108.7	8.7	0.1%	7,107.8	9.6	0.1%	7,106.9	10.4	0.1%	7,106.0	11.3	0.2%	7,105.1	12.3	0.2%	7,104.3	13.1	0.2%
ME 5	33 51 22	2000	Above Normal	June	--	2,620.5	2,607.4	13.1	0.5%	2,606.1	14.4	0.5%	2,604.9	15.6	0.6%	2,603.6	16.9	0.6%	2,602.2	18.3	0.7%	2,600.9	19.6	0.7%
ME 5	33 51 22	2000	Above Normal	July	--	996.2	984.3	11.9	1.2%	983.1	13.1	1.3%	981.9	14.3	1.4%	980.7	15.5	1.6%	979.5	16.7	1.7%	978.3	17.9	1.8%
ME 5	33 51 22	2000	Above Normal	August	--	526.4	515.2	11.3	2.1%	514.0	12.4	2.4%	512.9	13.5	2.6%	511.8	14.6	2.8%	510.7	15.7	3.0%	509.5	16.9	3.2%
ME 5	33 51 22	2000	Above Normal	September	Used in Summary Table Analysis	299.1	289.2	10.0	3.3%	288.2	11.0	3.7%	287.2	12.0	4.0%	286.2	13.0	4.3%	285.2	14.0	4.7%	284.2	15.0	5.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 51 22	2001	Dry	October	Used in Summary Table Analysis	3,839.1	3,830.9	8.2	0.2%	3,830.1	9.0	0.2%	3,829.3	9.8	0.3%	3,828.4	10.8	0.3%	3,827.5	11.6	0.3%	3,826.7	12.4	0.3%
ME 5	33 51 22	2001	Dry	November	Used in Summary Table Analysis	6,162.8	6,156.3	6.6	0.1%	6,155.6	7.3	0.1%	6,155.0	7.9	0.1%	6,154.3	8.6	0.1%	6,153.6	9.3	0.2%	6,152.9	10.0	0.2%
ME 5	33 51 22	2001	Dry	December	--	8,877.5	8,871.8	5.8	0.1%	8,871.2	6.4	0.1%	8,870.6	6.9	0.1%	8,870.0	7.5	0.1%	8,869.4	8.1	0.1%	8,868.9	8.7	0.1%
ME 5	33 51 22	2001	Dry	January	--	12,865.7	12,860.0	5.8	0.0%	12,860.0	5.8	0.0%	12,858.8	6.9	0.1%	12,858.8	6.9	0.1%	12,857.6	8.1	0.1%	12,857.6	8.1	0.1%
ME 5	33 51 22	2001	Dry	February	--	17,518.5	17,513.9	4.6	0.0%	17,513.9	4.6	0.0%	17,512.7	5.8	0.0%	17,512.7	5.8	0.0%	17,512.7	5.8	0.0%	17,511.6	6.9	0.0%
ME 5	33 51 22	2001	Dry	March	--	12,321.8	12,317.1	4.6	0.0%	12,317.1	4.6	0.0%	12,316.0	5.8	0.0%	12,316.0	5.8	0.0%	12,314.8	6.9	0.1%	12,314.8	6.9	0.1%
ME 5	33 51 22	2001	Dry	April	--	10,997.6	10,988.5	9.0	0.1%	10,987.6	10.0	0.1%	10,986.7	10.9	0.1%	10,985.8	11.8	0.1%	10,984.8	12.7	0.1%	10,984.0	13.5	0.1%
ME 5	33 51 22	2001	Dry	May	--	2,638.0	2,627.3	10.6	0.4%	2,626.3	11.7	0.4%	2,625.1	12.8	0.5%	2,624.2	13.8	0.5%	2,623.0	14.9	0.6%	2,622.0	16.0	0.6%
ME 5	33 51 22	2001	Dry	June	--	2,664.5	2,649.9	14.6	0.5%	2,648.5	16.0	0.6%	2,647.0	17.5	0.7%	2,645.6	18.9	0.7%	2,644.1	20.4	0.8%	2,642.6	21.9	0.8%
ME 5	33 51 22	2001	Dry	July	--	720.5	706.8	13.7	1.9%	705.4	15.1	2.1%	704.0	16.5	2.3%	702.6	17.9	2.5%	701.3	19.2	2.7%	699.9	20.6	2.9%
ME 5	33 51 22	2001	Dry	August	--	175.7	162.3	13.4	7.6%	161.0	14.7	8.4%	159.6	16.1	9.2%	158.3	17.4	9.9%	156.9	18.8	10.7%	155.6	20.1	11.4%
ME 5	33 51 22	2001	Dry	September	Used in Summary Table Analysis	98.8	86.8	12.0	12.1%	85.6	13.2	13.4%	84.4	14.4	14.6%	83.1	15.7	15.9%	81.9	16.9	17.1%	80.7	18.1	18.3%
ME 5	33 51 22	2002	Below Normal	October	Used in Summary Table Analysis	268.9	258.8	10.0	3.7%	257.8	11.1	4.1%	256.8	12.1	4.5%	255.7	13.2	4.9%	254.7	14.2	5.3%	253.7	15.2	5.6%
ME 5	33 51 22	2002	Below Normal	November	Used in Summary Table Analysis	12,077.5	12,069.4	8.1	0.1%	12,068.3	9.3	0.1%	12,068.3	9.3	0.1%	12,067.1	10.4	0.1%	12,066.0	11.6	0.1%	12,064.8	12.7	0.1%
ME 5	33 51 22	2002	Below Normal	December	--	35,836.8	35,829.9	6.9	0.0%	35,829.9	6.9	0.0%	35,828.7	8.1	0.0%	35,828.7	8.1	0.0%	35,827.5	9.3	0.0%	35,826.4	10.4	0.0%
ME 5	33 51 22	2002	Below Normal	January	--	30,975.7	30,968.8	6.9	0.0%	30,968.8	6.9	0.0%	30,967.6	8.1	0.0%	30,967.6	8.1	0.0%	30,966.4	9.3	0.0%	30,966.4	9.3	0.0%
ME 5	33 51 22	2002	Below Normal	February	--	24,736.1	24,730.3	5.8	0.0%	24,730.3	5.8	0.0%	24,729.2	6.9	0.0%	24,729.2	6.9	0.0%	24,728.0	8.1	0.0%	24,728.0	8.1	0.0%
ME 5	33 51 22	2002	Below Normal	March	--	17,825.2	17,819.4	5.8	0.0%	17,819.4	5.8	0.0%	17,819.4	5.8	0.0%	17,818.3	6.9	0.0%	17,818.3	6.9	0.0%	17,817.1	8.1	0.0%
ME 5	33 51 22	2002	Below Normal	April	--	9,942.8	9,933.8	9.0	0.1%	9,932.9	10.0	0.1%	9,931.9	10.9	0.1%	9,931.0	11.8	0.1%	9,930.1	12.7	0.1%	9,929.2	13.7	0.1%
ME 5	33 51 22	2002	Below Normal	May	--	3,326.0	3,315.4	10.6	0.3%	3,314.4	11.7	0.4%	3,313.2	12.8	0.4%	3,312.2	13.9	0.4%	3,311.1	14.9	0.4%	3,310.0	16.1	0.5%
ME 5	33 51 22	2002	Below Normal	June	--	857.2	845.1	12.1	1.4%	843.9	13.3	1.6%	842.7	14.5	1.7%	841.4	15.8	1.8%	840.2	17.0	2.0%	839.0	18.2	2.1%
ME 5	33 51 22	2002	Below Normal	July	--	365.8	353.4	12.3	3.4%	352.2	13.6	3.7%	351.0	14.8	4.1%	349.7	16.1	4.4%	348.5	17.3	4.7%	347.3	18.5	5.1%
ME 5	33 51 22	2002	Below Normal	August	--	231.0	219.4	11.6	5.0%	218.2	12.8	5.5%	217.0	14.0	6.0%	215.9	15.2	6.6%	214.7	16.3	7.1%	213.5	17.5	7.6%
ME 5	33 51 22	2002	Below Normal	September	Used in Summary Table Analysis	167.5	156.5	11.0	6.6%	155.4	12.1	7.2%	154.3	13.2	7.9%	153.2	14.3	8.6%	152.1	15.4	9.2%	151.0	16.5	9.9%
ME 5	33 51 22	2003	Wet	October	Used in Summary Table Analysis	132.4	123.4	9.0	6.8%	122.5	9.9	7.5%	121.6	10.8	8.2%	120.6	11.8	8.9%	119.7	12.7	9.6%	118.8	13.6	10.3%
ME 5	33 51 22	2003	Wet	November	Used in Summary Table Analysis	900.9	893.6	7.3	0.8%	892.9	8.0	0.9%	892.2	8.8	1.0%	891.4	9.5	1.1%	890.7	10.2	1.1%	890.0	11.0	1.2%
ME 5	33 51 22	2003	Wet	December	--	57,182.9	57,177.1	5.8	0.0%	57,175.9	6.9	0.0%	57,174.8	8.1	0.0%	57,174.8	8.1	0.0%	57,173.6	9.3	0.0%	57,173.6	9.3	0.0%
ME 5	33 51 22	2003	Wet	January	--	31,605.3	31,599.5	5.8	0.0%	31,599.5	5.8	0.0%	31,598.4	6.9	0.0%	31,598.4	6.9	0.0%	31,597.2	8.1	0.0%	31,597.2	8.1	0.0%
ME 5	33 51 22	2003	Wet	February	--	20,393.5	20,387.7	5.8	0.0%	20,387.7	5.8	0.0%	20,387.7	5.8	0.0%	20,386.6	6.9	0.0%	20,386.6	6.9	0.0%	20,385.4	8.1	0.0%
ME 5	33 51 22	2003	Wet	March	--	24,094.9	24,090.3	4.6	0.0%	24,089.1	5.8	0.0%	24,089.1	5.8	0.0%	24,089.1	5.8	0.0%	24,088.0	6.9	0.0%	24,088.0	6.9	0.0%
ME 5	33 51 22	2003	Wet	April	--	43,063.7	43,059.0	4.6	0.0%	43,059.0	4.6	0.0%	43,059.0	4.6	0.0%	43,057.9	5.8	0.0%	43,057.9	5.8	0.0%	43,056.7	6.9	0.0%
ME 5	33 51 22	2003	Wet	May	--	12,245.4	12,236.1	9.3	0.1%	12,235.0	10.4	0.1%	12,233.8	11.6	0.1%	12,232.6	12.7	0.1%	12,231.5	13.9	0.1%	12,231.5	13.9	0.1%
ME 5	33 51 22	2003	Wet	June	--	3,171.8	3,160.0	11.8	0.4%	3,158.8	13.0	0.4%	3,157.6	14.1	0.4%	3,156.5	15.3	0.5%	3,155.3	16.4	0.5%	3,154.2	17.6	0.6%
ME 5	33 51 22	2003	Wet	July	--	1,479.6	1,467.4	12.3	0.8%	1,466.2	13.4	0.9%	1,464.9	14.7	1.0%	1,463.7	16.0	1.1%	1,462.5	17.1	1.2%	1,461.2	18.4	1.2%
ME 5	33 51 22	2003	Wet	August	--	765.1	753.3	11.9	1.5%	752.1	13.0	1.7%	750.9	14.2	1.9%	749.7	15.4	2.0%	748.5	16.6	2.2%	747.3	17.8	2.3%
ME 5	33 51 22	2003	Wet	September	Used in Summary Table Analysis	462.4	452.2	10.2	2.2%	451.2	11.2	2.4%	450.2	12.2	2.6%	449.2	13.3	2.9%	448.2	14.3	3.1%	447.1	15.3	3.3%
ME 5	33 51 22	2004	Wet	October	Used in Summary Table Analysis	329.1	320.7	8.4	2.6%	319.9	9.3	2.8%	319.0	10.1	3.1%	318.2	11.0	3.3%	317.3	11.8	3.6%	316.5	12.7	3.8%
ME 5	33 51 22	2004	Wet	November	Used in Summary Table Analysis	5,845.7	5,838.9	6.8	0.1%	5,838.2	7.5	0.1%	5,837.5	8.2	0.1%	5,836.8	8.9	0.2%	5,836.1	9.6	0.2%	5,835.4	10.3	0.2%
ME 5	33 51 22	2004	Wet	December	--	36,502.3	36,496.5	5.8	0.0%	36,495.4	6.9	0.0%	36,495.4	6.9	0.0%	36,494.2	8.1	0.0%	36,494.2	8.1	0.0%	36,493.1	9.3	0.0%
ME 5	33 51 22	2004	Wet	January	--	31,604.2	31,599.5	4.6	0.0%	31,598.4	5.8	0.0%	31,598.4	5.8	0.0%	31,597.2	6.9	0.0%	31,597.2	6.9	0.0%	31,596.1	8.1	0.0%
ME 5	33 51 22	2004	Wet	February	--	38,362.3	38,357.6	4.6	0.0%	38,356.5	5.8	0.0%	38,356.5	5.8	0.0%	38,355.3	6.9	0.0%	38,355.3	6.9	0.0%	38,354.2	8.1	0.0%
ME 5	33 51 22	2004	Wet	March	--	16,546.3	16,541.7	4.6	0.0%	16,541.7	4.6	0.0%	16,541.7	4.6	0.0%	16,540.5	5.8	0.0%	16,540.5	5.8	0.0%	16,539.4	6.9	0.0%
ME 5	33 51 22	2004	Wet	April	--	9,467.0	9,462.8	4.2	0.0%	9,462.4	4.6	0.0%	9,462.0	5.0	0.1%	9,461.6	5.4	0.1%	9,461.1	5.9	0.1%	9,460.8	6.3	0.1%
ME 5	33 51 22	2004	Wet	May	--	3,433.3	3,424.5	8.8	0.3%	3,423.6	9.7	0.3%	3,422.8	10.5	0.3%	3,421.9	11.5	0.3%	3,420.9	12.4	0.4%	3,420.1	13.2	0.4%
ME 5	33 51 22	2004	Wet	June	--	695.0	683.9	11.1	1.6%	682.8	12.2	1.8%	681.7	13.4	1.9%	680.6	14.5	2.1%	679.5	15.6	2.2%	678.4	16.7	2.4%
ME 5	33 51 22	2004	Wet	July	--	360.3	348.3	12.0	3.3%	347.1	13.2	3.7%	345.9	14.4	4.0%	344.7	15.6	4.3%	343.5	16.8	4.7%	342.3	18.0	5.0%
ME 5	33 51 22	2004	Wet	August	--	229.0	217.7	11.3	5.0%	216.5	12.5	5.4%	215.4	13.6	5.9%	214.3	14.7	6.4%	213.1	15.9	6.9%	212.0	17.0	7.4%
ME 5	33 51 22	2004	Wet	September	Used in Summary Table Analysis	165.7	154.9	10.8	6.5%	153.8	11.9	7.2%	152.8	12.9	7.8%	151.7	14.0	8.5%	150.6	15.1	9.1%	149.5	16.2	9.8%
ME 5	33 51 22	2005	Above Normal	October	Used in Summary Table Analysis	7,738.0	7,729.4	8.6	0.1%	7,728.6	9.4	0.1%	7,727.8	10.2	0.1%	7,726.9	11.1	0.1%	7,726.0	11.9	0.2%	7,725.1	12.8	0.2%
ME 5	33 51 22	2005	Above Normal	November	Used in Summary Table Analysis	2,264.7	2,258.0	6.7	0.3%	2,257.3	7.4	0.3%	2,256.6	8.1	0.4%	2,255.9	8.8	0.4%	2,255.2	9.5	0.4%	2,254.5	10.2	0.4%
ME 5	33 51 22	2005	Above Normal	December	--	21,188.7	21,181.7	6.9	0.0%	21,181.7	6.9	0.0%	21,180.6	8.1	0.0%	21,180.6	8.1	0.0%	21,179.4	9.3	0.0%	21,179.4	9.3	0.0%
ME 5	33 51 22	2005	Above Normal	January	--	22,511.6	22,506.9	4.6	0.0%	22,505.8	5.8	0.0%	22,505.8	5.8	0.0%	22,504.6	6.9	0.0%	22,504.6	6.9	0.0%	22,503.5	8.1	0.0%
ME 5	33 51 22	2005	Above Normal	February	--	14,034.7	14,028.9	5.8	0.0%	14,028.9	5.8	0.0%	14,028.9	5.8	0.0%	14,027.8	6.9	0.0%	14,027.8	6.9	0.0%	14,026.6	8.1	0.1%
ME 5	33 51 22	2005	Above Normal	March	--	28,663.2	28,659.7	3.5	0.0%	28,658.6	4.6	0.0%	28,658.6	4.6	0.0%	28,658.6	4.6	0.0%	28,657.4	5.8	0.0%	28,657.4	5.8	0.0%
ME 5	33 51 22	2005	Above Normal	April	--	21,509.3	21,504.6	4.6	0.0%	21,504.6	4.6	0.0%	21,503.5	5.8	0.0%	21,503.5	5.8	0.0%	21,502.3	6.9	0.0%	21,502.3	6.9	0.0%
ME 5	33 51 22	2005	Above Normal	May	--	19,645.8	19,636.6	9.3	0.0%	19,636.6	9.3	0.0%	19,635.4	10.4	0.1%	19,634.3	11.6	0.1%	19,633.1	12.7	0.1%	19,631.9	13.9	0.1%
ME 5	33 51 22	2005	Above Normal	June	--	15,961.8	15,947.9	13.9	0.1%	15,946.8	15.0	0.1%	15,945.6	16.2	0.1%	15,944.4	17.4	0.1%	15,943.3	18.5	0.1%	15,942.1	19.7	0.1%
ME 5	33 51 22	2005	Above Normal	July	--	2,865.5	2,853.1	12.4	0.4%	2,851.9	13.7	0.5%	2,850.7	14.8	0.5%	2,849.4	16.1	0.6%	2,848.1	17.4	0.6%	2,846.9	18.6	0.7%
ME 5	33 51 22	2005	Above Normal	August	--	988.1	976.8	11.3	1.1%	975.7	12.4	1.3%	974.6	13.6	1.4%	973.4	14.7	1.5%	972.3	15.8	1.6%	971.2	16.9	1.7%
ME 5	33 51 22	2005	Above Normal	September	Used in Summary Table Analysis	529.4	519.4	10.0	1.9%	518.4	11.0	2.1%	517.4	12.0	2.3%	516.4	13.0	2.5%	515.4	14.0	2.6%	514.4	15.0	2.8%
ME 5	33 51 22	2006	Wet	October	Used in Summary Table Analysis	639.8	631.7	8.1	1.3%	630.9	9.0	1.4%	630.1	9.8	1.5%	629.3	10.6	1.7%	628.4	11.4	1.8%	627.6	12.2	1.9%
ME 5	33 51 22	2006	Wet	November	Used in Summary Table Analysis	9,379.7	9,373.3	6.5	0.1%	9,372.7	7.1	0.1%	9,372.0	7.8	0.1%	9,371.4	8.3	0.1%	9,370.7	9.0	0.1%	9,370.0	9.7	0.1%
ME 5	33 51 22	2006	Wet	December	--	43,741.9	43,736.1	5.8	0.0%	43,735.0	6.9	0.0%	43,735.0	6.9	0.0%	43,733.8	8.1	0.0%	43,733.8	8.1	0.0%	43,732.6	9.3	0.0%
ME 5	33 51 22	2006	Wet	January	--	46,518.5	46,513.9	4.6	0.0%	46,512.7	5.8	0.0%	46,512.7	5.8	0.0%	46,511.6	6.9	0.0%	46,511.6	6.9	0.0%	46,510.4	8.1	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 51 22	2006	Wet	February	--	26,714.1	26,709.5	4.6	0.0%	26,709.5	4.6	0.0%	26,708.3	5.8	0.0%	26,708.3	5.8	0.0%	26,707.2	6.9	0.0%	26,707.2	6.9	0.0%
ME 5	33 51 22	2006	Wet	March	--	47,333.3	47,328.7	4.6	0.0%	47,328.7	4.6	0.0%	47,327.5	5.8	0.0%	47,327.5	5.8	0.0%	47,327.5	5.8	0.0%	47,326.4	6.9	0.0%
ME 5	33 51 22	2006	Wet	April	--	30,497.7	30,493.1	4.6	0.0%	30,493.1	4.6	0.0%	30,493.1	4.6	0.0%	30,491.9	5.8	0.0%	30,491.9	5.8	0.0%	30,491.9	5.8	0.0%
ME 5	33 51 22	2006	Wet	May	--	14,247.7	14,243.1	4.6	0.0%	14,241.9	5.8	0.0%	14,241.9	5.8	0.0%	14,240.7	6.9	0.0%	14,240.7	6.9	0.0%	14,239.6	8.1	0.1%
ME 5	33 51 22	2006	Wet	June	--	3,552.4	3,541.3	11.1	0.3%	3,540.3	12.2	0.3%	3,539.2	13.2	0.4%	3,538.1	14.4	0.4%	3,536.9	15.5	0.4%	3,535.9	16.6	0.5%
ME 5	33 51 22	2006	Wet	July	--	1,285.3	1,273.5	11.8	0.9%	1,272.3	13.0	1.0%	1,271.2	14.1	1.1%	1,270.0	15.3	1.2%	1,268.9	16.4	1.3%	1,267.6	17.7	1.4%
ME 5	33 51 22	2006	Wet	August	--	671.2	659.7	11.5	1.7%	658.5	12.7	1.9%	657.4	13.8	2.1%	656.2	15.0	2.2%	655.0	16.2	2.4%	653.9	17.3	2.6%
ME 5	33 51 22	2006	Wet	September	Used in Summary Table Analysis	431.5	421.4	10.1	2.3%	420.4	11.1	2.6%	419.3	12.2	2.8%	418.3	13.2	3.1%	417.3	14.2	3.3%	416.3	15.2	3.5%
ME 5	33 51 22	2007	Above Normal	October	Used in Summary Table Analysis	278.8	270.6	8.3	3.0%	269.7	9.1	3.3%	268.9	9.9	3.6%	268.1	10.8	3.9%	267.3	11.6	4.2%	266.4	12.4	4.5%
ME 5	33 51 22	2007	Above Normal	November	Used in Summary Table Analysis	8,731.6	8,724.9	6.7	0.1%	8,724.2	7.4	0.1%	8,723.5	8.1	0.1%	8,722.8	8.8	0.1%	8,722.2	9.4	0.1%	8,721.5	10.1	0.1%
ME 5	33 51 22	2007	Above Normal	December	--	20,542.8	20,537.0	5.8	0.0%	20,537.0	5.8	0.0%	20,535.9	6.9	0.0%	20,535.9	6.9	0.0%	20,534.7	8.1	0.0%	20,533.6	9.3	0.0%
ME 5	33 51 22	2007	Above Normal	January	--	10,286.8	10,281.6	5.2	0.1%	10,281.1	5.7	0.1%	10,280.6	6.3	0.1%	10,280.1	6.7	0.1%	10,279.5	7.3	0.1%	10,279.1	7.8	0.1%
ME 5	33 51 22	2007	Above Normal	February	--	30,721.1	30,715.3	5.8	0.0%	30,715.3	5.8	0.0%	30,715.3	5.8	0.0%	30,714.1	6.9	0.0%	30,714.1	6.9	0.0%	30,713.0	8.1	0.0%
ME 5	33 51 22	2007	Above Normal	March	--	13,127.3	13,122.7	4.6	0.0%	13,122.7	4.6	0.0%	13,122.7	4.6	0.0%	13,121.5	5.8	0.0%	13,121.5	5.8	0.0%	13,120.4	6.9	0.1%
ME 5	33 51 22	2007	Above Normal	April	--	11,558.9	11,550.2	8.7	0.1%	11,549.4	9.5	0.1%	11,548.5	10.4	0.1%	11,547.7	11.2	0.1%	11,546.8	12.2	0.1%	11,545.9	13.0	0.1%
ME 5	33 51 22	2007	Above Normal	May	--	4,150.9	4,140.6	10.3	0.2%	4,139.6	11.3	0.3%	4,138.7	12.3	0.3%	4,137.6	13.3	0.3%	4,136.6	14.4	0.3%	4,135.5	15.4	0.4%
ME 5	33 51 22	2007	Above Normal	June	--	1,506.4	1,494.0	12.4	0.8%	1,492.7	13.7	0.9%	1,491.4	14.9	1.0%	1,490.2	16.2	1.1%	1,489.0	17.4	1.2%	1,487.7	18.6	1.2%
ME 5	33 51 22	2007	Above Normal	July	--	499.5	486.9	12.6	2.5%	485.6	13.8	2.8%	484.4	15.1	3.0%	483.1	16.3	3.3%	481.9	17.6	3.5%	480.6	18.9	3.8%
ME 5	33 51 22	2007	Above Normal	August	--	227.1	215.7	11.4	5.0%	214.6	12.5	5.5%	213.5	13.7	6.0%	212.3	14.8	6.5%	211.2	15.9	7.0%	210.1	17.1	7.5%
ME 5	33 51 22	2007	Above Normal	September	Used in Summary Table Analysis	154.7	143.9	10.8	7.0%	142.8	11.9	7.7%	141.7	12.9	8.4%	140.7	14.0	9.1%	139.6	15.1	9.8%	138.5	16.2	10.5%
ME 5	33 51 22	2008	Dry	October	Used in Summary Table Analysis	3,457.3	3,448.5	8.8	0.3%	3,447.6	9.7	0.3%	3,446.6	10.6	0.3%	3,445.8	11.5	0.3%	3,444.9	12.4	0.4%	3,444.1	13.2	0.4%
ME 5	33 51 22	2008	Dry	November	Used in Summary Table Analysis	3,297.5	3,290.6	6.8	0.2%	3,289.9	7.5	0.2%	3,289.2	8.2	0.2%	3,288.5	8.9	0.3%	3,287.8	9.6	0.3%	3,287.3	10.2	0.3%
ME 5	33 51 22	2008	Dry	December	--	23,299.8	23,292.8	6.9	0.0%	23,292.8	6.9	0.0%	23,291.7	8.1	0.0%	23,291.7	8.1	0.0%	23,290.5	9.3	0.0%	23,290.5	9.3	0.0%
ME 5	33 51 22	2008	Dry	January	--	37,696.8	37,691.0	5.8	0.0%	37,691.0	5.8	0.0%	37,689.8	6.9	0.0%	37,689.8	6.9	0.0%	37,688.7	8.1	0.0%	37,688.7	8.1	0.0%
ME 5	33 51 22	2008	Dry	February	--	26,311.3	26,306.7	4.6	0.0%	26,306.7	4.6	0.0%	26,305.6	5.8	0.0%	26,305.6	5.8	0.0%	26,304.4	6.9	0.0%	26,304.4	6.9	0.0%
ME 5	33 51 22	2008	Dry	March	--	11,813.7	11,809.0	4.6	0.0%	11,809.0	4.6	0.0%	11,809.0	4.6	0.0%	11,807.9	5.8	0.0%	11,807.9	5.8	0.0%	11,806.7	6.9	0.1%
ME 5	33 51 22	2008	Dry	April	--	9,031.9	9,023.1	8.8	0.1%	9,022.2	9.7	0.1%	9,021.4	10.5	0.1%	9,020.5	11.5	0.1%	9,019.7	12.3	0.1%	9,018.8	13.2	0.1%
ME 5	33 51 22	2008	Dry	May	--	1,359.0	1,349.5	9.5	0.7%	1,348.6	10.4	0.8%	1,347.7	11.3	0.8%	1,346.8	12.3	0.9%	1,345.7	13.3	1.0%	1,344.8	14.2	1.0%
ME 5	33 51 22	2008	Dry	June	--	441.5	427.9	13.6	3.1%	426.6	15.0	3.4%	425.2	16.3	3.7%	423.9	17.7	4.0%	422.5	19.0	4.3%	421.2	20.3	4.6%
ME 5	33 51 22	2008	Dry	July	--	259.3	245.9	13.5	5.2%	244.5	14.8	5.7%	243.2	16.2	6.2%	241.8	17.5	6.7%	240.5	18.8	7.3%	239.2	20.2	7.8%
ME 5	33 51 22	2008	Dry	August	--	182.9	169.7	13.1	7.2%	168.4	14.4	7.9%	167.1	15.8	8.6%	165.8	17.1	9.3%	164.5	18.4	10.0%	163.2	19.7	10.8%
ME 5	33 51 22	2008	Dry	September	Used in Summary Table Analysis	144.4	131.8	12.6	8.7%	130.5	13.9	9.6%	129.2	15.2	10.5%	128.0	16.4	11.4%	126.7	17.7	12.2%	125.4	18.9	13.1%
ME 5	33 51 22	2009	Critical	October	Used in Summary Table Analysis	929.1	919.1	10.0	1.1%	918.1	11.0	1.2%	917.1	12.0	1.3%	916.1	13.0	1.4%	915.0	14.0	1.5%	914.0	15.0	1.6%
ME 5	33 51 22	2009	Critical	November	Used in Summary Table Analysis	5,553.9	5,546.2	7.8	0.1%	5,545.4	8.6	0.2%	5,544.7	9.3	0.2%	5,543.9	10.1	0.2%	5,543.1	10.9	0.2%	5,542.2	11.7	0.2%
ME 5	33 51 22	2009	Critical	December	--	12,254.6	12,248.8	5.8	0.0%	12,247.7	6.9	0.1%	12,246.5	8.1	0.1%	12,246.5	8.1	0.1%	12,245.4	9.3	0.1%	12,245.4	9.3	0.1%
ME 5	33 51 22	2009	Critical	January	--	8,822.2	8,816.2	6.0	0.1%	8,815.6	6.6	0.1%	8,815.0	7.2	0.1%	8,814.5	7.8	0.1%	8,813.8	8.4	0.1%	8,813.2	9.0	0.1%
ME 5	33 51 22	2009	Critical	February	--	22,689.8	22,685.2	4.6	0.0%	22,684.0	5.8	0.0%	22,684.0	5.8	0.0%	22,682.9	6.9	0.0%	22,682.9	6.9	0.0%	22,681.7	8.1	0.0%
ME 5	33 51 22	2009	Critical	March	--	21,178.2	21,173.6	4.6	0.0%	21,172.5	5.8	0.0%	21,172.5	5.8	0.0%	21,172.5	5.8	0.0%	21,171.3	6.9	0.0%	21,171.3	6.9	0.0%
ME 5	33 51 22	2009	Critical	April	--	10,104.1	10,094.9	9.1	0.1%	10,094.0	10.1	0.1%	10,093.1	11.0	0.1%	10,092.2	11.8	0.1%	10,091.3	12.7	0.1%	10,090.4	13.7	0.1%
ME 5	33 51 22	2009	Critical	May	--	15,613.4	15,601.9	11.6	0.1%	15,600.7	12.7	0.1%	15,599.5	13.9	0.1%	15,598.4	15.0	0.1%	15,597.2	16.2	0.1%	15,596.1	17.4	0.1%
ME 5	33 51 22	2009	Critical	June	--	3,164.9	3,150.6	14.4	0.5%	3,149.2	15.7	0.5%	3,147.7	17.2	0.5%	3,146.2	18.8	0.6%	3,144.8	20.1	0.6%	3,143.4	21.5	0.7%
ME 5	33 51 22	2009	Critical	July	--	1,267.0	1,253.4	13.7	1.1%	1,252.0	15.0	1.2%	1,250.6	16.4	1.3%	1,249.2	17.8	1.4%	1,247.9	19.1	1.5%	1,246.5	20.5	1.6%
ME 5	33 51 22	2009	Critical	August	--	673.0	659.7	13.2	2.0%	658.4	14.5	2.2%	657.1	15.9	2.4%	655.8	17.2	2.6%	654.5	18.5	2.7%	653.2	19.8	2.9%
ME 5	33 51 22	2009	Critical	September	Used in Summary Table Analysis	393.7	381.9	11.9	3.0%	380.7	13.0	3.3%	379.5	14.2	3.6%	378.3	15.5	3.9%	377.1	16.6	4.2%	376.0	17.8	4.5%
ME 5	33 51 22	2010	Below Normal	October	Used in Summary Table Analysis	6,094.8	6,084.6	10.2	0.2%	6,083.6	11.2	0.2%	6,082.5	12.3	0.2%	6,081.5	13.3	0.2%	6,080.6	14.2	0.2%	6,079.5	15.3	0.3%
ME 5	33 51 22	2010	Below Normal	November	Used in Summary Table Analysis	8,319.7	8,311.6	8.1	0.1%	8,310.8	8.9	0.1%	8,310.0	9.7	0.1%	8,309.1	10.5	0.1%	8,308.3	11.3	0.1%	8,307.5	12.2	0.1%
ME 5	33 51 22	2010	Below Normal	December	--	12,415.5	12,408.6	6.9	0.1%	12,407.4	8.1	0.1%	12,407.4	8.1	0.1%	12,406.3	9.3	0.1%	12,406.3	9.3	0.1%	12,405.1	10.4	0.1%
ME 5	33 51 22	2010	Below Normal	January	--	36,438.7	36,432.9	5.8	0.0%	36,431.7	6.9	0.0%	36,431.7	6.9	0.0%	36,430.6	8.1	0.0%	36,430.6	8.1	0.0%	36,429.4	9.3	0.0%
ME 5	33 51 22	2010	Below Normal	February	--	27,303.2	27,298.6	4.6	0.0%	27,297.5	5.8	0.0%	27,297.5	5.8	0.0%	27,296.3	6.9	0.0%	27,296.3	6.9	0.0%	27,295.1	8.1	0.0%
ME 5	33 51 22	2010	Below Normal	March	--	28,887.7	28,883.1	4.6	0.0%	28,881.9	5.8	0.0%	28,881.9	5.8	0.0%	28,880.8	6.9	0.0%	28,880.8	6.9	0.0%	28,880.8	6.9	0.0%
ME 5	33 51 22	2010	Below Normal	April	--	40,107.6	40,103.0	4.6	0.0%	40,103.0	4.6	0.0%	40,101.9	5.8	0.0%	40,101.9	5.8	0.0%	40,101.9	5.8	0.0%	40,100.7	6.9	0.0%
ME 5	33 51 22	2010	Below Normal	May	--	20,342.6	20,333.3	9.3	0.0%	20,332.2	10.4	0.1%	20,331.0	11.6	0.1%	20,331.0	11.6	0.1%	20,329.9	12.7	0.1%	20,328.7	13.9	0.1%
ME 5	33 51 22	2010	Below Normal	June	--	9,408.9	9,395.1	13.8	0.1%	9,393.8	15.2	0.2%	9,392.4	16.6	0.2%	9,391.0	17.9	0.2%	9,389.6	19.3	0.2%	9,388.2	20.7	0.2%
ME 5	33 51 22	2010	Below Normal	July	--	1,458.8	1,446.2	12.6	0.9%	1,444.9	13.9	1.0%	1,443.6	15.2	1.0%	1,442.5	16.3	1.1%	1,441.2	17.6	1.2%	1,439.9	18.9	1.3%
ME 5	33 51 22	2010	Below Normal	August	--	574.3	562.6	11.7	2.0%	561.4	12.8	2.2%	560.3	14.0	2.4%	559.1	15.2	2.6%	558.0	16.2	2.8%	556.9	17.4	3.0%
ME 5	33 51 22	2010	Below Normal	September	Used in Summary Table Analysis	656.4	645.4	11.0	1.7%	644.3	12.1	1.8%	643.2	13.3	2.0%	642.1	14.4	2.2%	641.0	15.5	2.4%	639.9	16.6	2.5%
ME 5	33 51 22	2011	Wet	October	Used in Summary Table Analysis	9,680.0	9,671.6	8.3	0.1%	9,670.7	9.3	0.1%	9,669.9	10.1	0.1%	9,669.1	10.9	0.1%	9,668.2	11.8	0.1%	9,667.4	12.6	0.1%
ME 5	33 51 22	2011	Wet	November	Used in Summary Table Analysis	14,273.1	14,266.2	6.9	0.0%	14,266.2	6.9	0.0%	14,265.0	8.1	0.1%	14,265.0	8.1	0.1%	14,263.9	9.3	0.1%	14,262.7	10.4	0.1%
ME 5	33 51 22	2011	Wet	December	--	33,919.0	33,913.2	5.8	0.0%	33,912.0	6.9	0.0%	33,912.0	6.9	0.0%	33,910.9	8.1	0.0%	33,910.9	8.1	0.0%	33,909.7	9.3	0.0%
ME 5	33 51 22	2011	Wet	January	--	14,197.9	14,193.3	4.6	0.0%	14,192.1	5.8	0.0%	14,192.1	5.8	0.0%	14,191.0	6.9	0.0%	14,191.0	6.9	0.0%	14,189.8	8.1	0.1%
ME 5	33 51 22	2011	Wet	February	--	20,807.9	20,803.2	4.6	0.0%	20,803.2	4.6	0.0%	20,802.1	5.8	0.0%	20,802.1	5.8	0.0%	20,802.1	5.8	0.0%	20,800.9	6.9	0.0%
ME 5	33 51 22	2011	Wet	March	--	52,149.3	52,144.7	4.6	0.0%	52,144.7	4.6	0.0%	52,144.7	4.6	0.0%	52,143.5	5.8	0.0%	52,143.5	5.8	0.0%	52,143.5	5.8	0.0%
ME 5	33 51 22	2011	Wet	April	--	24,850.7	24,846.1	4.6	0.0%	24,844.9	5.8	0.0%	24,844.9	5.8	0.0%	24,844.9	5.8	0.0%	24,843.8	6.9	0.0%	24,843.8	6.9	0.0%
ME 5	33 51 22	2011	Wet	May	--	11,407.1	11,398.3	8.8	0.1%	11,397.3	9.7	0.1%	11,396.4	10.6	0.1%	11,395.6	11.5	0.1%	11,394.6	12.5	0.1%	11,393.8	13.3	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 51 22	2011	Wet	June	--	7,080.6	7,067.1	13.4	0.2%	7,065.7	14.8	0.2%	7,064.5	16.1	0.2%	7,063.1	17.5	0.2%	7,061.8	18.8	0.3%	7,060.4	20.1	0.3%
ME 5	33 51 22	2011	Wet	July	--	1,831.5	1,818.1	13.4	0.7%	1,816.8	14.7	0.8%	1,815.4	16.1	0.9%	1,814.1	17.4	0.9%	1,812.7	18.8	1.0%	1,811.5	20.0	1.1%
ME 5	33 51 22	2011	Wet	August	--	781.3	769.8	11.5	1.5%	768.7	12.6	1.6%	767.5	13.8	1.8%	766.4	14.9	1.9%	765.2	16.0	2.1%	764.1	17.2	2.2%
ME 5	33 51 22	2011	Wet	September	Used in Summary Table Analysis	437.8	427.3	10.4	2.4%	426.3	11.5	2.6%	425.2	12.5	2.9%	424.2	13.6	3.1%	423.1	14.6	3.3%	422.1	15.6	3.6%
ME 5	33 51 22	2012	Below Normal	October	Used in Summary Table Analysis	4,565.6	4,557.1	8.6	0.2%	4,556.1	9.5	0.2%	4,555.3	10.3	0.2%	4,554.5	11.1	0.2%	4,553.6	12.0	0.3%	4,552.8	12.8	0.3%
ME 5	33 51 22	2012	Below Normal	November	Used in Summary Table Analysis	8,287.2	8,280.3	6.8	0.1%	8,279.6	7.5	0.1%	8,279.1	8.1	0.1%	8,278.4	8.8	0.1%	8,277.7	9.5	0.1%	8,277.0	10.2	0.1%
ME 5	33 51 22	2012	Below Normal	December	--	5,205.2	5,199.3	5.9	0.1%	5,198.7	6.5	0.1%	5,198.1	7.1	0.1%	5,197.6	7.6	0.1%	5,197.0	8.2	0.2%	5,196.4	8.8	0.2%
ME 5	33 51 22	2012	Below Normal	January	--	20,256.9	20,252.3	4.6	0.0%	20,251.2	5.8	0.0%	20,251.2	5.8	0.0%	20,251.2	5.8	0.0%	20,250.0	6.9	0.0%	20,250.0	6.9	0.0%
ME 5	33 51 22	2012	Below Normal	February	--	18,253.5	18,248.8	4.6	0.0%	18,248.8	4.6	0.0%	18,247.7	5.8	0.0%	18,247.7	5.8	0.0%	18,247.7	5.8	0.0%	18,246.5	6.9	0.0%
ME 5	33 51 22	2012	Below Normal	March	--	45,592.6	45,588.0	4.6	0.0%	45,586.8	5.8	0.0%	45,586.8	5.8	0.0%	45,585.6	6.9	0.0%	45,585.6	6.9	0.0%	45,585.6	6.9	0.0%
ME 5	33 51 22	2012	Below Normal	April	--	26,920.1	26,916.7	3.5	0.0%	26,915.5	4.6	0.0%	26,915.5	4.6	0.0%	26,915.5	4.6	0.0%	26,914.4	5.8	0.0%	26,914.4	5.8	0.0%
ME 5	33 51 22	2012	Below Normal	May	--	7,498.3	7,489.4	8.9	0.1%	7,488.4	9.8	0.1%	7,487.5	10.8	0.1%	7,486.6	11.7	0.2%	7,485.8	12.5	0.2%	7,485.0	13.3	0.2%
ME 5	33 51 22	2012	Below Normal	June	--	5,539.4	5,525.7	13.7	0.2%	5,524.3	15.0	0.3%	5,523.0	16.3	0.3%	5,521.6	17.7	0.3%	5,520.3	19.1	0.3%	5,519.0	20.4	0.4%
ME 5	33 51 22	2012	Below Normal	July	--	2,238.5	2,225.6	13.0	0.6%	2,224.3	14.2	0.6%	2,223.0	15.5	0.7%	2,221.8	16.8	0.7%	2,220.5	18.1	0.8%	2,219.2	19.3	0.9%
ME 5	33 51 22	2012	Below Normal	August	--	391.7	381.2	10.6	2.7%	380.1	11.6	3.0%	379.1	12.7	3.2%	378.1	13.7	3.5%	377.0	14.7	3.8%	376.0	15.8	4.0%
ME 5	33 51 22	2012	Below Normal	September	Used in Summary Table Analysis	253.2	243.8	9.4	3.7%	242.8	10.3	4.1%	241.9	11.3	4.5%	241.0	12.2	4.8%	240.0	13.2	5.2%	239.1	14.1	5.6%
ME 5	33 51 22	2013	Below Normal	October	Used in Summary Table Analysis	1,927.8	1,919.6	8.2	0.4%	1,918.8	9.0	0.5%	1,917.9	9.8	0.5%	1,917.1	10.6	0.6%	1,916.3	11.5	0.6%	1,915.4	12.4	0.6%
ME 5	33 51 22	2013	Below Normal	November	Used in Summary Table Analysis	14,775.5	14,769.7	5.8	0.0%	14,768.5	6.9	0.0%	14,768.5	6.9	0.0%	14,767.4	8.1	0.1%	14,766.2	9.3	0.1%	14,766.2	9.3	0.1%
ME 5	33 51 22	2013	Below Normal	December	--	60,194.4	60,187.5	6.9	0.0%	60,187.5	6.9	0.0%	60,186.3	8.1	0.0%	60,186.3	8.1	0.0%	60,185.2	9.3	0.0%	60,185.2	9.3	0.0%
ME 5	33 51 22	2013	Below Normal	January	--	22,260.4	22,255.8	4.6	0.0%	22,255.8	4.6	0.0%	22,254.6	5.8	0.0%	22,254.6	5.8	0.0%	22,253.5	6.9	0.0%	22,253.5	6.9	0.0%
ME 5	33 51 22	2013	Below Normal	February	--	8,873.8	8,869.1	4.7	0.1%	8,868.6	5.2	0.1%	8,868.2	5.7	0.1%	8,867.7	6.1	0.1%	8,867.2	6.6	0.1%	8,866.7	7.2	0.1%
ME 5	33 51 22	2013	Below Normal	March	--	10,372.6	10,368.1	4.5	0.0%	10,367.6	5.0	0.0%	10,367.1	5.4	0.1%	10,366.7	5.9	0.1%	10,366.2	6.4	0.1%	10,365.7	6.8	0.1%
ME 5	33 51 22	2013	Below Normal	April	--	8,304.1	8,295.5	8.6	0.1%	8,294.7	9.4	0.1%	8,293.9	10.2	0.1%	8,292.9	11.1	0.1%	8,292.1	11.9	0.1%	8,291.2	12.8	0.2%
ME 5	33 51 22	2013	Below Normal	May	--	4,447.7	4,437.4	10.3	0.2%	4,436.3	11.3	0.3%	4,435.3	12.4	0.3%	4,434.3	13.4	0.3%	4,433.2	14.5	0.3%	4,432.2	15.5	0.3%
ME 5	33 51 22	2013	Below Normal	June	--	2,116.1	2,103.8	12.3	0.6%	2,102.5	13.5	0.6%	2,101.3	14.8	0.7%	2,100.1	16.0	0.8%	2,098.8	17.2	0.8%	2,097.6	18.5	0.9%
ME 5	33 51 22	2013	Below Normal	July	--	720.8	708.8	12.1	1.7%	707.6	13.3	1.8%	706.4	14.5	2.0%	705.2	15.7	2.2%	704.0	16.9	2.3%	702.8	18.1	2.5%
ME 5	33 51 22	2013	Below Normal	August	--	343.8	332.5	11.3	3.3%	331.3	12.5	3.6%	330.2	13.6	4.0%	329.1	14.7	4.3%	327.9	15.9	4.6%	326.8	17.0	4.9%
ME 5	33 51 22	2013	Below Normal	September	Used in Summary Table Analysis	4,810.9	4,799.1	11.8	0.2%	4,797.9	13.0	0.3%	4,796.8	14.1	0.3%	4,795.6	15.3	0.3%	4,794.4	16.4	0.3%	4,793.3	17.6	0.4%
ME 5	33 51 22	2014	Critical	October	Used in Summary Table Analysis	281.9	273.3	8.6	3.1%	272.4	9.5	3.4%	271.6	10.3	3.7%	270.7	11.2	4.0%	269.8	12.1	4.3%	269.0	12.9	4.6%
ME 5	33 51 22	2014	Critical	November	Used in Summary Table Analysis	1,551.3	1,544.3	6.9	0.4%	1,543.6	7.6	0.5%	1,542.9	8.3	0.5%	1,542.2	9.0	0.6%	1,541.6	9.7	0.6%	1,540.9	10.4	0.7%
ME 5	33 51 22	2014	Critical	December	--	1,597.6	1,591.6	6.0	0.4%	1,591.0	6.6	0.4%	1,590.4	7.2	0.4%	1,589.7	7.9	0.5%	1,589.1	8.4	0.5%	1,588.5	9.0	0.6%
ME 5	33 51 22	2014	Critical	January	--	2,835.1	2,829.7	5.3	0.2%	2,829.2	5.9	0.2%	2,828.6	6.5	0.2%	2,828.1	6.9	0.2%	2,827.5	7.5	0.3%	2,827.0	8.1	0.3%
ME 5	33 51 22	2014	Critical	February	--	15,792.8	15,788.2	4.6	0.0%	15,788.2	4.6	0.0%	15,787.0	5.8	0.0%	15,787.0	5.8	0.0%	15,785.9	6.9	0.0%	15,785.9	6.9	0.0%
ME 5	33 51 22	2014	Critical	March	--	31,538.2	31,533.6	4.6	0.0%	31,532.4	5.8	0.0%	31,532.4	5.8	0.0%	31,532.4	5.8	0.0%	31,531.3	6.9	0.0%	31,531.3	6.9	0.0%
ME 5	33 51 22	2014	Critical	April	--	13,008.1	12,998.8	9.3	0.1%	12,997.7	10.4	0.1%	12,997.7	10.4	0.1%	12,996.5	11.6	0.1%	12,995.4	12.7	0.1%	12,994.2	13.9	0.1%
ME 5	33 51 22	2014	Critical	May	--	5,199.4	5,188.7	10.8	0.2%	5,187.5	11.9	0.2%	5,186.5	13.0	0.2%	5,185.3	14.1	0.3%	5,184.3	15.2	0.3%	5,183.1	16.3	0.3%
ME 5	33 51 22	2014	Critical	June	--	1,202.7	1,187.8	14.8	1.2%	1,186.3	16.3	1.4%	1,184.8	17.8	1.5%	1,183.3	19.3	1.6%	1,181.8	20.8	1.7%	1,180.4	22.2	1.8%
ME 5	33 51 22	2014	Critical	July	--	549.0	535.2	13.8	2.5%	533.8	15.2	2.8%	532.4	16.6	3.0%	531.0	17.9	3.3%	529.7	19.3	3.5%	528.3	20.7	3.8%
ME 5	33 51 22	2014	Critical	August	--	351.7	338.5	13.2	3.8%	337.2	14.5	4.1%	335.9	15.8	4.5%	334.6	17.2	4.9%	333.3	18.5	5.3%	331.9	19.8	5.6%
ME 5	33 51 22	2014	Critical	September	Used in Summary Table Analysis	2,585.3	2,572.5	12.8	0.5%	2,571.2	14.1	0.5%	2,569.8	15.5	0.6%	2,568.5	16.8	0.6%	2,567.2	18.1	0.7%	2,566.0	19.3	0.7%
ME 5	33 51 22	2015	Dry	October	Used in Summary Table Analysis	11,407.2	11,397.2	10.0	0.1%	11,396.3	10.9	0.1%	11,395.3	11.9	0.1%	11,393.6	13.5	0.1%	11,392.7	14.5	0.1%	11,391.7	15.5	0.1%
ME 5	33 51 22	2015	Dry	November	Used in Summary Table Analysis	9,086.8	9,079.2	7.6	0.1%	9,078.4	8.4	0.1%	9,077.7	9.1	0.1%	9,076.9	10.0	0.1%	9,076.0	10.8	0.1%	9,075.3	11.5	0.1%
ME 5	33 51 22	2015	Dry	December	--	32,797.5	32,791.7	5.8	0.0%	32,790.5	6.9	0.0%	32,790.5	6.9	0.0%	32,789.4	8.1	0.0%	32,789.4	8.1	0.0%	32,788.2	9.3	0.0%
ME 5	33 51 22	2015	Dry	January	--	14,605.3	14,599.5	5.8	0.0%	14,598.4	6.9	0.0%	14,598.4	6.9	0.0%	14,597.2	8.1	0.1%	14,597.2	8.1	0.1%	14,596.1	9.3	0.1%
ME 5	33 51 22	2015	Dry	February	--	27,305.6	27,299.8	5.8	0.0%	27,299.8	5.8	0.0%	27,298.6	6.9	0.0%	27,298.6	6.9	0.0%	27,297.5	8.1	0.0%	27,297.5	8.1	0.0%
ME 5	33 51 22	2015	Dry	March	--	11,588.0	11,583.3	4.6	0.0%	11,583.3	4.6	0.0%	11,582.2	5.8	0.0%	11,582.2	5.8	0.0%	11,581.0	6.9	0.1%	11,581.0	6.9	0.1%
ME 5	33 51 22	2015	Dry	April	--	8,433.3	8,424.3	9.0	0.1%	8,423.4	10.0	0.1%	8,422.5	10.9	0.1%	8,421.5	11.8	0.1%	8,420.6	12.7	0.2%	8,419.7	13.7	0.2%
ME 5	33 51 22	2015	Dry	May	--	1,510.4	1,499.8	10.6	0.7%	1,498.7	11.7	0.8%	1,497.6	12.8	0.9%	1,496.5	13.9	0.9%	1,495.5	14.9	1.0%	1,494.4	16.0	1.1%
ME 5	33 51 22	2015	Dry	June	--	655.1	641.3	13.8	2.1%	639.9	15.2	2.3%	638.5	16.6	2.5%	637.2	17.9	2.7%	635.8	19.3	2.9%	634.4	20.7	3.2%
ME 5	33 51 22	2015	Dry	July	--	271.3	257.8	13.6	5.0%	256.4	14.9	5.5%	255.1	16.3	6.0%	253.7	17.6	6.5%	252.3	19.0	7.0%	251.0	20.3	7.5%
ME 5	33 51 22	2015	Dry	August	--	169.8	156.7	13.1	7.7%	155.4	14.4	8.5%	154.1	15.8	9.3%	152.7	17.1	10.1%	151.4	18.4	10.8%	150.1	19.7	11.6%
ME 5	33 51 22	2015	Dry	September	Used in Summary Table Analysis	123.5	111.7	11.8	9.5%	110.6	12.9	10.5%	109.4	14.1	11.4%	108.2	15.3	12.4%	107.0	16.5	13.4%	105.8	17.7	14.3%
ME 5	33 51 22	2016	Above Normal	October	Used in Summary Table Analysis	88.6	78.6	10.0	11.3%	77.6	11.1	12.5%	76.6	12.1	13.6%	76.1	12.5	14.2%	75.2	13.4	15.1%	73.9	14.8	16.7%
ME 5	33 51 22	2016	Above Normal	November	Used in Summary Table Analysis	3,907.5	3,899.9	7.6	0.2%	3,899.1	8.4	0.2%	3,898.3	9.3	0.2%	3,897.5	10.1	0.3%	3,896.6	10.9	0.3%	3,895.8	11.7	0.3%
ME 5	33 51 22	2016	Above Normal	December	--	36,831.0	36,824.1	6.9	0.0%	36,824.1	6.9	0.0%	36,822.9	8.1	0.0%	36,821.8	9.3	0.0%	36,821.8	9.3	0.0%	36,820.6	10.4	0.0%
ME 5	33 51 22	2016	Above Normal	January	--	57,538.2	57,532.4	5.8	0.0%	57,531.3	6.9	0.0%	57,531.3	6.9	0.0%	57,530.1	8.1	0.0%	57,530.1	8.1	0.0%	57,528.9	9.3	0.0%
ME 5	33 51 22	2016	Above Normal	February	--	24,305.6	24,299.8	5.8	0.0%	24,299.8	5.8	0.0%	24,298.6	6.9	0.0%	24,298.6	6.9	0.0%	24,298.6	6.9	0.0%	24,297.5	8.1	0.0%
ME 5	33 51 22	2016	Above Normal	March	--	41,880.8	41,875.0	5.8	0.0%	41,875.0	5.8	0.0%	41,875.0	5.8	0.0%	41,873.8	6.9	0.0%	41,873.8	6.9	0.0%	41,872.7	8.1	0.0%
ME 5	33 51 22	2016	Above Normal	April	--	18,567.1	18,562.5	4.6	0.0%	18,561.3	5.8	0.0%	18,561.3	5.8	0.0%	18,561.3	5.8	0.0%	18,560.2	6.9	0.0%	18,560.2	6.9	0.0%
ME 5	33 51 22	2016	Above Normal	May	--	5,225.8	5,220.4	5.4	0.1%	5,219.8	6.0	0.1%	5,219.2	6.6	0.1%	5,218.6	7.2	0.1%	5,218.1	7.8	0.1%	5,217.5	8.3	0.2%
ME 5	33 51 22	2016	Above Normal	June	--	1,513.7	1,503.0	10.6	0.7%	1,502.0	11.7	0.8%	1,500.9	12.7	0.8%	1,499.9	13.8	0.9%	1,498.7	14.9	1.0%	1,497.7	16.0	1.1%
ME 5	33 51 22	2016	Above Normal	July	--	827.5	815.6	11.9	1.4%	814.5	13.0	1.6%	813.3	14.2	1.7%	812.1	15.4	1.9%	810.9	16.6	2.0%	809.7	17.8	2.1%
ME 5	33 51 22	2016	Above Normal	August	--	496.2	484.6	11.7	2.3%	483.4	12.8	2.6%	482.2	14.0	2.8%	481.1	15.2	3.1%	479.9	16.3	3.3%	478.7	17.5	3.5%
ME 5	33 51 22	2016	Above Normal	September	Used in Summary Table Analysis	332.2	321.8	10.4	3.1%	320.8	11.4	3.4%	319.8	12.5	3.8%	318.7	13.6	4.1%	317.7	14.6	4.4%	316.6	15.6	4.7%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 51 22	2017	Wet	October	Used in Summary Table Analysis	18,366.9	18,357.6	9.3	0.1%	18,357.6	9.3	0.1%	18,356.5	10.4	0.1%	18,355.3	11.6	0.1%	18,354.2	12.7	0.1%	18,353.0	13.9	0.1%
ME 5	33 51 22	2017	Wet	November	Used in Summary Table Analysis	18,914.4	18,908.6	5.8	0.0%	18,907.4	6.9	0.0%	18,906.3	8.1	0.0%	18,906.3	8.1	0.0%	18,905.1	9.3	0.0%	18,905.1	9.3	0.0%
ME 5	33 51 22	2017	Wet	December	--	24,253.5	24,247.7	5.8	0.0%	24,246.5	6.9	0.0%	24,246.5	6.9	0.0%	24,245.4	8.1	0.0%	24,245.4	8.1	0.0%	24,244.2	9.3	0.0%
ME 5	33 51 22	2017	Wet	January	--	107,313.7	107,309.0	4.6	0.0%	107,307.9	5.8	0.0%	107,307.9	5.8	0.0%	107,306.7	6.9	0.0%	107,306.7	6.9	0.0%	107,305.6	8.1	0.0%
ME 5	33 51 22	2017	Wet	February	--	82,079.9	82,075.2	4.6	0.0%	82,075.2	4.6	0.0%	82,074.1	5.8	0.0%	82,074.1	5.8	0.0%	82,072.9	6.9	0.0%	82,072.9	6.9	0.0%
ME 5	33 51 22	2017	Wet	March	--	27,351.9	27,347.2	4.6	0.0%	27,346.1	5.8	0.0%	27,346.1	5.8	0.0%	27,344.9	6.9	0.0%	27,344.9	6.9	0.0%	27,344.9	6.9	0.0%
ME 5	33 51 22	2017	Wet	April	--	23,018.5	23,013.9	4.6	0.0%	23,013.9	4.6	0.0%	23,012.7	5.8	0.0%	23,012.7	5.8	0.0%	23,012.7	5.8	0.0%	23,011.6	6.9	0.0%
ME 5	33 51 22	2017	Wet	May	--	6,276.6	6,271.1	5.6	0.1%	6,270.5	6.1	0.1%	6,269.9	6.7	0.1%	6,269.3	7.3	0.1%	6,268.8	7.9	0.1%	6,268.2	8.4	0.1%
ME 5	33 51 22	2017	Wet	June	--	2,127.1	2,116.2	10.9	0.5%	2,115.0	12.0	0.6%	2,114.0	13.1	0.6%	2,113.0	14.1	0.7%	2,111.8	15.3	0.7%	2,110.8	16.3	0.8%
ME 5	33 51 22	2017	Wet	July	--	940.5	928.6	12.0	1.3%	927.4	13.1	1.4%	926.2	14.3	1.5%	925.0	15.5	1.7%	923.8	16.7	1.8%	922.6	17.9	1.9%
ME 5	33 51 22	2017	Wet	August	--	512.6	500.9	11.7	2.3%	499.7	12.8	2.5%	498.6	14.0	2.7%	497.4	15.2	3.0%	496.3	16.3	3.2%	495.1	17.5	3.4%
ME 5	33 51 22	2017	Wet	September	Used in Summary Table Analysis	327.7	316.9	10.8	3.3%	315.8	11.9	3.6%	314.8	12.9	3.9%	313.7	14.0	4.3%	312.6	15.1	4.6%	311.5	16.2	4.9%
ME 5	33 51 22	2018	Above Normal	October	Used in Summary Table Analysis	280.3	272.6	7.7	2.7%	271.4	9.0	3.2%	270.4	9.9	3.5%	269.3	11.1	3.9%	268.3	12.0	4.3%	267.4	12.9	4.6%
ME 5	33 51 22	2018	Above Normal	November	Used in Summary Table Analysis	10,882.4	10,875.7	6.7	0.1%	10,875.0	7.4	0.1%	10,874.3	8.1	0.1%	10,873.6	8.8	0.1%	10,873.0	9.4	0.1%	10,872.3	10.1	0.1%
ME 5	33 51 22	2018	Above Normal	December	--	5,455.0	5,449.3	5.7	0.1%	5,448.7	6.3	0.1%	5,448.1	6.8	0.1%	5,447.6	7.4	0.1%	5,447.0	8.0	0.1%	5,446.4	8.6	0.2%
ME 5	33 51 22	2018	Above Normal	January	--	17,937.5	17,931.7	5.8	0.0%	17,931.7	5.8	0.0%	17,930.6	6.9	0.0%	17,930.6	6.9	0.0%	17,929.4	8.1	0.0%	17,929.4	8.1	0.0%
ME 5	33 51 22	2018	Above Normal	February	--	7,605.6	7,601.0	4.5	0.1%	7,600.6	5.0	0.1%	7,600.1	5.4	0.1%	7,599.7	5.9	0.1%	7,599.2	6.4	0.1%	7,598.7	6.8	0.1%
ME 5	33 51 22	2018	Above Normal	March	--	20,800.9	20,796.3	4.6	0.0%	20,796.3	4.6	0.0%	20,795.1	5.8	0.0%	20,795.1	5.8	0.0%	20,795.1	5.8	0.0%	20,794.0	6.9	0.0%
ME 5	33 51 22	2018	Above Normal	April	--	32,319.4	32,316.0	3.5	0.0%	32,314.8	4.6	0.0%	32,314.8	4.6	0.0%	32,314.8	4.6	0.0%	32,313.7	5.8	0.0%	32,313.7	5.8	0.0%
ME 5	33 51 22	2018	Above Normal	May	--	6,993.5	6,985.0	8.6	0.1%	6,984.1	9.4	0.1%	6,983.2	10.3	0.1%	6,982.4	11.1	0.2%	6,981.6	11.9	0.2%	6,980.7	12.8	0.2%
ME 5	33 51 22	2018	Above Normal	June	--	1,918.8	1,907.8	11.0	0.6%	1,906.6	12.2	0.6%	1,905.4	13.3	0.7%	1,904.4	14.4	0.7%	1,903.2	15.5	0.8%	1,902.2	16.6	0.9%
ME 5	33 51 22	2018	Above Normal	July	--	786.4	774.4	12.0	1.5%	773.2	13.2	1.7%	772.0	14.4	1.8%	770.8	15.6	2.0%	769.6	16.8	2.1%	768.4	18.0	2.3%
ME 5	33 51 22	2018	Above Normal	August	--	447.5	436.3	11.2	2.5%	435.2	12.3	2.8%	434.1	13.4	3.0%	432.9	14.6	3.3%	431.8	15.7	3.5%	430.7	16.8	3.8%
ME 5	33 51 22	2018	Above Normal	September	Used in Summary Table Analysis	304.5	293.7	10.8	3.5%	292.6	11.9	3.9%	291.5	12.9	4.2%	290.5	14.0	4.6%	289.4	15.1	5.0%	288.3	16.2	5.3%
ME 5	33 51 22	2019	Below Normal	October	Used in Summary Table Analysis	211.3	202.9	8.5	4.0%	202.0	9.4	4.4%	201.2	10.2	4.8%	200.3	11.0	5.2%	199.5	11.8	5.6%	198.7	12.7	6.0%
ME 5	33 51 22	2019	Below Normal	November	Used in Summary Table Analysis	6,683.2	6,676.5	6.7	0.1%	6,675.8	7.4	0.1%	6,675.1	8.1	0.1%	6,674.4	8.8	0.1%	6,673.7	9.5	0.1%	6,673.0	10.2	0.2%
ME 5	33 51 22	2019	Below Normal	December	--	14,767.4	14,761.6	5.8	0.0%	14,760.4	6.9	0.0%	14,760.4	6.9	0.0%	14,759.3	8.1	0.1%	14,759.3	8.1	0.1%	14,758.1	9.3	0.1%
ME 5	33 51 22	2019	Below Normal	January	--	35,425.9	35,420.1	5.8	0.0%	35,420.1	5.8	0.0%	35,419.0	6.9	0.0%	35,419.0	6.9	0.0%	35,417.8	8.1	0.0%	35,417.8	8.1	0.0%
ME 5	33 51 22	2019	Below Normal	February	--	142,141.2	142,129.6	11.6	0.0%	142,129.6	11.6	0.0%	142,129.6	11.6	0.0%	142,129.6	11.6	0.0%	142,129.6	11.6	0.0%	142,129.6	11.6	0.0%
ME 5	33 51 22	2019	Below Normal	March	--	42,434.0	42,430.6	3.5	0.0%	42,429.4	4.6	0.0%	42,429.4	4.6	0.0%	42,429.4	4.6	0.0%	42,428.2	5.8	0.0%	42,428.2	5.8	0.0%
ME 5	33 51 22	2019	Below Normal	April	--	15,305.6	15,300.9	4.6	0.0%	15,300.9	4.6	0.0%	15,300.9	4.6	0.0%	15,299.8	5.8	0.0%	15,299.8	5.8	0.0%	15,298.6	6.9	0.0%
ME 5	33 51 22	2019	Below Normal	May	--	17,098.4	17,089.1	9.3	0.1%	17,088.0	10.4	0.1%	17,086.8	11.6	0.1%	17,086.8	11.6	0.1%	17,085.6	12.7	0.1%	17,084.5	13.9	0.1%
ME 5	33 51 22	2019	Below Normal	June	--	4,244.1	4,232.2	11.9	0.3%	4,231.0	13.1	0.3%	4,229.9	14.2	0.3%	4,228.6	15.5	0.4%	4,227.4	16.7	0.4%	4,226.3	17.8	0.4%
ME 5	33 51 22	2019	Below Normal	July	--	1,367.6	1,355.6	12.0	0.9%	1,354.4	13.2	1.0%	1,353.1	14.5	1.1%	1,352.0	15.6	1.1%	1,350.8	16.8	1.2%	1,349.5	18.1	1.3%
ME 5	33 51 22	2019	Below Normal	August	--	602.3	590.8	11.5	1.9%	589.6	12.7	2.1%	588.4	13.8	2.3%	587.3	15.0	2.5%	586.1	16.1	2.7%	585.0	17.3	2.9%
ME 5	33 51 22	2019	Below Normal	September	Used in Summary Table Analysis	467.5	456.8	10.7	2.3%	455.7	11.8	2.5%	454.6	12.9	2.8%	453.6	13.9	3.0%	452.5	15.0	3.2%	451.4	16.1	3.4%
ME 5	33 51 22	2020	Dry	October	Used in Summary Table Analysis	359.4	351.3	8.1	2.3%	350.5	8.9	2.5%	349.7	9.7	2.7%	348.9	10.6	2.9%	348.1	11.4	3.2%	347.3	12.2	3.4%
ME 5	33 51 22	2020	Dry	November	Used in Summary Table Analysis	326.7	320.4	6.4	1.9%	319.7	7.0	2.1%	319.1	7.7	2.3%	318.4	8.3	2.5%	317.8	9.0	2.7%	317.1	9.6	2.9%
ME 5	33 51 22	2020	Dry	December	--	13,432.9	13,427.1	5.8	0.0%	13,427.1	5.8	0.0%	13,425.9	6.9	0.1%	13,425.9	6.9	0.1%	13,424.8	8.1	0.1%	13,424.8	8.1	0.1%
ME 5	33 51 22	2020	Dry	January	--	22,446.8	22,441.0	5.8	0.0%	22,441.0	5.8	0.0%	22,439.8	6.9	0.0%	22,439.8	6.9	0.0%	22,438.7	8.1	0.0%	22,438.7	8.1	0.0%
ME 5	33 51 22	2020	Dry	February	--	7,420.4	7,415.7	4.6	0.1%	7,415.3	5.1	0.1%	7,414.7	5.7	0.1%	7,414.2	6.1	0.1%	7,413.8	6.6	0.1%	7,413.3	7.1	0.1%
ME 5	33 51 22	2020	Dry	March	--	7,265.6	7,261.2	4.4	0.1%	7,260.8	4.9	0.1%	7,260.4	5.2	0.1%	7,260.0	5.7	0.1%	7,259.5	6.1	0.1%	7,259.0	6.6	0.1%
ME 5	33 51 22	2020	Dry	April	--	5,506.5	5,497.5	9.0	0.2%	5,496.6	9.8	0.2%	5,495.7	10.8	0.2%	5,494.8	11.7	0.2%	5,493.9	12.6	0.2%	5,492.9	13.5	0.2%
ME 5	33 51 22	2020	Dry	May	--	7,406.9	7,396.2	10.8	0.1%	7,395.0	11.9	0.2%	7,394.0	13.0	0.2%	7,392.9	14.0	0.2%	7,391.8	15.2	0.2%	7,390.7	16.2	0.2%
ME 5	33 51 22	2020	Dry	June	--	2,105.8	2,091.7	14.1	0.7%	2,090.3	15.5	0.7%	2,088.8	17.0	0.8%	2,087.4	18.4	0.9%	2,086.0	19.8	0.9%	2,084.6	21.2	1.0%
ME 5	33 51 22	2020	Dry	July	--	800.1	786.1	14.0	1.8%	784.7	15.4	1.9%	783.3	16.8	2.1%	781.9	18.2	2.3%	780.5	19.6	2.5%	779.1	21.0	2.6%
ME 5	33 51 22	2020	Dry	August	--	403.0	389.1	13.9	3.4%	387.7	15.2	3.8%	386.3	16.6	4.1%	384.9	18.0	4.5%	383.6	19.4	4.8%	382.2	20.8	5.2%
ME 5	33 51 22	2020	Dry	September	Used in Summary Table Analysis	252.2	239.7	12.5	4.9%	238.5	13.7	5.4%	237.3	14.9	5.9%	236.0	16.2	6.4%	234.8	17.4	6.9%	233.5	18.7	7.4%
ME 5	33 50 23	2000	Above Normal	October	Used in Summary Table Analysis	824.4	815.9	8.5	1.0%	815.0	9.3	1.1%	814.2	10.2	1.2%	813.3	11.0	1.3%	812.5	11.9	1.4%	811.6	12.7	1.5%
ME 5	33 50 23	2000	Above Normal	November	Used in Summary Table Analysis	12,250.0	12,243.1	6.9	0.1%	12,241.9	8.1	0.1%	12,241.9	8.1	0.1%	12,240.7	9.3	0.1%	12,239.6	10.4	0.1%	12,239.6	10.4	0.1%
ME 5	33 50 23	2000	Above Normal	December	--	10,880.6	10,874.9	5.7	0.1%	10,874.3	6.3	0.1%	10,873.7	6.8	0.1%	10,873.1	7.4	0.1%	10,872.6	8.0	0.1%	10,872.0	8.6	0.1%
ME 5	33 50 23	2000	Above Normal	January	--	28,795.1	28,789.4	5.8	0.0%	28,789.4	5.8	0.0%	28,789.4	5.8	0.0%	28,788.2	6.9	0.0%	28,788.2	6.9	0.0%	28,787.0	8.1	0.0%
ME 5	33 50 23	2000	Above Normal	February	--	37,184.0	37,179.4	4.6	0.0%	37,179.4	4.6	0.0%	37,178.2	5.8	0.0%	37,178.2	5.8	0.0%	37,178.2	5.8	0.0%	37,177.1	6.9	0.0%
ME 5	33 50 23	2000	Above Normal	March	--	18,360.0	18,356.5	3.5	0.0%	18,355.3	4.6	0.0%	18,355.3	4.6	0.0%	18,355.3	4.6	0.0%	18,354.2	5.8	0.0%	18,354.2	5.8	0.0%
ME 5	33 50 23	2000	Above Normal	April	--	12,348.4	12,343.8	4.6	0.0%	12,343.8	4.6	0.0%	12,343.8	4.6	0.0%	12,342.6	5.8	0.0%	12,342.6	5.8	0.0%	12,342.6	5.8	0.0%
ME 5	33 50 23	2000	Above Normal	May	--	7,123.0	7,114.4	8.7	0.1%	7,113.4	9.6	0.1%	7,112.6	10.4	0.1%	7,111.7	11.3	0.2%	7,110.8	12.3	0.2%	7,110.0	13.1	0.2%
ME 5	33 50 23	2000	Above Normal	June	--	2,622.7	2,609.6	13.1	0.5%	2,608.3	14.4	0.5%	2,606.9	15.7	0.6%	2,605.7	17.0	0.6%	2,604.4	18.3	0.7%	2,603.1	19.6	0.7%
ME 5	33 50 23	2000	Above Normal	July	--	997.4	985.5	12.0	1.2%	984.3	13.2	1.3%	983.1	14.3	1.4%	981.9	15.5	1.6%	980.7	16.7	1.7%	979.5	17.9	1.8%
ME 5	33 50 23	2000	Above Normal	August	--	527.9	516.6	11.3	2.1%	515.5	12.4	2.4%	514.3	13.6	2.6%	513.2	14.7	2.8%	512.1	15.8	3.0%	510.9	16.9	3.2%
ME 5	33 50 23	2000	Above Normal	September	Used in Summary Table Analysis	300.6	290.5	10.0	3.3%	289.5	11.0	3.7%	288.5	12.0	4.0%	287.5	13.0	4.3%	286.5	14.0	4.7%	285.5	15.1	5.0%
ME 5	33 50 23	2001	Dry	October	Used in Summary Table Analysis	3,846.3	3,838.0	8.3	0.2%	3,837.2	9.1	0.2%	3,836.3	10.0	0.3%	3,835.4	10.9	0.3%	3,834.6	11.7	0.3%	3,833.8	12.5	0.3%
ME 5	33 50 23	2001	Dry	November	Used in Summary Table Analysis	6,174.0	6,167.2	6.7	0.1%	6,166.6	7.4	0.1%	6,165.9	8.1	0.1%	6,165.2	8.8	0.1%	6,164.6	9.4	0.2%	6,163.9	10.1	0.2%
ME 5	33 50 23	2001	Dry	December	--	8,888.5	8,882.8	5.8	0.1%	8,882.2	6.4	0.1%	8,881.6	6.9	0.1%	8,881.0	7.5	0.1%	8,880.4	8.1	0.1%	8,879.9	8.7	0.1%
ME 5	33 50 23	2001	Dry	January	--	12,885.4	12,880.8	4.6	0.0%	12,879.6	5.8	0.0%	12,879.6	5.8	0.0%	12,878.5	6.9	0.1%	12,878.5	6.9	0.1%	12,878.5	6.9	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 50 23	2001	Dry	February	--	17,531.3	17,526.6	4.6	0.0%	17,526.6	4.6	0.0%	17,526.6	4.6	0.0%	17,525.5	5.8	0.0%	17,525.5	5.8	0.0%	17,524.3	6.9	0.0%
ME 5	33 50 23	2001	Dry	March	--	12,327.5	12,322.9	4.6	0.0%	12,322.9	4.6	0.0%	12,322.9	4.6	0.0%	12,321.8	5.8	0.0%	12,321.8	5.8	0.0%	12,320.6	6.9	0.1%
ME 5	33 50 23	2001	Dry	April	--	11,004.3	10,995.3	9.0	0.1%	10,994.3	10.0	0.1%	10,993.5	10.8	0.1%	10,992.6	11.7	0.1%	10,991.7	12.6	0.1%	10,990.7	13.5	0.1%
ME 5	33 50 23	2001	Dry	May	--	2,638.0	2,627.3	10.6	0.4%	2,626.2	11.8	0.4%	2,625.1	12.8	0.5%	2,624.1	13.9	0.5%	2,623.0	14.9	0.6%	2,622.0	16.0	0.6%
ME 5	33 50 23	2001	Dry	June	--	2,669.1	2,654.5	14.6	0.5%	2,653.0	16.1	0.6%	2,651.5	17.6	0.7%	2,650.1	19.0	0.7%	2,648.6	20.5	0.8%	2,647.2	21.9	0.8%
ME 5	33 50 23	2001	Dry	July	--	721.2	707.4	13.8	1.9%	706.1	15.2	2.1%	704.6	16.6	2.3%	703.3	18.0	2.5%	701.9	19.3	2.7%	700.5	20.7	2.9%
ME 5	33 50 23	2001	Dry	August	--	176.9	163.5	13.4	7.6%	162.2	14.8	8.4%	160.8	16.2	9.1%	159.4	17.5	9.9%	158.1	18.9	10.7%	156.7	20.2	11.4%
ME 5	33 50 23	2001	Dry	September	Used in Summary Table Analysis	100.2	88.1	12.1	12.0%	86.9	13.3	13.3%	85.7	14.5	14.5%	84.4	15.8	15.7%	83.2	17.0	16.9%	82.0	18.2	18.1%
ME 5	33 50 23	2002	Below Normal	October	Used in Summary Table Analysis	270.5	260.4	10.1	3.7%	259.4	11.1	4.1%	258.3	12.2	4.5%	257.2	13.3	4.9%	256.2	14.3	5.3%	255.2	15.3	5.6%
ME 5	33 50 23	2002	Below Normal	November	Used in Summary Table Analysis	12,092.6	12,084.5	8.1	0.1%	12,083.3	9.3	0.1%	12,083.3	9.3	0.1%	12,082.2	10.4	0.1%	12,081.0	11.6	0.1%	12,079.9	12.7	0.1%
ME 5	33 50 23	2002	Below Normal	December	--	35,879.6	35,872.7	6.9	0.0%	35,872.7	6.9	0.0%	35,871.5	8.1	0.0%	35,870.4	9.3	0.0%	35,870.4	9.3	0.0%	35,869.2	10.4	0.0%
ME 5	33 50 23	2002	Below Normal	January	--	31,001.2	30,995.4	5.8	0.0%	30,994.2	6.9	0.0%	30,994.2	6.9	0.0%	30,993.1	8.1	0.0%	30,993.1	8.1	0.0%	30,991.9	9.3	0.0%
ME 5	33 50 23	2002	Below Normal	February	--	24,751.2	24,746.5	4.6	0.0%	24,745.4	5.8	0.0%	24,745.4	5.8	0.0%	24,744.2	6.9	0.0%	24,744.2	6.9	0.0%	24,743.1	8.1	0.0%
ME 5	33 50 23	2002	Below Normal	March	--	17,836.8	17,832.2	4.6	0.0%	17,831.0	5.8	0.0%	17,831.0	5.8	0.0%	17,829.9	6.9	0.0%	17,829.9	6.9	0.0%	17,828.7	8.1	0.0%
ME 5	33 50 23	2002	Below Normal	April	--	9,947.1	9,938.1	9.0	0.1%	9,937.2	10.0	0.1%	9,936.2	10.9	0.1%	9,935.3	11.8	0.1%	9,934.4	12.7	0.1%	9,933.4	13.7	0.1%
ME 5	33 50 23	2002	Below Normal	May	--	3,327.5	3,316.8	10.8	0.3%	3,315.7	11.8	0.4%	3,314.7	12.8	0.4%	3,313.5	14.0	0.4%	3,312.5	15.0	0.5%	3,311.5	16.1	0.5%
ME 5	33 50 23	2002	Below Normal	June	--	858.1	845.9	12.2	1.4%	844.7	13.4	1.6%	843.5	14.6	1.7%	842.2	15.8	1.8%	841.0	17.0	2.0%	839.8	18.2	2.1%
ME 5	33 50 23	2002	Below Normal	July	--	366.9	354.5	12.4	3.4%	353.3	13.6	3.7%	352.0	14.9	4.1%	350.8	16.1	4.4%	349.6	17.4	4.7%	348.3	18.6	5.1%
ME 5	33 50 23	2002	Below Normal	August	--	232.5	220.8	11.7	5.0%	219.6	12.9	5.5%	218.4	14.0	6.0%	217.2	15.2	6.6%	216.1	16.4	7.1%	214.9	17.6	7.6%
ME 5	33 50 23	2002	Below Normal	September	Used in Summary Table Analysis	169.0	158.0	11.1	6.6%	156.8	12.2	7.2%	155.7	13.3	7.9%	154.6	14.4	8.5%	153.5	15.5	9.2%	152.4	16.6	9.8%
ME 5	33 50 23	2003	Wet	October	Used in Summary Table Analysis	133.9	124.8	9.1	6.8%	123.9	10.0	7.5%	123.0	10.9	8.2%	122.1	11.9	8.9%	121.1	12.8	9.5%	120.2	13.7	10.2%
ME 5	33 50 23	2003	Wet	November	Used in Summary Table Analysis	903.0	895.6	7.3	0.8%	894.9	8.1	0.9%	894.1	8.8	1.0%	893.4	9.6	1.1%	892.6	10.3	1.1%	891.9	11.1	1.2%
ME 5	33 50 23	2003	Wet	December	--	57,283.6	57,276.6	6.9	0.0%	57,276.6	6.9	0.0%	57,275.5	8.1	0.0%	57,275.5	8.1	0.0%	57,274.3	9.3	0.0%	57,274.3	9.3	0.0%
ME 5	33 50 23	2003	Wet	January	--	31,625.0	31,619.2	5.8	0.0%	31,618.1	6.9	0.0%	31,618.1	6.9	0.0%	31,616.9	8.1	0.0%	31,616.9	8.1	0.0%	31,615.7	9.3	0.0%
ME 5	33 50 23	2003	Wet	February	--	20,402.8	20,398.1	4.6	0.0%	20,398.1	4.6	0.0%	20,397.0	5.8	0.0%	20,397.0	5.8	0.0%	20,395.8	6.9	0.0%	20,395.8	6.9	0.0%
ME 5	33 50 23	2003	Wet	March	--	24,111.1	24,106.5	4.6	0.0%	24,106.5	4.6	0.0%	24,105.3	5.8	0.0%	24,105.3	5.8	0.0%	24,104.2	6.9	0.0%	24,104.2	6.9	0.0%
ME 5	33 50 23	2003	Wet	April	--	43,105.3	43,100.7	4.6	0.0%	43,099.5	5.8	0.0%	43,099.5	5.8	0.0%	43,099.5	5.8	0.0%	43,098.4	6.9	0.0%	43,098.4	6.9	0.0%
ME 5	33 50 23	2003	Wet	May	--	12,248.8	12,239.6	9.3	0.1%	12,238.4	10.4	0.1%	12,237.3	11.6	0.1%	12,237.3	11.6	0.1%	12,236.1	12.7	0.1%	12,235.0	13.9	0.1%
ME 5	33 50 23	2003	Wet	June	--	3,172.5	3,160.5	11.9	0.4%	3,159.5	13.0	0.4%	3,158.2	14.2	0.4%	3,157.2	15.3	0.5%	3,156.0	16.4	0.5%	3,154.9	17.6	0.6%
ME 5	33 50 23	2003	Wet	July	--	1,481.0	1,468.6	12.4	0.8%	1,467.5	13.5	0.9%	1,466.2	14.8	1.0%	1,464.9	16.1	1.1%	1,463.8	17.2	1.2%	1,462.5	18.5	1.3%
ME 5	33 50 23	2003	Wet	August	--	766.6	754.7	11.9	1.6%	753.5	13.1	1.7%	752.3	14.3	1.9%	751.1	15.5	2.0%	749.9	16.7	2.2%	748.7	17.9	2.3%
ME 5	33 50 23	2003	Wet	September	Used in Summary Table Analysis	464.0	453.7	10.3	2.2%	452.7	11.3	2.4%	451.6	12.3	2.7%	450.6	13.3	2.9%	449.6	14.4	3.1%	448.6	15.4	3.3%
ME 5	33 50 23	2004	Wet	October	Used in Summary Table Analysis	330.7	322.2	8.5	2.6%	321.4	9.3	2.8%	320.5	10.2	3.1%	319.7	11.0	3.3%	318.8	11.9	3.6%	318.0	12.8	3.9%
ME 5	33 50 23	2004	Wet	November	Used in Summary Table Analysis	5,857.8	5,850.8	6.9	0.1%	5,850.1	7.6	0.1%	5,849.4	8.3	0.1%	5,848.7	9.0	0.2%	5,848.0	9.7	0.2%	5,847.3	10.4	0.2%
ME 5	33 50 23	2004	Wet	December	--	36,553.2	36,547.5	5.8	0.0%	36,547.5	5.8	0.0%	36,546.3	6.9	0.0%	36,546.3	6.9	0.0%	36,545.1	8.1	0.0%	36,545.1	8.1	0.0%
ME 5	33 50 23	2004	Wet	January	--	31,637.7	31,633.1	4.6	0.0%	31,631.9	5.8	0.0%	31,631.9	5.8	0.0%	31,630.8	6.9	0.0%	31,630.8	6.9	0.0%	31,629.6	8.1	0.0%
ME 5	33 50 23	2004	Wet	February	--	38,394.7	38,390.0	4.6	0.0%	38,388.9	5.8	0.0%	38,388.9	5.8	0.0%	38,387.7	6.9	0.0%	38,387.7	6.9	0.0%	38,386.6	8.1	0.0%
ME 5	33 50 23	2004	Wet	March	--	16,550.9	16,546.3	4.6	0.0%	16,546.3	4.6	0.0%	16,545.1	5.8	0.0%	16,545.1	5.8	0.0%	16,545.1	5.8	0.0%	16,544.0	6.9	0.0%
ME 5	33 50 23	2004	Wet	April	--	9,470.8	9,466.7	4.2	0.0%	9,466.2	4.6	0.0%	9,465.7	5.1	0.1%	9,465.4	5.4	0.1%	9,464.9	5.9	0.1%	9,464.5	6.4	0.1%
ME 5	33 50 23	2004	Wet	May	--	3,436.5	3,427.7	8.8	0.3%	3,426.7	9.7	0.3%	3,425.9	10.5	0.3%	3,425.0	11.5	0.3%	3,424.1	12.4	0.4%	3,423.3	13.2	0.4%
ME 5	33 50 23	2004	Wet	June	--	695.8	684.7	11.2	1.6%	683.5	12.3	1.8%	682.4	13.4	1.9%	681.3	14.5	2.1%	680.2	15.6	2.2%	679.1	16.7	2.4%
ME 5	33 50 23	2004	Wet	July	--	361.6	349.6	12.0	3.3%	348.4	13.2	3.7%	347.2	14.4	4.0%	346.0	15.6	4.3%	344.8	16.8	4.7%	343.6	18.0	5.0%
ME 5	33 50 23	2004	Wet	August	--	230.4	219.0	11.4	4.9%	217.9	12.5	5.4%	216.7	13.7	5.9%	215.6	14.8	6.4%	214.4	16.0	6.9%	213.3	17.1	7.4%
ME 5	33 50 23	2004	Wet	September	Used in Summary Table Analysis	167.1	156.2	10.8	6.5%	155.2	11.9	7.1%	154.1	13.0	7.8%	153.0	14.1	8.4%	151.9	15.2	9.1%	150.8	16.3	9.7%
ME 5	33 50 23	2005	Above Normal	October	Used in Summary Table Analysis	7,753.5	7,744.8	8.7	0.1%	7,744.0	9.5	0.1%	7,743.1	10.4	0.1%	7,742.2	11.2	0.1%	7,741.3	12.2	0.2%	7,740.5	13.0	0.2%
ME 5	33 50 23	2005	Above Normal	November	Used in Summary Table Analysis	2,267.0	2,260.3	6.7	0.3%	2,259.6	7.4	0.3%	2,258.9	8.1	0.4%	2,258.2	8.8	0.4%	2,257.5	9.5	0.4%	2,256.8	10.2	0.4%
ME 5	33 50 23	2005	Above Normal	December	--	21,231.5	21,224.5	6.9	0.0%	21,224.5	6.9	0.0%	21,223.4	8.1	0.0%	21,223.4	8.1	0.0%	21,222.2	9.3	0.0%	21,222.2	9.3	0.0%
ME 5	33 50 23	2005	Above Normal	January	--	22,544.0	22,539.4	4.6	0.0%	22,538.2	5.8	0.0%	22,538.2	5.8	0.0%	22,538.2	5.8	0.0%	22,537.0	6.9	0.0%	22,537.0	6.9	0.0%
ME 5	33 50 23	2005	Above Normal	February	--	14,039.4	14,034.7	4.6	0.0%	14,034.7	4.6	0.0%	14,033.6	5.8	0.0%	14,033.6	5.8	0.0%	14,033.6	5.8	0.0%	14,032.4	6.9	0.0%
ME 5	33 50 23	2005	Above Normal	March	--	28,688.7	28,685.2	3.5	0.0%	28,684.0	4.6	0.0%	28,684.0	4.6	0.0%	28,682.9	5.8	0.0%	28,682.9	5.8	0.0%	28,682.9	5.8	0.0%
ME 5	33 50 23	2005	Above Normal	April	--	21,524.3	21,520.8	3.5	0.0%	21,519.7	4.6	0.0%	21,519.7	4.6	0.0%	21,519.7	4.6	0.0%	21,518.5	5.8	0.0%	21,518.5	5.8	0.0%
ME 5	33 50 23	2005	Above Normal	May	--	19,665.5	19,656.3	9.3	0.0%	19,655.1	10.4	0.1%	19,655.1	10.4	0.1%	19,653.9	11.6	0.1%	19,652.8	12.7	0.1%	19,651.6	13.9	0.1%
ME 5	33 50 23	2005	Above Normal	June	--	15,985.0	15,971.1	13.9	0.1%	15,969.9	15.0	0.1%	15,968.8	16.2	0.1%	15,967.6	17.4	0.1%	15,965.3	19.7	0.1%	15,964.1	20.8	0.1%
ME 5	33 50 23	2005	Above Normal	July	--	2,865.4	2,852.9	12.5	0.4%	2,851.6	13.8	0.5%	2,850.5	14.9	0.5%	2,849.2	16.2	0.6%	2,847.9	17.5	0.6%	2,846.6	18.8	0.7%
ME 5	33 50 23	2005	Above Normal	August	--	989.4	978.1	11.3	1.1%	977.0	12.5	1.3%	975.8	13.6	1.4%	974.7	14.7	1.5%	973.6	15.9	1.6%	972.5	17.0	1.7%
ME 5	33 50 23	2005	Above Normal	September	Used in Summary Table Analysis	531.0	520.9	10.1	1.9%	519.9	11.1	2.1%	518.9	12.1	2.3%	517.9	13.1	2.5%	516.9	14.1	2.7%	515.9	15.1	2.8%
ME 5	33 50 23	2006	Wet	October	Used in Summary Table Analysis	641.8	633.6	8.2	1.3%	632.8	9.0	1.4%	631.9	9.8	1.5%	631.1	10.6	1.7%	630.3	11.5	1.8%	629.5	12.3	1.9%
ME 5	33 50 23	2006	Wet	November	Used in Summary Table Analysis	9,399.8	9,393.3	6.5	0.1%	9,392.6	7.2	0.1%	9,392.0	7.8	0.1%	9,391.3	8.4	0.1%	9,390.6	9.1	0.1%	9,390.0	9.7	0.1%
ME 5	33 50 23	2006	Wet	December	--	43,805.6	43,799.8	5.8	0.0%	43,799.8	5.8	0.0%	43,798.6	6.9	0.0%	43,798.6	6.9	0.0%	43,797.5	8.1	0.0%	43,797.5	8.1	0.0%
ME 5	33 50 23	2006	Wet	January	--	46,575.2	46,569.4	5.8	0.0%	46,569.4	5.8	0.0%	46,568.3	6.9	0.0%	46,568.3	6.9	0.0%	46,568.3	6.9	0.0%	46,567.1	8.1	0.0%
ME 5	33 50 23	2006	Wet	February	--	26,737.3	26,732.6	4.6	0.0%	26,732.6	4.6	0.0%	26,731.5	5.8	0.0%	26,731.5	5.8	0.0%	26,730.3	6.9	0.0%	26,730.3	6.9	0.0%
ME 5	33 50 23	2006	Wet	March	--	47,378.5	47,373.8	4.6	0.0%	47,373.8	4.6	0.0%	47,372.7	5.8	0.0%	47,372.7	5.8	0.0%	47,371.5	6.9	0.0%	47,371.5	6.9	0.0%
ME 5	33 50 23	2006	Wet	April	--	30,513.9	30,510.4	3.5	0.0%	30,509.3	4.6	0.0%	30,509.3	4.6	0.0%	30,509.3	4.6	0.0%	30,508.1	5.8	0.0%	30,508.1	5.8	0.0%
ME 5	33 50 23	2006	Wet	May	--	14,256.9	14,251.2	5.8	0.0%	14,251.2	5.8	0.0%	14,251.2	5.8	0.0%	14,250.0	6.9	0.0%	14,250.0	6.9	0.0%	14,248.8	8.1	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 50 23	2006	Wet	June	--	3,552.9	3,541.8	11.1	0.3%	3,540.7	12.2	0.3%	3,539.6	13.3	0.4%	3,538.5	14.4	0.4%	3,537.4	15.5	0.4%	3,536.3	16.6	0.5%
ME 5	33 50 23	2006	Wet	July	--	1,286.7	1,274.9	11.8	0.9%	1,273.7	13.0	1.0%	1,272.5	14.2	1.1%	1,271.3	15.4	1.2%	1,270.1	16.6	1.3%	1,269.0	17.7	1.4%
ME 5	33 50 23	2006	Wet	August	--	672.9	661.3	11.6	1.7%	660.1	12.7	1.9%	659.0	13.9	2.1%	657.8	15.1	2.2%	656.6	16.3	2.4%	655.5	17.4	2.6%
ME 5	33 50 23	2006	Wet	September	Used in Summary Table Analysis	433.2	423.0	10.2	2.4%	422.0	11.2	2.6%	420.9	12.2	2.8%	419.9	13.3	3.1%	418.9	14.3	3.3%	417.9	15.3	3.5%
ME 5	33 50 23	2007	Above Normal	October	Used in Summary Table Analysis	280.4	272.1	8.3	3.0%	271.2	9.2	3.3%	270.4	10.0	3.6%	269.6	10.8	3.9%	268.7	11.7	4.2%	267.9	12.5	4.5%
ME 5	33 50 23	2007	Above Normal	November	Used in Summary Table Analysis	8,749.3	8,742.5	6.8	0.1%	8,741.9	7.4	0.1%	8,741.2	8.1	0.1%	8,740.5	8.8	0.1%	8,739.8	9.5	0.1%	8,739.1	10.2	0.1%
ME 5	33 50 23	2007	Above Normal	December	--	20,577.5	20,571.8	5.8	0.0%	20,571.8	5.8	0.0%	20,570.6	6.9	0.0%	20,570.6	6.9	0.0%	20,569.4	8.1	0.0%	20,569.4	8.1	0.0%
ME 5	33 50 23	2007	Above Normal	January	--	10,295.6	10,290.4	5.2	0.1%	10,289.8	5.8	0.1%	10,289.4	6.3	0.1%	10,288.8	6.8	0.1%	10,288.3	7.3	0.1%	10,287.7	7.9	0.1%
ME 5	33 50 23	2007	Above Normal	February	--	30,759.3	30,754.6	4.6	0.0%	30,754.6	4.6	0.0%	30,753.5	5.8	0.0%	30,753.5	5.8	0.0%	30,752.3	6.9	0.0%	30,752.3	6.9	0.0%
ME 5	33 50 23	2007	Above Normal	March	--	13,133.1	13,128.5	4.6	0.0%	13,128.5	4.6	0.0%	13,128.5	4.6	0.0%	13,127.3	5.8	0.0%	13,127.3	5.8	0.0%	13,126.2	6.9	0.1%
ME 5	33 50 23	2007	Above Normal	April	--	11,565.0	11,556.4	8.7	0.1%	11,555.4	9.6	0.1%	11,554.6	10.4	0.1%	11,553.7	11.3	0.1%	11,552.9	12.2	0.1%	11,552.0	13.1	0.1%
ME 5	33 50 23	2007	Above Normal	May	--	4,153.5	4,143.2	10.3	0.2%	4,142.1	11.3	0.3%	4,141.1	12.4	0.3%	4,140.0	13.4	0.3%	4,139.0	14.5	0.3%	4,138.0	15.5	0.4%
ME 5	33 50 23	2007	Above Normal	June	--	1,508.3	1,495.8	12.5	0.8%	1,494.7	13.7	0.9%	1,493.4	14.9	1.0%	1,492.1	16.2	1.1%	1,490.9	17.5	1.2%	1,489.7	18.6	1.2%
ME 5	33 50 23	2007	Above Normal	July	--	500.5	487.9	12.6	2.5%	486.6	13.9	2.8%	485.4	15.2	3.0%	484.1	16.4	3.3%	482.9	17.7	3.5%	481.6	18.9	3.8%
ME 5	33 50 23	2007	Above Normal	August	--	228.5	217.1	11.4	5.0%	215.9	12.6	5.5%	214.8	13.7	6.0%	213.7	14.9	6.5%	212.5	16.0	7.0%	211.4	17.1	7.5%
ME 5	33 50 23	2007	Above Normal	September	Used in Summary Table Analysis	156.2	145.4	10.8	6.9%	144.3	11.9	7.6%	143.2	13.0	8.3%	142.1	14.1	9.0%	141.0	15.2	9.7%	140.0	16.3	10.4%
ME 5	33 50 23	2008	Dry	October	Used in Summary Table Analysis	3,464.1	3,455.3	8.8	0.3%	3,454.4	9.7	0.3%	3,453.5	10.6	0.3%	3,452.7	11.5	0.3%	3,451.7	12.4	0.4%	3,450.8	13.3	0.4%
ME 5	33 50 23	2008	Dry	November	Used in Summary Table Analysis	3,303.9	3,297.0	6.9	0.2%	3,296.3	7.6	0.2%	3,295.6	8.3	0.3%	3,294.9	9.0	0.3%	3,294.2	9.7	0.3%	3,293.5	10.4	0.3%
ME 5	33 50 23	2008	Dry	December	--	23,344.9	23,339.1	5.8	0.0%	23,338.0	6.9	0.0%	23,338.0	6.9	0.0%	23,336.8	8.1	0.0%	23,336.8	8.1	0.0%	23,335.6	9.3	0.0%
ME 5	33 50 23	2008	Dry	January	--	37,740.7	37,735.0	5.8	0.0%	37,733.8	6.9	0.0%	37,733.8	6.9	0.0%	37,732.6	8.1	0.0%	37,732.6	8.1	0.0%	37,731.5	9.3	0.0%
ME 5	33 50 23	2008	Dry	February	--	26,320.6	26,316.0	4.6	0.0%	26,316.0	4.6	0.0%	26,314.8	5.8	0.0%	26,314.8	5.8	0.0%	26,314.8	5.8	0.0%	26,313.7	6.9	0.0%
ME 5	33 50 23	2008	Dry	March	--	11,818.3	11,813.7	4.6	0.0%	11,812.5	5.8	0.0%	11,812.5	5.8	0.0%	11,812.5	5.8	0.0%	11,811.3	6.9	0.1%	11,811.3	6.9	0.1%
ME 5	33 50 23	2008	Dry	April	--	9,035.8	9,026.9	8.9	0.1%	9,026.0	9.7	0.1%	9,025.1	10.6	0.1%	9,024.2	11.6	0.1%	9,023.4	12.4	0.1%	9,022.5	13.3	0.1%
ME 5	33 50 23	2008	Dry	May	--	1,358.4	1,349.0	9.5	0.7%	1,348.0	10.4	0.8%	1,347.1	11.3	0.8%	1,346.2	12.3	0.9%	1,345.3	13.2	1.0%	1,344.2	14.2	1.0%
ME 5	33 50 23	2008	Dry	June	--	442.6	429.0	13.6	3.1%	427.6	15.0	3.4%	426.3	16.4	3.7%	424.9	17.7	4.0%	423.5	19.1	4.3%	422.2	20.4	4.6%
ME 5	33 50 23	2008	Dry	July	--	260.5	247.0	13.5	5.2%	245.6	14.9	5.7%	244.3	16.2	6.2%	242.9	17.6	6.7%	241.6	18.9	7.3%	240.2	20.3	7.8%
ME 5	33 50 23	2008	Dry	August	--	184.2	171.0	13.2	7.2%	169.7	14.5	7.9%	168.4	15.8	8.6%	167.1	17.2	9.3%	165.8	18.5	10.0%	164.4	19.8	10.7%
ME 5	33 50 23	2008	Dry	September	Used in Summary Table Analysis	145.8	133.1	12.7	8.7%	131.8	14.0	9.6%	130.5	15.3	10.5%	129.3	16.5	11.3%	128.0	17.8	12.2%	126.7	19.1	13.1%
ME 5	33 50 23	2009	Critical	October	Used in Summary Table Analysis	931.1	921.0	10.1	1.1%	920.0	11.1	1.2%	919.0	12.1	1.3%	917.9	13.1	1.4%	916.9	14.2	1.5%	915.9	15.2	1.6%
ME 5	33 50 23	2009	Critical	November	Used in Summary Table Analysis	5,565.7	5,557.9	7.9	0.1%	5,557.1	8.7	0.2%	5,556.3	9.5	0.2%	5,555.6	10.2	0.2%	5,554.7	11.0	0.2%	5,553.9	11.8	0.2%
ME 5	33 50 23	2009	Critical	December	--	12,278.9	12,272.0	6.9	0.1%	12,270.8	8.1	0.1%	12,270.8	8.1	0.1%	12,269.7	9.3	0.1%	12,269.7	9.3	0.1%	12,268.5	10.4	0.1%
ME 5	33 50 23	2009	Critical	January	--	8,829.2	8,823.0	6.1	0.1%	8,822.5	6.7	0.1%	8,821.9	7.3	0.1%	8,821.2	8.0	0.1%	8,820.6	8.6	0.1%	8,820.0	9.1	0.1%
ME 5	33 50 23	2009	Critical	February	--	22,710.6	22,704.9	5.8	0.0%	22,703.7	6.9	0.0%	22,703.7	6.9	0.0%	22,703.7	6.9	0.0%	22,702.5	8.1	0.0%	22,702.5	8.1	0.0%
ME 5	33 50 23	2009	Critical	March	--	21,192.1	21,187.5	4.6	0.0%	21,187.5	4.6	0.0%	21,186.3	5.8	0.0%	21,186.3	5.8	0.0%	21,186.3	5.8	0.0%	21,185.2	6.9	0.0%
ME 5	33 50 23	2009	Critical	April	--	10,105.4	10,096.2	9.3	0.1%	10,095.3	10.2	0.1%	10,094.3	11.1	0.1%	10,093.5	11.9	0.1%	10,092.6	12.8	0.1%	10,091.7	13.8	0.1%
ME 5	33 50 23	2009	Critical	May	--	15,620.4	15,610.0	10.4	0.1%	15,608.8	11.6	0.1%	15,607.6	12.7	0.1%	15,606.5	13.9	0.1%	15,605.3	15.0	0.1%	15,604.2	16.2	0.1%
ME 5	33 50 23	2009	Critical	June	--	3,165.7	3,151.4	14.4	0.5%	3,149.9	15.9	0.5%	3,148.5	17.2	0.5%	3,147.0	18.8	0.6%	3,145.6	20.1	0.6%	3,144.2	21.5	0.7%
ME 5	33 50 23	2009	Critical	July	--	1,268.1	1,254.4	13.7	1.1%	1,253.0	15.0	1.2%	1,251.6	16.4	1.3%	1,250.2	17.8	1.4%	1,249.0	19.1	1.5%	1,247.6	20.5	1.6%
ME 5	33 50 23	2009	Critical	August	--	674.4	661.1	13.3	2.0%	659.8	14.6	2.2%	658.4	16.0	2.4%	657.1	17.3	2.6%	655.8	18.6	2.8%	654.5	19.9	3.0%
ME 5	33 50 23	2009	Critical	September	Used in Summary Table Analysis	395.1	383.2	12.0	3.0%	382.0	13.1	3.3%	380.8	14.3	3.6%	379.6	15.6	3.9%	378.4	16.7	4.2%	377.2	17.9	4.5%
ME 5	33 50 23	2010	Below Normal	October	Used in Summary Table Analysis	6,097.3	6,087.0	10.3	0.2%	6,086.0	11.3	0.2%	6,085.0	12.4	0.2%	6,083.9	13.4	0.2%	6,083.0	14.4	0.2%	6,081.9	15.4	0.3%
ME 5	33 50 23	2010	Below Normal	November	Used in Summary Table Analysis	8,327.8	8,319.7	8.1	0.1%	8,318.9	8.9	0.1%	8,318.1	9.7	0.1%	8,317.2	10.5	0.1%	8,316.4	11.3	0.1%	8,315.6	12.2	0.1%
ME 5	33 50 23	2010	Below Normal	December	--	12,430.6	12,423.6	6.9	0.1%	12,423.6	6.9	0.1%	12,422.5	8.1	0.1%	12,422.5	8.1	0.1%	12,421.3	9.3	0.1%	12,420.1	10.4	0.1%
ME 5	33 50 23	2010	Below Normal	January	--	36,490.7	36,483.8	6.9	0.0%	36,483.8	6.9	0.0%	36,482.6	8.1	0.0%	36,482.6	8.1	0.0%	36,481.5	9.3	0.0%	36,481.5	9.3	0.0%
ME 5	33 50 23	2010	Below Normal	February	--	27,317.1	27,312.5	4.6	0.0%	27,311.3	5.8	0.0%	27,311.3	5.8	0.0%	27,310.2	6.9	0.0%	27,310.2	6.9	0.0%	27,309.0	8.1	0.0%
ME 5	33 50 23	2010	Below Normal	March	--	28,900.5	28,894.7	5.8	0.0%	28,894.7	5.8	0.0%	28,893.5	6.9	0.0%	28,893.5	6.9	0.0%	28,893.5	6.9	0.0%	28,892.4	8.1	0.0%
ME 5	33 50 23	2010	Below Normal	April	--	40,130.8	40,126.2	4.6	0.0%	40,126.2	4.6	0.0%	40,125.0	5.8	0.0%	40,125.0	5.8	0.0%	40,125.0	5.8	0.0%	40,123.8	6.9	0.0%
ME 5	33 50 23	2010	Below Normal	May	--	20,360.0	20,350.7	9.3	0.0%	20,349.5	10.4	0.1%	20,348.4	11.6	0.1%	20,347.2	12.7	0.1%	20,346.1	13.9	0.1%	20,346.1	13.9	0.1%
ME 5	33 50 23	2010	Below Normal	June	--	9,422.3	9,408.6	13.8	0.1%	9,407.2	15.2	0.2%	9,405.8	16.6	0.2%	9,404.5	17.8	0.2%	9,403.1	19.2	0.2%	9,401.7	20.6	0.2%
ME 5	33 50 23	2010	Below Normal	July	--	1,459.4	1,446.8	12.6	0.9%	1,445.5	13.9	1.0%	1,444.2	15.2	1.0%	1,442.9	16.4	1.1%	1,441.7	17.7	1.2%	1,440.4	19.0	1.3%
ME 5	33 50 23	2010	Below Normal	August	--	575.7	564.0	11.7	2.0%	562.8	12.9	2.2%	561.6	14.1	2.4%	560.5	15.2	2.6%	559.4	16.3	2.8%	558.2	17.5	3.0%
ME 5	33 50 23	2010	Below Normal	September	Used in Summary Table Analysis	658.2	647.1	11.1	1.7%	646.0	12.2	1.9%	644.8	13.3	2.0%	643.7	14.4	2.2%	642.6	15.6	2.4%	641.5	16.7	2.5%
ME 5	33 50 23	2011	Wet	October	Used in Summary Table Analysis	9,692.0	9,683.6	8.4	0.1%	9,682.8	9.3	0.1%	9,681.8	10.2	0.1%	9,681.0	11.0	0.1%	9,680.1	11.9	0.1%	9,679.3	12.7	0.1%
ME 5	33 50 23	2011	Wet	November	Used in Summary Table Analysis	14,285.9	14,280.1	5.8	0.0%	14,278.9	6.9	0.0%	14,277.8	8.1	0.1%	14,277.8	8.1	0.1%	14,276.6	9.3	0.1%	14,276.6	9.3	0.1%
ME 5	33 50 23	2011	Wet	December	--	33,971.1	33,965.3	5.8	0.0%	33,964.1	6.9	0.0%	33,964.1	6.9	0.0%	33,963.0	8.1	0.0%	33,963.0	8.1	0.0%	33,961.8	9.3	0.0%
ME 5	33 50 23	2011	Wet	January	--	14,207.2	14,201.4	5.8	0.0%	14,201.4	5.8	0.0%	14,200.2	6.9	0.0%	14,200.2	6.9	0.0%	14,199.1	8.1	0.1%	14,199.1	8.1	0.1%
ME 5	33 50 23	2011	Wet	February	--	20,818.3	20,813.7	4.6	0.0%	20,812.5	5.8	0.0%	20,812.5	5.8	0.0%	20,811.3	6.9	0.0%	20,811.3	6.9	0.0%	20,811.3	6.9	0.0%
ME 5	33 50 23	2011	Wet	March	--	52,184.0	52,179.4	4.6	0.0%	52,179.4	4.6	0.0%	52,178.2	5.8	0.0%	52,178.2	5.8	0.0%	52,178.2	5.8	0.0%	52,177.1	6.9	0.0%
ME 5	33 50 23	2011	Wet	April	--	24,861.1	24,856.5	4.6	0.0%	24,855.3	5.8	0.0%	24,855.3	5.8	0.0%	24,855.3	5.8	0.0%	24,854.2	6.9	0.0%	24,854.2	6.9	0.0%
ME 5	33 50 23	2011	Wet	May	--	11,411.9	11,403.1	8.8	0.1%	11,402.2	9.7	0.1%	11,401.3	10.6	0.1%	11,400.3	11.6	0.1%	11,399.4	12.5	0.1%	11,398.5	13.4	0.1%
ME 5	33 50 23	2011	Wet	June	--	7,085.8	7,072.3	13.4	0.2%	7,071.1	14.7	0.2%	7,069.7	16.1	0.2%	7,068.3	17.5	0.2%	7,067.0	18.8	0.3%	7,065.6	20.1	0.3%
ME 5	33 50 23	2011	Wet	July	--	1,831.9	1,818.5	13.4	0.7%	1,817.1	14.8	0.8%	1,815.9	16.1	0.9%	1,814.5	17.5	1.0%	1,813.2	18.8	1.0%	1,811.8	20.1	1.1%
ME 5	33 50 23	2011	Wet	August	--	782.5	771.0	11.5	1.5%	769.9	12.7	1.6%	768.7	13.8	1.8%	767.6	15.0	1.9%	766.4	16.1	2.1%	765.3	17.3	2.2%
ME 5	33 50 23	2011	Wet	September	Used in Summary Table Analysis	439.2	428.7	10.5	2.4%	427.7	11.5	2.6%	426.6	12.6	2.9%	425.6	13.6	3.1%	424.5	14.7	3.3%	423.5	15.7	3.6%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 50 23	2012	Below Normal	October	Used in Summary Table Analysis	4,572.0	4,563.4	8.6	0.2%	4,562.5	9.5	0.2%	4,561.7	10.3	0.2%	4,560.8	11.2	0.2%	4,560.0	12.0	0.3%	4,559.0	13.0	0.3%
ME 5	33 50 23	2012	Below Normal	November	Used in Summary Table Analysis	8,299.4	8,292.6	6.8	0.1%	8,291.9	7.5	0.1%	8,291.2	8.2	0.1%	8,290.5	8.9	0.1%	8,289.8	9.6	0.1%	8,289.1	10.3	0.1%
ME 5	33 50 23	2012	Below Normal	December	--	5,210.5	5,204.7	5.8	0.1%	5,204.2	6.4	0.1%	5,203.6	6.9	0.1%	5,203.0	7.5	0.1%	5,202.3	8.2	0.2%	5,201.7	8.8	0.2%
ME 5	33 50 23	2012	Below Normal	January	--	20,291.7	20,287.0	4.6	0.0%	20,285.9	5.8	0.0%	20,285.9	5.8	0.0%	20,284.7	6.9	0.0%	20,284.7	6.9	0.0%	20,283.6	8.1	0.0%
ME 5	33 50 23	2012	Below Normal	February	--	18,263.9	18,258.1	5.8	0.0%	18,258.1	5.8	0.0%	18,258.1	5.8	0.0%	18,256.9	6.9	0.0%	18,256.9	6.9	0.0%	18,255.8	8.1	0.0%
ME 5	33 50 23	2012	Below Normal	March	--	45,631.9	45,627.3	4.6	0.0%	45,627.3	4.6	0.0%	45,626.2	5.8	0.0%	45,626.2	5.8	0.0%	45,626.2	5.8	0.0%	45,625.0	6.9	0.0%
ME 5	33 50 23	2012	Below Normal	April	--	26,934.0	26,929.4	4.6	0.0%	26,929.4	4.6	0.0%	26,929.4	4.6	0.0%	26,928.2	5.8	0.0%	26,928.2	5.8	0.0%	26,927.1	6.9	0.0%
ME 5	33 50 23	2012	Below Normal	May	--	7,500.8	7,491.8	9.0	0.1%	7,490.9	10.0	0.1%	7,490.0	10.8	0.1%	7,489.1	11.7	0.2%	7,488.3	12.5	0.2%	7,487.5	13.3	0.2%
ME 5	33 50 23	2012	Below Normal	June	--	5,544.7	5,531.0	13.7	0.2%	5,529.6	15.0	0.3%	5,528.2	16.4	0.3%	5,527.0	17.7	0.3%	5,525.6	19.1	0.3%	5,524.2	20.5	0.4%
ME 5	33 50 23	2012	Below Normal	July	--	2,242.0	2,228.9	13.1	0.6%	2,227.7	14.4	0.6%	2,226.4	15.6	0.7%	2,225.1	16.9	0.8%	2,223.8	18.2	0.8%	2,222.6	19.4	0.9%
ME 5	33 50 23	2012	Below Normal	August	--	392.7	382.1	10.6	2.7%	381.0	11.7	3.0%	380.0	12.7	3.2%	379.0	13.8	3.5%	377.9	14.8	3.8%	376.9	15.8	4.0%
ME 5	33 50 23	2012	Below Normal	September	Used in Summary Table Analysis	254.6	245.2	9.4	3.7%	244.2	10.4	4.1%	243.3	11.3	4.5%	242.3	12.3	4.8%	241.4	13.2	5.2%	240.4	14.2	5.6%
ME 5	33 50 23	2013	Below Normal	October	Used in Summary Table Analysis	1,932.2	1,923.8	8.3	0.4%	1,923.0	9.1	0.5%	1,922.2	10.0	0.5%	1,921.4	10.8	0.6%	1,920.6	11.6	0.6%	1,919.7	12.5	0.6%
ME 5	33 50 23	2013	Below Normal	November	Used in Summary Table Analysis	14,798.6	14,791.7	6.9	0.0%	14,790.5	8.1	0.1%	14,790.5	8.1	0.1%	14,789.4	9.3	0.1%	14,789.4	9.3	0.1%	14,788.2	10.4	0.1%
ME 5	33 50 23	2013	Below Normal	December	--	60,243.1	60,237.3	5.8	0.0%	60,236.1	6.9	0.0%	60,236.1	6.9	0.0%	60,235.0	8.1	0.0%	60,235.0	8.1	0.0%	60,233.8	9.3	0.0%
ME 5	33 50 23	2013	Below Normal	January	--	22,273.1	22,268.5	4.6	0.0%	22,268.5	4.6	0.0%	22,267.4	5.8	0.0%	22,267.4	5.8	0.0%	22,266.2	6.9	0.0%	22,266.2	6.9	0.0%
ME 5	33 50 23	2013	Below Normal	February	--	8,879.7	8,875.0	4.7	0.1%	8,874.5	5.2	0.1%	8,874.1	5.7	0.1%	8,873.6	6.1	0.1%	8,873.1	6.6	0.1%	8,872.6	7.2	0.1%
ME 5	33 50 23	2013	Below Normal	March	--	10,382.6	10,378.0	4.6	0.0%	10,377.5	5.1	0.0%	10,377.1	5.6	0.1%	10,376.6	6.0	0.1%	10,376.2	6.5	0.1%	10,375.7	6.9	0.1%
ME 5	33 50 23	2013	Below Normal	April	--	8,307.1	8,298.5	8.6	0.1%	8,297.7	9.4	0.1%	8,296.9	10.2	0.1%	8,295.9	11.1	0.1%	8,295.1	11.9	0.1%	8,294.2	12.8	0.2%
ME 5	33 50 23	2013	Below Normal	May	--	4,451.6	4,441.3	10.3	0.2%	4,440.3	11.3	0.3%	4,439.2	12.4	0.3%	4,438.2	13.4	0.3%	4,437.2	14.5	0.3%	4,436.1	15.5	0.3%
ME 5	33 50 23	2013	Below Normal	June	--	2,117.7	2,105.2	12.5	0.6%	2,104.1	13.7	0.6%	2,102.8	14.9	0.7%	2,101.5	16.2	0.8%	2,100.3	17.4	0.8%	2,099.1	18.6	0.9%
ME 5	33 50 23	2013	Below Normal	July	--	721.7	709.6	12.1	1.7%	708.4	13.3	1.8%	707.2	14.5	2.0%	706.0	15.8	2.2%	704.8	17.0	2.4%	703.6	18.2	2.5%
ME 5	33 50 23	2013	Below Normal	August	--	345.1	333.7	11.4	3.3%	332.6	12.5	3.6%	331.4	13.7	4.0%	330.3	14.8	4.3%	329.2	15.9	4.6%	328.0	17.1	5.0%
ME 5	33 50 23	2013	Below Normal	September	Used in Summary Table Analysis	4,817.5	4,805.7	11.8	0.2%	4,804.5	13.0	0.3%	4,803.4	14.1	0.3%	4,802.2	15.3	0.3%	4,800.9	16.6	0.3%	4,799.8	17.7	0.4%
ME 5	33 50 23	2014	Critical	October	Used in Summary Table Analysis	282.4	273.7	8.7	3.1%	272.9	9.5	3.4%	272.0	10.4	3.7%	271.1	11.3	4.0%	270.3	12.2	4.3%	269.4	13.0	4.6%
ME 5	33 50 23	2014	Critical	November	Used in Summary Table Analysis	1,555.0	1,548.0	6.9	0.4%	1,547.3	7.6	0.5%	1,546.6	8.3	0.5%	1,545.9	9.0	0.6%	1,545.3	9.7	0.6%	1,544.6	10.4	0.7%
ME 5	33 50 23	2014	Critical	December	--	1,600.0	1,594.0	6.0	0.4%	1,593.4	6.6	0.4%	1,592.7	7.3	0.5%	1,592.1	7.9	0.5%	1,591.6	8.4	0.5%	1,591.0	9.0	0.6%
ME 5	33 50 23	2014	Critical	January	--	2,839.0	2,833.6	5.4	0.2%	2,833.0	6.0	0.2%	2,832.5	6.5	0.2%	2,831.9	7.1	0.2%	2,831.4	7.6	0.3%	2,830.9	8.1	0.3%
ME 5	33 50 23	2014	Critical	February	--	15,804.4	15,798.6	5.8	0.0%	15,798.6	5.8	0.0%	15,797.5	6.9	0.0%	15,797.5	6.9	0.0%	15,797.5	6.9	0.0%	15,796.3	8.1	0.1%
ME 5	33 50 23	2014	Critical	March	--	31,550.9	31,546.3	4.6	0.0%	31,546.3	4.6	0.0%	31,545.1	5.8	0.0%	31,545.1	5.8	0.0%	31,545.1	5.8	0.0%	31,544.0	6.9	0.0%
ME 5	33 50 23	2014	Critical	April	--	13,011.6	13,003.5	8.1	0.1%	13,002.3	9.3	0.1%	13,001.2	10.4	0.1%	13,000.0	11.6	0.1%	12,998.8	12.7	0.1%	12,998.8	12.7	0.1%
ME 5	33 50 23	2014	Critical	May	--	5,202.0	5,191.1	10.9	0.2%	5,190.0	11.9	0.2%	5,188.9	13.1	0.3%	5,187.8	14.1	0.3%	5,186.7	15.3	0.3%	5,185.6	16.3	0.3%
ME 5	33 50 23	2014	Critical	June	--	1,203.8	1,189.0	14.8	1.2%	1,187.5	16.3	1.4%	1,186.0	17.8	1.5%	1,184.5	19.3	1.6%	1,183.0	20.8	1.7%	1,181.6	22.2	1.8%
ME 5	33 50 23	2014	Critical	July	--	550.0	536.1	13.9	2.5%	534.7	15.3	2.8%	533.3	16.6	3.0%	532.0	18.0	3.3%	530.6	19.4	3.5%	529.2	20.7	3.8%
ME 5	33 50 23	2014	Critical	August	--	353.1	339.8	13.3	3.8%	338.5	14.6	4.1%	337.2	15.9	4.5%	335.9	17.2	4.9%	334.5	18.6	5.3%	333.2	19.9	5.6%
ME 5	33 50 23	2014	Critical	September	Used in Summary Table Analysis	2,588.9	2,575.9	13.0	0.5%	2,574.7	14.2	0.5%	2,573.4	15.5	0.6%	2,572.0	16.9	0.7%	2,570.7	18.2	0.7%	2,569.4	19.4	0.8%
ME 5	33 50 23	2015	Dry	October	Used in Summary Table Analysis	11,418.9	11,408.9	10.0	0.1%	11,407.9	11.0	0.1%	11,406.9	11.9	0.1%	11,405.2	13.7	0.1%	11,404.3	14.6	0.1%	11,403.2	15.6	0.1%
ME 5	33 50 23	2015	Dry	November	Used in Summary Table Analysis	9,098.4	9,090.6	7.8	0.1%	9,089.9	8.4	0.1%	9,089.1	9.3	0.1%	9,088.3	10.1	0.1%	9,087.6	10.8	0.1%	9,086.8	11.6	0.1%
ME 5	33 50 23	2015	Dry	December	--	32,840.3	32,834.5	5.8	0.0%	32,833.3	6.9	0.0%	32,833.3	6.9	0.0%	32,832.2	8.1	0.0%	32,832.2	8.1	0.0%	32,831.0	9.3	0.0%
ME 5	33 50 23	2015	Dry	January	--	14,611.1	14,605.3	5.8	0.0%	14,604.2	6.9	0.0%	14,604.2	6.9	0.0%	14,603.0	8.1	0.1%	14,603.0	8.1	0.1%	14,601.9	9.3	0.1%
ME 5	33 50 23	2015	Dry	February	--	27,321.8	27,317.1	4.6	0.0%	27,316.0	5.8	0.0%	27,316.0	5.8	0.0%	27,314.8	6.9	0.0%	27,314.8	6.9	0.0%	27,313.7	8.1	0.0%
ME 5	33 50 23	2015	Dry	March	--	11,591.4	11,586.8	4.6	0.0%	11,585.6	5.8	0.0%	11,585.6	5.8	0.0%	11,585.6	5.8	0.0%	11,584.5	6.9	0.1%	11,584.5	6.9	0.1%
ME 5	33 50 23	2015	Dry	April	--	8,444.0	8,435.0	9.0	0.1%	8,434.0	10.0	0.1%	8,433.1	10.9	0.1%	8,432.3	11.7	0.1%	8,431.4	12.6	0.1%	8,430.4	13.5	0.2%
ME 5	33 50 23	2015	Dry	May	--	1,510.6	1,499.9	10.8	0.7%	1,498.8	11.8	0.8%	1,497.8	12.8	0.9%	1,496.6	14.0	0.9%	1,495.6	15.0	1.0%	1,494.6	16.1	1.1%
ME 5	33 50 23	2015	Dry	June	--	655.9	642.1	13.8	2.1%	640.7	15.2	2.3%	639.3	16.6	2.5%	637.9	18.0	2.7%	636.5	19.4	3.0%	635.2	20.7	3.2%
ME 5	33 50 23	2015	Dry	July	--	272.3	258.7	13.6	5.0%	257.4	15.0	5.5%	256.0	16.3	6.0%	254.6	17.7	6.5%	253.3	19.1	7.0%	251.9	20.4	7.5%
ME 5	33 50 23	2015	Dry	August	--	171.1	157.9	13.2	7.7%	156.6	14.5	8.5%	155.3	15.8	9.3%	154.0	17.2	10.0%	152.7	18.5	10.8%	151.3	19.8	11.6%
ME 5	33 50 23	2015	Dry	September	Used in Summary Table Analysis	124.8	112.9	11.8	9.5%	111.8	13.0	10.4%	110.6	14.2	11.4%	109.3	15.4	12.4%	108.2	16.6	13.3%	107.0	17.8	14.3%
ME 5	33 50 23	2016	Above Normal	October	Used in Summary Table Analysis	89.9	79.8	10.1	11.2%	78.8	11.1	12.4%	77.7	12.1	13.5%	77.2	12.6	14.1%	76.4	13.5	15.0%	75.0	14.9	16.6%
ME 5	33 50 23	2016	Above Normal	November	Used in Summary Table Analysis	3,918.2	3,910.4	7.8	0.2%	3,909.6	8.6	0.2%	3,908.9	9.3	0.2%	3,908.0	10.2	0.3%	3,907.2	11.0	0.3%	3,906.4	11.8	0.3%
ME 5	33 50 23	2016	Above Normal	December	--	36,881.9	36,875.0	6.9	0.0%	36,873.8	8.1	0.0%	36,873.8	8.1	0.0%	36,872.7	9.3	0.0%	36,872.7	9.3	0.0%	36,871.5	10.4	0.0%
ME 5	33 50 23	2016	Above Normal	January	--	57,590.3	57,583.3	6.9	0.0%	57,583.3	6.9	0.0%	57,582.2	8.1	0.0%	57,582.2	8.1	0.0%	57,581.0	9.3	0.0%	57,581.0	9.3	0.0%
ME 5	33 50 23	2016	Above Normal	February	--	24,312.5	24,306.7	5.8	0.0%	24,306.7	5.8	0.0%	24,305.6	6.9	0.0%	24,305.6	6.9	0.0%	24,304.4	8.1	0.0%	24,304.4	8.1	0.0%
ME 5	33 50 23	2016	Above Normal	March	--	41,905.1	41,899.3	5.8	0.0%	41,899.3	5.8	0.0%	41,898.1	6.9	0.0%	41,898.1	6.9	0.0%	41,898.1	6.9	0.0%	41,897.0	8.1	0.0%
ME 5	33 50 23	2016	Above Normal	April	--	18,571.8	18,568.3	3.5	0.0%	18,567.1	4.6	0.0%	18,567.1	4.6	0.0%	18,566.0	5.8	0.0%	18,566.0	5.8	0.0%	18,566.0	5.8	0.0%
ME 5	33 50 23	2016	Above Normal	May	--	5,227.5	5,222.0	5.6	0.1%	5,221.5	6.0	0.1%	5,220.9	6.6	0.1%	5,220.4	7.2	0.1%	5,219.8	7.8	0.1%	5,219.2	8.3	0.2%
ME 5	33 50 23	2016	Above Normal	June	--	1,514.6	1,503.8	10.8	0.7%	1,502.8	11.8	0.8%	1,501.7	12.8	0.8%	1,500.6	14.0	0.9%	1,499.5	15.0	1.0%	1,498.5	16.1	1.1%
ME 5	33 50 23	2016	Above Normal	July	--	828.8	816.8	11.9	1.4%	815.6	13.1	1.6%	814.5	14.3	1.7%	813.3	15.5	1.9%	812.1	16.7	2.0%	810.9	17.9	2.2%
ME 5	33 50 23	2016	Above Normal	August	--	497.7	486.0	11.7	2.4%	484.8	12.9	2.6%	483.6	14.1	2.8%	482.4	15.2	3.1%	481.3	16.4	3.3%	480.1	17.6	3.5%
ME 5	33 50 23	2016	Above Normal	September	Used in Summary Table Analysis	333.8	323.3	10.5	3.1%	322.2	11.5	3.5%	321.2	12.6	3.8%	320.1	13.6	4.1%	319.1	14.7	4.4%	318.0	15.7	4.7%
ME 5	33 50 23	2017	Wet	October	Used in Summary Table Analysis	18,386.6	18,378.5	8.1	0.0%	18,377.3	9.3	0.1%	18,377.3	9.3	0.1%	18,376.2	10.4	0.1%	18,375.0	11.6	0.1%	18,373.8	12.7	0.1%
ME 5	33 50 23	2017	Wet	November	Used in Summary Table Analysis	18,936.3	18,929.4	6.9	0.0%	18,929.4	6.9	0.0%	18,928.2	8.1	0.0%	18,927.1	9.3	0.0%	18,927.1	9.3	0.0%	18,925.9	10.4	0.1%
ME 5	33 50 23	2017	Wet	December	--	24,287.0	24,281.3	5.8	0.0%	24,280.1	6.9	0.0%	24,280.1	6.9	0.0%	24,278.9	8.1	0.0%	24,278.9	8.1	0.0%	24,277.8	9.3	0.0%
ME 5	33 50 23	2017	Wet	January	--	107,412.0	107,406.3	5.8	0.0%	107,406.3	5.8	0.0%	107,406.3	5.8	0.0%	107,405.1	6.9	0.0%	107,405.1	6.9	0.0%	107,403.9	8.1	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 50 23	2017	Wet	February	--	82,135.4	82,130.8	4.6	0.0%	82,129.6	5.8	0.0%	82,129.6	5.8	0.0%	82,128.5	6.9	0.0%	82,128.5	6.9	0.0%	82,127.3	8.1	0.0%
ME 5	33 50 23	2017	Wet	March	--	27,366.9	27,362.3	4.6	0.0%	27,362.3	4.6	0.0%	27,361.1	5.8	0.0%	27,361.1	5.8	0.0%	27,360.0	6.9	0.0%	27,360.0	6.9	0.0%
ME 5	33 50 23	2017	Wet	April	--	23,035.9	23,032.4	3.5	0.0%	23,031.3	4.6	0.0%	23,031.3	4.6	0.0%	23,031.3	4.6	0.0%	23,030.1	5.8	0.0%	23,030.1	5.8	0.0%
ME 5	33 50 23	2017	Wet	May	--	6,276.2	6,270.6	5.6	0.1%	6,270.0	6.1	0.1%	6,269.4	6.7	0.1%	6,268.9	7.3	0.1%	6,268.3	7.9	0.1%	6,267.7	8.4	0.1%
ME 5	33 50 23	2017	Wet	June	--	2,129.2	2,118.2	11.0	0.5%	2,117.1	12.0	0.6%	2,116.1	13.1	0.6%	2,114.9	14.2	0.7%	2,113.9	15.3	0.7%	2,112.7	16.4	0.8%
ME 5	33 50 23	2017	Wet	July	--	942.0	930.0	12.0	1.3%	928.8	13.2	1.4%	927.6	14.4	1.5%	926.4	15.6	1.7%	925.2	16.8	1.8%	924.0	18.0	1.9%
ME 5	33 50 23	2017	Wet	August	--	514.3	502.5	11.7	2.3%	501.4	12.9	2.5%	500.2	14.1	2.7%	499.0	15.2	3.0%	497.9	16.4	3.2%	496.7	17.5	3.4%
ME 5	33 50 23	2017	Wet	September	Used in Summary Table Analysis	329.3	318.4	10.8	3.3%	317.4	11.9	3.6%	316.3	13.0	4.0%	315.2	14.1	4.3%	314.1	15.2	4.6%	313.0	16.3	4.9%
ME 5	33 50 23	2018	Above Normal	October	Used in Summary Table Analysis	282.0	274.2	7.8	2.8%	273.0	9.0	3.2%	272.0	10.0	3.5%	270.9	11.1	3.9%	269.9	12.1	4.3%	269.0	13.0	4.6%
ME 5	33 50 23	2018	Above Normal	November	Used in Summary Table Analysis	10,905.6	10,898.8	6.7	0.1%	10,898.1	7.4	0.1%	10,897.5	8.1	0.1%	10,896.8	8.8	0.1%	10,896.1	9.5	0.1%	10,895.4	10.2	0.1%
ME 5	33 50 23	2018	Above Normal	December	--	5,457.3	5,451.5	5.8	0.1%	5,450.9	6.4	0.1%	5,450.3	6.9	0.1%	5,449.8	7.5	0.1%	5,449.2	8.1	0.1%	5,448.6	8.7	0.2%
ME 5	33 50 23	2018	Above Normal	January	--	17,975.7	17,971.1	4.6	0.0%	17,969.9	5.8	0.0%	17,969.9	5.8	0.0%	17,968.8	6.9	0.0%	17,968.8	6.9	0.0%	17,967.6	8.1	0.0%
ME 5	33 50 23	2018	Above Normal	February	--	7,607.2	7,602.7	4.5	0.1%	7,602.1	5.1	0.1%	7,601.6	5.6	0.1%	7,601.2	6.0	0.1%	7,600.8	6.4	0.1%	7,600.2	6.9	0.1%
ME 5	33 50 23	2018	Above Normal	March	--	20,825.2	20,821.8	3.5	0.0%	20,820.6	4.6	0.0%	20,820.6	4.6	0.0%	20,820.6	4.6	0.0%	20,819.4	5.8	0.0%	20,819.4	5.8	0.0%
ME 5	33 50 23	2018	Above Normal	April	--	32,348.4	32,344.9	3.5	0.0%	32,343.8	4.6	0.0%	32,343.8	4.6	0.0%	32,342.6	5.8	0.0%	32,342.6	5.8	0.0%	32,342.6	5.8	0.0%
ME 5	33 50 23	2018	Above Normal	May	--	6,993.6	6,985.1	8.6	0.1%	6,984.3	9.4	0.1%	6,983.3	10.3	0.1%	6,982.5	11.1	0.2%	6,981.7	11.9	0.2%	6,980.8	12.8	0.2%
ME 5	33 50 23	2018	Above Normal	June	--	1,919.7	1,908.6	11.1	0.6%	1,907.4	12.3	0.6%	1,906.4	13.3	0.7%	1,905.2	14.5	0.8%	1,904.2	15.5	0.8%	1,903.0	16.7	0.9%
ME 5	33 50 23	2018	Above Normal	July	--	787.8	775.8	12.1	1.5%	774.6	13.3	1.7%	773.4	14.5	1.8%	772.2	15.7	2.0%	771.0	16.9	2.1%	769.7	18.1	2.3%
ME 5	33 50 23	2018	Above Normal	August	--	449.1	437.8	11.3	2.5%	436.7	12.4	2.8%	435.6	13.5	3.0%	434.4	14.7	3.3%	433.3	15.8	3.5%	432.2	16.9	3.8%
ME 5	33 50 23	2018	Above Normal	September	Used in Summary Table Analysis	306.1	295.2	10.8	3.5%	294.1	11.9	3.9%	293.1	13.0	4.2%	292.0	14.1	4.6%	290.9	15.2	5.0%	289.8	16.3	5.3%
ME 5	33 50 23	2019	Below Normal	October	Used in Summary Table Analysis	212.8	204.2	8.5	4.0%	203.3	9.4	4.4%	202.5	10.2	4.8%	201.6	11.1	5.2%	200.9	11.9	5.6%	200.0	12.8	6.0%
ME 5	33 50 23	2019	Below Normal	November	Used in Summary Table Analysis	6,698.8	6,692.0	6.8	0.1%	6,691.3	7.5	0.1%	6,690.6	8.2	0.1%	6,689.9	8.9	0.1%	6,689.2	9.6	0.1%	6,688.5	10.3	0.2%
ME 5	33 50 23	2019	Below Normal	December	--	14,792.8	14,787.0	5.8	0.0%	14,785.9	6.9	0.0%	14,785.9	6.9	0.0%	14,784.7	8.1	0.1%	14,784.7	8.1	0.1%	14,783.6	9.3	0.1%
ME 5	33 50 23	2019	Below Normal	January	--	35,476.9	35,471.1	5.8	0.0%	35,471.1	5.8	0.0%	35,469.9	6.9	0.0%	35,469.9	6.9	0.0%	35,468.8	8.1	0.0%	35,468.8	8.1	0.0%
ME 5	33 50 23	2019	Below Normal	February	--	142,199.1	142,187.5	11.6	0.0%	142,187.5	11.6	0.0%	142,187.5	11.6	0.0%	142,187.5	11.6	0.0%	142,187.5	11.6	0.0%	142,187.5	11.6	0.0%
ME 5	33 50 23	2019	Below Normal	March	--	42,459.5	42,454.9	4.6	0.0%	42,454.9	4.6	0.0%	42,453.7	5.8	0.0%	42,453.7	5.8	0.0%	42,452.5	6.9	0.0%	42,452.5	6.9	0.0%
ME 5	33 50 23	2019	Below Normal	April	--	15,311.3	15,307.9	3.5	0.0%	15,306.7	4.6	0.0%	15,306.7	4.6	0.0%	15,306.7	4.6	0.0%	15,305.6	5.8	0.0%	15,305.6	5.8	0.0%
ME 5	33 50 23	2019	Below Normal	May	--	17,135.4	17,126.2	9.3	0.1%	17,126.2	9.3	0.1%	17,125.0	10.4	0.1%	17,123.8	11.6	0.1%	17,122.7	12.7	0.1%	17,121.5	13.9	0.1%
ME 5	33 50 23	2019	Below Normal	June	--	4,243.4	4,231.5	11.9	0.3%	4,230.3	13.1	0.3%	4,229.2	14.2	0.3%	4,227.9	15.5	0.4%	4,226.7	16.7	0.4%	4,225.5	17.9	0.4%
ME 5	33 50 23	2019	Below Normal	August	--	603.8	592.3	11.6	1.9%	591.1	12.7	2.1%	590.0	13.9	2.3%	588.8	15.0	2.5%	587.6	16.2	2.7%	586.5	17.4	2.9%
ME 5	33 50 23	2019	Below Normal	September	Used in Summary Table Analysis	469.1	458.3	10.8	2.3%	457.2	11.9	2.5%	456.1	13.0	2.8%	455.0	14.0	3.0%	453.9	15.1	3.2%	452.8	16.2	3.5%
ME 5	33 50 23	2020	Dry	October	Used in Summary Table Analysis	360.8	352.6	8.2	2.3%	351.8	9.0	2.5%	351.0	9.8	2.7%	350.1	10.6	2.9%	349.3	11.5	3.2%	348.5	12.3	3.4%
ME 5	33 50 23	2020	Dry	November	Used in Summary Table Analysis	329.1	322.7	6.4	1.9%	322.1	7.1	2.1%	321.4	7.7	2.3%	320.8	8.4	2.5%	320.1	9.0	2.7%	319.4	9.7	2.9%
ME 5	33 50 23	2020	Dry	December	--	13,469.9	13,464.1	5.8	0.0%	13,464.1	5.8	0.0%	13,463.0	6.9	0.1%	13,463.0	6.9	0.1%	13,461.8	8.1	0.1%	13,461.8	8.1	0.1%
ME 5	33 50 23	2020	Dry	January	--	22,475.7	22,469.9	5.8	0.0%	22,469.9	5.8	0.0%	22,468.8	6.9	0.0%	22,468.8	6.9	0.0%	22,467.6	8.1	0.0%	22,467.6	8.1	0.0%
ME 5	33 50 23	2020	Dry	February	--	7,421.1	7,416.4	4.6	0.1%	7,416.0	5.1	0.1%	7,415.4	5.7	0.1%	7,414.9	6.1	0.1%	7,414.5	6.6	0.1%	7,414.0	7.1	0.1%
ME 5	33 50 23	2020	Dry	March	--	7,270.9	7,266.6	4.4	0.1%	7,266.1	4.9	0.1%	7,265.6	5.3	0.1%	7,265.2	5.8	0.1%	7,264.7	6.3	0.1%	7,264.4	6.6	0.1%
ME 5	33 50 23	2020	Dry	April	--	5,512.4	5,503.4	9.0	0.2%	5,502.5	9.8	0.2%	5,501.6	10.8	0.2%	5,500.7	11.7	0.2%	5,499.8	12.6	0.2%	5,498.8	13.5	0.2%
ME 5	33 50 23	2020	Dry	May	--	7,414.7	7,403.9	10.8	0.1%	7,402.8	11.9	0.2%	7,401.7	13.0	0.2%	7,400.7	14.0	0.2%	7,399.5	15.2	0.2%	7,398.5	16.2	0.2%
ME 5	33 50 23	2020	Dry	June	--	2,106.1	2,091.9	14.2	0.7%	2,090.5	15.6	0.7%	2,089.1	17.0	0.8%	2,087.6	18.5	0.9%	2,086.2	19.9	0.9%	2,084.8	21.3	1.0%
ME 5	33 50 23	2020	Dry	July	--	801.3	787.2	14.1	1.8%	785.8	15.5	1.9%	784.4	16.9	2.1%	783.0	18.3	2.3%	781.6	19.7	2.5%	780.2	21.1	2.6%
ME 5	33 50 23	2020	Dry	August	--	404.4	390.4	13.9	3.4%	389.1	15.3	3.8%	387.7	16.7	4.1%	386.3	18.1	4.5%	384.9	19.5	4.8%	383.5	20.9	5.2%
ME 5	33 50 23	2020	Dry	September	Used in Summary Table Analysis	253.7	241.1	12.5	4.9%	239.9	13.8	5.4%	238.6	15.0	5.9%	237.4	16.3	6.4%	236.1	17.5	6.9%	234.9	18.8	7.4%
ME 5	32 50 24	2000	Above Normal	October	Used in Summary Table Analysis	825.8	817.1	8.7	1.1%	816.2	9.5	1.2%	815.4	10.4	1.3%	814.5	11.3	1.4%	813.6	12.2	1.5%	812.8	13.0	1.6%
ME 5	32 50 24	2000	Above Normal	November	Used in Summary Table Analysis	12,267.4	12,260.4	6.9	0.1%	12,259.3	8.1	0.1%	12,259.3	8.1	0.1%	12,258.1	9.3	0.1%	12,258.1	9.3	0.1%	12,256.9	10.4	0.1%
ME 5	32 50 24	2000	Above Normal	December	--	10,890.3	10,884.5	5.8	0.1%	10,883.8	6.5	0.1%	10,883.2	7.1	0.1%	10,882.6	7.6	0.1%	10,882.1	8.2	0.1%	10,881.5	8.8	0.1%
ME 5	32 50 24	2000	Above Normal	January	--	28,825.2	28,819.4	5.8	0.0%	28,819.4	5.8	0.0%	28,818.3	6.9	0.0%	28,818.3	6.9	0.0%	28,817.1	8.1	0.0%	28,817.1	8.1	0.0%
ME 5	32 50 24	2000	Above Normal	February	--	37,203.7	37,199.1	4.6	0.0%	37,197.9	5.8	0.0%	37,197.9	5.8	0.0%	37,196.8	6.9	0.0%	37,196.8	6.9	0.0%	37,196.8	6.9	0.0%
ME 5	32 50 24	2000	Above Normal	March	--	18,366.9	18,362.3	4.6	0.0%	18,362.3	4.6	0.0%	18,361.1	5.8	0.0%	18,361.1	5.8	0.0%	18,360.0	6.9	0.0%	18,360.0	6.9	0.0%
ME 5	32 50 24	2000	Above Normal	April	--	12,353.0	12,349.5	3.5	0.0%	12,348.4	4.6	0.0%	12,348.4	4.6	0.0%	12,347.2	5.8	0.0%	12,347.2	5.8	0.0%	12,347.2	5.8	0.0%
ME 5	32 50 24	2000	Above Normal	May	--	7,127.2	7,118.4	8.8	0.1%	7,117.6	9.6	0.1%	7,116.7	10.5	0.1%	7,115.7	11.5	0.2%	7,114.9	12.3	0.2%	7,114.0	13.2	0.2%
ME 5	32 50 24	2000	Above Normal	June	--	2,624.7	2,611.5	13.2	0.5%	2,610.2	14.5	0.6%	2,608.8	15.9	0.6%	2,607.5	17.1	0.7%	2,606.3	18.4	0.7%	2,604.9	19.8	0.8%
ME 5	32 50 24	2000	Above Normal	July	--	998.6	986.5	12.1	1.2%	985.3	13.4	1.3%	984.1	14.6	1.5%	982.9	15.8	1.6%	981.7	17.0	1.7%	980.4	18.2	1.8%
ME 5	32 50 24	2000	Above Normal	August	--	529.1	517.6	11.5	2.2%	516.5	12.6	2.4%	515.3	13.8	2.6%	514.2	14.9	2.8%	513.1	16.1	3.0%	511.9	17.2	3.3%
ME 5	32 50 24	2000	Above Normal	September	Used in Summary Table Analysis	301.7	291.5	10.2	3.4%	290.4	11.3	3.7%	289.4	12.3	4.1%	288.4	13.3	4.4%	287.4	14.3	4.7%	286.3	15.4	5.1%
ME 5	32 50 24	2001	Dry	October	Used in Summary Table Analysis	3,850.7	3,842.1	8.6	0.2%	3,841.3	9.4	0.2%	3,840.4	10.3	0.3%	3,839.6	11.1	0.3%	3,838.8	11.9	0.3%	3,837.8	12.8	0.3%
ME 5	32 50 24	2001	Dry	November	Used in Summary Table Analysis	6,180.8	6,174.0	6.8	0.1%	6,173.3	7.5	0.1%	6,172.6	8.2	0.1%	6,171.9	8.9	0.1%	6,171.2	9.6	0.2%	6,170.5	10.3	0.2%
ME 5	32 50 24	2001	Dry	December	--	8,895.4	8,889.5	5.9	0.1%	8,888.9	6.5	0.1%	8,888.3	7.1	0.1%	8,887.7	7.6	0.1%	8,887.2	8.2	0.1%	8,886.5	8.9	0.1%
ME 5	32 50 24	2001	Dry	January	--	12,898.1	12,893.5	4.6	0.0%	12,892.4	5.8	0.0%	12,892.4	5.8	0.0%	12,892.4	5.8	0.0%	12,891.2	6.9	0.1%	12,891.2	6.9	0.1%
ME 5	32 50 24	2001	Dry	February	--	17,539.4	17,534.7	4.6	0.0%	17,534.7	4.6	0.0%	17,533.6	5.8	0.0%	17,533.6	5.8	0.0%	17,533.6	5.8	0.0%	17,532.4	6.9	0.0%
ME 5	32 50 24	2001	Dry	March	--	12,332.2	12,327.5	4.6	0.0%	12,327.5	4.6	0.0%	12,326.4	5.8	0.0%	12,326.4	5.8	0.0%	12,325.2	6.9	0.1%	12,325.2	6.9	0.1%
ME 5	32 50 24	2001	Dry	April	--	11,008.8	10,999.7	9.1	0.1%	10,998.8	10.0	0.1%	10,997.9	10.9	0.1%	10,997.0	11.8	0.1%	10,996.1	12.7	0.1%	10,995.1	13.7	0.1%
ME 5	32 50 24	2001	Dry	May	--	2,638.5	2,627.8	10.8	0.4%	2,626.6	11.9	0.5%	2,625.6	13.0	0.5%	2,624.5	14.0	0.5%	2,623.5	15.0	0.6%	2,622.3	16.2	0.6%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 50 24	2001	Dry	June	--	2,672.3	2,657.5	14.8	0.6%	2,656.0	16.3	0.6%	2,654.5	17.8	0.7%	2,653.1	19.2	0.7%	2,651.6	20.7	0.8%	2,650.1	22.2	0.8%
ME 5	32 50 24	2001	Dry	July	--	722.0	708.0	14.0	1.9%	706.6	15.4	2.1%	705.1	16.8	2.3%	703.7	18.2	2.5%	702.3	19.6	2.7%	700.9	21.0	2.9%
ME 5	32 50 24	2001	Dry	August	--	178.0	164.3	13.7	7.7%	162.9	15.0	8.5%	161.5	16.5	9.2%	160.1	17.8	10.0%	158.8	19.2	10.8%	157.4	20.6	11.6%
ME 5	32 50 24	2001	Dry	September	Used in Summary Table Analysis	101.3	89.0	12.3	12.2%	87.7	13.6	13.4%	86.4	14.8	14.6%	85.1	16.1	15.9%	83.9	17.3	17.1%	82.7	18.6	18.3%
ME 5	32 50 24	2002	Below Normal	October	Used in Summary Table Analysis	271.6	261.2	10.4	3.8%	260.2	11.4	4.2%	259.1	12.5	4.6%	258.0	13.6	5.0%	257.0	14.6	5.4%	255.9	15.7	5.8%
ME 5	32 50 24	2002	Below Normal	November	Used in Summary Table Analysis	12,100.7	12,092.6	8.1	0.1%	12,092.6	8.1	0.1%	12,091.4	9.3	0.1%	12,090.3	10.4	0.1%	12,089.1	11.6	0.1%	12,089.1	11.6	0.1%
ME 5	32 50 24	2002	Below Normal	December	--	35,906.3	35,899.3	6.9	0.0%	35,898.1	8.1	0.0%	35,898.1	8.1	0.0%	35,897.0	9.3	0.0%	35,895.8	10.4	0.0%	35,895.8	10.4	0.0%
ME 5	32 50 24	2002	Below Normal	January	--	31,018.5	31,011.6	6.9	0.0%	31,011.6	6.9	0.0%	31,010.4	8.1	0.0%	31,010.4	8.1	0.0%	31,009.3	9.3	0.0%	31,009.3	9.3	0.0%
ME 5	32 50 24	2002	Below Normal	February	--	24,761.6	24,755.8	5.8	0.0%	24,755.8	5.8	0.0%	24,754.6	6.9	0.0%	24,754.6	6.9	0.0%	24,753.5	8.1	0.0%	24,753.5	8.1	0.0%
ME 5	32 50 24	2002	Below Normal	March	--	17,844.9	17,840.3	4.6	0.0%	17,839.1	5.8	0.0%	17,839.1	5.8	0.0%	17,838.0	6.9	0.0%	17,838.0	6.9	0.0%	17,836.8	8.1	0.0%
ME 5	32 50 24	2002	Below Normal	April	--	9,950.3	9,941.2	9.1	0.1%	9,940.3	10.1	0.1%	9,939.4	11.0	0.1%	9,938.4	11.9	0.1%	9,937.5	12.8	0.1%	9,936.6	13.8	0.1%
ME 5	32 50 24	2002	Below Normal	May	--	3,329.1	3,318.3	10.8	0.3%	3,317.2	11.8	0.4%	3,316.1	13.0	0.4%	3,315.0	14.0	0.4%	3,313.9	15.2	0.5%	3,312.8	16.2	0.5%
ME 5	32 50 24	2002	Below Normal	June	--	859.1	846.8	12.3	1.4%	845.6	13.5	1.6%	844.3	14.7	1.7%	843.1	16.0	1.9%	841.9	17.2	2.0%	840.6	18.4	2.1%
ME 5	32 50 24	2002	Below Normal	July	--	368.0	355.4	12.6	3.4%	354.1	13.9	3.8%	352.9	15.1	4.1%	351.6	16.4	4.5%	350.3	17.6	4.8%	349.1	18.9	5.1%
ME 5	32 50 24	2002	Below Normal	August	--	233.6	221.7	11.9	5.1%	220.5	13.1	5.6%	219.3	14.3	6.1%	218.1	15.5	6.6%	216.9	16.7	7.1%	215.7	17.9	7.7%
ME 5	32 50 24	2002	Below Normal	September	Used in Summary Table Analysis	170.1	158.8	11.3	6.7%	157.7	12.4	7.3%	156.5	13.6	8.0%	155.4	14.7	8.7%	154.2	15.9	9.3%	153.1	17.0	10.0%
ME 5	32 50 24	2003	Wet	October	Used in Summary Table Analysis	134.9	125.6	9.3	6.9%	124.7	10.3	7.6%	123.7	11.2	8.3%	122.8	12.2	9.0%	121.9	13.1	9.7%	120.9	14.0	10.4%
ME 5	32 50 24	2003	Wet	November	Used in Summary Table Analysis	904.1	896.5	7.6	0.8%	895.8	8.3	0.9%	895.0	9.1	1.0%	894.2	9.9	1.1%	893.4	10.6	1.2%	892.7	11.4	1.3%
ME 5	32 50 24	2003	Wet	December	--	57,346.1	57,339.1	6.9	0.0%	57,339.1	6.9	0.0%	57,338.0	8.1	0.0%	57,338.0	8.1	0.0%	57,336.8	9.3	0.0%	57,335.6	10.4	0.0%
ME 5	32 50 24	2003	Wet	January	--	31,637.7	31,631.9	5.8	0.0%	31,630.8	6.9	0.0%	31,630.8	6.9	0.0%	31,629.6	8.1	0.0%	31,629.6	8.1	0.0%	31,628.5	9.3	0.0%
ME 5	32 50 24	2003	Wet	February	--	20,409.7	20,405.1	4.6	0.0%	20,403.9	5.8	0.0%	20,403.9	5.8	0.0%	20,402.8	6.9	0.0%	20,402.8	6.9	0.0%	20,401.6	8.1	0.0%
ME 5	32 50 24	2003	Wet	March	--	24,121.5	24,116.9	4.6	0.0%	24,116.9	4.6	0.0%	24,115.7	5.8	0.0%	24,115.7	5.8	0.0%	24,114.6	6.9	0.0%	24,114.6	6.9	0.0%
ME 5	32 50 24	2003	Wet	April	--	43,130.8	43,126.2	4.6	0.0%	43,126.2	4.6	0.0%	43,125.0	5.8	0.0%	43,125.0	5.8	0.0%	43,123.8	6.9	0.0%	43,123.8	6.9	0.0%
ME 5	32 50 24	2003	Wet	May	--	12,252.3	12,243.1	9.3	0.1%	12,241.9	10.4	0.1%	12,241.9	10.4	0.1%	12,240.7	11.6	0.1%	12,239.6	12.7	0.1%	12,238.4	13.9	0.1%
ME 5	32 50 24	2003	Wet	June	--	3,173.7	3,161.8	11.9	0.4%	3,160.6	13.1	0.4%	3,159.5	14.2	0.4%	3,158.3	15.4	0.5%	3,157.2	16.6	0.5%	3,156.0	17.7	0.6%
ME 5	32 50 24	2003	Wet	July	--	1,482.4	1,469.9	12.5	0.8%	1,468.6	13.8	0.9%	1,467.4	15.0	1.0%	1,466.2	16.2	1.1%	1,464.9	17.5	1.2%	1,463.7	18.8	1.3%
ME 5	32 50 24	2003	Wet	August	--	768.0	755.8	12.1	1.6%	754.7	13.3	1.7%	753.4	14.5	1.9%	752.2	15.8	2.1%	751.0	17.0	2.2%	749.7	18.2	2.4%
ME 5	32 50 24	2003	Wet	September	Used in Summary Table Analysis	465.2	454.7	10.5	2.2%	453.7	11.5	2.5%	452.6	12.6	2.7%	451.6	13.6	2.9%	450.5	14.7	3.2%	449.5	15.7	3.4%
ME 5	32 50 24	2004	Wet	October	Used in Summary Table Analysis	331.9	323.2	8.7	2.6%	322.3	9.5	2.9%	321.5	10.4	3.1%	320.6	11.3	3.4%	319.7	12.2	3.7%	318.8	13.1	3.9%
ME 5	32 50 24	2004	Wet	November	Used in Summary Table Analysis	5,865.0	5,858.0	7.1	0.1%	5,857.3	7.8	0.1%	5,856.6	8.4	0.1%	5,855.9	9.1	0.2%	5,855.2	9.8	0.2%	5,854.4	10.6	0.2%
ME 5	32 50 24	2004	Wet	December	--	36,585.6	36,579.9	5.8	0.0%	36,578.7	6.9	0.0%	36,577.5	8.1	0.0%	36,577.5	8.1	0.0%	36,576.4	9.3	0.0%	36,576.4	9.3	0.0%
ME 5	32 50 24	2004	Wet	January	--	31,659.7	31,653.9	5.8	0.0%	31,653.9	5.8	0.0%	31,652.8	6.9	0.0%	31,652.8	6.9	0.0%	31,652.8	6.9	0.0%	31,651.6	8.1	0.0%
ME 5	32 50 24	2004	Wet	February	--	38,415.5	38,409.7	5.8	0.0%	38,409.7	5.8	0.0%	38,408.6	6.9	0.0%	38,408.6	6.9	0.0%	38,408.6	6.9	0.0%	38,407.4	8.1	0.0%
ME 5	32 50 24	2004	Wet	March	--	16,554.4	16,549.8	4.6	0.0%	16,549.8	4.6	0.0%	16,549.8	4.6	0.0%	16,548.6	5.8	0.0%	16,548.6	5.8	0.0%	16,547.5	6.9	0.0%
ME 5	32 50 24	2004	Wet	April	--	9,473.8	9,469.6	4.3	0.0%	9,469.1	4.7	0.1%	9,468.6	5.2	0.1%	9,468.2	5.7	0.1%	9,467.8	6.0	0.1%	9,467.4	6.5	0.1%
ME 5	32 50 24	2004	Wet	May	--	3,439.1	3,430.3	8.8	0.3%	3,429.4	9.7	0.3%	3,428.5	10.6	0.3%	3,427.5	11.6	0.3%	3,426.7	12.4	0.4%	3,425.8	13.3	0.4%
ME 5	32 50 24	2004	Wet	June	--	696.8	685.6	11.3	1.6%	684.4	12.4	1.8%	683.3	13.5	1.9%	682.2	14.7	2.1%	681.1	15.8	2.3%	680.0	16.9	2.4%
ME 5	32 50 24	2004	Wet	July	--	362.8	350.6	12.2	3.4%	349.4	13.4	3.7%	348.2	14.7	4.0%	347.0	15.9	4.4%	345.7	17.1	4.7%	344.5	18.3	5.0%
ME 5	32 50 24	2004	Wet	August	--	231.5	219.9	11.6	5.0%	218.8	12.7	5.5%	217.6	13.9	6.0%	216.4	15.1	6.5%	215.3	16.2	7.0%	214.1	17.4	7.5%
ME 5	32 50 24	2004	Wet	September	Used in Summary Table Analysis	168.1	157.1	11.1	6.6%	156.0	12.2	7.2%	154.8	13.3	7.9%	153.8	14.4	8.5%	152.6	15.5	9.2%	151.5	16.6	9.9%
ME 5	32 50 24	2005	Above Normal	October	Used in Summary Table Analysis	7,763.0	7,754.1	8.9	0.1%	7,753.2	9.7	0.1%	7,752.3	10.6	0.1%	7,751.4	11.6	0.1%	7,750.5	12.5	0.2%	7,749.7	13.3	0.2%
ME 5	32 50 24	2005	Above Normal	November	Used in Summary Table Analysis	2,268.6	2,261.7	6.9	0.3%	2,261.0	7.6	0.3%	2,260.3	8.3	0.4%	2,259.6	9.0	0.4%	2,258.9	9.7	0.4%	2,258.2	10.4	0.5%
ME 5	32 50 24	2005	Above Normal	December	--	21,258.1	21,252.3	5.8	0.0%	21,251.2	6.9	0.0%	21,251.2	6.9	0.0%	21,250.0	8.1	0.0%	21,248.8	9.3	0.0%	21,248.8	9.3	0.0%
ME 5	32 50 24	2005	Above Normal	January	--	22,566.0	22,560.2	5.8	0.0%	22,560.2	5.8	0.0%	22,559.0	6.9	0.0%	22,559.0	6.9	0.0%	22,557.9	8.1	0.0%	22,557.9	8.1	0.0%
ME 5	32 50 24	2005	Above Normal	February	--	14,044.0	14,038.2	5.8	0.0%	14,038.2	5.8	0.0%	14,038.2	5.8	0.0%	14,037.0	6.9	0.0%	14,037.0	6.9	0.0%	14,035.9	8.1	0.1%
ME 5	32 50 24	2005	Above Normal	March	--	28,704.9	28,700.2	4.6	0.0%	28,700.2	4.6	0.0%	28,699.1	5.8	0.0%	28,699.1	5.8	0.0%	28,699.1	5.8	0.0%	28,697.9	6.9	0.0%
ME 5	32 50 24	2005	Above Normal	April	--	21,534.7	21,531.3	3.5	0.0%	21,530.1	4.6	0.0%	21,530.1	4.6	0.0%	21,530.1	4.6	0.0%	21,528.9	5.8	0.0%	21,528.9	5.8	0.0%
ME 5	32 50 24	2005	Above Normal	May	--	19,678.2	19,669.0	9.3	0.0%	19,667.8	10.4	0.1%	19,666.7	11.6	0.1%	19,666.7	11.6	0.1%	19,665.5	12.7	0.1%	19,664.4	13.9	0.1%
ME 5	32 50 24	2005	Above Normal	June	--	16,000.0	15,986.1	13.9	0.1%	15,985.0	15.0	0.1%	15,983.8	16.2	0.1%	15,981.5	18.5	0.1%	15,980.3	19.7	0.1%	15,979.2	20.8	0.1%
ME 5	32 50 24	2005	Above Normal	July	--	2,866.1	2,853.5	12.6	0.4%	2,852.2	13.9	0.5%	2,850.9	15.2	0.5%	2,849.7	16.4	0.6%	2,848.4	17.7	0.6%	2,847.1	19.0	0.7%
ME 5	32 50 24	2005	Above Normal	August	--	990.9	979.4	11.5	1.2%	978.2	12.7	1.3%	977.0	13.8	1.4%	975.9	15.0	1.5%	974.8	16.1	1.6%	973.6	17.3	1.7%
ME 5	32 50 24	2005	Above Normal	September	Used in Summary Table Analysis	532.3	522.1	10.3	1.9%	521.1	11.3	2.1%	520.0	12.3	2.3%	519.0	13.3	2.5%	518.0	14.4	2.7%	516.9	15.4	2.9%
ME 5	32 50 24	2006	Wet	October	Used in Summary Table Analysis	643.2	634.8	8.4	1.3%	633.9	9.2	1.4%	633.1	10.1	1.6%	632.3	10.9	1.7%	631.4	11.7	1.8%	630.6	12.6	2.0%
ME 5	32 50 24	2006	Wet	November	Used in Summary Table Analysis	9,412.2	9,405.6	6.6	0.1%	9,405.0	7.2	0.1%	9,404.3	7.9	0.1%	9,403.6	8.6	0.1%	9,402.9	9.3	0.1%	9,402.2	10.0	0.1%
ME 5	32 50 24	2006	Wet	December	--	43,846.1	43,840.3	5.8	0.0%	43,839.1	6.9	0.0%	43,839.1	6.9	0.0%	43,838.0	8.1	0.0%	43,838.0	8.1	0.0%	43,836.8	9.3	0.0%
ME 5	32 50 24	2006	Wet	January	--	46,611.1	46,606.5	4.6	0.0%	46,605.3	5.8	0.0%	46,605.3	5.8	0.0%	46,604.2	6.9	0.0%	46,604.2	6.9	0.0%	46,603.0	8.1	0.0%
ME 5	32 50 24	2006	Wet	February	--	26,752.3	26,747.7	4.6	0.0%	26,747.7	4.6	0.0%	26,747.7	4.6	0.0%	26,746.5	5.8	0.0%	26,746.5	5.8	0.0%	26,745.4	6.9	0.0%
ME 5	32 50 24	2006	Wet	March	--	47,406.3	47,402.8	3.5	0.0%	47,401.6	4.6	0.0%	47,401.6	4.6	0.0%	47,400.5	5.8	0.0%	47,400.5	5.8	0.0%	47,400.5	5.8	0.0%
ME 5	32 50 24	2006	Wet	April	--	30,525.5	30,520.8	4.6	0.0%	30,520.8	4.6	0.0%	30,520.8	4.6	0.0%	30,519.7	5.8	0.0%	30,519.7	5.8	0.0%	30,519.7	5.8	0.0%
ME 5	32 50 24	2006	Wet	May	--	14,263.9	14,258.1	5.8	0.0%	14,258.1	5.8	0.0%	14,256.9	6.9	0.0%	14,256.9	6.9	0.0%	14,255.8	8.1	0.1%	14,255.8	8.1	0.1%
ME 5	32 50 24	2006	Wet	June	--	3,554.1	3,542.9	11.1	0.3%	3,541.9	12.2	0.3%	3,540.7	13.3	0.4%	3,539.6	14.5	0.4%	3,538.4	15.6	0.4%	3,537.4	16.7	0.5%
ME 5	32 50 24	2006	Wet	July	--	1,288.3	1,276.3	12.0	0.9%	1,275.1	13.2	1.0%	1,273.8	14.5	1.1%	1,272.7	15.6	1.2%	1,271.5	16.8	1.3%	1,270.3	18.1	1.4%
ME 5	32 50 24	2006	Wet	August	--	674.4	662.6	11.8	1.7%	661.4	13.0	1.9%	660.3	14.1	2.1%	659.0	15.4	2.3%	657.9	16.5	2.5%	656.7	17.7	2.6%
ME 5	32 50 24	2006	Wet	September	Used in Summary Table Analysis	434.6	424.2	10.4	2.4%	423.1	11.4	2.6%	422.1	12.5	2.9%	421.1	13.5	3.1%	420.0	14.6	3.4%	419.0	15.6	3.6%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 50 24	2007	Above Normal	October	Used in Summary Table Analysis	281.6	273.1	8.5	3.0%	272.2	9.4	3.3%	271.4	10.2	3.6%	270.5	11.1	3.9%	269.7	11.9	4.2%	268.8	12.8	4.5%
ME 5	32 50 24	2007	Above Normal	November	Used in Summary Table Analysis	8,760.2	8,753.2	6.9	0.1%	8,752.5	7.6	0.1%	8,751.9	8.3	0.1%	8,751.2	9.0	0.1%	8,750.5	9.7	0.1%	8,749.8	10.4	0.1%
ME 5	32 50 24	2007	Above Normal	December	--	20,600.7	20,593.8	6.9	0.0%	20,593.8	6.9	0.0%	20,592.6	8.1	0.0%	20,592.6	8.1	0.0%	20,591.4	9.3	0.0%	20,591.4	9.3	0.0%
ME 5	32 50 24	2007	Above Normal	January	--	10,301.5	10,296.2	5.3	0.1%	10,295.7	5.8	0.1%	10,295.1	6.4	0.1%	10,294.7	6.8	0.1%	10,294.1	7.4	0.1%	10,293.5	8.0	0.1%
ME 5	32 50 24	2007	Above Normal	February	--	30,784.7	30,778.9	5.8	0.0%	30,778.9	5.8	0.0%	30,778.9	5.8	0.0%	30,777.8	6.9	0.0%	30,777.8	6.9	0.0%	30,776.6	8.1	0.0%
ME 5	32 50 24	2007	Above Normal	March	--	13,137.7	13,133.1	4.6	0.0%	13,133.1	4.6	0.0%	13,131.9	5.8	0.0%	13,131.9	5.8	0.0%	13,130.8	6.9	0.1%	13,130.8	6.9	0.1%
ME 5	32 50 24	2007	Above Normal	April	--	11,569.2	11,560.4	8.8	0.1%	11,559.5	9.7	0.1%	11,558.7	10.5	0.1%	11,557.8	11.5	0.1%	11,556.9	12.3	0.1%	11,556.0	13.2	0.1%
ME 5	32 50 24	2007	Above Normal	May	--	4,155.7	4,145.3	10.4	0.3%	4,144.2	11.5	0.3%	4,143.2	12.5	0.3%	4,142.1	13.5	0.3%	4,141.1	14.6	0.4%	4,140.0	15.6	0.4%
ME 5	32 50 24	2007	Above Normal	June	--	1,510.2	1,497.6	12.6	0.8%	1,496.3	13.9	0.9%	1,495.0	15.2	1.0%	1,493.8	16.4	1.1%	1,492.5	17.7	1.2%	1,491.2	19.0	1.3%
ME 5	32 50 24	2007	Above Normal	July	--	501.6	488.8	12.8	2.6%	487.5	14.1	2.8%	486.2	15.4	3.1%	484.9	16.6	3.3%	483.6	17.9	3.6%	482.4	19.2	3.8%
ME 5	32 50 24	2007	Above Normal	August	--	229.7	218.1	11.6	5.1%	216.9	12.8	5.6%	215.7	14.0	6.1%	214.6	15.1	6.6%	213.4	16.3	7.1%	212.3	17.4	7.6%
ME 5	32 50 24	2007	Above Normal	September	Used in Summary Table Analysis	157.3	146.3	11.1	7.0%	145.2	12.2	7.7%	144.1	13.3	8.4%	143.0	14.4	9.1%	141.9	15.5	9.8%	140.8	16.6	10.5%
ME 5	32 50 24	2008	Dry	October	Used in Summary Table Analysis	3,468.3	3,459.3	9.0	0.3%	3,458.3	10.0	0.3%	3,457.4	10.9	0.3%	3,456.5	11.8	0.3%	3,455.6	12.7	0.4%	3,454.6	13.7	0.4%
ME 5	32 50 24	2008	Dry	November	Used in Summary Table Analysis	3,307.9	3,300.8	7.1	0.2%	3,300.1	7.8	0.2%	3,299.4	8.4	0.3%	3,298.7	9.1	0.3%	3,298.0	9.8	0.3%	3,297.3	10.5	0.3%
ME 5	32 50 24	2008	Dry	December	--	23,373.8	23,368.1	5.8	0.0%	23,366.9	6.9	0.0%	23,366.9	6.9	0.0%	23,365.7	8.1	0.0%	23,365.7	8.1	0.0%	23,364.6	9.3	0.0%
ME 5	32 50 24	2008	Dry	January	--	37,767.4	37,761.6	5.8	0.0%	37,761.6	5.8	0.0%	37,760.4	6.9	0.0%	37,760.4	6.9	0.0%	37,759.3	8.1	0.0%	37,759.3	8.1	0.0%
ME 5	32 50 24	2008	Dry	February	--	26,327.5	26,322.9	4.6	0.0%	26,321.8	5.8	0.0%	26,321.8	5.8	0.0%	26,320.6	6.9	0.0%	26,320.6	6.9	0.0%	26,320.6	6.9	0.0%
ME 5	32 50 24	2008	Dry	March	--	11,820.6	11,816.0	4.6	0.0%	11,816.0	4.6	0.0%	11,816.0	4.6	0.0%	11,814.8	5.8	0.0%	11,814.8	5.8	0.0%	11,814.8	5.8	0.0%
ME 5	32 50 24	2008	Dry	April	--	9,038.4	9,029.5	8.9	0.1%	9,028.6	9.8	0.1%	9,027.7	10.8	0.1%	9,026.9	11.6	0.1%	9,025.9	12.5	0.1%	9,025.0	13.4	0.1%
ME 5	32 50 24	2008	Dry	May	--	1,358.8	1,349.2	9.6	0.7%	1,348.3	10.5	0.8%	1,347.3	11.5	0.8%	1,346.4	12.4	0.9%	1,345.4	13.4	1.0%	1,344.4	14.4	1.1%
ME 5	32 50 24	2008	Dry	June	--	443.7	429.9	13.8	3.1%	428.5	15.2	3.4%	427.2	16.6	3.7%	425.8	17.9	4.0%	424.4	19.3	4.4%	423.1	20.7	4.7%
ME 5	32 50 24	2008	Dry	July	--	261.5	247.8	13.8	5.3%	246.4	15.1	5.8%	245.0	16.5	6.3%	243.7	17.9	6.8%	242.3	19.2	7.4%	240.9	20.6	7.9%
ME 5	32 50 24	2008	Dry	August	--	185.2	171.8	13.5	7.3%	170.4	14.8	8.0%	169.1	16.1	8.7%	167.8	17.5	9.4%	166.4	18.8	10.2%	165.1	20.2	10.9%
ME 5	32 50 24	2008	Dry	September	Used in Summary Table Analysis	146.8	133.8	13.0	8.8%	132.5	14.3	9.7%	131.2	15.6	10.6%	129.9	16.9	11.5%	128.6	18.2	12.4%	127.3	19.5	13.3%
ME 5	32 50 24	2009	Critical	October	Used in Summary Table Analysis	932.2	921.9	10.3	1.1%	920.8	11.4	1.2%	919.8	12.4	1.3%	918.8	13.5	1.4%	917.7	14.5	1.6%	916.7	15.6	1.7%
ME 5	32 50 24	2009	Critical	November	Used in Summary Table Analysis	5,572.9	5,564.8	8.1	0.1%	5,564.0	8.9	0.2%	5,563.2	9.7	0.2%	5,562.4	10.5	0.2%	5,561.6	11.3	0.2%	5,560.8	12.2	0.2%
ME 5	32 50 24	2009	Critical	December	--	12,294.0	12,287.0	6.9	0.1%	12,285.9	8.1	0.1%	12,285.9	8.1	0.1%	12,284.7	9.3	0.1%	12,283.6	10.4	0.1%	12,283.6	10.4	0.1%
ME 5	32 50 24	2009	Critical	January	--	8,833.6	8,827.4	6.1	0.1%	8,826.7	6.8	0.1%	8,826.2	7.4	0.1%	8,825.5	8.1	0.1%	8,824.9	8.7	0.1%	8,824.2	9.4	0.1%
ME 5	32 50 24	2009	Critical	February	--	22,722.2	22,716.4	5.8	0.0%	22,716.4	5.8	0.0%	22,715.3	6.9	0.0%	22,715.3	6.9	0.0%	22,715.3	6.9	0.0%	22,714.1	8.1	0.0%
ME 5	32 50 24	2009	Critical	March	--	21,201.4	21,196.8	4.6	0.0%	21,196.8	4.6	0.0%	21,195.6	5.8	0.0%	21,195.6	5.8	0.0%	21,194.4	6.9	0.0%	21,194.4	6.9	0.0%
ME 5	32 50 24	2009	Critical	April	--	10,106.6	10,097.3	9.3	0.1%	10,096.4	10.2	0.1%	10,095.5	11.1	0.1%	10,094.7	11.9	0.1%	10,093.8	12.8	0.1%	10,092.7	13.9	0.1%
ME 5	32 50 24	2009	Critical	May	--	15,625.0	15,614.6	10.4	0.1%	15,613.4	11.6	0.1%	15,612.3	12.7	0.1%	15,611.1	13.9	0.1%	15,610.0	15.0	0.1%	15,608.8	16.2	0.1%
ME 5	32 50 24	2009	Critical	June	--	3,166.8	3,152.3	14.5	0.5%	3,150.8	16.0	0.5%	3,149.3	17.5	0.6%	3,147.9	18.9	0.6%	3,146.4	20.4	0.6%	3,145.0	21.8	0.7%
ME 5	32 50 24	2009	Critical	July	--	1,269.2	1,255.3	13.9	1.1%	1,253.9	15.3	1.2%	1,252.5	16.7	1.3%	1,251.0	18.2	1.4%	1,249.8	19.4	1.5%	1,248.4	20.8	1.6%
ME 5	32 50 24	2009	Critical	August	--	675.5	662.0	13.6	2.0%	660.6	14.9	2.2%	659.3	16.3	2.4%	657.9	17.7	2.6%	656.6	18.9	2.8%	655.3	20.3	3.0%
ME 5	32 50 24	2009	Critical	September	Used in Summary Table Analysis	396.2	384.0	12.2	3.1%	382.8	13.4	3.4%	381.5	14.7	3.7%	380.3	15.9	4.0%	379.1	17.1	4.3%	377.9	18.3	4.6%
ME 5	32 50 24	2010	Below Normal	October	Used in Summary Table Analysis	6,098.4	6,087.8	10.5	0.2%	6,086.8	11.6	0.2%	6,085.8	12.6	0.2%	6,084.7	13.7	0.2%	6,083.7	14.7	0.2%	6,082.6	15.7	0.3%
ME 5	32 50 24	2010	Below Normal	November	Used in Summary Table Analysis	8,332.6	8,324.3	8.3	0.1%	8,323.4	9.3	0.1%	8,322.6	10.1	0.1%	8,321.8	10.9	0.1%	8,320.9	11.7	0.1%	8,320.0	12.6	0.2%
ME 5	32 50 24	2010	Below Normal	December	--	12,441.0	12,434.0	6.9	0.1%	12,432.9	8.1	0.1%	12,431.7	9.3	0.1%	12,431.7	9.3	0.1%	12,430.6	10.4	0.1%	12,430.6	10.4	0.1%
ME 5	32 50 24	2010	Below Normal	January	--	36,523.1	36,516.2	6.9	0.0%	36,516.2	6.9	0.0%	36,515.0	8.1	0.0%	36,513.9	9.3	0.0%	36,513.9	9.3	0.0%	36,512.7	10.4	0.0%
ME 5	32 50 24	2010	Below Normal	February	--	27,326.4	27,320.6	5.8	0.0%	27,320.6	5.8	0.0%	27,319.4	6.9	0.0%	27,319.4	6.9	0.0%	27,318.3	8.1	0.0%	27,318.3	8.1	0.0%
ME 5	32 50 24	2010	Below Normal	March	--	28,907.4	28,902.8	4.6	0.0%	28,901.6	5.8	0.0%	28,901.6	5.8	0.0%	28,901.6	5.8	0.0%	28,900.5	6.9	0.0%	28,900.5	6.9	0.0%
ME 5	32 50 24	2010	Below Normal	April	--	40,145.8	40,141.2	4.6	0.0%	40,140.0	5.8	0.0%	40,140.0	5.8	0.0%	40,138.9	6.9	0.0%	40,138.9	6.9	0.0%	40,137.7	8.1	0.0%
ME 5	32 50 24	2010	Below Normal	May	--	20,371.5	20,361.1	10.4	0.1%	20,361.1	10.4	0.1%	20,360.0	11.6	0.1%	20,358.8	12.7	0.1%	20,357.6	13.9	0.1%	20,356.5	15.0	0.1%
ME 5	32 50 24	2010	Below Normal	June	--	9,431.8	9,417.8	14.0	0.1%	9,416.4	15.4	0.2%	9,415.0	16.8	0.2%	9,413.8	18.1	0.2%	9,412.3	19.6	0.2%	9,410.9	20.9	0.2%
ME 5	32 50 24	2010	Below Normal	July	--	1,460.5	1,447.7	12.8	0.9%	1,446.4	14.1	1.0%	1,445.1	15.4	1.1%	1,443.9	16.7	1.1%	1,442.6	17.9	1.2%	1,441.3	19.2	1.3%
ME 5	32 50 24	2010	Below Normal	August	--	577.1	565.2	11.9	2.1%	564.0	13.1	2.3%	562.8	14.3	2.5%	561.6	15.5	2.7%	560.5	16.6	2.9%	559.3	17.8	3.1%
ME 5	32 50 24	2010	Below Normal	September	Used in Summary Table Analysis	659.6	648.3	11.3	1.7%	647.1	12.4	1.9%	646.0	13.6	2.1%	644.9	14.7	2.2%	643.7	15.8	2.4%	642.6	17.0	2.6%
ME 5	32 50 24	2011	Wet	October	Used in Summary Table Analysis	9,699.2	9,690.6	8.6	0.1%	9,689.7	9.5	0.1%	9,688.9	10.3	0.1%	9,688.0	11.2	0.1%	9,687.0	12.2	0.1%	9,686.2	13.0	0.1%
ME 5	32 50 24	2011	Wet	November	Used in Summary Table Analysis	14,294.0	14,287.0	6.9	0.0%	14,287.0	6.9	0.0%	14,285.9	8.1	0.1%	14,285.9	8.1	0.1%	14,284.7	9.3	0.1%	14,283.6	10.4	0.1%
ME 5	32 50 24	2011	Wet	December	--	34,003.5	33,997.7	5.8	0.0%	33,997.7	5.8	0.0%	33,996.5	6.9	0.0%	33,996.5	6.9	0.0%	33,995.4	8.1	0.0%	33,995.4	8.1	0.0%
ME 5	32 50 24	2011	Wet	January	--	14,213.0	14,208.3	4.6	0.0%	14,207.2	5.8	0.0%	14,207.2	5.8	0.0%	14,206.0	6.9	0.0%	14,206.0	6.9	0.0%	14,204.9	8.1	0.1%
ME 5	32 50 24	2011	Wet	February	--	20,824.1	20,819.4	4.6	0.0%	20,818.3	5.8	0.0%	20,818.3	5.8	0.0%	20,817.1	6.9	0.0%	20,817.1	6.9	0.0%	20,817.1	6.9	0.0%
ME 5	32 50 24	2011	Wet	March	--	52,204.9	52,200.2	4.6	0.0%	52,200.2	4.6	0.0%	52,199.1	5.8	0.0%	52,199.1	5.8	0.0%	52,199.1	5.8	0.0%	52,197.9	6.9	0.0%
ME 5	32 50 24	2011	Wet	April	--	24,868.1	24,863.4	4.6	0.0%	24,863.4	4.6	0.0%	24,862.3	5.8	0.0%	24,862.3	5.8	0.0%	24,862.3	5.8	0.0%	24,861.1	6.9	0.0%
ME 5	32 50 24	2011	Wet	May	--	11,415.7	11,406.8	8.9	0.1%	11,405.9	9.8	0.1%	11,405.0	10.8	0.1%	11,404.1	11.7	0.1%	11,403.1	12.6	0.1%	11,402.2	13.5	0.1%
ME 5	32 50 24	2011	Wet	June	--	7,089.6	7,076.2	13.4	0.2%	7,074.8	14.8	0.2%	7,073.4	16.2	0.2%	7,072.0	17.6	0.2%	7,070.7	18.9	0.3%	7,069.3	20.3	0.3%
ME 5	32 50 24	2011	Wet	July	--	1,832.8	1,819.2	13.5	0.7%	1,817.8	14.9	0.8%	1,816.6	16.2	0.9%	1,815.2	17.6	1.0%	1,813.8	19.0	1.0%	1,812.4	20.4	1.1%
ME 5	32 50 24	2011	Wet	August	--	783.8	772.1	11.7	1.5%	770.9	12.9	1.6%	769.7	14.0	1.8%	768.6	15.2	1.9%	767.4	16.4	2.1%	766.2	17.5	2.2%
ME 5	32 50 24	2011	Wet	September	Used in Summary Table Analysis	440.4	429.7	10.7	2.4%	428.6	11.8	2.7%	427.6	12.8	2.9%	426.5	13.9	3.2%	425.4	15.0	3.4%	424.4	16.0	3.6%
ME 5	32 50 24	2012	Below Normal	October	Used in Summary Table Analysis	4,575.9	4,567.1	8.8	0.2%	4,566.2	9.7	0.2%	4,565.4	10.5	0.2%	4,564.5	11.5	0.3%	4,563.5	12.4	0.3%	4,562.7	13.2	0.3%
ME 5	32 50 24	2012	Below Normal	November	Used in Summary Table Analysis	8,307.1	8,300.0	7.1	0.1%	8,299.3	7.8	0.1%	8,298.6	8.4	0.1%	8,297.9	9.1	0.1%	8,297.2	9.8	0.1%	8,296.5	10.5	0.1%
ME 5	32 50 24	2012	Below Normal	December	--	5,214.1	5,208.2	5.9	0.1%	5,207.6	6.5	0.1%	5,206.9	7.2	0.1%	5,206.4	7.8	0.1%	5,205.8	8.3	0.2%	5,205.2	8.9	0.2%
ME 5	32 50 24	2012	Below Normal	January	--	20,313.7	20,307.9	5.8	0.0%	20,307.9	5.8	0.0%	20,306.7	6.9	0.0%	20,306.7	6.9	0.0%	20,305.6	8.1	0.0%	20,305.6	8.1	0.0%

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							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 50 24	2012	Below Normal	February	--	18,269.7	18,265.0	4.6	0.0%	18,263.9	5.8	0.0%	18,263.9	5.8	0.0%	18,262.7	6.9	0.0%	18,262.7	6.9	0.0%	18,261.6	8.1	0.0%
ME 5	32 50 24	2012	Below Normal	March	--	45,657.4	45,652.8	4.6	0.0%	45,651.6	5.8	0.0%	45,651.6	5.8	0.0%	45,650.5	6.9	0.0%	45,650.5	6.9	0.0%	45,649.3	8.1	0.0%
ME 5	32 50 24	2012	Below Normal	April	--	26,943.3	26,938.7	4.6	0.0%	26,938.7	4.6	0.0%	26,937.5	5.8	0.0%	26,937.5	5.8	0.0%	26,936.3	6.9	0.0%	26,936.3	6.9	0.0%
ME 5	32 50 24	2012	Below Normal	May	--	7,503.2	7,494.2	9.0	0.1%	7,493.3	10.0	0.1%	7,492.4	10.9	0.1%	7,491.6	11.7	0.2%	7,490.6	12.6	0.2%	7,489.8	13.4	0.2%
ME 5	32 50 24	2012	Below Normal	June	--	5,548.6	5,534.8	13.8	0.2%	5,533.4	15.2	0.3%	5,532.1	16.6	0.3%	5,530.7	17.9	0.3%	5,529.4	19.2	0.3%	5,528.0	20.6	0.4%
ME 5	32 50 24	2012	Below Normal	July	--	2,244.7	2,231.5	13.2	0.6%	2,230.2	14.5	0.6%	2,228.8	15.9	0.7%	2,227.5	17.1	0.8%	2,226.3	18.4	0.8%	2,224.9	19.8	0.9%
ME 5	32 50 24	2012	Below Normal	August	--	393.8	383.0	10.8	2.7%	381.9	11.9	3.0%	380.9	12.9	3.3%	379.8	14.0	3.6%	378.7	15.0	3.8%	377.7	16.1	4.1%
ME 5	32 50 24	2012	Below Normal	September	Used in Summary Table Analysis	255.8	246.2	9.6	3.8%	245.2	10.6	4.1%	244.2	11.6	4.5%	243.3	12.5	4.9%	242.3	13.5	5.3%	241.3	14.4	5.6%
ME 5	32 50 24	2013	Below Normal	October	Used in Summary Table Analysis	1,935.0	1,926.5	8.4	0.4%	1,925.7	9.3	0.5%	1,924.8	10.2	0.5%	1,924.0	11.0	0.6%	1,923.1	11.8	0.6%	1,922.2	12.7	0.7%
ME 5	32 50 24	2013	Below Normal	November	Used in Summary Table Analysis	14,811.3	14,805.6	5.8	0.0%	14,804.4	6.9	0.0%	14,804.4	6.9	0.0%	14,803.2	8.1	0.1%	14,802.1	9.3	0.1%	14,802.1	9.3	0.1%
ME 5	32 50 24	2013	Below Normal	December	--	60,273.1	60,266.2	6.9	0.0%	60,266.2	6.9	0.0%	60,265.0	8.1	0.0%	60,265.0	8.1	0.0%	60,263.9	9.3	0.0%	60,262.7	10.4	0.0%
ME 5	32 50 24	2013	Below Normal	January	--	22,282.4	22,276.6	5.8	0.0%	22,276.6	5.8	0.0%	22,276.6	5.8	0.0%	22,275.5	6.9	0.0%	22,275.5	6.9	0.0%	22,274.3	8.1	0.0%
ME 5	32 50 24	2013	Below Normal	February	--	8,884.1	8,879.4	4.7	0.1%	8,878.9	5.2	0.1%	8,878.4	5.8	0.1%	8,877.9	6.3	0.1%	8,877.4	6.7	0.1%	8,877.0	7.2	0.1%
ME 5	32 50 24	2013	Below Normal	March	--	10,389.2	10,384.6	4.6	0.0%	10,384.1	5.1	0.0%	10,383.7	5.6	0.1%	10,383.2	6.0	0.1%	10,382.8	6.5	0.1%	10,382.3	6.9	0.1%
ME 5	32 50 24	2013	Below Normal	April	--	8,309.3	8,300.6	8.7	0.1%	8,299.8	9.5	0.1%	8,299.0	10.3	0.1%	8,298.0	11.2	0.1%	8,297.2	12.0	0.1%	8,296.3	13.0	0.2%
ME 5	32 50 24	2013	Below Normal	May	--	4,454.5	4,444.1	10.4	0.2%	4,443.1	11.5	0.3%	4,442.0	12.5	0.3%	4,441.0	13.5	0.3%	4,439.9	14.6	0.3%	4,438.9	15.6	0.4%
ME 5	32 50 24	2013	Below Normal	June	--	2,119.0	2,106.4	12.6	0.6%	2,105.2	13.8	0.6%	2,103.9	15.0	0.7%	2,102.7	16.3	0.8%	2,101.4	17.6	0.8%	2,100.2	18.8	0.9%
ME 5	32 50 24	2013	Below Normal	July	--	722.6	710.3	12.3	1.7%	709.1	13.5	1.9%	707.8	14.8	2.0%	706.6	16.0	2.2%	705.4	17.2	2.4%	704.2	18.4	2.6%
ME 5	32 50 24	2013	Below Normal	August	--	346.2	334.6	11.6	3.3%	333.4	12.7	3.7%	332.3	13.9	4.0%	331.1	15.1	4.3%	330.0	16.2	4.7%	328.8	17.4	5.0%
ME 5	32 50 24	2013	Below Normal	September	Used in Summary Table Analysis	4,821.5	4,809.5	12.0	0.2%	4,808.3	13.2	0.3%	4,807.1	14.5	0.3%	4,805.9	15.6	0.3%	4,804.6	16.9	0.4%	4,803.5	18.1	0.4%
ME 5	32 50 24	2014	Critical	October	Used in Summary Table Analysis	282.9	274.1	8.9	3.1%	273.2	9.8	3.4%	272.3	10.6	3.8%	271.4	11.5	4.1%	270.5	12.4	4.4%	269.7	13.3	4.7%
ME 5	32 50 24	2014	Critical	November	Used in Summary Table Analysis	1,557.4	1,550.2	7.2	0.5%	1,549.5	7.9	0.5%	1,548.8	8.6	0.5%	1,548.1	9.3	0.6%	1,547.5	10.0	0.6%	1,546.6	10.8	0.7%
ME 5	32 50 24	2014	Critical	December	--	1,601.6	1,595.4	6.3	0.4%	1,594.8	6.8	0.4%	1,594.1	7.5	0.5%	1,593.5	8.1	0.5%	1,592.9	8.7	0.5%	1,592.2	9.4	0.6%
ME 5	32 50 24	2014	Critical	January	--	2,841.3	2,835.9	5.4	0.2%	2,835.3	6.0	0.2%	2,834.7	6.6	0.2%	2,834.1	7.2	0.3%	2,833.7	7.6	0.3%	2,833.1	8.2	0.3%
ME 5	32 50 24	2014	Critical	February	--	15,810.2	15,804.4	5.8	0.0%	15,804.4	5.8	0.0%	15,803.2	6.9	0.0%	15,803.2	6.9	0.0%	15,803.2	6.9	0.0%	15,802.1	8.1	0.1%
ME 5	32 50 24	2014	Critical	March	--	31,559.0	31,554.4	4.6	0.0%	31,553.2	5.8	0.0%	31,553.2	5.8	0.0%	31,552.1	6.9	0.0%	31,552.1	6.9	0.0%	31,552.1	6.9	0.0%
ME 5	32 50 24	2014	Critical	April	--	13,015.0	13,005.8	9.3	0.1%	13,004.6	10.4	0.1%	13,003.5	11.6	0.1%	13,002.3	12.7	0.1%	13,002.3	12.7	0.1%	13,001.2	13.9	0.1%
ME 5	32 50 24	2014	Critical	May	--	5,204.1	5,193.2	10.9	0.2%	5,192.0	12.0	0.2%	5,191.0	13.1	0.3%	5,189.8	14.2	0.3%	5,188.8	15.3	0.3%	5,187.6	16.4	0.3%
ME 5	32 50 24	2014	Critical	June	--	1,205.1	1,190.0	15.0	1.2%	1,188.5	16.6	1.4%	1,187.0	18.1	1.5%	1,185.5	19.6	1.6%	1,184.0	21.1	1.7%	1,182.5	22.6	1.9%
ME 5	32 50 24	2014	Critical	July	--	550.9	536.9	14.1	2.6%	535.5	15.5	2.8%	534.1	16.9	3.1%	532.7	18.3	3.3%	531.3	19.7	3.6%	529.9	21.1	3.8%
ME 5	32 50 24	2014	Critical	August	--	354.2	340.7	13.5	3.8%	339.3	14.8	4.2%	338.0	16.2	4.6%	336.6	17.5	5.0%	335.3	18.9	5.3%	333.9	20.2	5.7%
ME 5	32 50 24	2014	Critical	September	Used in Summary Table Analysis	2,591.1	2,577.8	13.3	0.5%	2,576.5	14.6	0.6%	2,575.1	16.0	0.6%	2,573.8	17.2	0.7%	2,572.5	18.6	0.7%	2,571.2	19.9	0.8%
ME 5	32 50 24	2015	Dry	October	Used in Summary Table Analysis	11,425.7	11,415.4	10.3	0.1%	11,414.5	11.2	0.1%	11,413.4	12.3	0.1%	11,411.7	14.0	0.1%	11,410.8	14.9	0.1%	11,409.7	16.0	0.1%
ME 5	32 50 24	2015	Dry	November	Used in Summary Table Analysis	9,105.7	9,097.8	7.9	0.1%	9,097.0	8.7	0.1%	9,096.2	9.5	0.1%	9,095.4	10.3	0.1%	9,094.6	11.1	0.1%	9,093.8	11.9	0.1%
ME 5	32 50 24	2015	Dry	December	--	32,868.1	32,861.1	6.9	0.0%	32,860.0	8.1	0.0%	32,860.0	8.1	0.0%	32,858.8	9.3	0.0%	32,857.6	10.4	0.0%	32,857.6	10.4	0.0%
ME 5	32 50 24	2015	Dry	January	--	14,615.7	14,608.8	6.9	0.0%	14,608.8	6.9	0.0%	14,607.6	8.1	0.1%	14,607.6	8.1	0.1%	14,606.5	9.3	0.1%	14,606.5	9.3	0.1%
ME 5	32 50 24	2015	Dry	February	--	27,332.2	27,327.5	4.6	0.0%	27,326.4	5.8	0.0%	27,326.4	5.8	0.0%	27,325.2	6.9	0.0%	27,325.2	6.9	0.0%	27,324.1	8.1	0.0%
ME 5	32 50 24	2015	Dry	March	--	11,593.8	11,589.1	4.6	0.0%	11,589.1	4.6	0.0%	11,588.0	5.8	0.0%	11,588.0	5.8	0.0%	11,586.8	6.9	0.1%	11,586.8	6.9	0.1%
ME 5	32 50 24	2015	Dry	April	--	8,451.3	8,442.1	9.1	0.1%	8,441.2	10.1	0.1%	8,440.3	11.0	0.1%	8,439.4	11.9	0.1%	8,438.4	12.8	0.2%	8,437.5	13.8	0.2%
ME 5	32 50 24	2015	Dry	May	--	1,511.2	1,500.5	10.8	0.7%	1,499.4	11.8	0.8%	1,498.3	13.0	0.9%	1,497.2	14.0	0.9%	1,496.2	15.0	1.0%	1,495.0	16.2	1.1%
ME 5	32 50 24	2015	Dry	June	--	656.8	642.8	14.0	2.1%	641.4	15.4	2.3%	640.0	16.8	2.6%	638.6	18.2	2.8%	637.2	19.6	3.0%	635.8	21.0	3.2%
ME 5	32 50 24	2015	Dry	July	--	273.3	259.4	13.9	5.1%	258.0	15.2	5.6%	256.6	16.6	6.1%	255.3	18.0	6.6%	253.9	19.4	7.1%	252.5	20.8	7.6%
ME 5	32 50 24	2015	Dry	August	--	172.2	158.8	13.4	7.8%	157.4	14.8	8.6%	156.1	16.1	9.4%	154.7	17.5	10.1%	153.4	18.8	10.9%	152.0	20.2	11.7%
ME 5	32 50 24	2015	Dry	September	Used in Summary Table Analysis	125.7	113.6	12.1	9.6%	112.4	13.3	10.6%	111.2	14.5	11.5%	110.0	15.8	12.5%	108.7	17.0	13.5%	107.5	18.2	14.5%
ME 5	32 50 24	2016	Above Normal	October	Used in Summary Table Analysis	90.8	80.5	10.3	11.3%	79.4	11.4	12.5%	78.4	12.4	13.7%	77.9	12.9	14.2%	77.0	13.8	15.2%	75.6	15.2	16.8%
ME 5	32 50 24	2016	Above Normal	November	Used in Summary Table Analysis	3,924.8	3,916.8	8.0	0.2%	3,916.0	8.8	0.2%	3,915.2	9.6	0.2%	3,914.4	10.4	0.3%	3,913.4	11.3	0.3%	3,912.6	12.2	0.3%
ME 5	32 50 24	2016	Above Normal	December	--	36,913.2	36,906.3	6.9	0.0%	36,905.1	8.1	0.0%	36,905.1	8.1	0.0%	36,903.9	9.3	0.0%	36,902.8	10.4	0.0%	36,902.8	10.4	0.0%
ME 5	32 50 24	2016	Above Normal	January	--	57,622.7	57,615.7	6.9	0.0%	57,615.7	6.9	0.0%	57,614.6	8.1	0.0%	57,613.4	9.3	0.0%	57,613.4	9.3	0.0%	57,612.3	10.4	0.0%
ME 5	32 50 24	2016	Above Normal	February	--	24,317.1	24,312.5	4.6	0.0%	24,311.3	5.8	0.0%	24,311.3	5.8	0.0%	24,310.2	6.9	0.0%	24,310.2	6.9	0.0%	24,309.0	8.1	0.0%
ME 5	32 50 24	2016	Above Normal	March	--	41,919.0	41,914.4	4.6	0.0%	41,914.4	4.6	0.0%	41,913.2	5.8	0.0%	41,913.2	5.8	0.0%	41,912.0	6.9	0.0%	41,912.0	6.9	0.0%
ME 5	32 50 24	2016	Above Normal	April	--	18,576.4	18,571.8	4.6	0.0%	18,571.8	4.6	0.0%	18,570.6	5.8	0.0%	18,570.6	5.8	0.0%	18,570.6	5.8	0.0%	18,569.4	6.9	0.0%
ME 5	32 50 24	2016	Above Normal	May	--	5,229.4	5,223.8	5.6	0.1%	5,223.3	6.1	0.1%	5,222.8	6.6	0.1%	5,222.1	7.3	0.1%	5,221.5	7.9	0.2%	5,221.1	8.3	0.2%
ME 5	32 50 24	2016	Above Normal	June	--	1,515.7	1,505.0	10.8	0.7%	1,503.8	11.9	0.8%	1,502.8	13.0	0.9%	1,501.7	14.0	0.9%	1,500.6	15.2	1.0%	1,499.5	16.2	1.1%
ME 5	32 50 24	2016	Above Normal	July	--	830.0	817.9	12.1	1.5%	816.7	13.3	1.6%	815.5	14.5	1.7%	814.3	15.7	1.9%	813.1	16.9	2.0%	811.9	18.1	2.2%
ME 5	32 50 24	2016	Above Normal	August	--	498.9	487.0	11.9	2.4%	485.8	13.1	2.6%	484.6	14.3	2.9%	483.4	15.5	3.1%	482.2	16.7	3.3%	481.1	17.9	3.6%
ME 5	32 50 24	2016	Above Normal	September	Used in Summary Table Analysis	334.9	324.2	10.7	3.2%	323.2	11.8	3.5%	322.1	12.8	3.8%	321.0	13.9	4.2%	320.0	15.0	4.5%	318.9	16.1	4.8%
ME 5	32 50 24	2017	Wet	October	Used in Summary Table Analysis	18,399.3	18,390.0	9.3	0.1%	18,390.0	9.3	0.1%	18,388.9	10.4	0.1%	18,387.7	11.6	0.1%	18,386.6	12.7	0.1%	18,385.4	13.9	0.1%
ME 5	32 50 24	2017	Wet	November	Used in Summary Table Analysis	18,950.2	18,943.3	6.9	0.0%	18,942.1	8.1	0.0%	18,942.1	8.1	0.0%	18,941.0	9.3	0.0%	18,939.8	10.4	0.1%	18,939.8	10.4	0.1%
ME 5	32 50 24	2017	Wet	December	--	24,307.9	24,302.1	5.8	0.0%	24,300.9	6.9	0.0%	24,300.9	6.9	0.0%	24,299.8	8.1	0.0%	24,299.8	8.1	0.0%	24,298.6	9.3	0.0%
ME 5	32 50 24	2017	Wet	January	--	107,474.5	107,468.8	5.8	0.0%	107,467.6	6.9	0.0%	107,467.6	6.9	0.0%	107,466.4	8.1	0.0%	107,466.4	8.1	0.0%	107,465.3	9.3	0.0%
ME 5	32 50 24	2017	Wet	February	--	82,171.3	82,166.7	4.6	0.0%	82,165.5	5.8	0.0%	82,165.5	5.8	0.0%	82,164.4	6.9	0.0%	82,164.4	6.9	0.0%	82,163.2	8.1	0.0%
ME 5	32 50 24	2017	Wet	March	--	27,378.5	27,373.8	4.6	0.0%	27,373.8	4.6	0.0%	27,372.7	5.8	0.0%	27,372.7	5.8	0.0%	27,371.5	6.9	0.0%	27,371.5	6.9	0.0%
ME 5	32 50 24	2017	Wet	April	--	23,048.6	23,044.0	4.6	0.0%	23,044.0	4.6	0.0%	23,044.0	4.6	0.0%	23,042.8	5.8	0.0%	23,042.8	5.8	0.0%	23,042.8	5.8	0.0%
ME 5	32 50 24	2017	Wet	May	--	6,277.0	6,271.4	5.6	0.1%	6,270.8	6.1	0.1%	6,270.3	6.7	0.1%	6,269.7	7.3	0.1%	6,269.0	8.0	0.1%	6,268.4	8.6	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 50 24	2017	Wet	June	--	2,131.4	2,120.4	11.0	0.5%	2,119.3	12.0	0.6%	2,118.2	13.2	0.6%	2,117.0	14.4	0.7%	2,116.0	15.4	0.7%	2,114.8	16.6	0.8%
ME 5	32 50 24	2017	Wet	July	--	943.6	931.4	12.2	1.3%	930.2	13.4	1.4%	929.0	14.6	1.5%	927.8	15.8	1.7%	926.6	17.0	1.8%	925.4	18.2	1.9%
ME 5	32 50 24	2017	Wet	August	--	515.8	503.9	11.9	2.3%	502.7	13.1	2.5%	501.5	14.3	2.8%	500.3	15.5	3.0%	499.1	16.7	3.2%	498.0	17.8	3.5%
ME 5	32 50 24	2017	Wet	September	Used in Summary Table Analysis	330.6	319.6	11.1	3.3%	318.5	12.2	3.7%	317.4	13.3	4.0%	316.3	14.4	4.3%	315.2	15.5	4.7%	314.1	16.6	5.0%
ME 5	32 50 24	2018	Above Normal	October	Used in Summary Table Analysis	283.3	275.3	8.0	2.8%	274.1	9.2	3.3%	273.1	10.2	3.6%	271.9	11.4	4.0%	270.9	12.4	4.4%	270.0	13.3	4.7%
ME 5	32 50 24	2018	Above Normal	November	Used in Summary Table Analysis	10,919.9	10,913.0	6.9	0.1%	10,912.3	7.6	0.1%	10,911.6	8.3	0.1%	10,910.9	9.0	0.1%	10,910.2	9.7	0.1%	10,909.5	10.4	0.1%
ME 5	32 50 24	2018	Above Normal	December	--	5,458.9	5,453.0	5.9	0.1%	5,452.4	6.5	0.1%	5,451.9	7.1	0.1%	5,451.3	7.6	0.1%	5,450.7	8.2	0.2%	5,450.0	8.9	0.2%
ME 5	32 50 24	2018	Above Normal	January	--	18,001.2	17,995.4	5.8	0.0%	17,995.4	5.8	0.0%	17,994.2	6.9	0.0%	17,994.2	6.9	0.0%	17,993.1	8.1	0.0%	17,993.1	8.1	0.0%
ME 5	32 50 24	2018	Above Normal	February	--	7,608.4	7,603.9	4.5	0.1%	7,603.4	5.1	0.1%	7,602.9	5.6	0.1%	7,602.4	6.0	0.1%	7,602.0	6.5	0.1%	7,601.5	6.9	0.1%
ME 5	32 50 24	2018	Above Normal	March	--	20,841.4	20,836.8	4.6	0.0%	20,836.8	4.6	0.0%	20,836.8	4.6	0.0%	20,835.6	5.8	0.0%	20,835.6	5.8	0.0%	20,834.5	6.9	0.0%
ME 5	32 50 24	2018	Above Normal	April	--	32,366.9	32,362.3	4.6	0.0%	32,362.3	4.6	0.0%	32,362.3	4.6	0.0%	32,361.1	5.8	0.0%	32,361.1	5.8	0.0%	32,361.1	5.8	0.0%
ME 5	32 50 24	2018	Above Normal	May	--	6,994.6	6,986.0	8.6	0.1%	6,985.1	9.5	0.1%	6,984.3	10.3	0.1%	6,983.4	11.1	0.2%	6,982.5	12.0	0.2%	6,981.7	12.8	0.2%
ME 5	32 50 24	2018	Above Normal	June	--	1,920.9	1,909.7	11.2	0.6%	1,908.7	12.3	0.6%	1,907.5	13.4	0.7%	1,906.4	14.6	0.8%	1,905.3	15.6	0.8%	1,904.2	16.8	0.9%
ME 5	32 50 24	2018	Above Normal	July	--	789.2	777.0	12.2	1.6%	775.7	13.5	1.7%	774.5	14.7	1.9%	773.3	15.9	2.0%	772.1	17.1	2.2%	770.8	18.4	2.3%
ME 5	32 50 24	2018	Above Normal	August	--	450.4	438.9	11.5	2.5%	437.8	12.6	2.8%	436.7	13.8	3.1%	435.5	14.9	3.3%	434.4	16.1	3.6%	433.2	17.2	3.8%
ME 5	32 50 24	2018	Above Normal	September	Used in Summary Table Analysis	307.3	296.2	11.0	3.6%	295.1	12.2	4.0%	294.0	13.3	4.3%	292.9	14.4	4.7%	291.8	15.5	5.0%	290.7	16.6	5.4%
ME 5	32 50 24	2019	Below Normal	October	Used in Summary Table Analysis	213.8	205.1	8.7	4.1%	204.1	9.7	4.5%	203.3	10.5	4.9%	202.4	11.4	5.3%	201.6	12.2	5.7%	200.7	13.1	6.1%
ME 5	32 50 24	2019	Below Normal	November	Used in Summary Table Analysis	6,708.3	6,701.4	6.9	0.1%	6,700.6	7.8	0.1%	6,699.9	8.4	0.1%	6,699.2	9.1	0.1%	6,698.5	9.8	0.1%	6,697.8	10.5	0.2%
ME 5	32 50 24	2019	Below Normal	December	--	14,809.0	14,803.2	5.8	0.0%	14,802.1	6.9	0.0%	14,800.9	8.1	0.1%	14,800.9	8.1	0.1%	14,799.8	9.3	0.1%	14,799.8	9.3	0.1%
ME 5	32 50 24	2019	Below Normal	January	--	35,508.1	35,503.5	4.6	0.0%	35,502.3	5.8	0.0%	35,502.3	5.8	0.0%	35,501.2	6.9	0.0%	35,501.2	6.9	0.0%	35,500.0	8.1	0.0%
ME 5	32 50 24	2019	Below Normal	February	--	142,222.2	142,222.2	0.0	0.0%	142,222.2	0.0	0.0%	142,222.2	0.0	0.0%	142,222.2	0.0	0.0%	142,222.2	0.0	0.0%	142,222.2	0.0	0.0%
ME 5	32 50 24	2019	Below Normal	March	--	42,476.9	42,472.2	4.6	0.0%	42,472.2	4.6	0.0%	42,471.1	5.8	0.0%	42,471.1	5.8	0.0%	42,471.1	5.8	0.0%	42,469.9	6.9	0.0%
ME 5	32 50 24	2019	Below Normal	April	--	15,317.1	15,312.5	4.6	0.0%	15,312.5	4.6	0.0%	15,311.3	5.8	0.0%	15,311.3	5.8	0.0%	15,311.3	5.8	0.0%	15,310.2	6.9	0.0%
ME 5	32 50 24	2019	Below Normal	May	--	17,160.9	17,151.6	9.3	0.1%	17,150.5	10.4	0.1%	17,149.3	11.6	0.1%	17,149.3	11.6	0.1%	17,148.1	12.7	0.1%	17,147.0	13.9	0.1%
ME 5	32 50 24	2019	Below Normal	June	--	4,244.0	4,231.9	12.0	0.3%	4,230.8	13.2	0.3%	4,229.5	14.5	0.3%	4,228.4	15.6	0.4%	4,227.1	16.9	0.4%	4,225.9	18.1	0.4%
ME 5	32 50 24	2019	Below Normal	July	--	1,370.6	1,358.3	12.3	0.9%	1,357.2	13.4	1.0%	1,355.9	14.7	1.1%	1,354.6	16.0	1.2%	1,353.5	17.1	1.2%	1,352.2	18.4	1.3%
ME 5	32 50 24	2019	Below Normal	August	--	605.4	593.6	11.8	1.9%	592.4	12.9	2.1%	591.3	14.1	2.3%	590.1	15.3	2.5%	588.9	16.5	2.7%	587.7	17.7	2.9%
ME 5	32 50 24	2019	Below Normal	September	Used in Summary Table Analysis	470.4	459.4	11.0	2.3%	458.3	12.1	2.6%	457.2	13.2	2.8%	456.1	14.3	3.0%	455.0	15.4	3.3%	453.8	16.5	3.5%
ME 5	32 50 24	2020	Dry	October	Used in Summary Table Analysis	361.9	353.5	8.4	2.3%	352.7	9.2	2.5%	351.8	10.0	2.8%	351.0	10.9	3.0%	350.1	11.7	3.2%	349.3	12.6	3.5%
ME 5	32 50 24	2020	Dry	November	Used in Summary Table Analysis	330.8	324.2	6.6	2.0%	323.5	7.3	2.2%	322.9	7.9	2.4%	322.2	8.6	2.6%	321.5	9.3	2.8%	320.8	10.0	3.0%
ME 5	32 50 24	2020	Dry	December	--	13,493.1	13,487.3	5.8	0.0%	13,487.3	5.8	0.0%	13,486.1	6.9	0.1%	13,486.1	6.9	0.1%	13,485.0	8.1	0.1%	13,485.0	8.1	0.1%
ME 5	32 50 24	2020	Dry	January	--	22,494.2	22,488.4	5.8	0.0%	22,488.4	5.8	0.0%	22,487.3	6.9	0.0%	22,487.3	6.9	0.0%	22,486.1	8.1	0.0%	22,486.1	8.1	0.0%
ME 5	32 50 24	2020	Dry	February	--	7,422.1	7,417.4	4.7	0.1%	7,416.8	5.3	0.1%	7,416.3	5.8	0.1%	7,415.9	6.3	0.1%	7,415.4	6.7	0.1%	7,414.9	7.2	0.1%
ME 5	32 50 24	2020	Dry	March	--	7,274.5	7,270.1	4.4	0.1%	7,269.7	4.9	0.1%	7,269.2	5.3	0.1%	7,268.8	5.8	0.1%	7,268.3	6.3	0.1%	7,267.8	6.7	0.1%
ME 5	32 50 24	2020	Dry	April	--	5,516.4	5,507.4	9.0	0.2%	5,506.5	10.0	0.2%	5,505.6	10.9	0.2%	5,504.6	11.8	0.2%	5,503.7	12.7	0.2%	5,502.8	13.7	0.2%
ME 5	32 50 24	2020	Dry	May	--	7,419.7	7,408.8	10.9	0.1%	7,407.8	11.9	0.2%	7,406.6	13.1	0.2%	7,405.6	14.1	0.2%	7,404.5	15.2	0.2%	7,403.4	16.3	0.2%
ME 5	32 50 24	2020	Dry	June	--	2,106.7	2,092.4	14.4	0.7%	2,091.0	15.7	0.7%	2,089.5	17.2	0.8%	2,088.1	18.6	0.9%	2,086.6	20.1	1.0%	2,085.2	21.5	1.0%
ME 5	32 50 24	2020	Dry	July	--	802.4	788.1	14.3	1.8%	786.7	15.7	2.0%	785.2	17.2	2.1%	783.8	18.6	2.3%	782.4	20.0	2.5%	780.9	21.4	2.7%
ME 5	32 50 24	2020	Dry	August	--	405.5	391.3	14.2	3.5%	389.9	15.6	3.8%	388.5	17.0	4.2%	387.0	18.4	4.5%	385.6	19.8	4.9%	384.2	21.3	5.2%
ME 5	32 50 24	2020	Dry	September	Used in Summary Table Analysis	254.7	241.9	12.8	5.0%	240.6	14.1	5.5%	239.4	15.4	6.0%	238.1	16.6	6.5%	236.8	17.9	7.0%	235.5	19.2	7.5%
ME 5	32 49 25	2000	Above Normal	October	Used in Summary Table Analysis	827.4	818.7	8.7	1.1%	817.8	9.6	1.2%	817.0	10.4	1.3%	816.1	11.3	1.4%	815.2	12.2	1.5%	814.4	13.0	1.6%
ME 5	32 49 25	2000	Above Normal	November	Used in Summary Table Analysis	12,281.3	12,274.3	6.9	0.1%	12,273.1	8.1	0.1%	12,273.1	8.1	0.1%	12,272.0	9.3	0.1%	12,272.0	9.3	0.1%	12,270.8	10.4	0.1%
ME 5	32 49 25	2000	Above Normal	December	--	10,898.1	10,892.2	5.9	0.1%	10,891.7	6.5	0.1%	10,891.1	7.1	0.1%	10,890.5	7.6	0.1%	10,889.9	8.2	0.1%	10,889.4	8.8	0.1%
ME 5	32 49 25	2000	Above Normal	January	--	28,847.2	28,842.6	4.6	0.0%	28,841.4	5.8	0.0%	28,841.4	5.8	0.0%	28,840.3	6.9	0.0%	28,840.3	6.9	0.0%	28,839.1	8.1	0.0%
ME 5	32 49 25	2000	Above Normal	February	--	37,218.8	37,214.1	4.6	0.0%	37,214.1	4.6	0.0%	37,213.0	5.8	0.0%	37,213.0	5.8	0.0%	37,213.0	5.8	0.0%	37,211.8	6.9	0.0%
ME 5	32 49 25	2000	Above Normal	March	--	18,372.7	18,368.1	4.6	0.0%	18,368.1	4.6	0.0%	18,366.9	5.8	0.0%	18,366.9	5.8	0.0%	18,365.7	6.9	0.0%	18,365.7	6.9	0.0%
ME 5	32 49 25	2000	Above Normal	April	--	12,357.6	12,354.2	3.5	0.0%	12,353.0	4.6	0.0%	12,353.0	4.6	0.0%	12,351.9	5.8	0.0%	12,351.9	5.8	0.0%	12,351.9	5.8	0.0%
ME 5	32 49 25	2000	Above Normal	May	--	7,131.1	7,122.3	8.8	0.1%	7,121.4	9.7	0.1%	7,120.6	10.5	0.1%	7,119.7	11.5	0.2%	7,118.8	12.4	0.2%	7,117.9	13.2	0.2%
ME 5	32 49 25	2000	Above Normal	June	--	2,626.7	2,613.5	13.2	0.5%	2,612.3	14.5	0.6%	2,611.0	15.7	0.6%	2,609.6	17.1	0.7%	2,608.3	18.4	0.7%	2,607.1	19.7	0.7%
ME 5	32 49 25	2000	Above Normal	July	--	1,000.1	988.0	12.1	1.2%	986.7	13.4	1.3%	985.5	14.6	1.5%	984.3	15.8	1.6%	983.1	17.0	1.7%	981.9	18.2	1.8%
ME 5	32 49 25	2000	Above Normal	August	--	530.6	519.1	11.5	2.2%	517.9	12.6	2.4%	516.8	13.8	2.6%	515.6	14.9	2.8%	514.5	16.1	3.0%	513.3	17.2	3.2%
ME 5	32 49 25	2000	Above Normal	September	Used in Summary Table Analysis	303.0	292.8	10.2	3.4%	291.7	11.3	3.7%	290.7	12.3	4.1%	289.7	13.3	4.4%	288.7	14.3	4.7%	287.6	15.4	5.1%
ME 5	32 49 25	2001	Dry	October	Used in Summary Table Analysis	3,854.5	3,846.1	8.4	0.2%	3,845.1	9.4	0.2%	3,844.3	10.2	0.3%	3,843.5	11.0	0.3%	3,842.6	11.9	0.3%	3,841.8	12.7	0.3%
ME 5	32 49 25	2001	Dry	November	Used in Summary Table Analysis	6,186.6	6,179.6	6.9	0.1%	6,179.1	7.5	0.1%	6,178.4	8.2	0.1%	6,177.7	8.9	0.1%	6,177.0	9.6	0.2%	6,176.3	10.3	0.2%
ME 5	32 49 25	2001	Dry	December	--	8,901.2	8,895.4	5.8	0.1%	8,894.7	6.5	0.1%	8,894.1	7.1	0.1%	8,893.5	7.6	0.1%	8,892.9	8.2	0.1%	8,892.4	8.8	0.1%
ME 5	32 49 25	2001	Dry	January	--	12,908.6	12,903.9	4.6	0.0%	12,902.8	5.8	0.0%	12,902.8	5.8	0.0%	12,901.6	6.9	0.1%	12,901.6	6.9	0.1%	12,900.5	8.1	0.1%
ME 5	32 49 25	2001	Dry	February	--	17,547.5	17,541.7	5.8	0.0%	17,541.7	5.8	0.0%	17,541.7	5.8	0.0%	17,540.5	6.9	0.0%	17,540.5	6.9	0.0%	17,539.4	8.1	0.0%
ME 5	32 49 25	2001	Dry	March	--	12,335.6	12,332.2	3.5	0.0%	12,331.0	4.6	0.0%	12,331.0	4.6	0.0%	12,329.9	5.8	0.0%	12,329.9	5.8	0.0%	12,329.9	5.8	0.0%
ME 5	32 49 25	2001	Dry	April	--	11,013.1	11,004.1	9.0	0.1%	11,003.1	10.0	0.1%	11,002.2	10.9	0.1%	11,001.3	11.8	0.1%	11,000.3	12.7	0.1%	10,999.4	13.7	0.1%
ME 5	32 49 25	2001	Dry	May	--	2,639.6	2,628.8	10.8	0.4%	2,627.8	11.8	0.4%	2,626.6	13.0	0.5%	2,625.6	14.0	0.5%	2,624.5	15.0	0.6%	2,623.5	16.1	0.6%
ME 5	32 49 25	2001	Dry	June	--	2,675.2	2,660.4	14.8	0.6%	2,659.0	16.2	0.6%	2,657.5	17.7	0.7%	2,656.0	19.2	0.7%	2,654.5	20.7	0.8%	2,653.0	22.2	0.8%
ME 5	32 49 25	2001	Dry	July	--	723.1	709.1	14.0	1.9%	707.7	15.4	2.1%	706.2	16.8	2.3%	704.8	18.2	2.5%	703.4	19.6	2.7%	702.0	21.0	2.9%
ME 5	32 49 25	2001	Dry	August	--	179.2	165.5	13.7	7.6%	164.1	15.1	8.4%	162.7	16.5	9.2%	161.3	17.8	10.0%	160.0	19.2	10.7%	158.6	20.6	11.5%
ME 5	32 49 25	2001	Dry	September	Used in Summary Table Analysis	102.5	90.1	12.3	12.0%	88.9	13.6	13.2%	87.6	14.8	14.5%	86.3	16.1	15.7%	85.1	17.3	16.9%	83.9	18.6	18.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 49 25	2002	Below Normal	October	Used in Summary Table Analysis	272.8	262.5	10.4	3.8%	261.4	11.4	4.2%	260.3	12.5	4.6%	259.2	13.6	5.0%	258.2	14.6	5.4%	257.1	15.7	5.7%
ME 5	32 49 25	2002	Below Normal	November	Used in Summary Table Analysis	12,108.8	12,100.7	8.1	0.1%	12,099.5	9.3	0.1%	12,098.4	10.4	0.1%	12,097.2	11.6	0.1%	12,097.2	11.6	0.1%	12,096.1	12.7	0.1%
ME 5	32 49 25	2002	Below Normal	December	--	35,927.1	35,920.1	6.9	0.0%	35,919.0	8.1	0.0%	35,917.8	9.3	0.0%	35,917.8	9.3	0.0%	35,916.7	10.4	0.0%	35,916.7	10.4	0.0%
ME 5	32 49 25	2002	Below Normal	January	--	31,032.4	31,025.5	6.9	0.0%	31,025.5	6.9	0.0%	31,024.3	8.1	0.0%	31,024.3	8.1	0.0%	31,023.1	9.3	0.0%	31,023.1	9.3	0.0%
ME 5	32 49 25	2002	Below Normal	February	--	24,770.8	24,765.0	5.8	0.0%	24,763.9	6.9	0.0%	24,763.9	6.9	0.0%	24,762.7	8.1	0.0%	24,762.7	8.1	0.0%	24,761.6	9.3	0.0%
ME 5	32 49 25	2002	Below Normal	March	--	17,851.9	17,847.2	4.6	0.0%	17,846.1	5.8	0.0%	17,846.1	5.8	0.0%	17,844.9	6.9	0.0%	17,844.9	6.9	0.0%	17,843.8	8.1	0.0%
ME 5	32 49 25	2002	Below Normal	April	--	9,953.7	9,944.7	9.0	0.1%	9,943.8	10.0	0.1%	9,942.8	10.9	0.1%	9,941.8	11.9	0.1%	9,940.9	12.8	0.1%	9,939.9	13.8	0.1%
ME 5	32 49 25	2002	Below Normal	May	--	3,330.9	3,320.1	10.8	0.3%	3,319.1	11.8	0.4%	3,317.9	13.0	0.4%	3,316.9	14.0	0.4%	3,315.7	15.2	0.5%	3,314.7	16.2	0.5%
ME 5	32 49 25	2002	Below Normal	June	--	860.4	848.1	12.3	1.4%	846.9	13.5	1.6%	845.6	14.8	1.7%	844.4	16.0	1.9%	843.1	17.2	2.0%	841.9	18.5	2.1%
ME 5	32 49 25	2002	Below Normal	July	--	369.2	356.6	12.6	3.4%	355.4	13.9	3.8%	354.1	15.1	4.1%	352.8	16.4	4.4%	351.6	17.7	4.8%	350.3	18.9	5.1%
ME 5	32 49 25	2002	Below Normal	August	--	234.9	223.0	11.9	5.1%	221.8	13.1	5.6%	220.6	14.3	6.1%	219.4	15.5	6.6%	218.2	16.7	7.1%	217.0	17.9	7.6%
ME 5	32 49 25	2002	Below Normal	September	Used in Summary Table Analysis	171.4	160.0	11.3	6.6%	158.9	12.5	7.3%	157.8	13.6	7.9%	156.6	14.8	8.6%	155.5	15.9	9.3%	154.3	17.0	9.9%
ME 5	32 49 25	2003	Wet	October	Used in Summary Table Analysis	136.2	126.8	9.3	6.9%	125.9	10.3	7.5%	124.9	11.2	8.2%	124.0	12.2	8.9%	123.1	13.1	9.6%	122.1	14.0	10.3%
ME 5	32 49 25	2003	Wet	November	Used in Summary Table Analysis	905.5	897.9	7.6	0.8%	897.2	8.3	0.9%	896.4	9.1	1.0%	895.6	9.9	1.1%	894.8	10.6	1.2%	894.1	11.4	1.3%
ME 5	32 49 25	2003	Wet	December	--	57,392.4	57,385.4	6.9	0.0%	57,385.4	6.9	0.0%	57,384.3	8.1	0.0%	57,384.3	8.1	0.0%	57,383.1	9.3	0.0%	57,381.9	10.4	0.0%
ME 5	32 49 25	2003	Wet	January	--	31,648.1	31,642.4	5.8	0.0%	31,642.4	5.8	0.0%	31,641.2	6.9	0.0%	31,641.2	6.9	0.0%	31,640.0	8.1	0.0%	31,640.0	8.1	0.0%
ME 5	32 49 25	2003	Wet	February	--	20,416.7	20,410.9	5.8	0.0%	20,410.9	5.8	0.0%	20,409.7	6.9	0.0%	20,409.7	6.9	0.0%	20,408.6	8.1	0.0%	20,408.6	8.1	0.0%
ME 5	32 49 25	2003	Wet	March	--	24,130.8	24,126.2	4.6	0.0%	24,125.0	5.8	0.0%	24,125.0	5.8	0.0%	24,123.8	6.9	0.0%	24,123.8	6.9	0.0%	24,123.8	6.9	0.0%
ME 5	32 49 25	2003	Wet	April	--	43,151.6	43,147.0	4.6	0.0%	43,145.8	5.8	0.0%	43,145.8	5.8	0.0%	43,144.7	6.9	0.0%	43,144.7	6.9	0.0%	43,144.7	6.9	0.0%
ME 5	32 49 25	2003	Wet	May	--	12,256.9	12,247.7	9.3	0.1%	12,246.5	10.4	0.1%	12,245.4	11.6	0.1%	12,244.2	12.7	0.1%	12,243.1	13.9	0.1%	12,243.1	13.9	0.1%
ME 5	32 49 25	2003	Wet	June	--	3,175.3	3,163.4	11.9	0.4%	3,162.3	13.1	0.4%	3,161.1	14.2	0.4%	3,160.0	15.4	0.5%	3,158.8	16.6	0.5%	3,157.6	17.7	0.6%
ME 5	32 49 25	2003	Wet	July	--	1,484.0	1,471.5	12.5	0.8%	1,470.3	13.8	0.9%	1,469.0	15.0	1.0%	1,467.7	16.3	1.1%	1,466.6	17.5	1.2%	1,465.3	18.8	1.3%
ME 5	32 49 25	2003	Wet	August	--	769.5	757.3	12.1	1.6%	756.1	13.3	1.7%	754.9	14.5	1.9%	753.7	15.8	2.1%	752.5	17.0	2.2%	751.2	18.2	2.4%
ME 5	32 49 25	2003	Wet	September	Used in Summary Table Analysis	466.6	456.1	10.5	2.2%	455.1	11.5	2.5%	454.0	12.6	2.7%	453.0	13.6	2.9%	451.9	14.7	3.1%	450.8	15.7	3.4%
ME 5	32 49 25	2004	Wet	October	Used in Summary Table Analysis	333.3	324.6	8.7	2.6%	323.7	9.6	2.9%	322.8	10.5	3.1%	321.9	11.3	3.4%	321.1	12.2	3.7%	320.2	13.1	3.9%
ME 5	32 49 25	2004	Wet	November	Used in Summary Table Analysis	5,871.2	5,864.1	7.1	0.1%	5,863.4	7.8	0.1%	5,862.6	8.6	0.1%	5,861.9	9.3	0.2%	5,861.2	10.0	0.2%	5,860.5	10.6	0.2%
ME 5	32 49 25	2004	Wet	December	--	36,610.0	36,604.2	5.8	0.0%	36,603.0	6.9	0.0%	36,601.9	8.1	0.0%	36,601.9	8.1	0.0%	36,600.7	9.3	0.0%	36,600.7	9.3	0.0%
ME 5	32 49 25	2004	Wet	January	--	31,677.1	31,671.3	5.8	0.0%	31,671.3	5.8	0.0%	31,670.1	6.9	0.0%	31,670.1	6.9	0.0%	31,669.0	8.1	0.0%	31,669.0	8.1	0.0%
ME 5	32 49 25	2004	Wet	February	--	38,431.7	38,427.1	4.6	0.0%	38,425.9	5.8	0.0%	38,425.9	5.8	0.0%	38,424.8	6.9	0.0%	38,424.8	6.9	0.0%	38,424.8	6.9	0.0%
ME 5	32 49 25	2004	Wet	March	--	16,559.0	16,554.4	4.6	0.0%	16,554.4	4.6	0.0%	16,553.2	5.8	0.0%	16,553.2	5.8	0.0%	16,552.1	6.9	0.0%	16,552.1	6.9	0.0%
ME 5	32 49 25	2004	Wet	April	--	9,477.0	9,472.8	4.2	0.0%	9,472.3	4.6	0.0%	9,471.9	5.1	0.1%	9,471.4	5.6	0.1%	9,470.9	6.0	0.1%	9,470.6	6.4	0.1%
ME 5	32 49 25	2004	Wet	May	--	3,441.8	3,432.9	8.9	0.3%	3,432.1	9.7	0.3%	3,431.1	10.6	0.3%	3,430.2	11.6	0.3%	3,429.3	12.5	0.4%	3,428.5	13.3	0.4%
ME 5	32 49 25	2004	Wet	June	--	698.1	686.8	11.3	1.6%	685.7	12.4	1.8%	684.6	13.5	1.9%	683.4	14.7	2.1%	682.3	15.8	2.3%	681.2	16.9	2.4%
ME 5	32 49 25	2004	Wet	July	--	364.2	352.0	12.2	3.4%	350.8	13.4	3.7%	349.5	14.7	4.0%	348.3	15.9	4.4%	347.1	17.1	4.7%	345.9	18.3	5.0%
ME 5	32 49 25	2004	Wet	August	--	232.8	221.2	11.6	5.0%	220.0	12.8	5.5%	218.9	13.9	6.0%	217.7	15.1	6.5%	216.6	16.3	7.0%	215.4	17.4	7.5%
ME 5	32 49 25	2004	Wet	September	Used in Summary Table Analysis	169.3	158.3	11.1	6.5%	157.2	12.2	7.2%	156.1	13.3	7.8%	155.0	14.4	8.5%	153.8	15.5	9.2%	152.7	16.6	9.8%
ME 5	32 49 25	2005	Above Normal	October	Used in Summary Table Analysis	7,770.6	7,761.7	8.9	0.1%	7,760.9	9.7	0.1%	7,760.0	10.6	0.1%	7,759.0	11.6	0.1%	7,758.1	12.5	0.2%	7,757.3	13.3	0.2%
ME 5	32 49 25	2005	Above Normal	November	Used in Summary Table Analysis	2,270.5	2,263.5	6.9	0.3%	2,262.8	7.6	0.3%	2,262.2	8.3	0.4%	2,261.5	9.0	0.4%	2,260.8	9.7	0.4%	2,260.1	10.4	0.5%
ME 5	32 49 25	2005	Above Normal	December	--	21,277.8	21,272.0	5.8	0.0%	21,272.0	5.8	0.0%	21,270.8	6.9	0.0%	21,270.8	6.9	0.0%	21,269.7	8.1	0.0%	21,268.5	9.3	0.0%
ME 5	32 49 25	2005	Above Normal	January	--	22,582.2	22,576.4	5.8	0.0%	22,576.4	5.8	0.0%	22,575.2	6.9	0.0%	22,575.2	6.9	0.0%	22,574.1	8.1	0.0%	22,574.1	8.1	0.0%
ME 5	32 49 25	2005	Above Normal	February	--	14,047.5	14,042.8	4.6	0.0%	14,041.7	5.8	0.0%	14,041.7	5.8	0.0%	14,041.7	5.8	0.0%	14,040.5	6.9	0.0%	14,040.5	6.9	0.0%
ME 5	32 49 25	2005	Above Normal	March	--	28,717.6	28,713.0	4.6	0.0%	28,713.0	4.6	0.0%	28,713.0	4.6	0.0%	28,711.8	5.8	0.0%	28,711.8	5.8	0.0%	28,710.6	6.9	0.0%
ME 5	32 49 25	2005	Above Normal	April	--	21,544.0	21,540.5	3.5	0.0%	21,539.4	4.6	0.0%	21,539.4	4.6	0.0%	21,538.2	5.8	0.0%	21,538.2	5.8	0.0%	21,538.2	5.8	0.0%
ME 5	32 49 25	2005	Above Normal	May	--	19,688.7	19,679.4	9.3	0.0%	19,678.2	10.4	0.1%	19,677.1	11.6	0.1%	19,677.1	11.6	0.1%	19,675.9	12.7	0.1%	19,674.8	13.9	0.1%
ME 5	32 49 25	2005	Above Normal	June	--	16,011.6	15,997.7	13.9	0.1%	15,996.5	15.0	0.1%	15,995.4	16.2	0.1%	15,994.2	17.4	0.1%	15,993.1	18.5	0.1%	15,990.7	20.8	0.1%
ME 5	32 49 25	2005	Above Normal	July	--	2,867.2	2,854.6	12.6	0.4%	2,853.4	13.9	0.5%	2,852.1	15.2	0.5%	2,850.8	16.4	0.6%	2,849.5	17.7	0.6%	2,848.3	19.0	0.7%
ME 5	32 49 25	2005	Above Normal	August	--	992.4	980.8	11.6	1.2%	979.7	12.7	1.3%	978.5	13.9	1.4%	977.4	15.0	1.5%	976.3	16.1	1.6%	975.1	17.3	1.7%
ME 5	32 49 25	2005	Above Normal	September	Used in Summary Table Analysis	533.8	523.5	10.3	1.9%	522.5	11.3	2.1%	521.5	12.3	2.3%	520.4	13.3	2.5%	519.4	14.4	2.7%	518.4	15.4	2.9%
ME 5	32 49 25	2006	Wet	October	Used in Summary Table Analysis	644.7	636.3	8.4	1.3%	635.5	9.2	1.4%	634.6	10.1	1.6%	633.8	10.9	1.7%	632.9	11.8	1.8%	632.1	12.6	2.0%
ME 5	32 49 25	2006	Wet	November	Used in Summary Table Analysis	9,422.0	9,415.4	6.6	0.1%	9,414.7	7.3	0.1%	9,414.0	8.0	0.1%	9,413.4	8.6	0.1%	9,412.7	9.3	0.1%	9,412.0	10.0	0.1%
ME 5	32 49 25	2006	Wet	December	--	43,876.2	43,870.4	5.8	0.0%	43,869.2	6.9	0.0%	43,869.2	6.9	0.0%	43,868.1	8.1	0.0%	43,868.1	8.1	0.0%	43,866.9	9.3	0.0%
ME 5	32 49 25	2006	Wet	January	--	46,640.0	46,634.3	5.8	0.0%	46,634.3	5.8	0.0%	46,633.1	6.9	0.0%	46,633.1	6.9	0.0%	46,631.9	8.1	0.0%	46,631.9	8.1	0.0%
ME 5	32 49 25	2006	Wet	February	--	26,766.2	26,761.6	4.6	0.0%	26,760.4	5.8	0.0%	26,760.4	5.8	0.0%	26,759.3	6.9	0.0%	26,759.3	6.9	0.0%	26,759.3	6.9	0.0%
ME 5	32 49 25	2006	Wet	March	--	47,429.4	47,424.8	4.6	0.0%	47,424.8	4.6	0.0%	47,423.6	5.8	0.0%	47,423.6	5.8	0.0%	47,422.5	6.9	0.0%	47,422.5	6.9	0.0%
ME 5	32 49 25	2006	Wet	April	--	30,535.9	30,531.3	4.6	0.0%	30,531.3	4.6	0.0%	30,530.1	5.8	0.0%	30,530.1	5.8	0.0%	30,530.1	5.8	0.0%	30,528.9	6.9	0.0%
ME 5	32 49 25	2006	Wet	May	--	14,269.7	14,265.0	4.6	0.0%	14,263.9	5.8	0.0%	14,263.9	5.8	0.0%	14,262.7	6.9	0.0%	14,262.7	6.9	0.0%	14,261.6	8.1	0.1%
ME 5	32 49 25	2006	Wet	June	--	3,555.8	3,544.6	11.2	0.3%	3,543.5	12.3	0.3%	3,542.4	13.4	0.4%	3,541.3	14.5	0.4%	3,540.2	15.6	0.4%	3,539.0	16.8	0.5%
ME 5	32 49 25	2006	Wet	July	--	1,289.9	1,278.0	11.9	0.9%	1,276.7	13.2	1.0%	1,275.6	14.4	1.1%	1,274.4	15.5	1.2%	1,273.1	16.8	1.3%	1,272.0	17.9	1.4%
ME 5	32 49 25	2006	Wet	August	--	676.0	664.2	11.8	1.7%	663.0	13.0	1.9%	661.9	14.1	2.1%	660.6	15.4	2.3%	659.5	16.5	2.4%	658.3	17.7	2.6%
ME 5	32 49 25	2006	Wet	September	Used in Summary Table Analysis	436.1	425.7	10.4	2.4%	424.6	11.4	2.6%	423.6	12.5	2.9%	422.5	13.5	3.1%	421.5	14.6	3.3%	420.5	15.6	3.6%
ME 5	32 49 25	2007	Above Normal	October	Used in Summary Table Analysis	283.0	274.4	8.5	3.0%	273.6	9.4	3.3%	272.7	10.3	3.6%	271.9	11.1	3.9%	271.0	12.0	4.2%	270.2	12.8	4.5%
ME 5	32 49 25	2007	Above Normal	November	Used in Summary Table Analysis	8,769.0	8,762.0	6.9	0.1%	8,761.3	7.6	0.1%	8,760.6	8.3	0.1%	8,760.0	9.0	0.1%	8,759.3	9.7	0.1%	8,758.6	10.4	0.1%
ME 5	32 49 25	2007	Above Normal	December	--	20,616.9	20,611.1	5.8	0.0%	20,610.0	6.9	0.0%	20,610.0	6.9	0.0%	20,608.8	8.1	0.0%	20,608.8	8.1	0.0%	20,607.6	9.3	0.0%
ME 5	32 49 25	2007	Above Normal	January	--	10,306.9	10,301.6	5.3	0.1%	10,301.0	5.9	0.1%	10,300.6	6.4	0.1%	10,300.0	6.9	0.1%	10,299.4	7.5	0.1%	10,299.0	8.0	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 49 25	2007	Above Normal	February	--	30,803.2	30,798.6	4.6	0.0%	30,798.6	4.6	0.0%	30,797.5	5.8	0.0%	30,797.5	5.8	0.0%	30,796.3	6.9	0.0%	30,796.3	6.9	0.0%
ME 5	32 49 25	2007	Above Normal	March	--	13,142.4	13,137.7	4.6	0.0%	13,137.7	4.6	0.0%	13,136.6	5.8	0.0%	13,136.6	5.8	0.0%	13,135.4	6.9	0.1%	13,135.4	6.9	0.1%
ME 5	32 49 25	2007	Above Normal	April	--	11,573.3	11,564.5	8.8	0.1%	11,563.7	9.6	0.1%	11,562.7	10.5	0.1%	11,561.8	11.5	0.1%	11,561.0	12.3	0.1%	11,560.1	13.2	0.1%
ME 5	32 49 25	2007	Above Normal	May	--	4,158.0	4,147.7	10.3	0.2%	4,146.6	11.3	0.3%	4,145.6	12.4	0.3%	4,144.6	13.4	0.3%	4,143.5	14.5	0.3%	4,142.5	15.5	0.4%
ME 5	32 49 25	2007	Above Normal	June	--	1,511.9	1,499.3	12.6	0.8%	1,498.0	13.9	0.9%	1,496.9	15.0	1.0%	1,495.6	16.3	1.1%	1,494.3	17.6	1.2%	1,493.1	18.9	1.2%
ME 5	32 49 25	2007	Above Normal	July	--	502.8	490.0	12.8	2.5%	488.7	14.1	2.8%	487.4	15.4	3.1%	486.2	16.7	3.3%	484.9	17.9	3.6%	483.6	19.2	3.8%
ME 5	32 49 25	2007	Above Normal	August	--	231.0	219.4	11.7	5.0%	218.2	12.8	5.6%	217.0	14.0	6.1%	215.9	15.1	6.6%	214.7	16.3	7.1%	213.6	17.5	7.6%
ME 5	32 49 25	2007	Above Normal	September	Used in Summary Table Analysis	158.6	147.6	11.1	7.0%	146.4	12.2	7.7%	145.3	13.3	8.4%	144.2	14.4	9.1%	143.1	15.5	9.8%	142.0	16.6	10.5%
ME 5	32 49 25	2008	Dry	October	Used in Summary Table Analysis	3,472.0	3,463.0	9.0	0.3%	3,462.0	10.0	0.3%	3,461.1	10.9	0.3%	3,460.2	11.8	0.3%	3,459.3	12.7	0.4%	3,458.3	13.7	0.4%
ME 5	32 49 25	2008	Dry	November	Used in Summary Table Analysis	3,311.5	3,304.4	7.1	0.2%	3,303.7	7.8	0.2%	3,303.0	8.4	0.3%	3,302.3	9.1	0.3%	3,301.6	9.8	0.3%	3,300.9	10.5	0.3%
ME 5	32 49 25	2008	Dry	December	--	23,395.8	23,388.9	6.9	0.0%	23,388.9	6.9	0.0%	23,387.7	8.1	0.0%	23,387.7	8.1	0.0%	23,386.6	9.3	0.0%	23,386.6	9.3	0.0%
ME 5	32 49 25	2008	Dry	January	--	37,788.2	37,782.4	5.8	0.0%	37,782.4	5.8	0.0%	37,781.3	6.9	0.0%	37,781.3	6.9	0.0%	37,780.1	8.1	0.0%	37,780.1	8.1	0.0%
ME 5	32 49 25	2008	Dry	February	--	26,334.5	26,328.7	5.8	0.0%	26,328.7	5.8	0.0%	26,327.5	6.9	0.0%	26,327.5	6.9	0.0%	26,327.5	6.9	0.0%	26,326.4	8.1	0.0%
ME 5	32 49 25	2008	Dry	March	--	11,824.1	11,820.6	3.5	0.0%	11,819.4	4.6	0.0%	11,819.4	4.6	0.0%	11,818.3	5.8	0.0%	11,818.3	5.8	0.0%	11,818.3	5.8	0.0%
ME 5	32 49 25	2008	Dry	April	--	9,041.3	9,032.4	8.9	0.1%	9,031.5	9.8	0.1%	9,030.7	10.6	0.1%	9,029.7	11.6	0.1%	9,028.8	12.5	0.1%	9,028.0	13.3	0.1%
ME 5	32 49 25	2008	Dry	May	--	1,359.6	1,350.1	9.5	0.7%	1,349.1	10.5	0.8%	1,348.1	11.5	0.8%	1,347.2	12.4	0.9%	1,346.3	13.3	1.0%	1,345.3	14.4	1.1%
ME 5	32 49 25	2008	Dry	June	--	445.0	431.2	13.8	3.1%	429.8	15.2	3.4%	428.4	16.6	3.7%	427.1	17.9	4.0%	425.7	19.3	4.3%	424.3	20.7	4.6%
ME 5	32 49 25	2008	Dry	July	--	262.7	249.0	13.8	5.2%	247.6	15.1	5.8%	246.2	16.5	6.3%	244.8	17.9	6.8%	243.5	19.3	7.3%	242.1	20.6	7.9%
ME 5	32 49 25	2008	Dry	August	--	186.4	173.0	13.5	7.2%	171.6	14.8	7.9%	170.3	16.2	8.7%	168.9	17.5	9.4%	167.6	18.8	10.1%	166.3	20.2	10.8%
ME 5	32 49 25	2008	Dry	September	Used in Summary Table Analysis	148.0	135.0	13.0	8.8%	133.6	14.3	9.7%	132.3	15.6	10.6%	131.0	16.9	11.4%	129.7	18.2	12.3%	128.4	19.5	13.2%
ME 5	32 49 25	2009	Critical	October	Used in Summary Table Analysis	933.6	923.3	10.4	1.1%	922.2	11.4	1.2%	921.2	12.5	1.3%	920.1	13.5	1.4%	919.1	14.6	1.6%	918.0	15.6	1.7%
ME 5	32 49 25	2009	Critical	November	Used in Summary Table Analysis	5,578.9	5,570.8	8.1	0.1%	5,570.0	8.9	0.2%	5,569.2	9.7	0.2%	5,568.4	10.5	0.2%	5,567.6	11.3	0.2%	5,566.7	12.3	0.2%
ME 5	32 49 25	2009	Critical	December	--	12,305.6	12,298.6	6.9	0.1%	12,297.5	8.1	0.1%	12,297.5	8.1	0.1%	12,296.3	9.3	0.1%	12,295.1	10.4	0.1%	12,295.1	10.4	0.1%
ME 5	32 49 25	2009	Critical	January	--	8,837.6	8,831.4	6.3	0.1%	8,830.8	6.8	0.1%	8,830.1	7.5	0.1%	8,829.5	8.1	0.1%	8,828.9	8.7	0.1%	8,828.2	9.4	0.1%
ME 5	32 49 25	2009	Critical	February	--	22,732.6	22,726.9	5.8	0.0%	22,726.9	5.8	0.0%	22,725.7	6.9	0.0%	22,725.7	6.9	0.0%	22,724.5	8.1	0.0%	22,724.5	8.1	0.0%
ME 5	32 49 25	2009	Critical	March	--	21,209.5	21,204.9	4.6	0.0%	21,204.9	4.6	0.0%	21,203.7	5.8	0.0%	21,203.7	5.8	0.0%	21,202.5	6.9	0.0%	21,202.5	6.9	0.0%
ME 5	32 49 25	2009	Critical	April	--	10,108.7	10,099.3	9.4	0.1%	10,098.4	10.3	0.1%	10,097.5	11.2	0.1%	10,096.6	12.0	0.1%	10,095.7	13.0	0.1%	10,094.8	13.9	0.1%
ME 5	32 49 25	2009	Critical	May	--	15,629.6	15,619.2	10.4	0.1%	15,618.1	11.6	0.1%	15,616.9	12.7	0.1%	15,615.7	13.9	0.1%	15,614.6	15.0	0.1%	15,613.4	16.2	0.1%
ME 5	32 49 25	2009	Critical	June	--	3,168.4	3,153.8	14.6	0.5%	3,152.4	16.0	0.5%	3,150.9	17.5	0.6%	3,149.4	19.0	0.6%	3,148.0	20.4	0.6%	3,146.5	21.9	0.7%
ME 5	32 49 25	2009	Critical	July	--	1,270.6	1,256.6	14.0	1.1%	1,255.2	15.4	1.2%	1,253.8	16.8	1.3%	1,252.4	18.2	1.4%	1,251.0	19.6	1.5%	1,249.7	20.9	1.6%
ME 5	32 49 25	2009	Critical	August	--	676.9	663.3	13.6	2.0%	662.0	14.9	2.2%	660.6	16.3	2.4%	659.2	17.7	2.6%	657.9	19.0	2.8%	656.6	20.3	3.0%
ME 5	32 49 25	2009	Critical	September	Used in Summary Table Analysis	397.5	385.2	12.2	3.1%	384.0	13.5	3.4%	382.8	14.7	3.7%	381.5	15.9	4.0%	380.3	17.1	4.3%	379.1	18.3	4.6%
ME 5	32 49 25	2010	Below Normal	October	Used in Summary Table Analysis	6,100.1	6,089.6	10.5	0.2%	6,088.5	11.6	0.2%	6,087.5	12.6	0.2%	6,086.3	13.8	0.2%	6,085.4	14.7	0.2%	6,084.3	15.9	0.3%
ME 5	32 49 25	2010	Below Normal	November	Used in Summary Table Analysis	8,337.2	8,328.7	8.4	0.1%	8,327.9	9.3	0.1%	8,327.1	10.1	0.1%	8,326.2	11.0	0.1%	8,325.3	11.8	0.1%	8,324.5	12.6	0.2%
ME 5	32 49 25	2010	Below Normal	December	--	12,449.1	12,442.1	6.9	0.1%	12,441.0	8.1	0.1%	12,439.8	9.3	0.1%	12,439.8	9.3	0.1%	12,438.7	10.4	0.1%	12,437.5	11.6	0.1%
ME 5	32 49 25	2010	Below Normal	January	--	36,547.5	36,540.5	6.9	0.0%	36,540.5	6.9	0.0%	36,539.4	8.1	0.0%	36,539.4	8.1	0.0%	36,538.2	9.3	0.0%	36,538.2	9.3	0.0%
ME 5	32 49 25	2010	Below Normal	February	--	27,334.5	27,328.7	5.8	0.0%	27,328.7	5.8	0.0%	27,327.5	6.9	0.0%	27,327.5	6.9	0.0%	27,326.4	8.1	0.0%	27,326.4	8.1	0.0%
ME 5	32 49 25	2010	Below Normal	March	--	28,915.5	28,909.7	5.8	0.0%	28,909.7	5.8	0.0%	28,908.6	6.9	0.0%	28,908.6	6.9	0.0%	28,907.4	8.1	0.0%	28,907.4	8.1	0.0%
ME 5	32 49 25	2010	Below Normal	April	--	40,157.4	40,152.8	4.6	0.0%	40,152.8	4.6	0.0%	40,151.6	5.8	0.0%	40,151.6	5.8	0.0%	40,150.5	6.9	0.0%	40,150.5	6.9	0.0%
ME 5	32 49 25	2010	Below Normal	May	--	20,380.8	20,371.5	9.3	0.0%	20,370.4	10.4	0.1%	20,369.2	11.6	0.1%	20,368.1	12.7	0.1%	20,368.1	12.7	0.1%	20,366.9	13.9	0.1%
ME 5	32 49 25	2010	Below Normal	June	--	9,439.6	9,425.6	14.0	0.1%	9,424.2	15.4	0.2%	9,422.8	16.8	0.2%	9,421.4	18.2	0.2%	9,420.0	19.6	0.2%	9,418.6	20.9	0.2%
ME 5	32 49 25	2010	Below Normal	July	--	1,462.0	1,449.2	12.8	0.9%	1,447.9	14.1	1.0%	1,446.6	15.4	1.1%	1,445.4	16.7	1.1%	1,444.1	17.9	1.2%	1,442.8	19.2	1.3%
ME 5	32 49 25	2010	Below Normal	August	--	578.6	566.7	11.9	2.1%	565.5	13.1	2.3%	564.3	14.3	2.5%	563.1	15.5	2.7%	562.0	16.6	2.9%	560.8	17.8	3.1%
ME 5	32 49 25	2010	Below Normal	September	Used in Summary Table Analysis	661.1	649.8	11.3	1.7%	648.6	12.4	1.9%	647.5	13.6	2.1%	646.4	14.7	2.2%	645.2	15.9	2.4%	644.1	17.0	2.6%
ME 5	32 49 25	2011	Wet	October	Used in Summary Table Analysis	9,705.3	9,696.6	8.7	0.1%	9,695.8	9.5	0.1%	9,694.9	10.4	0.1%	9,694.1	11.2	0.1%	9,693.2	12.2	0.1%	9,692.4	13.0	0.1%
ME 5	32 49 25	2011	Wet	November	Used in Summary Table Analysis	14,300.9	14,294.0	6.9	0.0%	14,294.0	6.9	0.0%	14,292.8	8.1	0.1%	14,292.8	8.1	0.1%	14,291.7	9.3	0.1%	14,290.5	10.4	0.1%
ME 5	32 49 25	2011	Wet	December	--	34,028.9	34,023.1	5.8	0.0%	34,022.0	6.9	0.0%	34,022.0	6.9	0.0%	34,020.8	8.1	0.0%	34,020.8	8.1	0.0%	34,019.7	9.3	0.0%
ME 5	32 49 25	2011	Wet	January	--	14,218.8	14,214.1	4.6	0.0%	14,213.0	5.8	0.0%	14,213.0	5.8	0.0%	14,211.8	6.9	0.0%	14,211.8	6.9	0.0%	14,210.6	8.1	0.1%
ME 5	32 49 25	2011	Wet	February	--	20,829.9	20,825.2	4.6	0.0%	20,824.1	5.8	0.0%	20,824.1	5.8	0.0%	20,822.9	6.9	0.0%	20,822.9	6.9	0.0%	20,822.9	6.9	0.0%
ME 5	32 49 25	2011	Wet	March	--	52,222.2	52,217.6	4.6	0.0%	52,217.6	4.6	0.0%	52,216.4	5.8	0.0%	52,216.4	5.8	0.0%	52,215.3	6.9	0.0%	52,215.3	6.9	0.0%
ME 5	32 49 25	2011	Wet	April	--	24,875.0	24,870.4	4.6	0.0%	24,870.4	4.6	0.0%	24,869.2	5.8	0.0%	24,869.2	5.8	0.0%	24,869.2	5.8	0.0%	24,868.1	6.9	0.0%
ME 5	32 49 25	2011	Wet	May	--	11,419.6	11,410.6	8.9	0.1%	11,409.7	9.8	0.1%	11,408.9	10.6	0.1%	11,408.0	11.6	0.1%	11,407.1	12.5	0.1%	11,406.1	13.4	0.1%
ME 5	32 49 25	2011	Wet	June	--	7,093.4	7,079.9	13.5	0.2%	7,078.5	14.9	0.2%	7,077.1	16.3	0.2%	7,075.7	17.7	0.2%	7,074.4	19.0	0.3%	7,073.0	20.4	0.3%
ME 5	32 49 25	2011	Wet	July	--	1,834.0	1,820.5	13.5	0.7%	1,819.1	14.9	0.8%	1,817.8	16.2	0.9%	1,816.4	17.6	1.0%	1,815.0	19.0	1.0%	1,813.7	20.4	1.1%
ME 5	32 49 25	2011	Wet	August	--	785.2	773.5	11.7	1.5%	772.3	12.9	1.6%	771.1	14.1	1.8%	770.0	15.2	1.9%	768.8	16.4	2.1%	767.6	17.6	2.2%
ME 5	32 49 25	2011	Wet	September	Used in Summary Table Analysis	441.8	431.1	10.7	2.4%	430.0	11.8	2.7%	428.9	12.8	2.9%	427.8	13.9	3.1%	426.8	15.0	3.4%	425.7	16.1	3.6%
ME 5	32 49 25	2012	Below Normal	October	Used in Summary Table Analysis	4,579.5	4,570.7	8.8	0.2%	4,569.8	9.7	0.2%	4,568.9	10.6	0.2%	4,568.1	11.5	0.3%	4,567.1	12.4	0.3%	4,566.2	13.3	0.3%
ME 5	32 49 25	2012	Below Normal	November	Used in Summary Table Analysis	8,313.4	8,306.4	7.1	0.1%	8,305.7	7.8	0.1%	8,305.0	8.4	0.1%	8,304.3	9.1	0.1%	8,303.6	9.8	0.1%	8,302.9	10.5	0.1%
ME 5	32 49 25	2012	Below Normal	December	--	5,217.5	5,211.6	5.9	0.1%	5,211.0	6.5	0.1%	5,210.3	7.2	0.1%	5,209.7	7.8	0.1%	5,209.1	8.3	0.2%	5,208.6	8.9	0.2%
ME 5	32 49 25	2012	Below Normal	January	--	20,329.9	20,324.1	5.8	0.0%	20,324.1	5.8	0.0%	20,322.9	6.9	0.0%	20,322.9	6.9	0.0%	20,321.8	8.1	0.0%	20,321.8	8.1	0.0%
ME 5	32 49 25	2012	Below Normal	February	--	18,275.5	18,270.8	4.6	0.0%	18,269.7	5.8	0.0%	18,269.7	5.8	0.0%	18,268.5	6.9	0.0%	18,268.5	6.9	0.0%	18,267.4	8.1	0.0%
ME 5	32 49 25	2012	Below Normal	March	--	45,677.1	45,671.3	5.8	0.0%	45,671.3	5.8	0.0%	45,671.3	5.8	0.0%	45,670.1	6.9	0.0%	45,670.1	6.9	0.0%	45,669.0	8.1	0.0%
ME 5	32 49 25	2012	Below Normal	April	--	26,951.4	26,946.8	4.6	0.0%	26,946.8	4.6	0.0%	26,945.6	5.8	0.0%	26,945.6	5.8	0.0%	26,945.6	5.8	0.0%	26,944.4	6.9	0.0%
ME 5	32 49 25	2012	Below Normal	May	--	7,506.0	7,497.1	8.9	0.1%	7,496.2	9.8	0.1%	7,495.3	10.8	0.1%	7,494.3	11.7	0.2%	7,493.5	12.5	0.2%	7,492.7	13.3	0.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 49 25	2012	Below Normal	June	--	5,552.2	5,538.4	13.8	0.2%	5,537.0	15.2	0.3%	5,535.6	16.6	0.3%	5,534.3	17.9	0.3%	5,532.9	19.3	0.3%	5,531.6	20.6	0.4%
ME 5	32 49 25	2012	Below Normal	July	--	2,247.1	2,234.0	13.1	0.6%	2,232.6	14.5	0.6%	2,231.4	15.7	0.7%	2,230.1	17.0	0.8%	2,228.7	18.4	0.8%	2,227.4	19.7	0.9%
ME 5	32 49 25	2012	Below Normal	August	--	395.0	384.2	10.8	2.7%	383.1	11.9	3.0%	382.1	12.9	3.3%	381.0	14.0	3.5%	380.0	15.0	3.8%	378.9	16.1	4.1%
ME 5	32 49 25	2012	Below Normal	September	Used in Summary Table Analysis	257.1	247.5	9.6	3.7%	246.5	10.6	4.1%	245.5	11.6	4.5%	244.5	12.5	4.9%	243.6	13.5	5.2%	242.6	14.5	5.6%
ME 5	32 49 25	2013	Below Normal	October	Used in Summary Table Analysis	1,937.5	1,929.1	8.4	0.4%	1,928.2	9.3	0.5%	1,927.3	10.2	0.5%	1,926.5	11.0	0.6%	1,925.7	11.8	0.6%	1,924.8	12.7	0.7%
ME 5	32 49 25	2013	Below Normal	November	Used in Summary Table Analysis	14,822.9	14,816.0	6.9	0.0%	14,816.0	6.9	0.0%	14,814.8	8.1	0.1%	14,813.7	9.3	0.1%	14,813.7	9.3	0.1%	14,812.5	10.4	0.1%
ME 5	32 49 25	2013	Below Normal	December	--	60,296.3	60,289.4	6.9	0.0%	60,289.4	6.9	0.0%	60,288.2	8.1	0.0%	60,288.2	8.1	0.0%	60,287.0	9.3	0.0%	60,287.0	9.3	0.0%
ME 5	32 49 25	2013	Below Normal	January	--	22,290.5	22,284.7	5.8	0.0%	22,284.7	5.8	0.0%	22,284.7	5.8	0.0%	22,283.6	6.9	0.0%	22,283.6	6.9	0.0%	22,282.4	8.1	0.0%
ME 5	32 49 25	2013	Below Normal	February	--	8,888.4	8,883.7	4.7	0.1%	8,883.1	5.3	0.1%	8,882.6	5.8	0.1%	8,882.2	6.3	0.1%	8,881.7	6.7	0.1%	8,881.3	7.2	0.1%
ME 5	32 49 25	2013	Below Normal	March	--	10,395.0	10,390.4	4.6	0.0%	10,389.9	5.1	0.0%	10,389.5	5.6	0.1%	10,389.0	6.0	0.1%	10,388.5	6.5	0.1%	10,388.1	6.9	0.1%
ME 5	32 49 25	2013	Below Normal	April	--	8,311.8	8,303.1	8.7	0.1%	8,302.3	9.5	0.1%	8,301.5	10.3	0.1%	8,300.6	11.2	0.1%	8,299.8	12.0	0.1%	8,298.8	13.0	0.2%
ME 5	32 49 25	2013	Below Normal	May	--	4,457.3	4,447.0	10.3	0.2%	4,445.9	11.3	0.3%	4,444.9	12.4	0.3%	4,443.9	13.4	0.3%	4,442.8	14.5	0.3%	4,441.8	15.5	0.3%
ME 5	32 49 25	2013	Below Normal	June	--	2,120.5	2,108.0	12.5	0.6%	2,106.7	13.8	0.6%	2,105.4	15.0	0.7%	2,104.2	16.3	0.8%	2,103.0	17.5	0.8%	2,101.7	18.8	0.9%
ME 5	32 49 25	2013	Below Normal	July	--	723.8	711.4	12.3	1.7%	710.2	13.5	1.9%	709.0	14.8	2.0%	707.7	16.0	2.2%	706.5	17.2	2.4%	705.3	18.5	2.6%
ME 5	32 49 25	2013	Below Normal	August	--	347.4	335.8	11.6	3.3%	334.6	12.7	3.7%	333.5	13.9	4.0%	332.3	15.1	4.3%	331.2	16.2	4.7%	330.0	17.4	5.0%
ME 5	32 49 25	2013	Below Normal	September	Used in Summary Table Analysis	4,825.1	4,813.1	12.0	0.2%	4,811.8	13.3	0.3%	4,810.6	14.5	0.3%	4,809.5	15.6	0.3%	4,808.2	16.9	0.4%	4,807.1	18.1	0.4%
ME 5	32 49 25	2014	Critical	October	Used in Summary Table Analysis	283.9	275.0	8.9	3.1%	274.1	9.8	3.4%	273.2	10.6	3.7%	272.3	11.5	4.1%	271.4	12.4	4.4%	270.6	13.3	4.7%
ME 5	32 49 25	2014	Critical	November	Used in Summary Table Analysis	1,559.6	1,552.5	7.1	0.5%	1,551.9	7.8	0.5%	1,551.0	8.6	0.5%	1,550.3	9.3	0.6%	1,549.7	10.0	0.6%	1,549.0	10.6	0.7%
ME 5	32 49 25	2014	Critical	December	--	1,603.2	1,597.1	6.1	0.4%	1,596.4	6.8	0.4%	1,595.8	7.4	0.5%	1,595.1	8.1	0.5%	1,594.6	8.7	0.5%	1,594.0	9.3	0.6%
ME 5	32 49 25	2014	Critical	January	--	2,843.8	2,838.2	5.6	0.2%	2,837.6	6.1	0.2%	2,837.0	6.7	0.2%	2,836.6	7.2	0.3%	2,836.0	7.8	0.3%	2,835.4	8.3	0.3%
ME 5	32 49 25	2014	Critical	February	--	15,814.8	15,810.2	4.6	0.0%	15,810.2	4.6	0.0%	15,809.0	5.8	0.0%	15,809.0	5.8	0.0%	15,807.9	6.9	0.0%	15,807.9	6.9	0.0%
ME 5	32 49 25	2014	Critical	March	--	31,566.0	31,561.3	4.6	0.0%	31,560.2	5.8	0.0%	31,560.2	5.8	0.0%	31,560.2	5.8	0.0%	31,559.0	6.9	0.0%	31,559.0	6.9	0.0%
ME 5	32 49 25	2014	Critical	April	--	13,018.5	13,009.3	9.3	0.1%	13,008.1	10.4	0.1%	13,006.9	11.6	0.1%	13,005.8	12.7	0.1%	13,004.6	13.9	0.1%	13,004.6	13.9	0.1%
ME 5	32 49 25	2014	Critical	May	--	5,206.3	5,195.4	10.9	0.2%	5,194.2	12.0	0.2%	5,193.1	13.2	0.3%	5,192.0	14.2	0.3%	5,190.9	15.4	0.3%	5,189.8	16.4	0.3%
ME 5	32 49 25	2014	Critical	June	--	1,206.5	1,191.4	15.0	1.2%	1,189.9	16.6	1.4%	1,188.4	18.1	1.5%	1,186.8	19.7	1.6%	1,185.4	21.1	1.7%	1,183.9	22.6	1.9%
ME 5	32 49 25	2014	Critical	July	--	552.0	538.0	14.1	2.6%	536.6	15.5	2.8%	535.2	16.9	3.1%	533.8	18.3	3.3%	532.4	19.7	3.6%	531.0	21.1	3.8%
ME 5	32 49 25	2014	Critical	August	--	355.3	341.9	13.5	3.8%	340.5	14.8	4.2%	339.2	16.2	4.6%	337.8	17.5	4.9%	336.5	18.9	5.3%	335.1	20.2	5.7%
ME 5	32 49 25	2014	Critical	September	Used in Summary Table Analysis	2,593.2	2,579.9	13.3	0.5%	2,578.6	14.6	0.6%	2,577.2	16.0	0.6%	2,575.9	17.2	0.7%	2,574.5	18.6	0.7%	2,573.3	19.9	0.8%
ME 5	32 49 25	2015	Dry	October	Used in Summary Table Analysis	11,431.7	11,421.4	10.3	0.1%	11,420.4	11.3	0.1%	11,419.3	12.4	0.1%	11,417.7	14.0	0.1%	11,416.7	15.0	0.1%	11,415.6	16.1	0.1%
ME 5	32 49 25	2015	Dry	November	Used in Summary Table Analysis	9,111.8	9,103.9	7.9	0.1%	9,103.1	8.7	0.1%	9,102.3	9.5	0.1%	9,101.5	10.3	0.1%	9,100.7	11.1	0.1%	9,099.9	11.9	0.1%
ME 5	32 49 25	2015	Dry	December	--	32,887.7	32,881.9	5.8	0.0%	32,880.8	6.9	0.0%	32,879.6	8.1	0.0%	32,879.6	8.1	0.0%	32,878.5	9.3	0.0%	32,878.5	9.3	0.0%
ME 5	32 49 25	2015	Dry	January	--	14,619.2	14,613.4	5.8	0.0%	14,613.4	5.8	0.0%	14,612.3	6.9	0.0%	14,611.1	8.1	0.1%	14,611.1	8.1	0.1%	14,610.0	9.3	0.1%
ME 5	32 49 25	2015	Dry	February	--	27,341.4	27,335.6	5.8	0.0%	27,335.6	5.8	0.0%	27,334.5	6.9	0.0%	27,334.5	6.9	0.0%	27,334.5	6.9	0.0%	27,333.3	8.1	0.0%
ME 5	32 49 25	2015	Dry	March	--	11,597.2	11,592.6	4.6	0.0%	11,591.4	5.8	0.0%	11,591.4	5.8	0.0%	11,590.3	6.9	0.1%	11,590.3	6.9	0.1%	11,590.3	6.9	0.1%
ME 5	32 49 25	2015	Dry	April	--	8,457.3	8,448.1	9.1	0.1%	8,447.2	10.1	0.1%	8,446.3	11.0	0.1%	8,445.4	11.9	0.1%	8,444.4	12.8	0.2%	8,443.5	13.8	0.2%
ME 5	32 49 25	2015	Dry	May	--	1,512.3	1,501.5	10.8	0.7%	1,500.5	11.8	0.8%	1,499.3	13.0	0.9%	1,498.3	14.0	0.9%	1,497.2	15.0	1.0%	1,496.1	16.2	1.1%
ME 5	32 49 25	2015	Dry	June	--	657.9	643.9	14.0	2.1%	642.5	15.4	2.3%	641.1	16.8	2.6%	639.7	18.2	2.8%	638.3	19.6	3.0%	636.9	21.0	3.2%
ME 5	32 49 25	2015	Dry	July	--	274.3	260.5	13.9	5.1%	259.1	15.2	5.6%	257.7	16.6	6.1%	256.3	18.0	6.6%	254.9	19.4	7.1%	253.5	20.8	7.6%
ME 5	32 49 25	2015	Dry	August	--	173.3	159.8	13.5	7.8%	158.5	14.8	8.5%	157.2	16.1	9.3%	155.8	17.5	10.1%	154.5	18.8	10.9%	153.1	20.2	11.7%
ME 5	32 49 25	2015	Dry	September	Used in Summary Table Analysis	126.8	114.7	12.1	9.5%	113.5	13.3	10.5%	112.2	14.5	11.5%	111.0	15.8	12.5%	109.8	17.0	13.4%	108.5	18.2	14.4%
ME 5	32 49 25	2016	Above Normal	October	Used in Summary Table Analysis	91.8	81.5	10.3	11.2%	80.4	11.4	12.4%	79.4	12.4	13.5%	78.8	12.9	14.1%	77.9	13.8	15.1%	76.5	15.2	16.6%
ME 5	32 49 25	2016	Above Normal	November	Used in Summary Table Analysis	3,930.0	3,922.0	8.0	0.2%	3,921.3	8.7	0.2%	3,920.5	9.5	0.2%	3,919.6	10.4	0.3%	3,918.8	11.2	0.3%	3,917.9	12.0	0.3%
ME 5	32 49 25	2016	Above Normal	December	--	36,937.5	36,930.6	6.9	0.0%	36,929.4	8.1	0.0%	36,928.2	9.3	0.0%	36,928.2	9.3	0.0%	36,927.1	10.4	0.0%	36,925.9	11.6	0.0%
ME 5	32 49 25	2016	Above Normal	January	--	57,648.1	57,641.2	6.9	0.0%	57,641.2	6.9	0.0%	57,640.0	8.1	0.0%	57,638.9	9.3	0.0%	57,638.9	9.3	0.0%	57,637.7	10.4	0.0%
ME 5	32 49 25	2016	Above Normal	February	--	24,322.9	24,318.3	4.6	0.0%	24,317.1	5.8	0.0%	24,317.1	5.8	0.0%	24,316.0	6.9	0.0%	24,316.0	6.9	0.0%	24,314.8	8.1	0.0%
ME 5	32 49 25	2016	Above Normal	March	--	41,931.7	41,927.1	4.6	0.0%	41,925.9	5.8	0.0%	41,925.9	5.8	0.0%	41,925.9	5.8	0.0%	41,924.8	6.9	0.0%	41,924.8	6.9	0.0%
ME 5	32 49 25	2016	Above Normal	April	--	18,581.0	18,576.4	4.6	0.0%	18,576.4	4.6	0.0%	18,575.2	5.8	0.0%	18,575.2	5.8	0.0%	18,575.2	5.8	0.0%	18,574.1	6.9	0.0%
ME 5	32 49 25	2016	Above Normal	May	--	5,231.6	5,226.0	5.6	0.1%	5,225.5	6.1	0.1%	5,224.9	6.7	0.1%	5,224.3	7.3	0.1%	5,223.7	7.9	0.2%	5,223.1	8.4	0.2%
ME 5	32 49 25	2016	Above Normal	June	--	1,517.1	1,506.3	10.9	0.7%	1,505.2	11.9	0.8%	1,504.2	13.0	0.9%	1,503.0	14.1	0.9%	1,502.0	15.2	1.0%	1,500.9	16.2	1.1%
ME 5	32 49 25	2016	Above Normal	July	--	831.3	819.2	12.1	1.5%	818.0	13.3	1.6%	816.8	14.5	1.7%	815.6	15.7	1.9%	814.4	16.9	2.0%	813.2	18.1	2.2%
ME 5	32 49 25	2016	Above Normal	August	--	500.3	488.3	11.9	2.4%	487.1	13.1	2.6%	485.9	14.3	2.9%	484.7	15.5	3.1%	483.5	16.7	3.3%	482.3	17.9	3.6%
ME 5	32 49 25	2016	Above Normal	September	Used in Summary Table Analysis	336.2	325.5	10.7	3.2%	324.4	11.8	3.5%	323.3	12.9	3.8%	322.3	13.9	4.1%	321.2	15.0	4.5%	320.1	16.1	4.8%
ME 5	32 49 25	2017	Wet	October	Used in Summary Table Analysis	18,409.7	18,400.5	9.3	0.1%	18,399.3	10.4	0.1%	18,398.1	11.6	0.1%	18,398.1	11.6	0.1%	18,397.0	12.7	0.1%	18,395.8	13.9	0.1%
ME 5	32 49 25	2017	Wet	November	Used in Summary Table Analysis	18,960.6	18,953.7	6.9	0.0%	18,953.7	6.9	0.0%	18,952.5	8.1	0.0%	18,952.5	8.1	0.0%	18,951.4	9.3	0.0%	18,950.2	10.4	0.1%
ME 5	32 49 25	2017	Wet	December	--	24,324.1	24,318.3	5.8	0.0%	24,318.3	5.8	0.0%	24,317.1	6.9	0.0%	24,317.1	6.9	0.0%	24,316.0	8.1	0.0%	24,316.0	8.1	0.0%
ME 5	32 49 25	2017	Wet	January	--	107,520.8	107,515.0	5.8	0.0%	107,515.0	5.8	0.0%	107,513.9	6.9	0.0%	107,513.9	6.9	0.0%	107,512.7	8.1	0.0%	107,512.7	8.1	0.0%
ME 5	32 49 25	2017	Wet	February	--	82,200.2	82,195.6	4.6	0.0%	82,194.4	5.8	0.0%	82,194.4	5.8	0.0%	82,193.3	6.9	0.0%	82,193.3	6.9	0.0%	82,192.1	8.1	0.0%
ME 5	32 49 25	2017	Wet	March	--	27,388.9	27,384.3	4.6	0.0%	27,383.1	5.8	0.0%	27,383.1	5.8	0.0%	27,381.9	6.9	0.0%	27,381.9	6.9	0.0%	27,381.9	6.9	0.0%
ME 5	32 49 25	2017	Wet	April	--	23,059.0	23,054.4	4.6	0.0%	23,054.4	4.6	0.0%	23,054.4	4.6	0.0%	23,053.2	5.8	0.0%	23,053.2	5.8	0.0%	23,052.1	6.9	0.0%
ME 5	32 49 25	2017	Wet	May	--	6,278.5	6,272.9	5.6	0.1%	6,272.3	6.1	0.1%	6,271.8	6.7	0.1%	6,271.2	7.3	0.1%	6,270.6	7.9	0.1%	6,270.0	8.4	0.1%
ME 5	32 49 25	2017	Wet	June	--	2,133.4	2,122.5	11.0	0.5%	2,121.4	12.0	0.6%	2,120.3	13.2	0.6%	2,119.2	14.2	0.7%	2,118.1	15.4	0.7%	2,117.0	16.4	0.8%
ME 5	32 49 25	2017	Wet	July	--	945.2	933.0	12.2	1.3%	931.8	13.4	1.4%	930.6	14.6	1.5%	929.4	15.8	1.7%	928.2	17.0	1.8%	927.0	18.2	1.9%
ME 5	32 49 25	2017	Wet	August	--	517.3	505.4	11.9	2.3%	504.2	13.1	2.5%	503.0	14.3	2.8%	501.8	15.5	3.0%	500.6	16.7	3.2%	499.5	17.8	3.4%
ME 5	32 49 25	2017	Wet	September	Used in Summary Table Analysis	332.0	320.9	11.1	3.3%	319.8	12.2	3.7%	318.7	13.3	4.0%	317.6	14.4	4.3%	316.5	15.5	4.7%	315.4	16.6	5.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 49 25	2018	Above Normal	October	Used in Summary Table Analysis	284.7	276.7	8.0	2.8%	275.4	9.2	3.2%	274.4	10.3	3.6%	273.3	11.4	4.0%	272.2	12.4	4.4%	271.4	13.3	4.7%
ME 5	32 49 25	2018	Above Normal	November	Used in Summary Table Analysis	10,931.1	10,924.2	6.9	0.1%	10,923.5	7.6	0.1%	10,922.7	8.4	0.1%	10,922.0	9.1	0.1%	10,921.3	9.8	0.1%	10,920.6	10.5	0.1%
ME 5	32 49 25	2018	Above Normal	December	--	5,460.9	5,455.0	5.9	0.1%	5,454.4	6.5	0.1%	5,453.8	7.1	0.1%	5,453.2	7.6	0.1%	5,452.5	8.3	0.2%	5,452.0	8.9	0.2%
ME 5	32 49 25	2018	Above Normal	January	--	18,019.7	18,013.9	5.8	0.0%	18,013.9	5.8	0.0%	18,012.7	6.9	0.0%	18,012.7	6.9	0.0%	18,011.6	8.1	0.0%	18,011.6	8.1	0.0%
ME 5	32 49 25	2018	Above Normal	February	--	7,610.5	7,605.9	4.6	0.1%	7,605.4	5.1	0.1%	7,605.0	5.6	0.1%	7,604.5	6.0	0.1%	7,604.1	6.5	0.1%	7,603.5	7.1	0.1%
ME 5	32 49 25	2018	Above Normal	March	--	20,854.2	20,849.5	4.6	0.0%	20,849.5	4.6	0.0%	20,848.4	5.8	0.0%	20,848.4	5.8	0.0%	20,848.4	5.8	0.0%	20,847.2	6.9	0.0%
ME 5	32 49 25	2018	Above Normal	April	--	32,381.9	32,377.3	4.6	0.0%	32,377.3	4.6	0.0%	32,376.2	5.8	0.0%	32,376.2	5.8	0.0%	32,376.2	5.8	0.0%	32,375.0	6.9	0.0%
ME 5	32 49 25	2018	Above Normal	May	--	6,996.2	6,987.6	8.6	0.1%	6,986.7	9.5	0.1%	6,985.9	10.3	0.1%	6,985.1	11.1	0.2%	6,984.1	12.0	0.2%	6,983.3	12.8	0.2%
ME 5	32 49 25	2018	Above Normal	June	--	1,922.3	1,911.1	11.2	0.6%	1,910.1	12.3	0.6%	1,908.9	13.4	0.7%	1,907.8	14.6	0.8%	1,906.7	15.6	0.8%	1,905.6	16.8	0.9%
ME 5	32 49 25	2018	Above Normal	July	--	790.6	778.3	12.2	1.5%	777.1	13.5	1.7%	775.9	14.7	1.9%	774.7	15.9	2.0%	773.4	17.2	2.2%	772.2	18.4	2.3%
ME 5	32 49 25	2018	Above Normal	August	--	451.8	440.3	11.5	2.5%	439.1	12.6	2.8%	438.0	13.8	3.0%	436.8	14.9	3.3%	435.7	16.1	3.6%	434.5	17.2	3.8%
ME 5	32 49 25	2018	Above Normal	September	Used in Summary Table Analysis	308.6	297.5	11.1	3.6%	296.4	12.2	3.9%	295.3	13.3	4.3%	294.2	14.4	4.7%	293.1	15.5	5.0%	292.0	16.6	5.4%
ME 5	32 49 25	2019	Below Normal	October	Used in Summary Table Analysis	214.9	206.2	8.8	4.1%	205.3	9.7	4.5%	204.5	10.5	4.9%	203.5	11.4	5.3%	202.7	12.2	5.7%	201.9	13.1	6.1%
ME 5	32 49 25	2019	Below Normal	November	Used in Summary Table Analysis	6,716.0	6,708.9	7.1	0.1%	6,708.2	7.8	0.1%	6,707.5	8.4	0.1%	6,706.7	9.3	0.1%	6,706.0	10.0	0.1%	6,705.3	10.6	0.2%
ME 5	32 49 25	2019	Below Normal	December	--	14,820.6	14,814.8	5.8	0.0%	14,814.8	5.8	0.0%	14,813.7	6.9	0.0%	14,813.7	6.9	0.0%	14,812.5	8.1	0.1%	14,812.5	8.1	0.1%
ME 5	32 49 25	2019	Below Normal	January	--	35,532.4	35,527.8	4.6	0.0%	35,526.6	5.8	0.0%	35,526.6	5.8	0.0%	35,525.5	6.9	0.0%	35,525.5	6.9	0.0%	35,524.3	8.1	0.0%
ME 5	32 49 25	2019	Below Normal	February	--	142,256.9	142,245.4	11.6	0.0%	142,245.4	11.6	0.0%	142,245.4	11.6	0.0%	142,245.4	11.6	0.0%	142,245.4	11.6	0.0%	142,245.4	11.6	0.0%
ME 5	32 49 25	2019	Below Normal	March	--	42,491.9	42,487.3	4.6	0.0%	42,487.3	4.6	0.0%	42,486.1	5.8	0.0%	42,486.1	5.8	0.0%	42,486.1	5.8	0.0%	42,485.0	6.9	0.0%
ME 5	32 49 25	2019	Below Normal	April	--	15,321.8	15,317.1	4.6	0.0%	15,317.1	4.6	0.0%	15,317.1	4.6	0.0%	15,316.0	5.8	0.0%	15,316.0	5.8	0.0%	15,314.8	6.9	0.0%
ME 5	32 49 25	2019	Below Normal	May	--	17,179.4	17,170.1	9.3	0.1%	17,169.0	10.4	0.1%	17,169.0	10.4	0.1%	17,167.8	11.6	0.1%	17,166.7	12.7	0.1%	17,165.5	13.9	0.1%
ME 5	32 49 25	2019	Below Normal	June	--	4,245.1	4,233.1	12.0	0.3%	4,231.9	13.2	0.3%	4,230.7	14.5	0.3%	4,229.5	15.6	0.4%	4,228.2	16.9	0.4%	4,227.1	18.1	0.4%
ME 5	32 49 25	2019	Below Normal	July	--	1,372.3	1,360.0	12.4	0.9%	1,358.8	13.5	1.0%	1,357.5	14.8	1.1%	1,356.4	16.0	1.2%	1,355.1	17.2	1.3%	1,353.8	18.5	1.3%
ME 5	32 49 25	2019	Below Normal	August	--	606.9	595.1	11.8	1.9%	593.9	13.0	2.1%	592.8	14.1	2.3%	591.6	15.3	2.5%	590.4	16.5	2.7%	589.2	17.7	2.9%
ME 5	32 49 25	2019	Below Normal	September	Used in Summary Table Analysis	471.7	460.7	11.0	2.3%	459.6	12.1	2.6%	458.5	13.2	2.8%	457.4	14.3	3.0%	456.3	15.4	3.3%	455.2	16.5	3.5%
ME 5	32 49 25	2020	Dry	October	Used in Summary Table Analysis	363.1	354.7	8.4	2.3%	353.8	9.2	2.5%	353.0	10.1	2.8%	352.2	10.9	3.0%	351.3	11.7	3.2%	350.5	12.6	3.5%
ME 5	32 49 25	2020	Dry	November	Used in Summary Table Analysis	332.4	325.8	6.6	2.0%	325.1	7.3	2.2%	324.5	7.9	2.4%	323.8	8.6	2.6%	323.1	9.3	2.8%	322.4	10.0	3.0%
ME 5	32 49 25	2020	Dry	December	--	13,511.6	13,504.6	6.9	0.1%	13,504.6	6.9	0.1%	13,503.5	8.1	0.1%	13,503.5	8.1	0.1%	13,502.3	9.3	0.1%	13,502.3	9.3	0.1%
ME 5	32 49 25	2020	Dry	January	--	22,508.1	22,502.3	5.8	0.0%	22,502.3	5.8	0.0%	22,501.2	6.9	0.0%	22,501.2	6.9	0.0%	22,501.2	6.9	0.0%	22,500.0	8.1	0.0%
ME 5	32 49 25	2020	Dry	February	--	7,423.8	7,419.1	4.7	0.1%	7,418.6	5.2	0.1%	7,418.1	5.8	0.1%	7,417.6	6.3	0.1%	7,417.1	6.7	0.1%	7,416.7	7.2	0.1%
ME 5	32 49 25	2020	Dry	March	--	7,278.0	7,273.5	4.5	0.1%	7,273.0	5.0	0.1%	7,272.6	5.4	0.1%	7,272.1	5.9	0.1%	7,271.6	6.4	0.1%	7,271.3	6.7	0.1%
ME 5	32 49 25	2020	Dry	April	--	5,520.0	5,511.0	9.0	0.2%	5,510.1	10.0	0.2%	5,509.1	10.9	0.2%	5,508.2	11.8	0.2%	5,507.3	12.7	0.2%	5,506.4	13.7	0.2%
ME 5	32 49 25	2020	Dry	May	--	7,424.1	7,413.2	10.9	0.1%	7,412.0	12.0	0.2%	7,411.0	13.1	0.2%	7,409.8	14.2	0.2%	7,408.8	15.3	0.2%	7,407.8	16.3	0.2%
ME 5	32 49 25	2020	Dry	June	--	2,107.8	2,093.4	14.4	0.7%	2,092.0	15.7	0.7%	2,090.5	17.2	0.8%	2,089.1	18.6	0.9%	2,087.6	20.1	1.0%	2,086.2	21.5	1.0%
ME 5	32 49 25	2020	Dry	July	--	803.6	789.3	14.3	1.8%	787.9	15.7	2.0%	786.4	17.2	2.1%	785.0	18.6	2.3%	783.6	20.0	2.5%	782.2	21.5	2.7%
ME 5	32 49 25	2020	Dry	August	--	406.7	392.5	14.2	3.5%	391.1	15.6	3.8%	389.7	17.0	4.2%	388.2	18.4	4.5%	386.8	19.8	4.9%	385.4	21.3	5.2%
ME 5	32 49 25	2020	Dry	September	Used in Summary Table Analysis	255.9	243.1	12.8	5.0%	241.8	14.1	5.5%	240.5	15.4	6.0%	239.2	16.7	6.5%	238.0	18.0	7.0%	236.7	19.2	7.5%
ME 6	32 49 25	2000	Above Normal	October	Used in Summary Table Analysis	827.4	818.7	8.7	1.1%	817.8	9.6	1.2%	817.0	10.4	1.3%	816.1	11.3	1.4%	815.2	12.2	1.5%	814.4	13.0	1.6%
ME 6	32 49 25	2000	Above Normal	November	Used in Summary Table Analysis	12,281.3	12,274.3	6.9	0.1%	12,273.1	8.1	0.1%	12,273.1	8.1	0.1%	12,272.0	9.3	0.1%	12,272.0	9.3	0.1%	12,270.8	10.4	0.1%
ME 6	32 49 25	2000	Above Normal	December	--	10,898.1	10,892.2	5.9	0.1%	10,891.7	6.5	0.1%	10,891.1	7.1	0.1%	10,890.5	7.6	0.1%	10,889.9	8.2	0.1%	10,889.4	8.8	0.1%
ME 6	32 49 25	2000	Above Normal	January	--	28,847.2	28,842.6	4.6	0.0%	28,841.4	5.8	0.0%	28,841.4	5.8	0.0%	28,840.3	6.9	0.0%	28,840.3	6.9	0.0%	28,839.1	8.1	0.0%
ME 6	32 49 25	2000	Above Normal	February	--	37,218.8	37,214.1	4.6	0.0%	37,214.1	4.6	0.0%	37,213.0	5.8	0.0%	37,213.0	5.8	0.0%	37,213.0	5.8	0.0%	37,211.8	6.9	0.0%
ME 6	32 49 25	2000	Above Normal	March	--	18,372.7	18,368.1	4.6	0.0%	18,368.1	4.6	0.0%	18,366.9	5.8	0.0%	18,366.9	5.8	0.0%	18,365.7	6.9	0.0%	18,365.7	6.9	0.0%
ME 6	32 49 25	2000	Above Normal	April	--	12,357.6	12,354.2	3.5	0.0%	12,353.0	4.6	0.0%	12,353.0	4.6	0.0%	12,351.9	5.8	0.0%	12,351.9	5.8	0.0%	12,351.9	5.8	0.0%
ME 6	32 49 25	2000	Above Normal	May	--	7,131.1	7,122.3	8.8	0.1%	7,121.4	9.7	0.1%	7,120.6	10.5	0.1%	7,119.7	11.5	0.2%	7,118.8	12.4	0.2%	7,117.9	13.2	0.2%
ME 6	32 49 25	2000	Above Normal	June	--	2,626.7	2,613.5	13.2	0.5%	2,612.3	14.5	0.6%	2,611.0	15.7	0.6%	2,609.6	17.1	0.7%	2,608.3	18.4	0.7%	2,607.1	19.7	0.7%
ME 6	32 49 25	2000	Above Normal	July	--	1,000.1	988.0	12.1	1.2%	986.7	13.4	1.3%	985.5	14.6	1.5%	984.3	15.8	1.6%	983.1	17.0	1.7%	981.9	18.2	1.8%
ME 6	32 49 25	2000	Above Normal	August	--	530.6	519.1	11.5	2.2%	517.9	12.6	2.4%	516.8	13.8	2.6%	515.6	14.9	2.8%	514.5	16.1	3.0%	513.3	17.2	3.2%
ME 6	32 49 25	2000	Above Normal	September	Used in Summary Table Analysis	303.0	292.8	10.2	3.4%	291.7	11.3	3.7%	290.7	12.3	4.1%	289.7	13.3	4.4%	288.7	14.3	4.7%	287.6	15.4	5.1%
ME 6	32 49 25	2001	Dry	October	Used in Summary Table Analysis	3,854.5	3,846.1	8.4	0.2%	3,845.1	9.4	0.2%	3,844.3	10.2	0.3%	3,843.5	11.0	0.3%	3,842.6	11.9	0.3%	3,841.8	12.7	0.3%
ME 6	32 49 25	2001	Dry	November	Used in Summary Table Analysis	6,186.6	6,179.6	6.9	0.1%	6,179.1	7.5	0.1%	6,178.4	8.2	0.1%	6,177.7	8.9	0.1%	6,177.0	9.6	0.2%	6,176.3	10.3	0.2%
ME 6	32 49 25	2001	Dry	December	--	8,901.2	8,895.4	5.8	0.1%	8,894.7	6.5	0.1%	8,894.1	7.1	0.1%	8,893.5	7.6	0.1%	8,892.9	8.2	0.1%	8,892.4	8.8	0.1%
ME 6	32 49 25	2001	Dry	January	--	12,908.6	12,903.9	4.6	0.0%	12,902.8	5.8	0.0%	12,902.8	5.8	0.0%	12,901.6	6.9	0.1%	12,901.6	6.9	0.1%	12,900.5	8.1	0.1%
ME 6	32 49 25	2001	Dry	February	--	17,547.5	17,541.7	5.8	0.0%	17,541.7	5.8	0.0%	17,541.7	5.8	0.0%	17,540.5	6.9	0.0%	17,540.5	6.9	0.0%	17,539.4	8.1	0.0%
ME 6	32 49 25	2001	Dry	March	--	12,335.6	12,332.2	3.5	0.0%	12,331.0	4.6	0.0%	12,331.0	4.6	0.0%	12,329.9	5.8	0.0%	12,329.9	5.8	0.0%	12,329.9	5.8	0.0%
ME 6	32 49 25	2001	Dry	April	--	11,013.1	11,004.1	9.0	0.1%	11,003.1	10.0	0.1%	11,002.2	10.9	0.1%	11,001.3	11.8	0.1%	11,000.3	12.7	0.1%	10,999.4	13.7	0.1%
ME 6	32 49 25	2001	Dry	May	--	2,639.6	2,628.8	10.8	0.4%	2,627.8	11.8	0.4%	2,626.6	13.0	0.5%	2,625.6	14.0	0.5%	2,624.5	15.0	0.6%	2,623.5	16.1	0.6%
ME 6	32 49 25	2001	Dry	June	--	2,675.2	2,660.4	14.8	0.6%	2,659.0	16.2	0.6%	2,657.5	17.7	0.7%	2,656.0	19.2	0.7%	2,654.5	20.7	0.8%	2,653.0	22.2	0.8%
ME 6	32 49 25	2001	Dry	July	--	723.1	709.1	14.0	1.9%	707.7	15.4	2.1%	706.2	16.8	2.3%	704.8	18.2	2.5%	703.4	19.6	2.7%	702.0	21.0	2.9%
ME 6	32 49 25	2001	Dry	August	--	179.2	165.5	13.7	7.6%	164.1	15.1	8.4%	162.7	16.5	9.2%	161.3	17.8	10.0%	160.0	19.2	10.7%	158.6	20.6	11.5%
ME 6	32 49 25	2001	Dry	September	Used in Summary Table Analysis	102.5	90.1	12.3	12.0%	88.9	13.6	13.2%	87.6	14.8	14.5%	86.3	16.1	15.7%	85.1	17.3	16.9%	83.9	18.6	18.1%
ME 6	32 49 25	2002	Below Normal	October	Used in Summary Table Analysis	272.8	262.5	10.4	3.8%	261.4	11.4	4.2%	260.3	12.5	4.6%	259.2	13.6	5.0%	258.2	14.6	5.4%	257.1	15.7	5.7%
ME 6	32 49 25	2002	Below Normal	November	Used in Summary Table Analysis	12,108.8	12,100.7	8.1	0.1%	12,099.5	9.3	0.1%	12,098.4	10.4	0.1%	12,097.2	11.6	0.1%	12,097.2	11.6	0.1%	12,096.1	12.7	0.1%
ME 6	32 49 25	2002	Below Normal	December	--	35,927.1	35,920.1	6.9	0.0%	35,919.0	8.1	0.0%	35,917.8	9.3	0.0%	35,917.8	9.3	0.0%	35,916.7	10.4	0.0%	35,916.7	10.4	0.0%
ME 6	32 49 25	2002	Below Normal	January	--	31,032.4	31,025.5	6.9	0.0%	31,025.5	6.9	0.0%	31,024.3	8.1	0.0%	31,024.3	8.1	0.0%	31,023.1	9.3	0.0%	31,023.1	9.3	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 49 25	2002	Below Normal	February	--	24,770.8	24,765.0	5.8	0.0%	24,763.9	6.9	0.0%	24,763.9	6.9	0.0%	24,762.7	8.1	0.0%	24,762.7	8.1	0.0%	24,761.6	9.3	0.0%
ME 6	32 49 25	2002	Below Normal	March	--	17,851.9	17,847.2	4.6	0.0%	17,846.1	5.8	0.0%	17,846.1	5.8	0.0%	17,844.9	6.9	0.0%	17,844.9	6.9	0.0%	17,843.8	8.1	0.0%
ME 6	32 49 25	2002	Below Normal	April	--	9,953.7	9,944.7	9.0	0.1%	9,943.8	10.0	0.1%	9,942.8	10.9	0.1%	9,941.8	11.9	0.1%	9,940.9	12.8	0.1%	9,939.9	13.8	0.1%
ME 6	32 49 25	2002	Below Normal	May	--	3,330.9	3,320.1	10.8	0.3%	3,319.1	11.8	0.4%	3,317.9	13.0	0.4%	3,316.9	14.0	0.4%	3,315.7	15.2	0.5%	3,314.7	16.2	0.5%
ME 6	32 49 25	2002	Below Normal	June	--	860.4	848.1	12.3	1.4%	846.9	13.5	1.6%	845.6	14.8	1.7%	844.4	16.0	1.9%	843.1	17.2	2.0%	841.9	18.5	2.1%
ME 6	32 49 25	2002	Below Normal	July	--	369.2	356.6	12.6	3.4%	355.4	13.9	3.8%	354.1	15.1	4.1%	352.8	16.4	4.4%	351.6	17.7	4.8%	350.3	18.9	5.1%
ME 6	32 49 25	2002	Below Normal	August	--	234.9	223.0	11.9	5.1%	221.8	13.1	5.6%	220.6	14.3	6.1%	219.4	15.5	6.6%	218.2	16.7	7.1%	217.0	17.9	7.6%
ME 6	32 49 25	2002	Below Normal	September	Used in Summary Table Analysis	171.4	160.0	11.3	6.6%	158.9	12.5	7.3%	157.8	13.6	7.9%	156.6	14.8	8.6%	155.5	15.9	9.3%	154.3	17.0	9.9%
ME 6	32 49 25	2003	Wet	October	Used in Summary Table Analysis	136.2	126.8	9.3	6.9%	125.9	10.3	7.5%	124.9	11.2	8.2%	124.0	12.2	8.9%	123.1	13.1	9.6%	122.1	14.0	10.3%
ME 6	32 49 25	2003	Wet	November	Used in Summary Table Analysis	905.5	897.9	7.6	0.8%	897.2	8.3	0.9%	896.4	9.1	1.0%	895.6	9.9	1.1%	894.8	10.6	1.2%	894.1	11.4	1.3%
ME 6	32 49 25	2003	Wet	December	--	57,392.4	57,385.4	6.9	0.0%	57,385.4	6.9	0.0%	57,384.3	8.1	0.0%	57,384.3	8.1	0.0%	57,383.1	9.3	0.0%	57,381.9	10.4	0.0%
ME 6	32 49 25	2003	Wet	January	--	31,648.1	31,642.4	5.8	0.0%	31,642.4	5.8	0.0%	31,641.2	6.9	0.0%	31,641.2	6.9	0.0%	31,640.0	8.1	0.0%	31,640.0	8.1	0.0%
ME 6	32 49 25	2003	Wet	February	--	20,416.7	20,410.9	5.8	0.0%	20,410.9	5.8	0.0%	20,409.7	6.9	0.0%	20,409.7	6.9	0.0%	20,408.6	8.1	0.0%	20,408.6	8.1	0.0%
ME 6	32 49 25	2003	Wet	March	--	24,130.8	24,126.2	4.6	0.0%	24,125.0	5.8	0.0%	24,125.0	5.8	0.0%	24,123.8	6.9	0.0%	24,123.8	6.9	0.0%	24,123.8	6.9	0.0%
ME 6	32 49 25	2003	Wet	April	--	43,151.6	43,147.0	4.6	0.0%	43,145.8	5.8	0.0%	43,145.8	5.8	0.0%	43,144.7	6.9	0.0%	43,144.7	6.9	0.0%	43,144.7	6.9	0.0%
ME 6	32 49 25	2003	Wet	May	--	12,256.9	12,247.7	9.3	0.1%	12,246.5	10.4	0.1%	12,245.4	11.6	0.1%	12,244.2	12.7	0.1%	12,243.1	13.9	0.1%	12,243.1	13.9	0.1%
ME 6	32 49 25	2003	Wet	June	--	3,175.3	3,163.4	11.9	0.4%	3,162.3	13.1	0.4%	3,161.1	14.2	0.4%	3,160.0	15.4	0.5%	3,158.8	16.6	0.5%	3,157.6	17.7	0.6%
ME 6	32 49 25	2003	Wet	July	--	1,484.0	1,471.5	12.5	0.8%	1,470.3	13.8	0.9%	1,469.0	15.0	1.0%	1,467.7	16.3	1.1%	1,466.6	17.5	1.2%	1,465.3	18.8	1.3%
ME 6	32 49 25	2003	Wet	August	--	769.5	757.3	12.1	1.6%	756.1	13.3	1.7%	754.9	14.5	1.9%	753.7	15.8	2.1%	752.5	17.0	2.2%	751.2	18.2	2.4%
ME 6	32 49 25	2003	Wet	September	Used in Summary Table Analysis	466.6	456.1	10.5	2.2%	455.1	11.5	2.5%	454.0	12.6	2.7%	453.0	13.6	2.9%	451.9	14.7	3.1%	450.8	15.7	3.4%
ME 6	32 49 25	2004	Wet	October	Used in Summary Table Analysis	333.3	324.6	8.7	2.6%	323.7	9.6	2.9%	322.8	10.5	3.1%	321.9	11.3	3.4%	321.1	12.2	3.7%	320.2	13.1	3.9%
ME 6	32 49 25	2004	Wet	November	Used in Summary Table Analysis	5,871.2	5,864.1	7.1	0.1%	5,863.4	7.8	0.1%	5,862.6	8.6	0.1%	5,861.9	9.3	0.2%	5,861.2	10.0	0.2%	5,860.5	10.6	0.2%
ME 6	32 49 25	2004	Wet	December	--	36,610.0	36,604.2	5.8	0.0%	36,603.0	6.9	0.0%	36,601.9	8.1	0.0%	36,601.9	8.1	0.0%	36,600.7	9.3	0.0%	36,600.7	9.3	0.0%
ME 6	32 49 25	2004	Wet	January	--	31,677.1	31,671.3	5.8	0.0%	31,671.3	5.8	0.0%	31,670.1	6.9	0.0%	31,670.1	6.9	0.0%	31,669.0	8.1	0.0%	31,669.0	8.1	0.0%
ME 6	32 49 25	2004	Wet	February	--	38,431.7	38,427.1	4.6	0.0%	38,425.9	5.8	0.0%	38,425.9	5.8	0.0%	38,424.8	6.9	0.0%	38,424.8	6.9	0.0%	38,424.8	6.9	0.0%
ME 6	32 49 25	2004	Wet	March	--	16,559.0	16,554.4	4.6	0.0%	16,554.4	4.6	0.0%	16,553.2	5.8	0.0%	16,553.2	5.8	0.0%	16,552.1	6.9	0.0%	16,552.1	6.9	0.0%
ME 6	32 49 25	2004	Wet	April	--	9,477.0	9,472.8	4.2	0.0%	9,472.3	4.6	0.0%	9,471.9	5.1	0.1%	9,471.4	5.6	0.1%	9,470.9	6.0	0.1%	9,470.6	6.4	0.1%
ME 6	32 49 25	2004	Wet	May	--	3,441.8	3,432.9	8.9	0.3%	3,432.1	9.7	0.3%	3,431.1	10.6	0.3%	3,430.2	11.6	0.3%	3,429.3	12.5	0.4%	3,428.5	13.3	0.4%
ME 6	32 49 25	2004	Wet	June	--	698.1	686.8	11.3	1.6%	685.7	12.4	1.8%	684.6	13.5	1.9%	683.4	14.7	2.1%	682.3	15.8	2.3%	681.2	16.9	2.4%
ME 6	32 49 25	2004	Wet	July	--	364.2	352.0	12.2	3.4%	350.8	13.4	3.7%	349.5	14.7	4.0%	348.3	15.9	4.4%	347.1	17.1	4.7%	345.9	18.3	5.0%
ME 6	32 49 25	2004	Wet	August	--	232.8	221.2	11.6	5.0%	220.0	12.8	5.5%	218.9	13.9	6.0%	217.7	15.1	6.5%	216.6	16.3	7.0%	215.4	17.4	7.5%
ME 6	32 49 25	2004	Wet	September	Used in Summary Table Analysis	169.3	158.3	11.1	6.5%	157.2	12.2	7.2%	156.1	13.3	7.8%	155.0	14.4	8.5%	153.8	15.5	9.2%	152.7	16.6	9.8%
ME 6	32 49 25	2005	Above Normal	October	Used in Summary Table Analysis	7,770.6	7,761.7	8.9	0.1%	7,760.9	9.7	0.1%	7,760.0	10.6	0.1%	7,759.0	11.6	0.1%	7,758.1	12.5	0.2%	7,757.3	13.3	0.2%
ME 6	32 49 25	2005	Above Normal	November	Used in Summary Table Analysis	2,270.5	2,263.5	6.9	0.3%	2,262.8	7.6	0.3%	2,262.2	8.3	0.4%	2,261.5	9.0	0.4%	2,260.8	9.7	0.4%	2,260.1	10.4	0.5%
ME 6	32 49 25	2005	Above Normal	December	--	21,277.8	21,272.0	5.8	0.0%	21,272.0	5.8	0.0%	21,270.8	6.9	0.0%	21,270.8	6.9	0.0%	21,269.7	8.1	0.0%	21,268.5	9.3	0.0%
ME 6	32 49 25	2005	Above Normal	January	--	22,582.2	22,576.4	5.8	0.0%	22,576.4	5.8	0.0%	22,575.2	6.9	0.0%	22,575.2	6.9	0.0%	22,574.1	8.1	0.0%	22,574.1	8.1	0.0%
ME 6	32 49 25	2005	Above Normal	February	--	14,047.5	14,042.8	4.6	0.0%	14,041.7	5.8	0.0%	14,041.7	5.8	0.0%	14,041.7	5.8	0.0%	14,040.5	6.9	0.0%	14,040.5	6.9	0.0%
ME 6	32 49 25	2005	Above Normal	March	--	28,717.6	28,713.0	4.6	0.0%	28,713.0	4.6	0.0%	28,713.0	4.6	0.0%	28,711.8	5.8	0.0%	28,711.8	5.8	0.0%	28,710.6	6.9	0.0%
ME 6	32 49 25	2005	Above Normal	April	--	21,544.0	21,540.5	3.5	0.0%	21,539.4	4.6	0.0%	21,539.4	4.6	0.0%	21,538.2	5.8	0.0%	21,538.2	5.8	0.0%	21,538.2	5.8	0.0%
ME 6	32 49 25	2005	Above Normal	May	--	19,688.7	19,679.4	9.3	0.0%	19,678.2	10.4	0.1%	19,677.1	11.6	0.1%	19,677.1	11.6	0.1%	19,675.9	12.7	0.1%	19,674.8	13.9	0.1%
ME 6	32 49 25	2005	Above Normal	June	--	16,011.6	15,997.7	13.9	0.1%	15,996.5	15.0	0.1%	15,995.4	16.2	0.1%	15,994.2	17.4	0.1%	15,993.1	18.5	0.1%	15,990.7	20.8	0.1%
ME 6	32 49 25	2005	Above Normal	July	--	2,867.2	2,854.6	12.6	0.4%	2,853.4	13.9	0.5%	2,852.1	15.2	0.5%	2,850.8	16.4	0.6%	2,849.5	17.7	0.6%	2,848.3	19.0	0.7%
ME 6	32 49 25	2005	Above Normal	August	--	992.4	980.8	11.6	1.2%	979.7	12.7	1.3%	978.5	13.9	1.4%	977.4	15.0	1.5%	976.3	16.1	1.6%	975.1	17.3	1.7%
ME 6	32 49 25	2005	Above Normal	September	Used in Summary Table Analysis	533.8	523.5	10.3	1.9%	522.5	11.3	2.1%	521.5	12.3	2.3%	520.4	13.3	2.5%	519.4	14.4	2.7%	518.4	15.4	2.9%
ME 6	32 49 25	2006	Wet	October	Used in Summary Table Analysis	644.7	636.3	8.4	1.3%	635.5	9.2	1.4%	634.6	10.1	1.6%	633.8	10.9	1.7%	632.9	11.8	1.8%	632.1	12.6	2.0%
ME 6	32 49 25	2006	Wet	November	Used in Summary Table Analysis	9,422.0	9,415.4	6.6	0.1%	9,414.7	7.3	0.1%	9,414.0	8.0	0.1%	9,413.4	8.6	0.1%	9,412.7	9.3	0.1%	9,412.0	10.0	0.1%
ME 6	32 49 25	2006	Wet	December	--	43,876.2	43,870.4	5.8	0.0%	43,869.2	6.9	0.0%	43,869.2	6.9	0.0%	43,868.1	8.1	0.0%	43,868.1	8.1	0.0%	43,866.9	9.3	0.0%
ME 6	32 49 25	2006	Wet	January	--	46,640.0	46,634.3	5.8	0.0%	46,634.3	5.8	0.0%	46,633.1	6.9	0.0%	46,633.1	6.9	0.0%	46,631.9	8.1	0.0%	46,631.9	8.1	0.0%
ME 6	32 49 25	2006	Wet	February	--	26,766.2	26,761.6	4.6	0.0%	26,760.4	5.8	0.0%	26,760.4	5.8	0.0%	26,759.3	6.9	0.0%	26,759.3	6.9	0.0%	26,759.3	6.9	0.0%
ME 6	32 49 25	2006	Wet	March	--	47,429.4	47,424.8	4.6	0.0%	47,424.8	4.6	0.0%	47,423.6	5.8	0.0%	47,423.6	5.8	0.0%	47,422.5	6.9	0.0%	47,422.5	6.9	0.0%
ME 6	32 49 25	2006	Wet	April	--	30,535.9	30,531.3	4.6	0.0%	30,531.3	4.6	0.0%	30,530.1	5.8	0.0%	30,530.1	5.8	0.0%	30,530.1	5.8	0.0%	30,528.9	6.9	0.0%
ME 6	32 49 25	2006	Wet	May	--	14,269.7	14,265.0	4.6	0.0%	14,263.9	5.8	0.0%	14,263.9	5.8	0.0%	14,262.7	6.9	0.0%	14,262.7	6.9	0.0%	14,261.6	8.1	0.1%
ME 6	32 49 25	2006	Wet	June	--	3,555.8	3,544.6	11.2	0.3%	3,543.5	12.3	0.3%	3,542.4	13.4	0.4%	3,541.3	14.5	0.4%	3,540.2	15.6	0.4%	3,539.0	16.8	0.5%
ME 6	32 49 25	2006	Wet	July	--	1,289.9	1,278.0	11.9	0.9%	1,276.7	13.2	1.0%	1,275.6	14.4	1.1%	1,274.4	15.5	1.2%	1,273.1	16.8	1.3%	1,272.0	17.9	1.4%
ME 6	32 49 25	2006	Wet	August	--	676.0	664.2	11.8	1.7%	663.0	13.0	1.9%	661.9	14.1	2.1%	660.6	15.4	2.3%	659.5	16.5	2.4%	658.3	17.7	2.6%
ME 6	32 49 25	2006	Wet	September	Used in Summary Table Analysis	436.1	425.7	10.4	2.4%	424.6	11.4	2.6%	423.6	12.5	2.9%	422.5	13.5	3.1%	421.5	14.6	3.3%	420.5	15.6	3.6%
ME 6	32 49 25	2007	Above Normal	October	Used in Summary Table Analysis	283.0	274.4	8.5	3.0%	273.6	9.4	3.3%	272.7	10.3	3.6%	271.9	11.1	3.9%	271.0	12.0	4.2%	270.2	12.8	4.5%
ME 6	32 49 25	2007	Above Normal	November	Used in Summary Table Analysis	8,769.0	8,762.0	6.9	0.1%	8,761.3	7.6	0.1%	8,760.6	8.3	0.1%	8,760.0	9.0	0.1%	8,759.3	9.7	0.1%	8,758.6	10.4	0.1%
ME 6	32 49 25	2007	Above Normal	December	--	20,616.9	20,611.1	5.8	0.0%	20,610.0	6.9	0.0%	20,610.0	6.9	0.0%	20,608.8	8.1	0.0%	20,608.8	8.1	0.0%	20,607.6	9.3	0.0%
ME 6	32 49 25	2007	Above Normal	January	--	10,306.9	10,301.6	5.3	0.1%	10,301.0	5.9	0.1%	10,300.6	6.4	0.1%	10,300.0	6.9	0.1%	10,299.4	7.5	0.1%	10,299.0	8.0	0.1%
ME 6	32 49 25	2007	Above Normal	February	--	30,803.2	30,798.6	4.6	0.0%	30,798.6	4.6	0.0%	30,797.5	5.8	0.0%	30,797.5	5.8	0.0%	30,796.3	6.9	0.0%	30,796.3	6.9	0.0%
ME 6	32 49 25	2007	Above Normal	March	--	13,142.4	13,137.7	4.6	0.0%	13,137.7	4.6	0.0%	13,136.6	5.8	0.0%	13,136.6	5.8	0.0%	13,135.4	6.9	0.1%	13,135.4	6.9	0.1%
ME 6	32 49 25	2007	Above Normal	April	--	11,573.3	11,564.5	8.8	0.1%	11,563.7	9.6	0.1%	11,562.7	10.5	0.1%	11,561.8	11.5	0.1%	11,561.0	12.3	0.1%	11,560.1	13.2	0.1%
ME 6	32 49 25	2007	Above Normal	May	--	4,158.0	4,147.7	10.3	0.2%	4,146.6	11.3	0.3%	4,145.6	12.4	0.3%	4,144.6	13.4	0.3%	4,143.5	14.5	0.3%	4,142.5	15.5	0.4%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 49 25	2007	Above Normal	June	--	1,511.9	1,499.3	12.6	0.8%	1,498.0	13.9	0.9%	1,496.9	15.0	1.0%	1,495.6	16.3	1.1%	1,494.3	17.6	1.2%	1,493.1	18.9	1.2%
ME 6	32 49 25	2007	Above Normal	July	--	502.8	490.0	12.8	2.5%	488.7	14.1	2.8%	487.4	15.4	3.1%	486.2	16.7	3.3%	484.9	17.9	3.6%	483.6	19.2	3.8%
ME 6	32 49 25	2007	Above Normal	August	--	231.0	219.4	11.7	5.0%	218.2	12.8	5.6%	217.0	14.0	6.1%	215.9	15.1	6.6%	214.7	16.3	7.1%	213.6	17.5	7.6%
ME 6	32 49 25	2007	Above Normal	September	Used in Summary Table Analysis	158.6	147.6	11.1	7.0%	146.4	12.2	7.7%	145.3	13.3	8.4%	144.2	14.4	9.1%	143.1	15.5	9.8%	142.0	16.6	10.5%
ME 6	32 49 25	2008	Dry	October	Used in Summary Table Analysis	3,472.0	3,463.0	9.0	0.3%	3,462.0	10.0	0.3%	3,461.1	10.9	0.3%	3,460.2	11.8	0.3%	3,459.3	12.7	0.4%	3,458.3	13.7	0.4%
ME 6	32 49 25	2008	Dry	November	Used in Summary Table Analysis	3,311.5	3,304.4	7.1	0.2%	3,303.7	7.8	0.2%	3,303.0	8.4	0.3%	3,302.3	9.1	0.3%	3,301.6	9.8	0.3%	3,300.9	10.5	0.3%
ME 6	32 49 25	2008	Dry	December	--	23,395.8	23,388.9	6.9	0.0%	23,388.9	6.9	0.0%	23,387.7	8.1	0.0%	23,387.7	8.1	0.0%	23,386.6	9.3	0.0%	23,386.6	9.3	0.0%
ME 6	32 49 25	2008	Dry	January	--	37,788.2	37,782.4	5.8	0.0%	37,782.4	5.8	0.0%	37,781.3	6.9	0.0%	37,781.3	6.9	0.0%	37,780.1	8.1	0.0%	37,780.1	8.1	0.0%
ME 6	32 49 25	2008	Dry	February	--	26,334.5	26,328.7	5.8	0.0%	26,328.7	5.8	0.0%	26,327.5	6.9	0.0%	26,327.5	6.9	0.0%	26,327.5	6.9	0.0%	26,326.4	8.1	0.0%
ME 6	32 49 25	2008	Dry	March	--	11,824.1	11,820.6	3.5	0.0%	11,819.4	4.6	0.0%	11,819.4	4.6	0.0%	11,818.3	5.8	0.0%	11,818.3	5.8	0.0%	11,818.3	5.8	0.0%
ME 6	32 49 25	2008	Dry	April	--	9,041.3	9,032.4	8.9	0.1%	9,031.5	9.8	0.1%	9,030.7	10.6	0.1%	9,029.7	11.6	0.1%	9,028.8	12.5	0.1%	9,028.0	13.3	0.1%
ME 6	32 49 25	2008	Dry	May	--	1,359.6	1,350.1	9.5	0.7%	1,349.1	10.5	0.8%	1,348.1	11.5	0.8%	1,347.2	12.4	0.9%	1,346.3	13.3	1.0%	1,345.3	14.4	1.1%
ME 6	32 49 25	2008	Dry	June	--	445.0	431.2	13.8	3.1%	429.8	15.2	3.4%	428.4	16.6	3.7%	427.1	17.9	4.0%	425.7	19.3	4.3%	424.3	20.7	4.6%
ME 6	32 49 25	2008	Dry	July	--	262.7	249.0	13.8	5.2%	247.6	15.1	5.8%	246.2	16.5	6.3%	244.8	17.9	6.8%	243.5	19.3	7.3%	242.1	20.6	7.9%
ME 6	32 49 25	2008	Dry	August	--	186.4	173.0	13.5	7.2%	171.6	14.8	7.9%	170.3	16.2	8.7%	168.9	17.5	9.4%	167.6	18.8	10.1%	166.3	20.2	10.8%
ME 6	32 49 25	2008	Dry	September	Used in Summary Table Analysis	148.0	135.0	13.0	8.8%	133.6	14.3	9.7%	132.3	15.6	10.6%	131.0	16.9	11.4%	129.7	18.2	12.3%	128.4	19.5	13.2%
ME 6	32 49 25	2009	Critical	October	Used in Summary Table Analysis	933.6	923.3	10.4	1.1%	922.2	11.4	1.2%	921.2	12.5	1.3%	920.1	13.5	1.4%	919.1	14.6	1.6%	918.0	15.6	1.7%
ME 6	32 49 25	2009	Critical	November	Used in Summary Table Analysis	5,578.9	5,570.8	8.1	0.1%	5,570.0	8.9	0.2%	5,569.2	9.7	0.2%	5,568.4	10.5	0.2%	5,567.6	11.3	0.2%	5,566.7	12.3	0.2%
ME 6	32 49 25	2009	Critical	December	--	12,305.6	12,298.6	6.9	0.1%	12,297.5	8.1	0.1%	12,297.5	8.1	0.1%	12,296.3	9.3	0.1%	12,295.1	10.4	0.1%	12,295.1	10.4	0.1%
ME 6	32 49 25	2009	Critical	January	--	8,837.6	8,831.4	6.3	0.1%	8,830.8	6.8	0.1%	8,830.1	7.5	0.1%	8,829.5	8.1	0.1%	8,828.9	8.7	0.1%	8,828.2	9.4	0.1%
ME 6	32 49 25	2009	Critical	February	--	22,732.6	22,726.9	5.8	0.0%	22,726.9	5.8	0.0%	22,725.7	6.9	0.0%	22,725.7	6.9	0.0%	22,724.5	8.1	0.0%	22,724.5	8.1	0.0%
ME 6	32 49 25	2009	Critical	March	--	21,209.5	21,204.9	4.6	0.0%	21,204.9	4.6	0.0%	21,203.7	5.8	0.0%	21,203.7	5.8	0.0%	21,202.5	6.9	0.0%	21,202.5	6.9	0.0%
ME 6	32 49 25	2009	Critical	April	--	10,108.7	10,099.3	9.4	0.1%	10,098.4	10.3	0.1%	10,097.5	11.2	0.1%	10,096.6	12.0	0.1%	10,095.7	13.0	0.1%	10,094.8	13.9	0.1%
ME 6	32 49 25	2009	Critical	May	--	15,629.6	15,619.2	10.4	0.1%	15,618.1	11.6	0.1%	15,616.9	12.7	0.1%	15,615.7	13.9	0.1%	15,614.6	15.0	0.1%	15,613.4	16.2	0.1%
ME 6	32 49 25	2009	Critical	June	--	3,168.4	3,153.8	14.6	0.5%	3,152.4	16.0	0.5%	3,150.9	17.5	0.6%	3,149.4	19.0	0.6%	3,148.0	20.4	0.6%	3,146.5	21.9	0.7%
ME 6	32 49 25	2009	Critical	July	--	1,270.6	1,256.6	14.0	1.1%	1,255.2	15.4	1.2%	1,253.8	16.8	1.3%	1,252.4	18.2	1.4%	1,251.0	19.6	1.5%	1,249.7	20.9	1.6%
ME 6	32 49 25	2009	Critical	August	--	676.9	663.3	13.6	2.0%	662.0	14.9	2.2%	660.6	16.3	2.4%	659.2	17.7	2.6%	657.9	19.0	2.8%	656.6	20.3	3.0%
ME 6	32 49 25	2009	Critical	September	Used in Summary Table Analysis	397.5	385.2	12.2	3.1%	384.0	13.5	3.4%	382.8	14.7	3.7%	381.5	15.9	4.0%	380.3	17.1	4.3%	379.1	18.3	4.6%
ME 6	32 49 25	2010	Below Normal	October	Used in Summary Table Analysis	6,100.1	6,089.6	10.5	0.2%	6,088.5	11.6	0.2%	6,087.5	12.6	0.2%	6,086.3	13.8	0.2%	6,085.4	14.7	0.2%	6,084.3	15.9	0.3%
ME 6	32 49 25	2010	Below Normal	November	Used in Summary Table Analysis	8,337.2	8,328.7	8.4	0.1%	8,327.9	9.3	0.1%	8,327.1	10.1	0.1%	8,326.2	11.0	0.1%	8,325.3	11.8	0.1%	8,324.5	12.6	0.2%
ME 6	32 49 25	2010	Below Normal	December	--	12,449.1	12,442.1	6.9	0.1%	12,441.0	8.1	0.1%	12,439.8	9.3	0.1%	12,439.8	9.3	0.1%	12,438.7	10.4	0.1%	12,437.5	11.6	0.1%
ME 6	32 49 25	2010	Below Normal	January	--	36,547.5	36,540.5	6.9	0.0%	36,540.5	6.9	0.0%	36,539.4	8.1	0.0%	36,539.4	8.1	0.0%	36,538.2	9.3	0.0%	36,538.2	9.3	0.0%
ME 6	32 49 25	2010	Below Normal	February	--	27,334.5	27,328.7	5.8	0.0%	27,328.7	5.8	0.0%	27,327.5	6.9	0.0%	27,327.5	6.9	0.0%	27,326.4	8.1	0.0%	27,326.4	8.1	0.0%
ME 6	32 49 25	2010	Below Normal	March	--	28,915.5	28,909.7	5.8	0.0%	28,909.7	5.8	0.0%	28,908.6	6.9	0.0%	28,908.6	6.9	0.0%	28,907.4	8.1	0.0%	28,907.4	8.1	0.0%
ME 6	32 49 25	2010	Below Normal	April	--	40,157.4	40,152.8	4.6	0.0%	40,152.8	4.6	0.0%	40,151.6	5.8	0.0%	40,151.6	5.8	0.0%	40,150.5	6.9	0.0%	40,150.5	6.9	0.0%
ME 6	32 49 25	2010	Below Normal	May	--	20,380.8	20,371.5	9.3	0.0%	20,370.4	10.4	0.1%	20,369.2	11.6	0.1%	20,368.1	12.7	0.1%	20,368.1	12.7	0.1%	20,366.9	13.9	0.1%
ME 6	32 49 25	2010	Below Normal	June	--	9,439.6	9,425.6	14.0	0.1%	9,424.2	15.4	0.2%	9,422.8	16.8	0.2%	9,421.4	18.2	0.2%	9,420.0	19.6	0.2%	9,418.6	20.9	0.2%
ME 6	32 49 25	2010	Below Normal	July	--	1,462.0	1,449.2	12.8	0.9%	1,447.9	14.1	1.0%	1,446.6	15.4	1.1%	1,445.4	16.7	1.1%	1,444.1	17.9	1.2%	1,442.8	19.2	1.3%
ME 6	32 49 25	2010	Below Normal	August	--	578.6	566.7	11.9	2.1%	565.5	13.1	2.3%	564.3	14.3	2.5%	563.1	15.5	2.7%	562.0	16.6	2.9%	560.8	17.8	3.1%
ME 6	32 49 25	2010	Below Normal	September	Used in Summary Table Analysis	661.1	649.8	11.3	1.7%	648.6	12.4	1.9%	647.5	13.6	2.1%	646.4	14.7	2.2%	645.2	15.9	2.4%	644.1	17.0	2.6%
ME 6	32 49 25	2011	Wet	October	Used in Summary Table Analysis	9,705.3	9,696.6	8.7	0.1%	9,695.8	9.5	0.1%	9,694.9	10.4	0.1%	9,694.1	11.2	0.1%	9,693.2	12.2	0.1%	9,692.4	13.0	0.1%
ME 6	32 49 25	2011	Wet	November	Used in Summary Table Analysis	14,300.9	14,294.0	6.9	0.0%	14,294.0	6.9	0.0%	14,292.8	8.1	0.1%	14,292.8	8.1	0.1%	14,291.7	9.3	0.1%	14,290.5	10.4	0.1%
ME 6	32 49 25	2011	Wet	December	--	34,028.9	34,023.1	5.8	0.0%	34,022.0	6.9	0.0%	34,022.0	6.9	0.0%	34,020.8	8.1	0.0%	34,020.8	8.1	0.0%	34,019.7	9.3	0.0%
ME 6	32 49 25	2011	Wet	January	--	14,218.8	14,214.1	4.6	0.0%	14,213.0	5.8	0.0%	14,213.0	5.8	0.0%	14,211.8	6.9	0.0%	14,211.8	6.9	0.0%	14,210.6	8.1	0.1%
ME 6	32 49 25	2011	Wet	February	--	20,829.9	20,825.2	4.6	0.0%	20,824.1	5.8	0.0%	20,824.1	5.8	0.0%	20,822.9	6.9	0.0%	20,822.9	6.9	0.0%	20,822.9	6.9	0.0%
ME 6	32 49 25	2011	Wet	March	--	52,222.2	52,217.6	4.6	0.0%	52,217.6	4.6	0.0%	52,216.4	5.8	0.0%	52,216.4	5.8	0.0%	52,215.3	6.9	0.0%	52,215.3	6.9	0.0%
ME 6	32 49 25	2011	Wet	April	--	24,875.0	24,870.4	4.6	0.0%	24,870.4	4.6	0.0%	24,869.2	5.8	0.0%	24,869.2	5.8	0.0%	24,869.2	5.8	0.0%	24,868.1	6.9	0.0%
ME 6	32 49 25	2011	Wet	May	--	11,419.6	11,410.6	8.9	0.1%	11,409.7	9.8	0.1%	11,408.9	10.6	0.1%	11,408.0	11.6	0.1%	11,407.1	12.5	0.1%	11,406.1	13.4	0.1%
ME 6	32 49 25	2011	Wet	June	--	7,093.4	7,079.9	13.5	0.2%	7,078.5	14.9	0.2%	7,077.1	16.3	0.2%	7,075.7	17.7	0.2%	7,074.4	19.0	0.3%	7,073.0	20.4	0.3%
ME 6	32 49 25	2011	Wet	July	--	1,834.0	1,820.5	13.5	0.7%	1,819.1	14.9	0.8%	1,817.8	16.2	0.9%	1,816.4	17.6	1.0%	1,815.0	19.0	1.0%	1,813.7	20.4	1.1%
ME 6	32 49 25	2011	Wet	August	--	785.2	773.5	11.7	1.5%	772.3	12.9	1.6%	771.1	14.1	1.8%	770.0	15.2	1.9%	768.8	16.4	2.1%	767.6	17.6	2.2%
ME 6	32 49 25	2011	Wet	September	Used in Summary Table Analysis	441.8	431.1	10.7	2.4%	430.0	11.8	2.7%	428.9	12.8	2.9%	427.8	13.9	3.1%	426.8	15.0	3.4%	425.7	16.1	3.6%
ME 6	32 49 25	2012	Below Normal	October	Used in Summary Table Analysis	4,579.5	4,570.7	8.8	0.2%	4,569.8	9.7	0.2%	4,568.9	10.6	0.2%	4,568.1	11.5	0.3%	4,567.1	12.4	0.3%	4,566.2	13.3	0.3%
ME 6	32 49 25	2012	Below Normal	November	Used in Summary Table Analysis	8,313.4	8,306.4	7.1	0.1%	8,305.7	7.8	0.1%	8,305.0	8.4	0.1%	8,304.3	9.1	0.1%	8,303.6	9.8	0.1%	8,302.9	10.5	0.1%
ME 6	32 49 25	2012	Below Normal	December	--	5,217.5	5,211.6	5.9	0.1%	5,211.0	6.5	0.1%	5,210.3	7.2	0.1%	5,209.7	7.8	0.1%	5,209.1	8.3	0.2%	5,208.6	8.9	0.2%
ME 6	32 49 25	2012	Below Normal	January	--	20,329.9	20,324.1	5.8	0.0%	20,324.1	5.8	0.0%	20,322.9	6.9	0.0%	20,322.9	6.9	0.0%	20,321.8	8.1	0.0%	20,321.8	8.1	0.0%
ME 6	32 49 25	2012	Below Normal	February	--	18,275.5	18,270.8	4.6	0.0%	18,269.7	5.8	0.0%	18,269.7	5.8	0.0%	18,268.5	6.9	0.0%	18,268.5	6.9	0.0%	18,267.4	8.1	0.0%
ME 6	32 49 25	2012	Below Normal	March	--	45,677.1	45,671.3	5.8	0.0%	45,671.3	5.8	0.0%	45,671.3	5.8	0.0%	45,670.1	6.9	0.0%	45,670.1	6.9	0.0%	45,669.0	8.1	0.0%
ME 6	32 49 25	2012	Below Normal	April	--	26,951.4	26,946.8	4.6	0.0%	26,946.8	4.6	0.0%	26,945.6	5.8	0.0%	26,945.6	5.8	0.0%	26,945.6	5.8	0.0%	26,944.4	6.9	0.0%
ME 6	32 49 25	2012	Below Normal	May	--	7,506.0	7,497.1	8.9	0.1%	7,496.2	9.8	0.1%	7,495.3	10.8	0.1%	7,494.3	11.7	0.2%	7,493.5	12.5	0.2%	7,492.7	13.3	0.2%
ME 6	32 49 25	2012	Below Normal	June	--	5,552.2	5,538.4	13.8	0.2%	5,537.0	15.2	0.3%	5,535.6	16.6	0.3%	5,534.3	17.9	0.3%	5,532.9	19.3	0.3%	5,531.6	20.6	0.4%
ME 6	32 49 25	2012	Below Normal	July	--	2,247.1	2,234.0	13.1	0.6%	2,232.6	14.5	0.6%	2,231.4	15.7	0.7%	2,230.1	17.0	0.8%	2,228.7	18.4	0.8%	2,227.4	19.7	0.9%
ME 6	32 49 25	2012	Below Normal	August	--	395.0	384.2	10.8	2.7%	383.1	11.9	3.0%	382.1	12.9	3.3%	381.0	14.0	3.5%	380.0	15.0	3.8%	378.9	16.1	4.1%
ME 6	32 49 25	2012	Below Normal	September	Used in Summary Table Analysis	257.1	247.5	9.6	3.7%	246.5	10.6	4.1%	245.5	11.6	4.5%	244.5	12.5	4.9%	243.6	13.5	5.2%	242.6	14.5	5.6%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 49 25	2013	Below Normal	October	Used in Summary Table Analysis	1,937.5	1,929.1	8.4	0.4%	1,928.2	9.3	0.5%	1,927.3	10.2	0.5%	1,926.5	11.0	0.6%	1,925.7	11.8	0.6%	1,924.8	12.7	0.7%
ME 6	32 49 25	2013	Below Normal	November	Used in Summary Table Analysis	14,822.9	14,816.0	6.9	0.0%	14,816.0	6.9	0.0%	14,814.8	8.1	0.1%	14,813.7	9.3	0.1%	14,813.7	9.3	0.1%	14,812.5	10.4	0.1%
ME 6	32 49 25	2013	Below Normal	December	--	60,296.3	60,289.4	6.9	0.0%	60,289.4	6.9	0.0%	60,288.2	8.1	0.0%	60,288.2	8.1	0.0%	60,287.0	9.3	0.0%	60,287.0	9.3	0.0%
ME 6	32 49 25	2013	Below Normal	January	--	22,290.5	22,284.7	5.8	0.0%	22,284.7	5.8	0.0%	22,284.7	5.8	0.0%	22,283.6	6.9	0.0%	22,283.6	6.9	0.0%	22,282.4	8.1	0.0%
ME 6	32 49 25	2013	Below Normal	February	--	8,888.4	8,883.7	4.7	0.1%	8,883.1	5.3	0.1%	8,882.6	5.8	0.1%	8,882.2	6.3	0.1%	8,881.7	6.7	0.1%	8,881.3	7.2	0.1%
ME 6	32 49 25	2013	Below Normal	March	--	10,395.0	10,390.4	4.6	0.0%	10,389.9	5.1	0.0%	10,389.5	5.6	0.1%	10,389.0	6.0	0.1%	10,388.5	6.5	0.1%	10,388.1	6.9	0.1%
ME 6	32 49 25	2013	Below Normal	April	--	8,311.8	8,303.1	8.7	0.1%	8,302.3	9.5	0.1%	8,301.5	10.3	0.1%	8,300.6	11.2	0.1%	8,299.8	12.0	0.1%	8,298.8	13.0	0.2%
ME 6	32 49 25	2013	Below Normal	May	--	4,457.3	4,447.0	10.3	0.2%	4,445.9	11.3	0.3%	4,444.9	12.4	0.3%	4,443.9	13.4	0.3%	4,442.8	14.5	0.3%	4,441.8	15.5	0.3%
ME 6	32 49 25	2013	Below Normal	June	--	2,120.5	2,108.0	12.5	0.6%	2,106.7	13.8	0.6%	2,105.4	15.0	0.7%	2,104.2	16.3	0.8%	2,103.0	17.5	0.8%	2,101.7	18.8	0.9%
ME 6	32 49 25	2013	Below Normal	July	--	723.8	711.4	12.3	1.7%	710.2	13.5	1.9%	709.0	14.8	2.0%	707.7	16.0	2.2%	706.5	17.2	2.4%	705.3	18.5	2.6%
ME 6	32 49 25	2013	Below Normal	August	--	347.4	335.8	11.6	3.3%	334.6	12.7	3.7%	333.5	13.9	4.0%	332.3	15.1	4.3%	331.2	16.2	4.7%	330.0	17.4	5.0%
ME 6	32 49 25	2013	Below Normal	September	Used in Summary Table Analysis	4,825.1	4,813.1	12.0	0.2%	4,811.8	13.3	0.3%	4,810.6	14.5	0.3%	4,809.5	15.6	0.3%	4,808.2	16.9	0.4%	4,807.1	18.1	0.4%
ME 6	32 49 25	2014	Critical	October	Used in Summary Table Analysis	283.9	275.0	8.9	3.1%	274.1	9.8	3.4%	273.2	10.6	3.7%	272.3	11.5	4.1%	271.4	12.4	4.4%	270.6	13.3	4.7%
ME 6	32 49 25	2014	Critical	November	Used in Summary Table Analysis	1,559.6	1,552.5	7.1	0.5%	1,551.9	7.8	0.5%	1,551.0	8.6	0.5%	1,550.3	9.3	0.6%	1,549.7	10.0	0.6%	1,549.0	10.6	0.7%
ME 6	32 49 25	2014	Critical	December	--	1,603.2	1,597.1	6.1	0.4%	1,596.4	6.8	0.4%	1,595.8	7.4	0.5%	1,595.1	8.1	0.5%	1,594.6	8.7	0.5%	1,594.0	9.3	0.6%
ME 6	32 49 25	2014	Critical	January	--	2,843.8	2,838.2	5.6	0.2%	2,837.6	6.1	0.2%	2,837.0	6.7	0.2%	2,836.6	7.2	0.3%	2,836.0	7.8	0.3%	2,835.4	8.3	0.3%
ME 6	32 49 25	2014	Critical	February	--	15,814.8	15,810.2	4.6	0.0%	15,810.2	4.6	0.0%	15,809.0	5.8	0.0%	15,809.0	5.8	0.0%	15,807.9	6.9	0.0%	15,807.9	6.9	0.0%
ME 6	32 49 25	2014	Critical	March	--	31,566.0	31,561.3	4.6	0.0%	31,560.2	5.8	0.0%	31,560.2	5.8	0.0%	31,560.2	5.8	0.0%	31,559.0	6.9	0.0%	31,559.0	6.9	0.0%
ME 6	32 49 25	2014	Critical	April	--	13,018.5	13,009.3	9.3	0.1%	13,008.1	10.4	0.1%	13,006.9	11.6	0.1%	13,005.8	12.7	0.1%	13,004.6	13.9	0.1%	13,004.6	13.9	0.1%
ME 6	32 49 25	2014	Critical	May	--	5,206.3	5,195.4	10.9	0.2%	5,194.2	12.0	0.2%	5,193.1	13.2	0.3%	5,192.0	14.2	0.3%	5,190.9	15.4	0.3%	5,189.8	16.4	0.3%
ME 6	32 49 25	2014	Critical	June	--	1,206.5	1,191.4	15.0	1.2%	1,189.9	16.6	1.4%	1,188.4	18.1	1.5%	1,186.8	19.7	1.6%	1,185.4	21.1	1.7%	1,183.9	22.6	1.9%
ME 6	32 49 25	2014	Critical	July	--	552.0	538.0	14.1	2.6%	536.6	15.5	2.8%	535.2	16.9	3.1%	533.8	18.3	3.3%	532.4	19.7	3.6%	531.0	21.1	3.8%
ME 6	32 49 25	2014	Critical	August	--	355.3	341.9	13.5	3.8%	340.5	14.8	4.2%	339.2	16.2	4.6%	337.8	17.5	4.9%	336.5	18.9	5.3%	335.1	20.2	5.7%
ME 6	32 49 25	2014	Critical	September	Used in Summary Table Analysis	2,593.2	2,579.9	13.3	0.5%	2,578.6	14.6	0.6%	2,577.2	16.0	0.6%	2,575.9	17.2	0.7%	2,574.5	18.6	0.7%	2,573.3	19.9	0.8%
ME 6	32 49 25	2015	Dry	October	Used in Summary Table Analysis	11,431.7	11,421.4	10.3	0.1%	11,420.4	11.3	0.1%	11,419.3	12.4	0.1%	11,417.7	14.0	0.1%	11,416.7	15.0	0.1%	11,415.6	16.1	0.1%
ME 6	32 49 25	2015	Dry	November	Used in Summary Table Analysis	9,111.8	9,103.9	7.9	0.1%	9,103.1	8.7	0.1%	9,102.3	9.5	0.1%	9,101.5	10.3	0.1%	9,100.7	11.1	0.1%	9,099.9	11.9	0.1%
ME 6	32 49 25	2015	Dry	December	--	32,887.7	32,881.9	5.8	0.0%	32,880.8	6.9	0.0%	32,879.6	8.1	0.0%	32,879.6	8.1	0.0%	32,878.5	9.3	0.0%	32,878.5	9.3	0.0%
ME 6	32 49 25	2015	Dry	January	--	14,619.2	14,613.4	5.8	0.0%	14,613.4	5.8	0.0%	14,612.3	6.9	0.0%	14,611.1	8.1	0.1%	14,611.1	8.1	0.1%	14,610.0	9.3	0.1%
ME 6	32 49 25	2015	Dry	February	--	27,341.4	27,335.6	5.8	0.0%	27,335.6	5.8	0.0%	27,334.5	6.9	0.0%	27,334.5	6.9	0.0%	27,334.5	6.9	0.0%	27,333.3	8.1	0.0%
ME 6	32 49 25	2015	Dry	March	--	11,597.2	11,592.6	4.6	0.0%	11,591.4	5.8	0.0%	11,591.4	5.8	0.0%	11,590.3	6.9	0.1%	11,590.3	6.9	0.1%	11,590.3	6.9	0.1%
ME 6	32 49 25	2015	Dry	April	--	8,457.3	8,448.1	9.1	0.1%	8,447.2	10.1	0.1%	8,446.3	11.0	0.1%	8,445.4	11.9	0.1%	8,444.4	12.8	0.2%	8,443.5	13.8	0.2%
ME 6	32 49 25	2015	Dry	May	--	1,512.3	1,501.5	10.8	0.7%	1,500.5	11.8	0.8%	1,499.3	13.0	0.9%	1,498.3	14.0	0.9%	1,497.2	15.0	1.0%	1,496.1	16.2	1.1%
ME 6	32 49 25	2015	Dry	June	--	657.9	643.9	14.0	2.1%	642.5	15.4	2.3%	641.1	16.8	2.6%	639.7	18.2	2.8%	638.3	19.6	3.0%	636.9	21.0	3.2%
ME 6	32 49 25	2015	Dry	July	--	274.3	260.5	13.9	5.1%	259.1	15.2	5.6%	257.7	16.6	6.1%	256.3	18.0	6.6%	254.9	19.4	7.1%	253.5	20.8	7.6%
ME 6	32 49 25	2015	Dry	August	--	173.3	159.8	13.5	7.8%	158.5	14.8	8.5%	157.2	16.1	9.3%	155.8	17.5	10.1%	154.5	18.8	10.9%	153.1	20.2	11.7%
ME 6	32 49 25	2015	Dry	September	Used in Summary Table Analysis	126.8	114.7	12.1	9.5%	113.5	13.3	10.5%	112.2	14.5	11.5%	111.0	15.8	12.5%	109.8	17.0	13.4%	108.5	18.2	14.4%
ME 6	32 49 25	2016	Above Normal	October	Used in Summary Table Analysis	91.8	81.5	10.3	11.2%	80.4	11.4	12.4%	79.4	12.4	13.5%	78.8	12.9	14.1%	77.9	13.8	15.1%	76.5	15.2	16.6%
ME 6	32 49 25	2016	Above Normal	November	Used in Summary Table Analysis	3,930.0	3,922.0	8.0	0.2%	3,921.3	8.7	0.2%	3,920.5	9.5	0.2%	3,919.6	10.4	0.3%	3,918.8	11.2	0.3%	3,917.9	12.0	0.3%
ME 6	32 49 25	2016	Above Normal	December	--	36,937.5	36,930.6	6.9	0.0%	36,929.4	8.1	0.0%	36,928.2	9.3	0.0%	36,928.2	9.3	0.0%	36,927.1	10.4	0.0%	36,925.9	11.6	0.0%
ME 6	32 49 25	2016	Above Normal	January	--	57,648.1	57,641.2	6.9	0.0%	57,641.2	6.9	0.0%	57,640.0	8.1	0.0%	57,638.9	9.3	0.0%	57,638.9	9.3	0.0%	57,637.7	10.4	0.0%
ME 6	32 49 25	2016	Above Normal	February	--	24,322.9	24,318.3	4.6	0.0%	24,317.1	5.8	0.0%	24,317.1	5.8	0.0%	24,316.0	6.9	0.0%	24,316.0	6.9	0.0%	24,314.8	8.1	0.0%
ME 6	32 49 25	2016	Above Normal	March	--	41,931.7	41,927.1	4.6	0.0%	41,925.9	5.8	0.0%	41,925.9	5.8	0.0%	41,925.9	5.8	0.0%	41,924.8	6.9	0.0%	41,924.8	6.9	0.0%
ME 6	32 49 25	2016	Above Normal	April	--	18,581.0	18,576.4	4.6	0.0%	18,576.4	4.6	0.0%	18,575.2	5.8	0.0%	18,575.2	5.8	0.0%	18,575.2	5.8	0.0%	18,574.1	6.9	0.0%
ME 6	32 49 25	2016	Above Normal	May	--	5,231.6	5,226.0	5.6	0.1%	5,225.5	6.1	0.1%	5,224.9	6.7	0.1%	5,224.3	7.3	0.1%	5,223.7	7.9	0.2%	5,223.1	8.4	0.2%
ME 6	32 49 25	2016	Above Normal	June	--	1,517.1	1,506.3	10.9	0.7%	1,505.2	11.9	0.8%	1,504.2	13.0	0.9%	1,503.0	14.1	0.9%	1,502.0	15.2	1.0%	1,500.9	16.2	1.1%
ME 6	32 49 25	2016	Above Normal	July	--	831.3	819.2	12.1	1.5%	818.0	13.3	1.6%	816.8	14.5	1.7%	815.6	15.7	1.9%	814.4	16.9	2.0%	813.2	18.1	2.2%
ME 6	32 49 25	2016	Above Normal	August	--	500.3	488.3	11.9	2.4%	487.1	13.1	2.6%	485.9	14.3	2.9%	484.7	15.5	3.1%	483.5	16.7	3.3%	482.3	17.9	3.6%
ME 6	32 49 25	2016	Above Normal	September	Used in Summary Table Analysis	336.2	325.5	10.7	3.2%	324.4	11.8	3.5%	323.3	12.9	3.8%	322.3	13.9	4.1%	321.2	15.0	4.5%	320.1	16.1	4.8%
ME 6	32 49 25	2017	Wet	October	Used in Summary Table Analysis	18,409.7	18,400.5	9.3	0.1%	18,399.3	10.4	0.1%	18,398.1	11.6	0.1%	18,398.1	11.6	0.1%	18,397.0	12.7	0.1%	18,395.8	13.9	0.1%
ME 6	32 49 25	2017	Wet	November	Used in Summary Table Analysis	18,960.6	18,953.7	6.9	0.0%	18,953.7	6.9	0.0%	18,952.5	8.1	0.0%	18,952.5	8.1	0.0%	18,951.4	9.3	0.0%	18,950.2	10.4	0.1%
ME 6	32 49 25	2017	Wet	December	--	24,324.1	24,318.3	5.8	0.0%	24,318.3	5.8	0.0%	24,317.1	6.9	0.0%	24,317.1	6.9	0.0%	24,316.0	8.1	0.0%	24,316.0	8.1	0.0%
ME 6	32 49 25	2017	Wet	January	--	107,520.8	107,515.0	5.8	0.0%	107,515.0	5.8	0.0%	107,513.9	6.9	0.0%	107,513.9	6.9	0.0%	107,512.7	8.1	0.0%	107,512.7	8.1	0.0%
ME 6	32 49 25	2017	Wet	February	--	82,200.2	82,195.6	4.6	0.0%	82,194.4	5.8	0.0%	82,194.4	5.8	0.0%	82,193.3	6.9	0.0%	82,193.3	6.9	0.0%	82,192.1	8.1	0.0%
ME 6	32 49 25	2017	Wet	March	--	27,388.9	27,384.3	4.6	0.0%	27,383.1	5.8	0.0%	27,383.1	5.8	0.0%	27,381.9	6.9	0.0%	27,381.9	6.9	0.0%	27,381.9	6.9	0.0%
ME 6	32 49 25	2017	Wet	April	--	23,059.0	23,054.4	4.6	0.0%	23,054.4	4.6	0.0%	23,054.4	4.6	0.0%	23,053.2	5.8	0.0%	23,053.2	5.8	0.0%	23,052.1	6.9	0.0%
ME 6	32 49 25	2017	Wet	May	--	6,278.5	6,272.9	5.6	0.1%	6,272.3	6.1	0.1%	6,271.8	6.7	0.1%	6,271.2	7.3	0.1%	6,270.6	7.9	0.1%	6,270.0	8.4	0.1%
ME 6	32 49 25	2017	Wet	June	--	2,133.4	2,122.5	11.0	0.5%	2,121.4	12.0	0.6%	2,120.3	13.2	0.6%	2,119.2	14.2	0.7%	2,118.1	15.4	0.7%	2,117.0	16.4	0.8%
ME 6	32 49 25	2017	Wet	July	--	945.2	933.0	12.2	1.3%	931.8	13.4	1.4%	930.6	14.6	1.5%	929.4	15.8	1.7%	928.2	17.0	1.8%	927.0	18.2	1.9%
ME 6	32 49 25	2017	Wet	August	--	517.3	505.4	11.9	2.3%	504.2	13.1	2.5%	503.0	14.3	2.8%	501.8	15.5	3.0%	500.6	16.7	3.2%	499.5	17.8	3.4%
ME 6	32 49 25	2017	Wet	September	Used in Summary Table Analysis	332.0	320.9	11.1	3.3%	319.8	12.2	3.7%	318.7	13.3	4.0%	317.6	14.4	4.3%	316.5	15.5	4.7%	315.4	16.6	5.0%
ME 6	32 49 25	2018	Above Normal	October	Used in Summary Table Analysis	284.7	276.7	8.0	2.8%	275.4	9.2	3.2%	274.4	10.3	3.6%	273.3	11.4	4.0%	272.2	12.4	4.4%	271.4	13.3	4.7%
ME 6	32 49 25	2018	Above Normal	November	Used in Summary Table Analysis	10,931.1	10,924.2	6.9	0.1%	10,923.5	7.6	0.1%	10,922.7	8.4	0.1%	10,922.0	9.1	0.1%	10,921.3	9.8	0.1%	10,920.6	10.5	0.1%
ME 6	32 49 25	2018	Above Normal	December	--	5,460.9	5,455.0	5.9	0.1%	5,454.4	6.5	0.1%	5,453.8	7.1	0.1%	5,453.2	7.6	0.1%	5,452.5	8.3	0.2%	5,452.0	8.9	0.2%
ME 6	32 49 25	2018	Above Normal	January	--	18,019.7	18,013.9	5.8	0.0%	18,013.9	5.8	0.0%	18,012.7	6.9	0.0%	18,012.7	6.9	0.0%	18,011.6	8.1	0.0%	18,011.6	8.1	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 49 25	2018	Above Normal	February	--	7,610.5	7,605.9	4.6	0.1%	7,605.4	5.1	0.1%	7,605.0	5.6	0.1%	7,604.5	6.0	0.1%	7,604.1	6.5	0.1%	7,603.5	7.1	0.1%
ME 6	32 49 25	2018	Above Normal	March	--	20,854.2	20,849.5	4.6	0.0%	20,849.5	4.6	0.0%	20,848.4	5.8	0.0%	20,848.4	5.8	0.0%	20,848.4	5.8	0.0%	20,847.2	6.9	0.0%
ME 6	32 49 25	2018	Above Normal	April	--	32,381.9	32,377.3	4.6	0.0%	32,377.3	4.6	0.0%	32,376.2	5.8	0.0%	32,376.2	5.8	0.0%	32,376.2	5.8	0.0%	32,375.0	6.9	0.0%
ME 6	32 49 25	2018	Above Normal	May	--	6,996.2	6,987.6	8.6	0.1%	6,986.7	9.5	0.1%	6,985.9	10.3	0.1%	6,985.1	11.1	0.2%	6,984.1	12.0	0.2%	6,983.3	12.8	0.2%
ME 6	32 49 25	2018	Above Normal	June	--	1,922.3	1,911.1	11.2	0.6%	1,910.1	12.3	0.6%	1,908.9	13.4	0.7%	1,907.8	14.6	0.8%	1,906.7	15.6	0.8%	1,905.6	16.8	0.9%
ME 6	32 49 25	2018	Above Normal	July	--	790.6	778.3	12.2	1.5%	777.1	13.5	1.7%	775.9	14.7	1.9%	774.7	15.9	2.0%	773.4	17.2	2.2%	772.2	18.4	2.3%
ME 6	32 49 25	2018	Above Normal	August	--	451.8	440.3	11.5	2.5%	439.1	12.6	2.8%	438.0	13.8	3.0%	436.8	14.9	3.3%	435.7	16.1	3.6%	434.5	17.2	3.8%
ME 6	32 49 25	2018	Above Normal	September	Used in Summary Table Analysis	308.6	297.5	11.1	3.6%	296.4	12.2	3.9%	295.3	13.3	4.3%	294.2	14.4	4.7%	293.1	15.5	5.0%	292.0	16.6	5.4%
ME 6	32 49 25	2019	Below Normal	October	Used in Summary Table Analysis	214.9	206.2	8.8	4.1%	205.3	9.7	4.5%	204.5	10.5	4.9%	203.5	11.4	5.3%	202.7	12.2	5.7%	201.9	13.1	6.1%
ME 6	32 49 25	2019	Below Normal	November	Used in Summary Table Analysis	6,716.0	6,708.9	7.1	0.1%	6,708.2	7.8	0.1%	6,707.5	8.4	0.1%	6,706.7	9.3	0.1%	6,706.0	10.0	0.1%	6,705.3	10.6	0.2%
ME 6	32 49 25	2019	Below Normal	December	--	14,820.6	14,814.8	5.8	0.0%	14,814.8	5.8	0.0%	14,813.7	6.9	0.0%	14,813.7	6.9	0.0%	14,812.5	8.1	0.1%	14,812.5	8.1	0.1%
ME 6	32 49 25	2019	Below Normal	January	--	35,532.4	35,527.8	4.6	0.0%	35,526.6	5.8	0.0%	35,526.6	5.8	0.0%	35,525.5	6.9	0.0%	35,525.5	6.9	0.0%	35,524.3	8.1	0.0%
ME 6	32 49 25	2019	Below Normal	February	--	142,256.9	142,245.4	11.6	0.0%	142,245.4	11.6	0.0%	142,245.4	11.6	0.0%	142,245.4	11.6	0.0%	142,245.4	11.6	0.0%	142,245.4	11.6	0.0%
ME 6	32 49 25	2019	Below Normal	March	--	42,491.9	42,487.3	4.6	0.0%	42,487.3	4.6	0.0%	42,486.1	5.8	0.0%	42,486.1	5.8	0.0%	42,486.1	5.8	0.0%	42,485.0	6.9	0.0%
ME 6	32 49 25	2019	Below Normal	April	--	15,321.8	15,317.1	4.6	0.0%	15,317.1	4.6	0.0%	15,317.1	4.6	0.0%	15,316.0	5.8	0.0%	15,316.0	5.8	0.0%	15,314.8	6.9	0.0%
ME 6	32 49 25	2019	Below Normal	May	--	17,179.4	17,170.1	9.3	0.1%	17,169.0	10.4	0.1%	17,169.0	10.4	0.1%	17,167.8	11.6	0.1%	17,166.7	12.7	0.1%	17,165.5	13.9	0.1%
ME 6	32 49 25	2019	Below Normal	June	--	4,245.1	4,233.1	12.0	0.3%	4,231.9	13.2	0.3%	4,230.7	14.5	0.3%	4,229.5	15.6	0.4%	4,228.2	16.9	0.4%	4,227.1	18.1	0.4%
ME 6	32 49 25	2019	Below Normal	July	--	1,372.3	1,360.0	12.4	0.9%	1,358.8	13.5	1.0%	1,357.5	14.8	1.1%	1,356.4	16.0	1.2%	1,355.1	17.2	1.3%	1,353.8	18.5	1.3%
ME 6	32 49 25	2019	Below Normal	August	--	606.9	595.1	11.8	1.9%	593.9	13.0	2.1%	592.8	14.1	2.3%	591.6	15.3	2.5%	590.4	16.5	2.7%	589.2	17.7	2.9%
ME 6	32 49 25	2019	Below Normal	September	Used in Summary Table Analysis	471.7	460.7	11.0	2.3%	459.6	12.1	2.6%	458.5	13.2	2.8%	457.4	14.3	3.0%	456.3	15.4	3.3%	455.2	16.5	3.5%
ME 6	32 49 25	2020	Dry	October	Used in Summary Table Analysis	363.1	354.7	8.4	2.3%	353.8	9.2	2.5%	353.0	10.1	2.8%	352.2	10.9	3.0%	351.3	11.7	3.2%	350.5	12.6	3.5%
ME 6	32 49 25	2020	Dry	November	Used in Summary Table Analysis	332.4	325.8	6.6	2.0%	325.1	7.3	2.2%	324.5	7.9	2.4%	323.8	8.6	2.6%	323.1	9.3	2.8%	322.4	10.0	3.0%
ME 6	32 49 25	2020	Dry	December	--	13,511.6	13,504.6	6.9	0.1%	13,504.6	6.9	0.1%	13,503.5	8.1	0.1%	13,503.5	8.1	0.1%	13,502.3	9.3	0.1%	13,502.3	9.3	0.1%
ME 6	32 49 25	2020	Dry	January	--	22,508.1	22,502.3	5.8	0.0%	22,502.3	5.8	0.0%	22,501.2	6.9	0.0%	22,501.2	6.9	0.0%	22,501.2	6.9	0.0%	22,500.0	8.1	0.0%
ME 6	32 49 25	2020	Dry	February	--	7,423.8	7,419.1	4.7	0.1%	7,418.6	5.2	0.1%	7,418.1	5.8	0.1%	7,417.6	6.3	0.1%	7,417.1	6.7	0.1%	7,416.7	7.2	0.1%
ME 6	32 49 25	2020	Dry	March	--	7,278.0	7,273.5	4.5	0.1%	7,273.0	5.0	0.1%	7,272.6	5.4	0.1%	7,272.1	5.9	0.1%	7,271.6	6.4	0.1%	7,271.3	6.7	0.1%
ME 6	32 49 25	2020	Dry	April	--	5,520.0	5,511.0	9.0	0.2%	5,510.1	10.0	0.2%	5,509.1	10.9	0.2%	5,508.2	11.8	0.2%	5,507.3	12.7	0.2%	5,506.4	13.7	0.2%
ME 6	32 49 25	2020	Dry	May	--	7,424.1	7,413.2	10.9	0.1%	7,412.0	12.0	0.2%	7,411.0	13.1	0.2%	7,409.8	14.2	0.2%	7,408.8	15.3	0.2%	7,407.8	16.3	0.2%
ME 6	32 49 25	2020	Dry	June	--	2,107.8	2,093.4	14.4	0.7%	2,092.0	15.7	0.7%	2,090.5	17.2	0.8%	2,089.1	18.6	0.9%	2,087.6	20.1	1.0%	2,086.2	21.5	1.0%
ME 6	32 49 25	2020	Dry	July	--	803.6	789.3	14.3	1.8%	787.9	15.7	2.0%	786.4	17.2	2.1%	785.0	18.6	2.3%	783.6	20.0	2.5%	782.2	21.5	2.7%
ME 6	32 49 25	2020	Dry	August	--	406.7	392.5	14.2	3.5%	391.1	15.6	3.8%	389.7	17.0	4.2%	388.2	18.4	4.5%	386.8	19.8	4.9%	385.4	21.3	5.2%
ME 6	32 49 25	2020	Dry	September	Used in Summary Table Analysis	255.9	243.1	12.8	5.0%	241.8	14.1	5.5%	240.5	15.4	6.0%	239.2	16.7	6.5%	238.0	18.0	7.0%	236.7	19.2	7.5%
ME 6	32 48 26	2000	Above Normal	October	Used in Summary Table Analysis	829.1	820.3	8.8	1.1%	819.4	9.7	1.2%	818.5	10.6	1.3%	817.6	11.4	1.4%	816.7	12.3	1.5%	815.9	13.2	1.6%
ME 6	32 48 26	2000	Above Normal	November	Used in Summary Table Analysis	12,306.7	12,299.8	6.9	0.1%	12,298.6	8.1	0.1%	12,298.6	8.1	0.1%	12,297.5	9.3	0.1%	12,296.3	10.4	0.1%	12,296.3	10.4	0.1%
ME 6	32 48 26	2000	Above Normal	December	--	10,911.5	10,905.6	5.9	0.1%	10,905.0	6.5	0.1%	10,904.4	7.1	0.1%	10,903.8	7.6	0.1%	10,903.2	8.2	0.1%	10,902.7	8.8	0.1%
ME 6	32 48 26	2000	Above Normal	January	--	28,890.0	28,884.3	5.8	0.0%	28,884.3	5.8	0.0%	28,883.1	6.9	0.0%	28,883.1	6.9	0.0%	28,881.9	8.1	0.0%	28,881.9	8.1	0.0%
ME 6	32 48 26	2000	Above Normal	February	--	37,246.5	37,241.9	4.6	0.0%	37,240.7	5.8	0.0%	37,240.7	5.8	0.0%	37,239.6	6.9	0.0%	37,239.6	6.9	0.0%	37,239.6	6.9	0.0%
ME 6	32 48 26	2000	Above Normal	March	--	18,380.8	18,376.2	4.6	0.0%	18,375.0	5.8	0.0%	18,375.0	5.8	0.0%	18,375.0	5.8	0.0%	18,373.8	6.9	0.0%	18,373.8	6.9	0.0%
ME 6	32 48 26	2000	Above Normal	April	--	12,364.6	12,360.0	4.6	0.0%	12,360.0	4.6	0.0%	12,358.8	5.8	0.0%	12,358.8	5.8	0.0%	12,357.6	6.9	0.1%	12,357.6	6.9	0.1%
ME 6	32 48 26	2000	Above Normal	May	--	7,136.3	7,127.5	8.8	0.1%	7,126.6	9.7	0.1%	7,125.8	10.5	0.1%	7,124.9	11.5	0.2%	7,124.0	12.4	0.2%	7,123.1	13.2	0.2%
ME 6	32 48 26	2000	Above Normal	June	--	2,628.8	2,615.6	13.2	0.5%	2,614.2	14.6	0.6%	2,613.0	15.9	0.6%	2,611.6	17.2	0.7%	2,610.3	18.5	0.7%	2,609.0	19.8	0.8%
ME 6	32 48 26	2000	Above Normal	July	--	1,001.2	988.9	12.2	1.2%	987.7	13.5	1.3%	986.5	14.7	1.5%	985.3	15.9	1.6%	984.0	17.1	1.7%	982.8	18.4	1.8%
ME 6	32 48 26	2000	Above Normal	August	--	531.7	520.2	11.6	2.2%	519.0	12.7	2.4%	517.8	13.9	2.6%	516.7	15.0	2.8%	515.5	16.2	3.0%	514.4	17.4	3.3%
ME 6	32 48 26	2000	Above Normal	September	Used in Summary Table Analysis	304.1	293.8	10.3	3.4%	292.7	11.4	3.7%	291.7	12.4	4.1%	290.6	13.4	4.4%	289.6	14.5	4.8%	288.6	15.5	5.1%
ME 6	32 48 26	2001	Dry	October	Used in Summary Table Analysis	3,860.6	3,852.0	8.7	0.2%	3,851.2	9.5	0.2%	3,850.3	10.3	0.3%	3,849.4	11.2	0.3%	3,848.6	12.0	0.3%	3,847.7	13.0	0.3%
ME 6	32 48 26	2001	Dry	November	Used in Summary Table Analysis	6,196.2	6,189.2	6.9	0.1%	6,188.5	7.6	0.1%	6,187.8	8.3	0.1%	6,187.2	9.0	0.1%	6,186.5	9.7	0.2%	6,185.8	10.4	0.2%
ME 6	32 48 26	2001	Dry	December	--	8,910.8	8,904.9	5.9	0.1%	8,904.3	6.5	0.1%	8,903.7	7.1	0.1%	8,903.1	7.6	0.1%	8,902.4	8.3	0.1%	8,901.9	8.9	0.1%
ME 6	32 48 26	2001	Dry	January	--	12,927.1	12,921.3	5.8	0.0%	12,921.3	5.8	0.0%	12,921.3	5.8	0.0%	12,920.1	6.9	0.1%	12,920.1	6.9	0.1%	12,919.0	8.1	0.1%
ME 6	32 48 26	2001	Dry	February	--	17,557.9	17,553.2	4.6	0.0%	17,553.2	4.6	0.0%	17,552.1	5.8	0.0%	17,552.1	5.8	0.0%	17,552.1	5.8	0.0%	17,550.9	6.9	0.0%
ME 6	32 48 26	2001	Dry	March	--	12,341.4	12,336.8	4.6	0.0%	12,336.8	4.6	0.0%	12,336.8	4.6	0.0%	12,335.6	5.8	0.0%	12,335.6	5.8	0.0%	12,335.6	5.8	0.0%
ME 6	32 48 26	2001	Dry	April	--	11,019.2	11,010.1	9.1	0.1%	11,009.1	10.1	0.1%	11,008.2	11.0	0.1%	11,007.3	11.9	0.1%	11,006.4	12.8	0.1%	11,005.4	13.8	0.1%
ME 6	32 48 26	2001	Dry	May	--	2,639.6	2,628.8	10.8	0.4%	2,627.7	11.9	0.5%	2,626.6	13.0	0.5%	2,625.6	14.0	0.5%	2,624.4	15.2	0.6%	2,623.4	16.2	0.6%
ME 6	32 48 26	2001	Dry	June	--	2,679.3	2,664.4	14.9	0.6%	2,663.0	16.3	0.6%	2,661.3	17.9	0.7%	2,660.0	19.3	0.7%	2,658.4	20.8	0.8%	2,656.9	22.3	0.8%
ME 6	32 48 26	2001	Dry	July	--	723.5	709.4	14.1	2.0%	708.0	15.5	2.1%	706.6	17.0	2.3%	705.1	18.4	2.5%	703.7	19.8	2.7%	702.3	21.2	2.9%
ME 6	32 48 26	2001	Dry	August	--	180.0	166.3	13.8	7.7%	164.9	15.2	8.4%	163.4	16.6	9.2%	162.0	18.0	10.0%	160.7	19.4	10.8%	159.3	20.8	11.5%
ME 6	32 48 26	2001	Dry	September	Used in Summary Table Analysis	103.4	91.0	12.4	12.0%	89.7	13.7	13.3%	88.4	15.0	14.5%	87.1	16.3	15.8%	85.9	17.5	16.9%	84.7	18.8	18.2%
ME 6	32 48 26	2002	Below Normal	October	Used in Summary Table Analysis	274.0	263.5	10.5	3.8%	262.4	11.6	4.2%	261.3	12.7	4.6%	260.2	13.8	5.0%	259.1	14.8	5.4%	258.1	15.9	5.8%
ME 6	32 48 26	2002	Below Normal	November	Used in Summary Table Analysis	12,121.5	12,113.4	8.1	0.1%	12,112.3	9.3	0.1%	12,111.1	10.4	0.1%	12,111.1	10.4	0.1%	12,110.0	11.6	0.1%	12,108.8	12.7	0.1%
ME 6	32 48 26	2002	Below Normal	December	--	35,965.3	35,958.3	6.9	0.0%	35,957.2	8.1	0.0%	35,956.0	9.3	0.0%	35,956.0	9.3	0.0%	35,954.9	10.4	0.0%	35,953.7	11.6	0.0%
ME 6	32 48 26	2002	Below Normal	January	--	31,055.6	31,049.8	5.8	0.0%	31,048.6	6.9	0.0%	31,048.6	6.9	0.0%	31,047.5	8.1	0.0%	31,046.3	9.3	0.0%	31,046.3	9.3	0.0%
ME 6	32 48 26	2002	Below Normal	February	--	24,784.7	24,778.9	5.8	0.0%	24,777.8	6.9	0.0%	24,777.8	6.9	0.0%	24,776.6	8.1	0.0%	24,776.6	8.1	0.0%	24,775.5	9.3	0.0%
ME 6	32 48 26	2002	Below Normal	March	--	17,863.4	17,857.6	5.8	0.0%	17,857.6	5.8	0.0%	17,856.5	6.9	0.0%	17,856.5	6.9	0.0%	17,855.3	8.1	0.0%	17,855.3	8.1	0.0%
ME 6	32 48 26	2002	Below Normal	April	--	9,957.8	9,948.6	9.1	0.1%	9,947.7	10.1	0.1%	9,946.8	11.0	0.1%	9,945.8	11.9	0.1%	9,944.9	12.8	0.1%	9,944.0	13.8	0.1%
ME 6	32 48 26	2002	Below Normal	May	--	3,332.3	3,321.5	10.8	0.3%	3,320.4	11.9	0.4%	3,319.3	13.0	0.4%	3,318.2	14.1	0.4%	3,317.1	15.2	0.5%	3,316.0	16.3	0.5%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 48 26	2002	Below Normal	June	--	861.1	848.8	12.4	1.4%	847.5	13.6	1.6%	846.3	14.8	1.7%	845.0	16.1	1.9%	843.8	17.3	2.0%	842.6	18.6	2.2%
ME 6	32 48 26	2002	Below Normal	July	--	370.1	357.4	12.7	3.4%	356.1	14.0	3.8%	354.9	15.3	4.1%	353.6	16.5	4.5%	352.3	17.8	4.8%	351.1	19.1	5.2%
ME 6	32 48 26	2002	Below Normal	August	--	236.0	224.0	12.0	5.1%	222.8	13.2	5.6%	221.6	14.4	6.1%	220.3	15.7	6.6%	219.1	16.9	7.1%	217.9	18.1	7.7%
ME 6	32 48 26	2002	Below Normal	September	Used in Summary Table Analysis	172.4	161.0	11.4	6.6%	159.8	12.6	7.3%	158.7	13.8	8.0%	157.5	14.9	8.6%	156.4	16.1	9.3%	155.2	17.2	10.0%
ME 6	32 48 26	2003	Wet	October	Used in Summary Table Analysis	137.2	127.7	9.5	6.9%	126.8	10.4	7.6%	125.8	11.4	8.3%	124.9	12.3	9.0%	123.9	13.3	9.7%	123.0	14.2	10.4%
ME 6	32 48 26	2003	Wet	November	Used in Summary Table Analysis	906.9	899.2	7.7	0.8%	898.4	8.4	0.9%	897.7	9.2	1.0%	896.9	10.0	1.1%	896.1	10.8	1.2%	895.3	11.6	1.3%
ME 6	32 48 26	2003	Wet	December	--	57,482.6	57,476.9	5.8	0.0%	57,475.7	6.9	0.0%	57,474.5	8.1	0.0%	57,474.5	8.1	0.0%	57,473.4	9.3	0.0%	57,473.4	9.3	0.0%
ME 6	32 48 26	2003	Wet	January	--	31,666.7	31,660.9	5.8	0.0%	31,659.7	6.9	0.0%	31,658.6	8.1	0.0%	31,658.6	8.1	0.0%	31,657.4	9.3	0.0%	31,657.4	9.3	0.0%
ME 6	32 48 26	2003	Wet	February	--	20,425.9	20,420.1	5.8	0.0%	20,420.1	5.8	0.0%	20,419.0	6.9	0.0%	20,419.0	6.9	0.0%	20,417.8	8.1	0.0%	20,417.8	8.1	0.0%
ME 6	32 48 26	2003	Wet	March	--	24,145.8	24,141.2	4.6	0.0%	24,140.0	5.8	0.0%	24,140.0	5.8	0.0%	24,138.9	6.9	0.0%	24,138.9	6.9	0.0%	24,137.7	8.1	0.0%
ME 6	32 48 26	2003	Wet	April	--	43,188.7	43,184.0	4.6	0.0%	43,182.9	5.8	0.0%	43,182.9	5.8	0.0%	43,181.7	6.9	0.0%	43,181.7	6.9	0.0%	43,181.7	6.9	0.0%
ME 6	32 48 26	2003	Wet	May	--	12,260.4	12,251.2	9.3	0.1%	12,250.0	10.4	0.1%	12,250.0	10.4	0.1%	12,248.8	11.6	0.1%	12,247.7	12.7	0.1%	12,246.5	13.9	0.1%
ME 6	32 48 26	2003	Wet	June	--	3,176.3	3,164.4	11.9	0.4%	3,163.2	13.1	0.4%	3,161.9	14.4	0.5%	3,160.8	15.5	0.5%	3,159.6	16.7	0.5%	3,158.4	17.8	0.6%
ME 6	32 48 26	2003	Wet	July	--	1,485.3	1,472.7	12.6	0.8%	1,471.4	13.9	0.9%	1,470.1	15.2	1.0%	1,468.9	16.4	1.1%	1,467.6	17.7	1.2%	1,466.3	19.0	1.3%
ME 6	32 48 26	2003	Wet	August	--	770.7	758.5	12.2	1.6%	757.3	13.4	1.7%	756.1	14.7	1.9%	754.8	15.9	2.1%	753.6	17.2	2.2%	752.3	18.4	2.4%
ME 6	32 48 26	2003	Wet	September	Used in Summary Table Analysis	467.8	457.2	10.6	2.3%	456.1	11.7	2.5%	455.1	12.7	2.7%	454.0	13.8	2.9%	452.9	14.8	3.2%	451.9	15.9	3.4%
ME 6	32 48 26	2004	Wet	October	Used in Summary Table Analysis	334.4	325.6	8.8	2.6%	324.8	9.7	2.9%	323.9	10.6	3.2%	323.0	11.5	3.4%	322.1	12.3	3.7%	321.2	13.3	4.0%
ME 6	32 48 26	2004	Wet	November	Used in Summary Table Analysis	5,881.6	5,874.4	7.2	0.1%	5,873.7	7.9	0.1%	5,873.0	8.6	0.1%	5,872.2	9.4	0.2%	5,871.5	10.1	0.2%	5,870.8	10.8	0.2%
ME 6	32 48 26	2004	Wet	December	--	36,656.3	36,649.3	6.9	0.0%	36,649.3	6.9	0.0%	36,648.1	8.1	0.0%	36,647.0	9.3	0.0%	36,647.0	9.3	0.0%	36,645.8	10.4	0.0%
ME 6	32 48 26	2004	Wet	January	--	31,707.2	31,702.5	4.6	0.0%	31,701.4	5.8	0.0%	31,701.4	5.8	0.0%	31,700.2	6.9	0.0%	31,700.2	6.9	0.0%	31,699.1	8.1	0.0%
ME 6	32 48 26	2004	Wet	February	--	38,460.6	38,456.0	4.6	0.0%	38,456.0	4.6	0.0%	38,454.9	5.8	0.0%	38,454.9	5.8	0.0%	38,453.7	6.9	0.0%	38,453.7	6.9	0.0%
ME 6	32 48 26	2004	Wet	March	--	16,563.7	16,559.0	4.6	0.0%	16,557.9	5.8	0.0%	16,557.9	5.8	0.0%	16,557.9	5.8	0.0%	16,556.7	6.9	0.0%	16,556.7	6.9	0.0%
ME 6	32 48 26	2004	Wet	April	--	9,480.7	9,476.4	4.3	0.0%	9,475.9	4.7	0.1%	9,475.5	5.2	0.1%	9,475.0	5.7	0.1%	9,474.5	6.1	0.1%	9,474.1	6.6	0.1%
ME 6	32 48 26	2004	Wet	May	--	3,444.8	3,435.9	8.9	0.3%	3,435.0	9.8	0.3%	3,434.0	10.8	0.3%	3,433.2	11.6	0.3%	3,432.3	12.5	0.4%	3,431.4	13.4	0.4%
ME 6	32 48 26	2004	Wet	June	--	698.8	687.5	11.3	1.6%	686.3	12.5	1.8%	685.2	13.6	1.9%	684.1	14.7	2.1%	682.9	15.9	2.3%	681.8	17.0	2.4%
ME 6	32 48 26	2004	Wet	July	--	365.3	352.9	12.3	3.4%	351.7	13.6	3.7%	350.5	14.8	4.0%	349.2	16.0	4.4%	348.0	17.2	4.7%	346.8	18.5	5.1%
ME 6	32 48 26	2004	Wet	August	--	233.9	222.2	11.7	5.0%	221.0	12.9	5.5%	219.8	14.1	6.0%	218.6	15.2	6.5%	217.5	16.4	7.0%	216.3	17.6	7.5%
ME 6	32 48 26	2004	Wet	September	Used in Summary Table Analysis	170.3	159.1	11.2	6.6%	158.0	12.3	7.2%	156.9	13.4	7.9%	155.8	14.5	8.5%	154.7	15.7	9.2%	153.5	16.8	9.9%
ME 6	32 48 26	2005	Above Normal	October	Used in Summary Table Analysis	7,784.1	7,775.1	9.0	0.1%	7,774.2	10.0	0.1%	7,773.4	10.8	0.1%	7,772.5	11.7	0.2%	7,771.5	12.6	0.2%	7,770.6	13.5	0.2%
ME 6	32 48 26	2005	Above Normal	November	Used in Summary Table Analysis	2,272.5	2,265.4	7.1	0.3%	2,264.7	7.8	0.3%	2,263.9	8.6	0.4%	2,263.2	9.3	0.4%	2,262.5	10.0	0.4%	2,261.8	10.6	0.5%
ME 6	32 48 26	2005	Above Normal	December	--	21,317.1	21,310.2	6.9	0.0%	21,310.2	6.9	0.0%	21,309.0	8.1	0.0%	21,309.0	8.1	0.0%	21,307.9	9.3	0.0%	21,306.7	10.4	0.0%
ME 6	32 48 26	2005	Above Normal	January	--	22,612.3	22,606.5	5.8	0.0%	22,605.3	6.9	0.0%	22,605.3	6.9	0.0%	22,604.2	8.1	0.0%	22,604.2	8.1	0.0%	22,603.0	9.3	0.0%
ME 6	32 48 26	2005	Above Normal	February	--	14,052.1	14,047.5	4.6	0.0%	14,047.5	4.6	0.0%	14,046.3	5.8	0.0%	14,046.3	5.8	0.0%	14,045.1	6.9	0.0%	14,045.1	6.9	0.0%
ME 6	32 48 26	2005	Above Normal	March	--	28,740.7	28,736.1	4.6	0.0%	28,736.1	4.6	0.0%	28,735.0	5.8	0.0%	28,735.0	5.8	0.0%	28,733.8	6.9	0.0%	28,733.8	6.9	0.0%
ME 6	32 48 26	2005	Above Normal	April	--	21,559.0	21,554.4	4.6	0.0%	21,554.4	4.6	0.0%	21,553.2	5.8	0.0%	21,553.2	5.8	0.0%	21,553.2	5.8	0.0%	21,552.1	6.9	0.0%
ME 6	32 48 26	2005	Above Normal	May	--	19,706.0	19,696.8	9.3	0.0%	19,695.6	10.4	0.1%	19,695.6	10.4	0.1%	19,694.4	11.6	0.1%	19,693.3	12.7	0.1%	19,692.1	13.9	0.1%
ME 6	32 48 26	2005	Above Normal	June	--	16,032.4	16,018.5	13.9	0.1%	16,017.4	15.0	0.1%	16,016.2	16.2	0.1%	16,015.0	17.4	0.1%	16,013.9	18.5	0.1%	16,011.6	20.8	0.1%
ME 6	32 48 26	2005	Above Normal	July	--	2,867.2	2,854.5	12.7	0.4%	2,853.2	14.0	0.5%	2,852.0	15.3	0.5%	2,850.7	16.6	0.6%	2,849.4	17.8	0.6%	2,848.1	19.1	0.7%
ME 6	32 48 26	2005	Above Normal	August	--	993.6	982.0	11.6	1.2%	980.8	12.8	1.3%	979.6	14.0	1.4%	978.5	15.1	1.5%	977.3	16.3	1.6%	976.2	17.4	1.8%
ME 6	32 48 26	2005	Above Normal	September	Used in Summary Table Analysis	535.0	524.7	10.4	1.9%	523.6	11.4	2.1%	522.6	12.5	2.3%	521.6	13.5	2.5%	520.5	14.5	2.7%	519.5	15.6	2.9%
ME 6	32 48 26	2006	Wet	October	Used in Summary Table Analysis	646.2	637.7	8.5	1.3%	636.9	9.3	1.4%	636.0	10.2	1.6%	635.2	11.0	1.7%	634.3	11.9	1.8%	633.4	12.8	2.0%
ME 6	32 48 26	2006	Wet	November	Used in Summary Table Analysis	9,439.7	9,433.0	6.7	0.1%	9,432.3	7.4	0.1%	9,431.7	8.0	0.1%	9,431.0	8.7	0.1%	9,430.3	9.4	0.1%	9,429.6	10.1	0.1%
ME 6	32 48 26	2006	Wet	December	--	43,934.0	43,928.2	5.8	0.0%	43,927.1	6.9	0.0%	43,927.1	6.9	0.0%	43,925.9	8.1	0.0%	43,925.9	8.1	0.0%	43,924.8	9.3	0.0%
ME 6	32 48 26	2006	Wet	January	--	46,691.0	46,685.2	5.8	0.0%	46,685.2	5.8	0.0%	46,684.0	6.9	0.0%	46,684.0	6.9	0.0%	46,682.9	8.1	0.0%	46,682.9	8.1	0.0%
ME 6	32 48 26	2006	Wet	February	--	26,787.0	26,782.4	4.6	0.0%	26,782.4	4.6	0.0%	26,781.3	5.8	0.0%	26,781.3	5.8	0.0%	26,780.1	6.9	0.0%	26,780.1	6.9	0.0%
ME 6	32 48 26	2006	Wet	March	--	47,469.9	47,465.3	4.6	0.0%	47,465.3	4.6	0.0%	47,464.1	5.8	0.0%	47,464.1	5.8	0.0%	47,464.1	5.8	0.0%	47,463.0	6.9	0.0%
ME 6	32 48 26	2006	Wet	April	--	30,550.9	30,546.3	4.6	0.0%	30,546.3	4.6	0.0%	30,546.3	4.6	0.0%	30,545.1	5.8	0.0%	30,545.1	5.8	0.0%	30,544.0	6.9	0.0%
ME 6	32 48 26	2006	Wet	May	--	14,278.9	14,273.1	5.8	0.0%	14,273.1	5.8	0.0%	14,272.0	6.9	0.0%	14,272.0	6.9	0.0%	14,270.8	8.1	0.1%	14,270.8	8.1	0.1%
ME 6	32 48 26	2006	Wet	June	--	3,556.5	3,545.4	11.1	0.3%	3,544.2	12.3	0.3%	3,543.1	13.4	0.4%	3,542.0	14.5	0.4%	3,540.9	15.6	0.4%	3,539.7	16.8	0.5%
ME 6	32 48 26	2006	Wet	July	--	1,291.3	1,279.3	12.0	0.9%	1,278.0	13.3	1.0%	1,276.9	14.5	1.1%	1,275.7	15.6	1.2%	1,274.4	16.9	1.3%	1,273.3	18.1	1.4%
ME 6	32 48 26	2006	Wet	August	--	677.5	665.6	11.9	1.8%	664.4	13.1	1.9%	663.2	14.3	2.1%	662.0	15.5	2.3%	660.8	16.7	2.5%	659.6	17.9	2.6%
ME 6	32 48 26	2006	Wet	September	Used in Summary Table Analysis	437.5	427.0	10.5	2.4%	425.9	11.6	2.6%	424.8	12.6	2.9%	423.8	13.7	3.1%	422.7	14.7	3.4%	421.7	15.8	3.6%
ME 6	32 48 26	2007	Above Normal	October	Used in Summary Table Analysis	284.2	275.5	8.6	3.0%	274.7	9.5	3.3%	273.8	10.4	3.6%	272.9	11.2	4.0%	272.1	12.1	4.3%	271.2	13.0	4.6%
ME 6	32 48 26	2007	Above Normal	November	Used in Summary Table Analysis	8,784.6	8,777.5	7.1	0.1%	8,776.9	7.8	0.1%	8,776.2	8.4	0.1%	8,775.5	9.1	0.1%	8,774.8	9.8	0.1%	8,774.0	10.6	0.1%
ME 6	32 48 26	2007	Above Normal	December	--	20,648.1	20,642.4	5.8	0.0%	20,641.2	6.9	0.0%	20,641.2	6.9	0.0%	20,640.0	8.1	0.0%	20,640.0	8.1	0.0%	20,638.9	9.3	0.0%
ME 6	32 48 26	2007	Above Normal	January	--	10,314.8	10,309.5	5.3	0.1%	10,308.9	5.9	0.1%	10,308.4	6.4	0.1%	10,307.9	6.9	0.1%	10,307.3	7.5	0.1%	10,306.7	8.1	0.1%
ME 6	32 48 26	2007	Above Normal	February	--	30,839.1	30,833.3	5.8	0.0%	30,833.3	5.8	0.0%	30,832.2	6.9	0.0%	30,832.2	6.9	0.0%	30,832.2	6.9	0.0%	30,831.0	8.1	0.0%
ME 6	32 48 26	2007	Above Normal	March	--	13,148.1	13,143.5	4.6	0.0%	13,142.4	5.8	0.0%	13,142.4	5.8	0.0%	13,141.2	6.9	0.1%	13,141.2	6.9	0.1%	13,140.0	8.1	0.1%
ME 6	32 48 26	2007	Above Normal	April	--	11,578.7	11,570.0	8.7	0.1%	11,569.1	9.6	0.1%	11,568.3	10.4	0.1%	11,567.4	11.3	0.1%	11,566.4	12.3	0.1%	11,565.6	13.1	0.1%
ME 6	32 48 26	2007	Above Normal	May	--	4,160.4	4,150.0	10.4	0.3%	4,149.0	11.5	0.3%	4,147.9	12.5	0.3%	4,146.9	13.5	0.3%	4,145.7	14.7	0.4%	4,144.8	15.6	0.4%
ME 6	32 48 26	2007	Above Normal	June	--	1,513.8	1,501.0	12.7	0.8%	1,499.8	14.0	0.9%	1,498.5	15.3	1.0%	1,497.2	16.6	1.1%	1,495.9	17.8	1.2%	1,494.7	19.1	1.3%
ME 6	32 48 26	2007	Above Normal	July	--	503.6	490.7	12.9	2.6%	489.4	14.2	2.8%	488.1	15.5	3.1%	486.9	16.8	3.3%	485.6	18.1	3.6%	484.3	19.4	3.8%
ME 6	32 48 26	2007	Above Normal	August	--	232.1	220.3	11.7	5.1%	219.2	12.9	5.6%	218.0	14.1	6.1%	216.8	15.3	6.6%	215.6	16.4	7.1%	214.5	17.6	7.6%
ME 6	32 48 26	2007	Above Normal	September	Used in Summary Table Analysis	159.7	148.5	11.2	7.0%	147.4	12.3	7.7%	146.3	13.4	8.4%	145.2	14.5	9.1%	144.1	15.7	9.8%	143.0	16.8	10.5%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 48 26	2008	Dry	October	Used in Summary Table Analysis	3,477.8	3,468.6	9.1	0.3%	3,467.7	10.1	0.3%	3,466.8	11.0	0.3%	3,465.9	11.9	0.3%	3,464.9	12.8	0.4%	3,464.0	13.8	0.4%
ME 6	32 48 26	2008	Dry	November	Used in Summary Table Analysis	3,316.9	3,309.8	7.1	0.2%	3,309.1	7.8	0.2%	3,308.3	8.6	0.3%	3,307.6	9.3	0.3%	3,306.9	10.0	0.3%	3,306.3	10.6	0.3%
ME 6	32 48 26	2008	Dry	December	--	23,436.3	23,430.6	5.8	0.0%	23,429.4	6.9	0.0%	23,429.4	6.9	0.0%	23,428.2	8.1	0.0%	23,428.2	8.1	0.0%	23,427.1	9.3	0.0%
ME 6	32 48 26	2008	Dry	January	--	37,827.5	37,821.8	5.8	0.0%	37,820.6	6.9	0.0%	37,820.6	6.9	0.0%	37,819.4	8.1	0.0%	37,819.4	8.1	0.0%	37,818.3	9.3	0.0%
ME 6	32 48 26	2008	Dry	February	--	26,342.6	26,338.0	4.6	0.0%	26,336.8	5.8	0.0%	26,336.8	5.8	0.0%	26,336.8	5.8	0.0%	26,335.6	6.9	0.0%	26,335.6	6.9	0.0%
ME 6	32 48 26	2008	Dry	March	--	11,828.7	11,824.1	4.6	0.0%	11,824.1	4.6	0.0%	11,822.9	5.8	0.0%	11,822.9	5.8	0.0%	11,821.8	6.9	0.1%	11,821.8	6.9	0.1%
ME 6	32 48 26	2008	Dry	April	--	9,044.7	9,035.8	8.9	0.1%	9,034.8	9.8	0.1%	9,034.0	10.6	0.1%	9,033.1	11.6	0.1%	9,032.2	12.5	0.1%	9,031.4	13.3	0.1%
ME 6	32 48 26	2008	Dry	May	--	1,359.3	1,349.7	9.6	0.7%	1,348.6	10.6	0.8%	1,347.7	11.6	0.9%	1,346.8	12.5	0.9%	1,345.8	13.4	1.0%	1,344.8	14.5	1.1%
ME 6	32 48 26	2008	Dry	June	--	445.9	432.0	13.9	3.1%	430.6	15.3	3.4%	429.2	16.7	3.7%	427.8	18.1	4.0%	426.4	19.4	4.4%	425.1	20.8	4.7%
ME 6	32 48 26	2008	Dry	July	--	263.6	249.7	13.9	5.3%	248.3	15.3	5.8%	247.0	16.7	6.3%	245.6	18.1	6.8%	244.2	19.4	7.4%	242.8	20.8	7.9%
ME 6	32 48 26	2008	Dry	August	--	187.4	173.8	13.6	7.3%	172.4	15.0	8.0%	171.1	16.3	8.7%	169.7	17.7	9.4%	168.4	19.0	10.1%	167.0	20.4	10.9%
ME 6	32 48 26	2008	Dry	September	Used in Summary Table Analysis	148.9	135.8	13.1	8.8%	134.4	14.5	9.7%	133.1	15.8	10.6%	131.8	17.1	11.5%	130.5	18.4	12.4%	129.2	19.7	13.3%
ME 6	32 48 26	2009	Critical	October	Used in Summary Table Analysis	935.0	924.5	10.5	1.1%	923.5	11.6	1.2%	922.4	12.6	1.4%	921.3	13.7	1.5%	920.3	14.8	1.6%	919.2	15.8	1.7%
ME 6	32 48 26	2009	Critical	November	Used in Summary Table Analysis	5,589.1	5,580.9	8.2	0.1%	5,580.1	9.0	0.2%	5,579.2	10.0	0.2%	5,578.4	10.8	0.2%	5,577.5	11.6	0.2%	5,576.7	12.4	0.2%
ME 6	32 48 26	2009	Critical	December	--	12,326.4	12,319.4	6.9	0.1%	12,318.3	8.1	0.1%	12,318.3	8.1	0.1%	12,317.1	9.3	0.1%	12,316.0	10.4	0.1%	12,316.0	10.4	0.1%
ME 6	32 48 26	2009	Critical	January	--	8,843.5	8,837.3	6.3	0.1%	8,836.7	6.8	0.1%	8,836.0	7.5	0.1%	8,835.4	8.1	0.1%	8,834.7	8.8	0.1%	8,834.1	9.4	0.1%
ME 6	32 48 26	2009	Critical	February	--	22,750.0	22,744.2	5.8	0.0%	22,744.2	5.8	0.0%	22,743.1	6.9	0.0%	22,743.1	6.9	0.0%	22,741.9	8.1	0.0%	22,741.9	8.1	0.0%
ME 6	32 48 26	2009	Critical	March	--	21,222.2	21,217.6	4.6	0.0%	21,217.6	4.6	0.0%	21,216.4	5.8	0.0%	21,216.4	5.8	0.0%	21,215.3	6.9	0.0%	21,215.3	6.9	0.0%
ME 6	32 48 26	2009	Critical	April	--	10,109.8	10,100.5	9.4	0.1%	10,099.5	10.3	0.1%	10,098.6	11.2	0.1%	10,097.8	12.0	0.1%	10,096.9	13.0	0.1%	10,095.9	13.9	0.1%
ME 6	32 48 26	2009	Critical	May	--	15,636.6	15,625.0	11.6	0.1%	15,623.8	12.7	0.1%	15,622.7	13.9	0.1%	15,621.5	15.0	0.1%	15,620.4	16.2	0.1%	15,619.2	17.4	0.1%
ME 6	32 48 26	2009	Critical	June	--	3,169.2	3,154.5	14.7	0.5%	3,153.1	16.1	0.5%	3,151.6	17.6	0.6%	3,150.1	19.1	0.6%	3,148.7	20.5	0.6%	3,147.2	22.0	0.7%
ME 6	32 48 26	2009	Critical	July	--	1,271.5	1,257.4	14.1	1.1%	1,256.0	15.5	1.2%	1,254.6	16.9	1.3%	1,253.2	18.3	1.4%	1,251.9	19.7	1.5%	1,250.5	21.1	1.7%
ME 6	32 48 26	2009	Critical	August	--	677.9	664.2	13.7	2.0%	662.9	15.1	2.2%	661.5	16.4	2.4%	660.1	17.8	2.6%	658.8	19.1	2.8%	657.4	20.5	3.0%
ME 6	32 48 26	2009	Critical	September	Used in Summary Table Analysis	398.5	386.1	12.4	3.1%	384.8	13.6	3.4%	383.6	14.9	3.7%	382.3	16.1	4.0%	381.1	17.3	4.3%	379.9	18.6	4.7%
ME 6	32 48 26	2010	Below Normal	October	Used in Summary Table Analysis	6,102.0	6,091.2	10.8	0.2%	6,090.2	11.8	0.2%	6,089.1	12.8	0.2%	6,088.0	14.0	0.2%	6,086.9	15.0	0.2%	6,085.9	16.1	0.3%
ME 6	32 48 26	2010	Below Normal	November	Used in Summary Table Analysis	8,344.1	8,335.5	8.6	0.1%	8,334.7	9.4	0.1%	8,333.8	10.3	0.1%	8,333.0	11.1	0.1%	8,332.2	11.9	0.1%	8,331.3	12.8	0.2%
ME 6	32 48 26	2010	Below Normal	December	--	12,463.0	12,454.9	8.1	0.1%	12,454.9	8.1	0.1%	12,453.7	9.3	0.1%	12,453.7	9.3	0.1%	12,452.5	10.4	0.1%	12,451.4	11.6	0.1%
ME 6	32 48 26	2010	Below Normal	January	--	36,593.8	36,586.8	6.9	0.0%	36,586.8	6.9	0.0%	36,585.6	8.1	0.0%	36,585.6	8.1	0.0%	36,584.5	9.3	0.0%	36,583.3	10.4	0.0%
ME 6	32 48 26	2010	Below Normal	February	--	27,347.2	27,341.4	5.8	0.0%	27,341.4	5.8	0.0%	27,340.3	6.9	0.0%	27,340.3	6.9	0.0%	27,339.1	8.1	0.0%	27,339.1	8.1	0.0%
ME 6	32 48 26	2010	Below Normal	March	--	28,925.9	28,921.3	4.6	0.0%	28,920.1	5.8	0.0%	28,920.1	5.8	0.0%	28,919.0	6.9	0.0%	28,919.0	6.9	0.0%	28,917.8	8.1	0.0%
ME 6	32 48 26	2010	Below Normal	April	--	40,178.2	40,173.6	4.6	0.0%	40,173.6	4.6	0.0%	40,172.5	5.8	0.0%	40,172.5	5.8	0.0%	40,171.3	6.9	0.0%	40,171.3	6.9	0.0%
ME 6	32 48 26	2010	Below Normal	May	--	20,397.0	20,386.6	10.4	0.1%	20,385.4	11.6	0.1%	20,385.4	11.6	0.1%	20,384.3	12.7	0.1%	20,383.1	13.9	0.1%	20,381.9	15.0	0.1%
ME 6	32 48 26	2010	Below Normal	June	--	9,452.0	9,438.0	14.0	0.1%	9,436.6	15.4	0.2%	9,435.2	16.8	0.2%	9,433.8	18.2	0.2%	9,432.4	19.6	0.2%	9,431.0	20.9	0.2%
ME 6	32 48 26	2010	Below Normal	July	--	1,462.7	1,449.8	13.0	0.9%	1,448.5	14.2	1.0%	1,447.2	15.5	1.1%	1,445.9	16.8	1.1%	1,444.7	18.1	1.2%	1,443.4	19.3	1.3%
ME 6	32 48 26	2010	Below Normal	August	--	579.9	567.9	12.0	2.1%	566.7	13.2	2.3%	565.5	14.4	2.5%	564.3	15.6	2.7%	563.2	16.7	2.9%	561.9	18.0	3.1%
ME 6	32 48 26	2010	Below Normal	September	Used in Summary Table Analysis	662.5	651.1	11.4	1.7%	649.9	12.6	1.9%	648.8	13.7	2.1%	647.6	14.9	2.2%	646.5	16.0	2.4%	645.3	17.2	2.6%
ME 6	32 48 26	2011	Wet	October	Used in Summary Table Analysis	9,715.9	9,707.1	8.8	0.1%	9,706.1	9.7	0.1%	9,705.3	10.5	0.1%	9,704.4	11.5	0.1%	9,703.5	12.4	0.1%	9,702.7	13.2	0.1%
ME 6	32 48 26	2011	Wet	November	Used in Summary Table Analysis	14,312.5	14,305.6	6.9	0.0%	14,305.6	6.9	0.0%	14,304.4	8.1	0.1%	14,304.4	8.1	0.1%	14,303.2	9.3	0.1%	14,302.1	10.4	0.1%
ME 6	32 48 26	2011	Wet	December	--	34,076.4	34,069.4	6.9	0.0%	34,069.4	6.9	0.0%	34,068.3	8.1	0.0%	34,068.3	8.1	0.0%	34,067.1	9.3	0.0%	34,067.1	9.3	0.0%
ME 6	32 48 26	2011	Wet	January	--	14,226.9	14,222.2	4.6	0.0%	14,221.1	5.8	0.0%	14,221.1	5.8	0.0%	14,219.9	6.9	0.0%	14,219.9	6.9	0.0%	14,218.8	8.1	0.1%
ME 6	32 48 26	2011	Wet	February	--	20,838.0	20,833.3	4.6	0.0%	20,833.3	4.6	0.0%	20,832.2	5.8	0.0%	20,832.2	5.8	0.0%	20,831.0	6.9	0.0%	20,831.0	6.9	0.0%
ME 6	32 48 26	2011	Wet	March	--	52,253.5	52,248.8	4.6	0.0%	52,247.7	5.8	0.0%	52,247.7	5.8	0.0%	52,246.5	6.9	0.0%	52,246.5	6.9	0.0%	52,246.5	6.9	0.0%
ME 6	32 48 26	2011	Wet	April	--	24,885.4	24,880.8	4.6	0.0%	24,879.6	5.8	0.0%	24,879.6	5.8	0.0%	24,879.6	5.8	0.0%	24,878.5	6.9	0.0%	24,878.5	6.9	0.0%
ME 6	32 48 26	2011	Wet	May	--	11,424.3	11,415.3	9.0	0.1%	11,414.4	10.0	0.1%	11,413.4	10.9	0.1%	11,412.6	11.7	0.1%	11,411.6	12.7	0.1%	11,410.8	13.5	0.1%
ME 6	32 48 26	2011	Wet	June	--	7,098.3	7,084.6	13.7	0.2%	7,083.2	15.0	0.2%	7,081.9	16.3	0.2%	7,080.6	17.7	0.2%	7,079.2	19.1	0.3%	7,077.9	20.4	0.3%
ME 6	32 48 26	2011	Wet	July	--	1,834.5	1,820.8	13.7	0.7%	1,819.4	15.0	0.8%	1,818.2	16.3	0.9%	1,816.8	17.7	1.0%	1,815.4	19.1	1.0%	1,814.0	20.5	1.1%
ME 6	32 48 26	2011	Wet	August	--	786.3	774.4	11.8	1.5%	773.3	13.0	1.7%	772.1	14.2	1.8%	770.9	15.3	2.0%	769.7	16.5	2.1%	768.6	17.7	2.3%
ME 6	32 48 26	2011	Wet	September	Used in Summary Table Analysis	442.9	432.1	10.8	2.4%	431.0	11.9	2.7%	429.9	13.0	2.9%	428.8	14.1	3.2%	427.8	15.1	3.4%	426.7	16.2	3.7%
ME 6	32 48 26	2012	Below Normal	October	Used in Summary Table Analysis	4,585.0	4,576.0	8.9	0.2%	4,575.1	9.8	0.2%	4,574.2	10.8	0.2%	4,573.4	11.6	0.3%	4,572.5	12.5	0.3%	4,571.5	13.4	0.3%
ME 6	32 48 26	2012	Below Normal	November	Used in Summary Table Analysis	8,324.2	8,317.1	7.1	0.1%	8,316.3	7.9	0.1%	8,315.6	8.6	0.1%	8,314.9	9.3	0.1%	8,314.2	10.0	0.1%	8,313.5	10.6	0.1%
ME 6	32 48 26	2012	Below Normal	December	--	5,222.2	5,216.1	6.1	0.1%	5,215.5	6.7	0.1%	5,214.9	7.3	0.1%	5,214.4	7.9	0.2%	5,213.7	8.6	0.2%	5,213.1	9.1	0.2%
ME 6	32 48 26	2012	Below Normal	January	--	20,361.1	20,355.3	5.8	0.0%	20,354.2	6.9	0.0%	20,354.2	6.9	0.0%	20,353.0	8.1	0.0%	20,353.0	8.1	0.0%	20,351.9	9.3	0.0%
ME 6	32 48 26	2012	Below Normal	February	--	18,283.6	18,278.9	4.6	0.0%	18,277.8	5.8	0.0%	18,277.8	5.8	0.0%	18,277.8	5.8	0.0%	18,276.6	6.9	0.0%	18,276.6	6.9	0.0%
ME 6	32 48 26	2012	Below Normal	March	--	45,713.0	45,708.3	4.6	0.0%	45,707.2	5.8	0.0%	45,707.2	5.8	0.0%	45,706.0	6.9	0.0%	45,706.0	6.9	0.0%	45,706.0	6.9	0.0%
ME 6	32 48 26	2012	Below Normal	April	--	26,964.1	26,959.5	4.6	0.0%	26,958.3	5.8	0.0%	26,958.3	5.8	0.0%	26,958.3	5.8	0.0%	26,957.2	6.9	0.0%	26,957.2	6.9	0.0%
ME 6	32 48 26	2012	Below Normal	May	--	7,508.7	7,499.7	9.0	0.1%	7,498.7	10.0	0.1%	7,497.8	10.9	0.1%	7,496.9	11.8	0.2%	7,496.1	12.6	0.2%	7,495.3	13.4	0.2%
ME 6	32 48 26	2012	Below Normal	June	--	5,557.1	5,543.3	13.8	0.2%	5,541.9	15.2	0.3%	5,540.5	16.6	0.3%	5,539.1	17.9	0.3%	5,537.7	19.3	0.3%	5,536.3	20.7	0.4%
ME 6	32 48 26	2012	Below Normal	July	--	2,250.2	2,236.9	13.3	0.6%	2,235.6	14.6	0.6%	2,234.3	16.0	0.7%	2,233.0	17.2	0.8%	2,231.7	18.5	0.8%	2,230.3	19.9	0.9%
ME 6	32 48 26	2012	Below Normal	August	--	395.8	384.9	10.9	2.8%	383.8	12.0	3.0%	382.8	13.0	3.3%	381.7	14.1	3.6%	380.6	15.2	3.8%	379.5	16.2	4.1%
ME 6	32 48 26	2012	Below Normal	September	Used in Summary Table Analysis	258.2	248.4	9.7	3.8%	247.5	10.7	4.2%	246.5	11.7	4.5%	245.5	12.7	4.9%	244.5	13.6	5.3%	243.6	14.6	5.7%
ME 6	32 48 26	2013	Below Normal	October	Used in Summary Table Analysis	1,941.1	1,932.6	8.4	0.4%	1,931.7	9.4	0.5%	1,930.9	10.2	0.5%	1,930.0	11.1	0.6%	1,929.2	11.9	0.6%	1,928.2	12.8	0.7%
ME 6	32 48 26	2013	Below Normal	November	Used in Summary Table Analysis	14,842.6	14,835.6	6.9	0.0%	14,835.6	6.9	0.0%	14,834.5	8.1	0.1%	14,833.3	9.3	0.1%	14,833.3	9.3	0.1%	14,832.2	10.4	0.1%
ME 6	32 48 26	2013	Below Normal	December	--	60,340.3	60,333.3	6.9	0.0%	60,333.3	6.9	0.0%	60,332.2	8.1	0.0%	60,332.2	8.1	0.0%	60,331.0	9.3	0.0%	60,331.0	9.3	0.0%
ME 6	32 48 26	2013	Below Normal	January	--	22,302.1	22,296.3	5.8	0.0%	22,296.3	5.8	0.0%	22,296.3	5.8	0.0%	22,295.1	6.9	0.0%	22,295.1	6.9	0.0%	22,294.0	8.1	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 48 26	2013	Below Normal	February	--	8,894.0	8,889.1	4.9	0.1%	8,888.7	5.3	0.1%	8,888.2	5.8	0.1%	8,887.7	6.3	0.1%	8,887.2	6.8	0.1%	8,886.7	7.3	0.1%
ME 6	32 48 26	2013	Below Normal	March	--	10,404.1	10,399.3	4.7	0.0%	10,398.8	5.2	0.1%	10,398.4	5.7	0.1%	10,397.9	6.1	0.1%	10,397.5	6.6	0.1%	10,397.0	7.1	0.1%
ME 6	32 48 26	2013	Below Normal	April	--	8,314.5	8,305.8	8.7	0.1%	8,305.0	9.5	0.1%	8,304.2	10.3	0.1%	8,303.2	11.2	0.1%	8,302.4	12.0	0.1%	8,301.5	13.0	0.2%
ME 6	32 48 26	2013	Below Normal	May	--	4,460.9	4,450.5	10.4	0.2%	4,449.4	11.5	0.3%	4,448.4	12.5	0.3%	4,447.3	13.5	0.3%	4,446.3	14.6	0.3%	4,445.3	15.6	0.4%
ME 6	32 48 26	2013	Below Normal	June	--	2,121.8	2,109.1	12.6	0.6%	2,107.9	13.9	0.7%	2,106.6	15.2	0.7%	2,105.3	16.4	0.8%	2,104.2	17.6	0.8%	2,102.9	18.9	0.9%
ME 6	32 48 26	2013	Below Normal	July	--	724.4	711.9	12.4	1.7%	710.7	13.6	1.9%	709.5	14.9	2.1%	708.2	16.1	2.2%	707.0	17.4	2.4%	705.8	18.6	2.6%
ME 6	32 48 26	2013	Below Normal	August	--	348.3	336.6	11.7	3.4%	335.5	12.9	3.7%	334.3	14.0	4.0%	333.1	15.2	4.4%	332.0	16.4	4.7%	330.8	17.5	5.0%
ME 6	32 48 26	2013	Below Normal	September	Used in Summary Table Analysis	4,830.7	4,818.5	12.2	0.3%	4,817.4	13.3	0.3%	4,816.1	14.6	0.3%	4,814.9	15.7	0.3%	4,813.7	17.0	0.4%	4,812.5	18.2	0.4%
ME 6	32 48 26	2014	Critical	October	Used in Summary Table Analysis	284.1	275.1	9.0	3.2%	274.2	9.9	3.5%	273.3	10.8	3.8%	272.4	11.7	4.1%	271.5	12.6	4.4%	270.6	13.4	4.7%
ME 6	32 48 26	2014	Critical	November	Used in Summary Table Analysis	1,562.6	1,555.4	7.2	0.5%	1,554.7	7.9	0.5%	1,554.1	8.6	0.5%	1,553.2	9.4	0.6%	1,552.5	10.1	0.6%	1,551.9	10.8	0.7%
ME 6	32 48 26	2014	Critical	December	--	1,605.1	1,598.8	6.3	0.4%	1,598.1	6.9	0.4%	1,597.6	7.5	0.5%	1,597.0	8.1	0.5%	1,596.3	8.8	0.5%	1,595.7	9.4	0.6%
ME 6	32 48 26	2014	Critical	January	--	2,846.9	2,841.3	5.6	0.2%	2,840.7	6.1	0.2%	2,840.2	6.7	0.2%	2,839.6	7.3	0.3%	2,839.0	7.9	0.3%	2,838.4	8.4	0.3%
ME 6	32 48 26	2014	Critical	February	--	15,824.1	15,819.4	4.6	0.0%	15,818.3	5.8	0.0%	15,818.3	5.8	0.0%	15,818.3	5.8	0.0%	15,817.1	6.9	0.0%	15,817.1	6.9	0.0%
ME 6	32 48 26	2014	Critical	March	--	31,577.5	31,572.9	4.6	0.0%	31,571.8	5.8	0.0%	31,571.8	5.8	0.0%	31,570.6	6.9	0.0%	31,570.6	6.9	0.0%	31,570.6	6.9	0.0%
ME 6	32 48 26	2014	Critical	April	--	13,020.8	13,012.7	8.1	0.1%	13,011.6	9.3	0.1%	13,010.4	10.4	0.1%	13,009.3	11.6	0.1%	13,008.1	12.7	0.1%	13,006.9	13.9	0.1%
ME 6	32 48 26	2014	Critical	May	--	5,208.4	5,197.5	11.0	0.2%	5,196.4	12.0	0.2%	5,195.3	13.2	0.3%	5,194.2	14.2	0.3%	5,193.1	15.4	0.3%	5,192.0	16.4	0.3%
ME 6	32 48 26	2014	Critical	June	--	1,207.4	1,192.2	15.2	1.3%	1,190.7	16.7	1.4%	1,189.2	18.2	1.5%	1,187.7	19.7	1.6%	1,186.2	21.2	1.8%	1,184.7	22.7	1.9%
ME 6	32 48 26	2014	Critical	July	--	552.8	538.6	14.2	2.6%	537.1	15.6	2.8%	535.7	17.0	3.1%	534.3	18.4	3.3%	532.9	19.9	3.6%	531.5	21.3	3.8%
ME 6	32 48 26	2014	Critical	August	--	356.3	342.7	13.6	3.8%	341.3	15.0	4.2%	340.0	16.3	4.6%	338.6	17.7	5.0%	337.2	19.1	5.4%	335.9	20.4	5.7%
ME 6	32 48 26	2014	Critical	September	Used in Summary Table Analysis	2,596.1	2,582.6	13.4	0.5%	2,581.3	14.8	0.6%	2,579.9	16.2	0.6%	2,578.6	17.5	0.7%	2,577.2	18.9	0.7%	2,575.9	20.1	0.8%
ME 6	32 48 26	2015	Dry	October	Used in Summary Table Analysis	11,441.7	11,431.3	10.4	0.1%	11,430.3	11.3	0.1%	11,429.3	12.4	0.1%	11,427.5	14.1	0.1%	11,426.5	15.2	0.1%	11,425.5	16.2	0.1%
ME 6	32 48 26	2015	Dry	November	Used in Summary Table Analysis	9,122.0	9,114.0	8.0	0.1%	9,113.2	8.8	0.1%	9,112.4	9.6	0.1%	9,111.6	10.4	0.1%	9,110.8	11.2	0.1%	9,110.0	12.0	0.1%
ME 6	32 48 26	2015	Dry	December	--	32,925.9	32,920.1	5.8	0.0%	32,919.0	6.9	0.0%	32,917.8	8.1	0.0%	32,917.8	8.1	0.0%	32,916.7	9.3	0.0%	32,916.7	9.3	0.0%
ME 6	32 48 26	2015	Dry	January	--	14,625.0	14,618.1	6.9	0.0%	14,618.1	6.9	0.0%	14,616.9	8.1	0.1%	14,616.9	8.1	0.1%	14,615.7	9.3	0.1%	14,615.7	9.3	0.1%
ME 6	32 48 26	2015	Dry	February	--	27,356.5	27,350.7	5.8	0.0%	27,350.7	5.8	0.0%	27,349.5	6.9	0.0%	27,349.5	6.9	0.0%	27,349.5	6.9	0.0%	27,348.4	8.1	0.0%
ME 6	32 48 26	2015	Dry	March	--	11,599.5	11,594.9	4.6	0.0%	11,594.9	4.6	0.0%	11,593.8	5.8	0.0%	11,593.8	5.8	0.0%	11,593.8	5.8	0.0%	11,592.6	6.9	0.1%
ME 6	32 48 26	2015	Dry	April	--	8,466.9	8,457.8	9.1	0.1%	8,456.8	10.1	0.1%	8,455.9	11.0	0.1%	8,455.1	11.8	0.1%	8,454.1	12.8	0.2%	8,453.1	13.8	0.2%
ME 6	32 48 26	2015	Dry	May	--	1,512.5	1,501.6	10.9	0.7%	1,500.5	12.0	0.8%	1,499.4	13.1	0.9%	1,498.4	14.1	0.9%	1,497.2	15.3	1.0%	1,496.2	16.3	1.1%
ME 6	32 48 26	2015	Dry	June	--	658.4	644.4	14.1	2.1%	642.9	15.5	2.4%	641.5	16.9	2.6%	640.1	18.3	2.8%	638.7	19.7	3.0%	637.3	21.1	3.2%
ME 6	32 48 26	2015	Dry	July	--	275.0	261.0	14.0	5.1%	259.6	15.4	5.6%	258.2	16.8	6.1%	256.8	18.2	6.6%	255.4	19.6	7.1%	254.0	21.0	7.6%
ME 6	32 48 26	2015	Dry	August	--	174.2	160.6	13.6	7.8%	159.3	14.9	8.6%	157.9	16.3	9.4%	156.6	17.7	10.1%	155.2	19.0	10.9%	153.8	20.4	11.7%
ME 6	32 48 26	2015	Dry	September	Used in Summary Table Analysis	127.6	115.3	12.2	9.6%	114.1	13.4	10.5%	112.9	14.7	11.5%	111.6	15.9	12.5%	110.4	17.2	13.5%	109.1	18.4	14.4%
ME 6	32 48 26	2016	Above Normal	October	Used in Summary Table Analysis	92.5	82.1	10.4	11.2%	81.0	11.5	12.4%	80.0	12.5	13.6%	79.4	13.1	14.1%	78.5	14.0	15.1%	77.1	15.4	16.7%
ME 6	32 48 26	2016	Above Normal	November	Used in Summary Table Analysis	3,939.1	3,931.0	8.1	0.2%	3,930.3	8.8	0.2%	3,929.5	9.6	0.2%	3,928.5	10.6	0.3%	3,927.7	11.5	0.3%	3,926.9	12.3	0.3%
ME 6	32 48 26	2016	Above Normal	December	--	36,982.6	36,975.7	6.9	0.0%	36,974.5	8.1	0.0%	36,973.4	9.3	0.0%	36,973.4	9.3	0.0%	36,972.2	10.4	0.0%	36,971.1	11.6	0.0%
ME 6	32 48 26	2016	Above Normal	January	--	57,694.4	57,687.5	6.9	0.0%	57,687.5	6.9	0.0%	57,686.3	8.1	0.0%	57,685.2	9.3	0.0%	57,685.2	9.3	0.0%	57,684.0	10.4	0.0%
ME 6	32 48 26	2016	Above Normal	February	--	24,329.9	24,324.1	5.8	0.0%	24,324.1	5.8	0.0%	24,322.9	6.9	0.0%	24,322.9	6.9	0.0%	24,321.8	8.1	0.0%	24,321.8	8.1	0.0%
ME 6	32 48 26	2016	Above Normal	March	--	41,953.7	41,949.1	4.6	0.0%	41,947.9	5.8	0.0%	41,947.9	5.8	0.0%	41,946.8	6.9	0.0%	41,946.8	6.9	0.0%	41,945.6	8.1	0.0%
ME 6	32 48 26	2016	Above Normal	April	--	18,586.8	18,582.2	4.6	0.0%	18,581.0	5.8	0.0%	18,581.0	5.8	0.0%	18,579.9	6.9	0.0%	18,579.9	6.9	0.0%	18,579.9	6.9	0.0%
ME 6	32 48 26	2016	Above Normal	May	--	5,233.4	5,227.8	5.7	0.1%	5,227.2	6.3	0.1%	5,226.6	6.8	0.1%	5,226.0	7.4	0.1%	5,225.5	8.0	0.2%	5,224.9	8.6	0.2%
ME 6	32 48 26	2016	Above Normal	June	--	1,517.9	1,507.1	10.9	0.7%	1,506.0	11.9	0.8%	1,504.9	13.1	0.9%	1,503.8	14.1	0.9%	1,502.8	15.2	1.0%	1,501.6	16.3	1.1%
ME 6	32 48 26	2016	Above Normal	July	--	832.4	820.2	12.2	1.5%	819.0	13.4	1.6%	817.8	14.6	1.8%	816.5	15.8	1.9%	815.3	17.1	2.0%	814.1	18.3	2.2%
ME 6	32 48 26	2016	Above Normal	August	--	501.4	489.4	12.0	2.4%	488.2	13.2	2.6%	486.9	14.5	2.9%	485.7	15.7	3.1%	484.5	16.9	3.4%	483.3	18.1	3.6%
ME 6	32 48 26	2016	Above Normal	September	Used in Summary Table Analysis	337.3	326.5	10.8	3.2%	325.4	11.9	3.5%	324.3	13.0	3.9%	323.2	14.1	4.2%	322.1	15.2	4.5%	321.0	16.3	4.8%
ME 6	32 48 26	2017	Wet	October	Used in Summary Table Analysis	18,427.1	18,417.8	9.3	0.1%	18,417.8	9.3	0.1%	18,416.7	10.4	0.1%	18,415.5	11.6	0.1%	18,414.4	12.7	0.1%	18,413.2	13.9	0.1%
ME 6	32 48 26	2017	Wet	November	Used in Summary Table Analysis	18,980.3	18,973.4	6.9	0.0%	18,972.2	8.1	0.0%	18,972.2	8.1	0.0%	18,971.1	9.3	0.0%	18,969.9	10.4	0.1%	18,969.9	10.4	0.1%
ME 6	32 48 26	2017	Wet	December	--	24,354.2	24,348.4	5.8	0.0%	24,348.4	5.8	0.0%	24,347.2	6.9	0.0%	24,347.2	6.9	0.0%	24,346.1	8.1	0.0%	24,346.1	8.1	0.0%
ME 6	32 48 26	2017	Wet	January	--	107,608.8	107,604.2	4.6	0.0%	107,603.0	5.8	0.0%	107,603.0	5.8	0.0%	107,601.9	6.9	0.0%	107,601.9	6.9	0.0%	107,600.7	8.1	0.0%
ME 6	32 48 26	2017	Wet	February	--	82,251.2	82,245.4	5.8	0.0%	82,245.4	5.8	0.0%	82,244.2	6.9	0.0%	82,244.2	6.9	0.0%	82,243.1	8.1	0.0%	82,243.1	8.1	0.0%
ME 6	32 48 26	2017	Wet	March	--	27,403.9	27,399.3	4.6	0.0%	27,398.1	5.8	0.0%	27,398.1	5.8	0.0%	27,397.0	6.9	0.0%	27,397.0	6.9	0.0%	27,397.0	6.9	0.0%
ME 6	32 48 26	2017	Wet	April	--	23,076.4	23,071.8	4.6	0.0%	23,070.6	5.8	0.0%	23,070.6	5.8	0.0%	23,070.6	5.8	0.0%	23,069.4	6.9	0.0%	23,069.4	6.9	0.0%
ME 6	32 48 26	2017	Wet	May	--	6,278.6	6,272.9	5.7	0.1%	6,272.3	6.3	0.1%	6,271.8	6.8	0.1%	6,271.2	7.4	0.1%	6,270.6	8.0	0.1%	6,270.0	8.6	0.1%
ME 6	32 48 26	2017	Wet	June	--	2,135.5	2,124.5	11.0	0.5%	2,123.5	12.0	0.6%	2,122.3	13.2	0.6%	2,121.2	14.4	0.7%	2,120.1	15.4	0.7%	2,119.0	16.6	0.8%
ME 6	32 48 26	2017	Wet	July	--	946.6	934.3	12.3	1.3%	933.1	13.5	1.4%	931.9	14.7	1.6%	930.6	15.9	1.7%	929.4	17.1	1.8%	928.2	18.4	1.9%
ME 6	32 48 26	2017	Wet	August	--	518.8	506.7	12.0	2.3%	505.6	13.2	2.5%	504.4	14.4	2.8%	503.1	15.6	3.0%	502.0	16.8	3.2%	500.8	18.0	3.5%
ME 6	32 48 26	2017	Wet	September	Used in Summary Table Analysis	333.3	322.1	11.2	3.4%	321.0	12.3	3.7%	319.9	13.4	4.0%	318.8	14.5	4.4%	317.6	15.6	4.7%	316.5	16.8	5.0%
ME 6	32 48 26	2018	Above Normal	October	Used in Summary Table Analysis	285.9	277.8	8.1	2.8%	276.6	9.4	3.3%	275.6	10.4	3.6%	274.4	11.6	4.0%	273.4	12.6	4.4%	272.5	13.5	4.7%
ME 6	32 48 26	2018	Above Normal	November	Used in Summary Table Analysis	10,951.6	10,944.6	7.1	0.1%	10,943.9	7.8	0.1%	10,943.2	8.4	0.1%	10,942.5	9.1	0.1%	10,941.7	10.0	0.1%	10,941.0	10.6	0.1%
ME 6	32 48 26	2018	Above Normal	December	--	5,462.7	5,456.7	6.0	0.1%	5,456.1	6.6	0.1%	5,455.6	7.2	0.1%	5,455.0	7.8	0.1%	5,454.3	8.4	0.2%	5,453.7	9.0	0.2%
ME 6	32 48 26	2018	Above Normal	January	--	18,054.4	18,048.6	5.8	0.0%	18,048.6	5.8	0.0%	18,047.5	6.9	0.0%	18,047.5	6.9	0.0%	18,046.3	8.1	0.0%	18,046.3	8.1	0.0%
ME 6	32 48 26	2018	Above Normal	February	--	7,611.8	7,607.2	4.6	0.1%	7,606.7	5.1	0.1%	7,606.3	5.6	0.1%	7,605.8	6.0	0.1%	7,605.3	6.5	0.1%	7,604.7	7.1	0.1%
ME 6	32 48 26	2018	Above Normal	March	--	20,876.2	20,871.5	4.6	0.0%	20,871.5	4.6	0.0%	20,871.5	4.6	0.0%	20,870.4	5.8	0.0%	20,870.4	5.8	0.0%	20,869.2	6.9	0.0%
ME 6	32 48 26	2018	Above Normal	April	--	32,407.4	32,403.9	3.5	0.0%	32,402.8	4.6	0.0%	32,402.8	4.6	0.0%	32,401.6	5.8	0.0%	32,401.6	5.8	0.0%	32,401.6	5.8	0.0%
ME 6	32 48 26	2018	Above Normal	May	--	6,996.5	6,987.8	8.7	0.1%	6,987.0	9.5	0.1%	6,986.1	10.4	0.1%	6,985.3	11.2	0.2%	6,984.5	12.0	0.2%	6,983.6	13.0	0.2%

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Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 48 26	2018	Above Normal	June	--	1,923.3	1,911.9	11.3	0.6%	1,910.9	12.4	0.6%	1,909.7	13.5	0.7%	1,908.6	14.7	0.8%	1,907.4	15.9	0.8%	1,906.4	16.9	0.9%
ME 6	32 48 26	2018	Above Normal	July	--	791.7	779.4	12.3	1.6%	778.2	13.6	1.7%	776.9	14.8	1.9%	775.7	16.1	2.0%	774.5	17.3	2.2%	773.2	18.5	2.3%
ME 6	32 48 26	2018	Above Normal	August	--	453.0	441.4	11.6	2.6%	440.2	12.7	2.8%	439.1	13.9	3.1%	437.9	15.1	3.3%	436.8	16.2	3.6%	435.6	17.4	3.8%
ME 6	32 48 26	2018	Above Normal	September	Used in Summary Table Analysis	309.7	298.6	11.2	3.6%	297.4	12.3	4.0%	296.3	13.4	4.3%	295.2	14.5	4.7%	294.1	15.6	5.1%	293.0	16.8	5.4%
ME 6	32 48 26	2019	Below Normal	October	Used in Summary Table Analysis	215.9	207.0	8.9	4.1%	206.1	9.8	4.5%	205.3	10.6	4.9%	204.3	11.6	5.4%	203.5	12.4	5.7%	202.7	13.2	6.1%
ME 6	32 48 26	2019	Below Normal	November	Used in Summary Table Analysis	6,729.5	6,722.3	7.2	0.1%	6,721.6	7.9	0.1%	6,720.9	8.6	0.1%	6,720.3	9.3	0.1%	6,719.4	10.1	0.1%	6,718.8	10.8	0.2%
ME 6	32 48 26	2019	Below Normal	December	--	14,843.8	14,838.0	5.8	0.0%	14,836.8	6.9	0.0%	14,836.8	6.9	0.0%	14,835.6	8.1	0.1%	14,835.6	8.1	0.1%	14,834.5	9.3	0.1%
ME 6	32 48 26	2019	Below Normal	January	--	35,578.7	35,572.9	5.8	0.0%	35,572.9	5.8	0.0%	35,571.8	6.9	0.0%	35,571.8	6.9	0.0%	35,570.6	8.1	0.0%	35,570.6	8.1	0.0%
ME 6	32 48 26	2019	Below Normal	February	--	142,303.2	142,291.7	11.6	0.0%	142,291.7	11.6	0.0%	142,291.7	11.6	0.0%	142,291.7	11.6	0.0%	142,291.7	11.6	0.0%	142,291.7	11.6	0.0%
ME 6	32 48 26	2019	Below Normal	March	--	42,515.0	42,510.4	4.6	0.0%	42,510.4	4.6	0.0%	42,509.3	5.8	0.0%	42,509.3	5.8	0.0%	42,509.3	5.8	0.0%	42,508.1	6.9	0.0%
ME 6	32 48 26	2019	Below Normal	April	--	15,327.5	15,324.1	3.5	0.0%	15,322.9	4.6	0.0%	15,322.9	4.6	0.0%	15,321.8	5.8	0.0%	15,321.8	5.8	0.0%	15,321.8	5.8	0.0%
ME 6	32 48 26	2019	Below Normal	May	--	17,214.1	17,204.9	9.3	0.1%	17,203.7	10.4	0.1%	17,202.5	11.6	0.1%	17,201.4	12.7	0.1%	17,201.4	12.7	0.1%	17,200.2	13.9	0.1%
ME 6	32 48 26	2019	Below Normal	June	--	4,244.9	4,232.8	12.2	0.3%	4,231.6	13.3	0.3%	4,230.3	14.6	0.3%	4,229.1	15.9	0.4%	4,227.9	17.0	0.4%	4,226.6	18.3	0.4%
ME 6	32 48 26	2019	Below Normal	July	--	1,373.6	1,361.2	12.4	0.9%	1,360.0	13.7	1.0%	1,358.8	14.8	1.1%	1,357.5	16.1	1.2%	1,356.3	17.4	1.3%	1,355.1	18.5	1.3%
ME 6	32 48 26	2019	Below Normal	August	--	608.3	596.4	11.9	2.0%	595.2	13.1	2.1%	594.0	14.3	2.3%	592.8	15.4	2.5%	591.6	16.6	2.7%	590.4	17.8	2.9%
ME 6	32 48 26	2019	Below Normal	September	Used in Summary Table Analysis	473.0	461.8	11.1	2.4%	460.7	12.2	2.6%	459.6	13.4	2.8%	458.5	14.5	3.1%	457.4	15.6	3.3%	456.3	16.7	3.5%
ME 6	32 48 26	2020	Dry	October	Used in Summary Table Analysis	364.0	355.5	8.5	2.3%	354.7	9.3	2.6%	353.8	10.2	2.8%	353.0	11.0	3.0%	352.1	11.9	3.3%	351.3	12.8	3.5%
ME 6	32 48 26	2020	Dry	November	Used in Summary Table Analysis	334.3	327.6	6.7	2.0%	326.9	7.4	2.2%	326.2	8.0	2.4%	325.5	8.7	2.6%	324.9	9.4	2.8%	324.2	10.1	3.0%
ME 6	32 48 26	2020	Dry	December	--	13,544.0	13,538.2	5.8	0.0%	13,538.2	5.8	0.0%	13,537.0	6.9	0.1%	13,537.0	6.9	0.1%	13,535.9	8.1	0.1%	13,534.7	9.3	0.1%
ME 6	32 48 26	2020	Dry	January	--	22,533.6	22,528.9	4.6	0.0%	22,527.8	5.8	0.0%	22,527.8	5.8	0.0%	22,526.6	6.9	0.0%	22,526.6	6.9	0.0%	22,525.5	8.1	0.0%
ME 6	32 48 26	2020	Dry	February	--	7,424.5	7,419.7	4.9	0.1%	7,419.2	5.3	0.1%	7,418.8	5.8	0.1%	7,418.2	6.4	0.1%	7,417.7	6.8	0.1%	7,417.2	7.3	0.1%
ME 6	32 48 26	2020	Dry	March	--	7,282.6	7,278.2	4.4	0.1%	7,277.8	4.9	0.1%	7,277.3	5.3	0.1%	7,276.9	5.8	0.1%	7,276.4	6.3	0.1%	7,275.9	6.7	0.1%
ME 6	32 48 26	2020	Dry	April	--	5,525.2	5,516.1	9.1	0.2%	5,515.3	10.0	0.2%	5,514.4	10.9	0.2%	5,513.4	11.8	0.2%	5,512.5	12.7	0.2%	5,511.6	13.7	0.2%
ME 6	32 48 26	2020	Dry	May	--	7,430.9	7,419.9	11.0	0.1%	7,418.9	12.0	0.2%	7,417.7	13.2	0.2%	7,416.7	14.2	0.2%	7,415.5	15.4	0.2%	7,414.5	16.4	0.2%
ME 6	32 48 26	2020	Dry	June	--	2,108.0	2,093.4	14.6	0.7%	2,092.0	16.0	0.8%	2,090.5	17.5	0.8%	2,089.1	18.9	0.9%	2,087.6	20.4	1.0%	2,086.2	21.8	1.0%
ME 6	32 48 26	2020	Dry	July	--	804.5	790.0	14.4	1.8%	788.6	15.9	2.0%	787.2	17.3	2.2%	785.7	18.8	2.3%	784.3	20.2	2.5%	782.8	21.7	2.7%
ME 6	32 48 26	2020	Dry	August	--	407.7	393.3	14.3	3.5%	391.9	15.7	3.9%	390.5	17.2	4.2%	389.1	18.6	4.6%	387.6	20.0	4.9%	386.2	21.5	5.3%
ME 6	32 48 26	2020	Dry	September	Used in Summary Table Analysis	256.9	243.9	13.0	5.0%	242.6	14.2	5.5%	241.3	15.5	6.1%	240.0	16.9	6.6%	238.7	18.1	7.1%	237.4	19.4	7.6%
ME 6	32 47 27	2000	Above Normal	October	Used in Summary Table Analysis	831.0	822.1	8.9	1.1%	821.2	9.8	1.2%	820.3	10.7	1.3%	819.4	11.6	1.4%	818.6	12.5	1.5%	817.7	13.4	1.6%
ME 6	32 47 27	2000	Above Normal	November	Used in Summary Table Analysis	12,332.2	12,325.2	6.9	0.1%	12,325.2	6.9	0.1%	12,324.1	8.1	0.1%	12,322.9	9.3	0.1%	12,322.9	9.3	0.1%	12,321.8	10.4	0.1%
ME 6	32 47 27	2000	Above Normal	December	--	10,925.3	10,919.4	5.9	0.1%	10,918.8	6.6	0.1%	10,918.2	7.2	0.1%	10,917.6	7.8	0.1%	10,917.0	8.3	0.1%	10,916.3	9.0	0.1%
ME 6	32 47 27	2000	Above Normal	January	--	28,932.9	28,927.1	5.8	0.0%	28,927.1	5.8	0.0%	28,927.1	5.8	0.0%	28,925.9	6.9	0.0%	28,925.9	6.9	0.0%	28,924.8	8.1	0.0%
ME 6	32 47 27	2000	Above Normal	February	--	37,274.3	37,269.7	4.6	0.0%	37,268.5	5.8	0.0%	37,268.5	5.8	0.0%	37,268.5	5.8	0.0%	37,267.4	6.9	0.0%	37,267.4	6.9	0.0%
ME 6	32 47 27	2000	Above Normal	March	--	18,388.9	18,384.3	4.6	0.0%	18,384.3	4.6	0.0%	18,383.1	5.8	0.0%	18,383.1	5.8	0.0%	18,381.9	6.9	0.0%	18,381.9	6.9	0.0%
ME 6	32 47 27	2000	Above Normal	April	--	12,370.4	12,366.9	3.5	0.0%	12,365.7	4.6	0.0%	12,365.7	4.6	0.0%	12,365.7	4.6	0.0%	12,364.6	5.8	0.0%	12,364.6	5.8	0.0%
ME 6	32 47 27	2000	Above Normal	May	--	7,142.0	7,133.2	8.8	0.1%	7,132.3	9.7	0.1%	7,131.4	10.6	0.1%	7,130.6	11.5	0.2%	7,129.6	12.4	0.2%	7,128.7	13.3	0.2%
ME 6	32 47 27	2000	Above Normal	June	--	2,631.1	2,617.9	13.2	0.5%	2,616.6	14.6	0.6%	2,615.3	15.9	0.6%	2,613.9	17.2	0.7%	2,612.6	18.5	0.7%	2,611.2	19.9	0.8%
ME 6	32 47 27	2000	Above Normal	July	--	1,002.5	990.2	12.3	1.2%	988.9	13.6	1.4%	987.7	14.8	1.5%	986.5	16.0	1.6%	985.2	17.3	1.7%	984.0	18.5	1.8%
ME 6	32 47 27	2000	Above Normal	August	--	533.2	521.5	11.7	2.2%	520.3	12.9	2.4%	519.2	14.0	2.6%	518.0	15.2	2.8%	516.9	16.3	3.1%	515.7	17.5	3.3%
ME 6	32 47 27	2000	Above Normal	September	Used in Summary Table Analysis	305.4	295.0	10.5	3.4%	293.9	11.5	3.8%	292.9	12.5	4.1%	291.9	13.6	4.4%	290.8	14.6	4.8%	289.8	15.7	5.1%
ME 6	32 47 27	2001	Dry	October	Used in Summary Table Analysis	3,867.1	3,858.3	8.8	0.2%	3,857.5	9.6	0.2%	3,856.6	10.5	0.3%	3,855.8	11.3	0.3%	3,854.9	12.3	0.3%	3,854.1	13.1	0.3%
ME 6	32 47 27	2001	Dry	November	Used in Summary Table Analysis	6,206.1	6,199.2	6.9	0.1%	6,198.5	7.6	0.1%	6,197.8	8.3	0.1%	6,197.1	9.0	0.1%	6,196.4	9.7	0.2%	6,195.6	10.5	0.2%
ME 6	32 47 27	2001	Dry	December	--	8,920.8	8,914.9	5.9	0.1%	8,914.2	6.6	0.1%	8,913.7	7.2	0.1%	8,913.1	7.8	0.1%	8,912.5	8.3	0.1%	8,911.8	9.0	0.1%
ME 6	32 47 27	2001	Dry	January	--	12,945.6	12,941.0	4.6	0.0%	12,939.8	5.8	0.0%	12,939.8	5.8	0.0%	12,938.7	6.9	0.1%	12,938.7	6.9	0.1%	12,937.5	8.1	0.1%
ME 6	32 47 27	2001	Dry	February	--	17,570.6	17,566.0	4.6	0.0%	17,564.8	5.8	0.0%	17,564.8	5.8	0.0%	17,563.7	6.9	0.0%	17,563.7	6.9	0.0%	17,562.5	8.1	0.0%
ME 6	32 47 27	2001	Dry	March	--	12,348.4	12,343.8	4.6	0.0%	12,342.6	5.8	0.0%	12,342.6	5.8	0.0%	12,342.6	5.8	0.0%	12,341.4	6.9	0.1%	12,341.4	6.9	0.1%
ME 6	32 47 27	2001	Dry	April	--	11,025.7	11,016.6	9.1	0.1%	11,015.6	10.1	0.1%	11,014.7	11.0	0.1%	11,013.8	11.9	0.1%	11,012.8	12.8	0.1%	11,011.9	13.8	0.1%
ME 6	32 47 27	2001	Dry	May	--	2,639.9	2,629.1	10.9	0.4%	2,627.9	12.0	0.5%	2,626.9	13.1	0.5%	2,625.8	14.1	0.5%	2,624.8	15.2	0.6%	2,623.6	16.3	0.6%
ME 6	32 47 27	2001	Dry	June	--	2,683.6	2,668.6	14.9	0.6%	2,667.1	16.4	0.6%	2,665.6	17.9	0.7%	2,664.1	19.4	0.7%	2,662.6	20.9	0.8%	2,661.1	22.5	0.8%
ME 6	32 47 27	2001	Dry	July	--	724.3	710.1	14.2	2.0%	708.6	15.7	2.2%	707.2	17.1	2.4%	705.8	18.6	2.6%	704.3	20.0	2.8%	702.9	21.4	3.0%
ME 6	32 47 27	2001	Dry	August	--	181.2	167.3	13.9	7.7%	165.9	15.3	8.5%	164.4	16.8	9.2%	163.0	18.2	10.0%	161.6	19.6	10.8%	160.3	20.9	11.6%
ME 6	32 47 27	2001	Dry	September	Used in Summary Table Analysis	104.7	92.1	12.6	12.0%	90.8	13.9	13.2%	89.5	15.2	14.5%	88.2	16.5	15.7%	87.0	17.7	16.9%	85.7	19.0	18.1%
ME 6	32 47 27	2002	Below Normal	October	Used in Summary Table Analysis	275.4	264.8	10.6	3.9%	263.7	11.7	4.2%	262.6	12.8	4.7%	261.4	14.0	5.1%	260.4	15.0	5.5%	259.3	16.1	5.8%
ME 6	32 47 27	2002	Below Normal	November	Used in Summary Table Analysis	12,135.4	12,127.3	8.1	0.1%	12,126.2	9.3	0.1%	12,125.0	10.4	0.1%	12,123.8	11.6	0.1%	12,123.8	11.6	0.1%	12,122.7	12.7	0.1%
ME 6	32 47 27	2002	Below Normal	December	--	36,003.5	35,996.5	6.9	0.0%	35,995.4	8.1	0.0%	35,995.4	8.1	0.0%	35,994.2	9.3	0.0%	35,993.1	10.4	0.0%	35,993.1	10.4	0.0%
ME 6	32 47 27	2002	Below Normal	January	--	31,079.9	31,074.1	5.8	0.0%	31,072.9	6.9	0.0%	31,071.8	8.1	0.0%	31,071.8	8.1	0.0%	31,070.6	9.3	0.0%	31,070.6	9.3	0.0%
ME 6	32 47 27	2002	Below Normal	February	--	24,798.6	24,792.8	5.8	0.0%	24,792.8	5.8	0.0%	24,791.7	6.9	0.0%	24,791.7	6.9	0.0%	24,790.5	8.1	0.0%	24,790.5	8.1	0.0%
ME 6	32 47 27	2002	Below Normal	March	--	17,873.8	17,869.2	4.6	0.0%	17,868.1	5.8	0.0%	17,868.1	5.8	0.0%	17,866.9	6.9	0.0%	17,866.9	6.9	0.0%	17,865.7	8.1	0.0%
ME 6	32 47 27	2002	Below Normal	April	--	9,962.3	9,953.0	9.3	0.1%	9,952.1	10.2	0.1%	9,951.2	11.1	0.1%	9,950.2	12.0	0.1%	9,949.3	13.0	0.1%	9,948.4	13.9	0.1%
ME 6	32 47 27	2002	Below Normal	May	--	3,334.0	3,323.1	10.9	0.3%	3,322.1	11.9	0.4%	3,321.1	13.0	0.4%	3,319.9	14.1	0.4%	3,318.8	15.3	0.5%	3,317.7	16.3	0.5%
ME 6	32 47 27	2002	Below Normal	June	--	862.2	849.7	12.5	1.4%	848.5	13.7	1.6%	847.2	15.0	1.7%	845.9	16.2	1.9%	844.7	17.5	2.0%	843.5	18.7	2.2%
ME 6	32 47 27	2002	Below Normal	July	--	371.3	358.5	12.8	3.5%	357.2	14.1	3.8%	355.9	15.4	4.1%	354.6	16.7	4.5%	353.3	18.0	4.8%	352.0	19.2	5.2%
ME 6	32 47 27	2002	Below Normal	August	--	237.4	225.2	12.1	5.1%	224.0	13.3	5.6%	222.8	14.6	6.1%	221.6	15.8	6.7%	220.3	17.0	7.2%	219.1	18.2	7.7%
ME 6	32 47 27	2002	Below Normal	September	Used in Summary Table Analysis	173.7	162.2	11.6	6.7%	161.0	12.7	7.3%	159.8	13.9	8.0%	158.7	15.1	8.7%	157.5	16.2	9.3%	156.4	17.4	10.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 47 27	2003	Wet	October	Used in Summary Table Analysis	138.5	128.9	9.6	6.9%	128.0	10.5	7.6%	127.0	11.5	8.3%	126.0	12.5	9.0%	125.1	13.4	9.7%	124.1	14.4	10.4%
ME 6	32 47 27	2003	Wet	November	Used in Summary Table Analysis	908.6	900.8	7.8	0.9%	900.1	8.6	0.9%	899.3	9.4	1.0%	898.5	10.2	1.1%	897.7	10.9	1.2%	896.9	11.7	1.3%
ME 6	32 47 27	2003	Wet	December	--	57,574.1	57,567.1	6.9	0.0%	57,567.1	6.9	0.0%	57,566.0	8.1	0.0%	57,566.0	8.1	0.0%	57,564.8	9.3	0.0%	57,563.7	10.4	0.0%
ME 6	32 47 27	2003	Wet	January	--	31,685.2	31,678.2	6.9	0.0%	31,678.2	6.9	0.0%	31,677.1	8.1	0.0%	31,677.1	8.1	0.0%	31,675.9	9.3	0.0%	31,675.9	9.3	0.0%
ME 6	32 47 27	2003	Wet	February	--	20,435.2	20,430.6	4.6	0.0%	20,429.4	5.8	0.0%	20,429.4	5.8	0.0%	20,428.2	6.9	0.0%	20,428.2	6.9	0.0%	20,427.1	8.1	0.0%
ME 6	32 47 27	2003	Wet	March	--	24,160.9	24,156.3	4.6	0.0%	24,155.1	5.8	0.0%	24,155.1	5.8	0.0%	24,155.1	5.8	0.0%	24,153.9	6.9	0.0%	24,153.9	6.9	0.0%
ME 6	32 47 27	2003	Wet	April	--	43,226.9	43,221.1	5.8	0.0%	43,221.1	5.8	0.0%	43,221.1	5.8	0.0%	43,219.9	6.9	0.0%	43,219.9	6.9	0.0%	43,218.8	8.1	0.0%
ME 6	32 47 27	2003	Wet	May	--	12,265.0	12,255.8	9.3	0.1%	12,254.6	10.4	0.1%	12,253.5	11.6	0.1%	12,253.5	11.6	0.1%	12,252.3	12.7	0.1%	12,251.2	13.9	0.1%
ME 6	32 47 27	2003	Wet	June	--	3,177.5	3,165.5	12.0	0.4%	3,164.2	13.3	0.4%	3,163.1	14.5	0.5%	3,161.9	15.6	0.5%	3,160.8	16.8	0.5%	3,159.6	17.9	0.6%
ME 6	32 47 27	2003	Wet	July	--	1,486.8	1,474.1	12.7	0.9%	1,472.9	13.9	0.9%	1,471.5	15.3	1.0%	1,470.3	16.6	1.1%	1,469.0	17.8	1.2%	1,467.7	19.1	1.3%
ME 6	32 47 27	2003	Wet	August	--	772.3	759.9	12.3	1.6%	758.7	13.6	1.8%	757.5	14.8	1.9%	756.2	16.1	2.1%	755.0	17.3	2.2%	753.7	18.6	2.4%
ME 6	32 47 27	2003	Wet	September	Used in Summary Table Analysis	469.3	458.6	10.7	2.3%	457.5	11.8	2.5%	456.4	12.9	2.7%	455.3	13.9	3.0%	454.3	15.0	3.2%	453.2	16.1	3.4%
ME 6	32 47 27	2004	Wet	October	Used in Summary Table Analysis	335.9	327.0	8.9	2.7%	326.1	9.8	2.9%	325.2	10.7	3.2%	324.3	11.6	3.5%	323.4	12.5	3.7%	322.5	13.4	4.0%
ME 6	32 47 27	2004	Wet	November	Used in Summary Table Analysis	5,892.5	5,885.2	7.3	0.1%	5,884.5	8.0	0.1%	5,883.8	8.7	0.1%	5,883.0	9.5	0.2%	5,882.3	10.2	0.2%	5,881.5	11.0	0.2%
ME 6	32 47 27	2004	Wet	December	--	36,702.5	36,695.6	6.9	0.0%	36,695.6	6.9	0.0%	36,694.4	8.1	0.0%	36,694.4	8.1	0.0%	36,693.3	9.3	0.0%	36,693.3	9.3	0.0%
ME 6	32 47 27	2004	Wet	January	--	31,738.4	31,732.6	5.8	0.0%	31,732.6	5.8	0.0%	31,731.5	6.9	0.0%	31,731.5	6.9	0.0%	31,730.3	8.1	0.0%	31,730.3	8.1	0.0%
ME 6	32 47 27	2004	Wet	February	--	38,490.7	38,486.1	4.6	0.0%	38,486.1	4.6	0.0%	38,485.0	5.8	0.0%	38,485.0	5.8	0.0%	38,483.8	6.9	0.0%	38,483.8	6.9	0.0%
ME 6	32 47 27	2004	Wet	March	--	16,568.3	16,563.7	4.6	0.0%	16,563.7	4.6	0.0%	16,562.5	5.8	0.0%	16,562.5	5.8	0.0%	16,562.5	5.8	0.0%	16,561.3	6.9	0.0%
ME 6	32 47 27	2004	Wet	April	--	9,484.7	9,480.3	4.4	0.0%	9,479.9	4.9	0.1%	9,479.5	5.2	0.1%	9,479.1	5.7	0.1%	9,478.6	6.1	0.1%	9,478.1	6.6	0.1%
ME 6	32 47 27	2004	Wet	May	--	3,448.0	3,439.1	8.9	0.3%	3,438.2	9.8	0.3%	3,437.4	10.6	0.3%	3,436.5	11.6	0.3%	3,435.5	12.5	0.4%	3,434.6	13.4	0.4%
ME 6	32 47 27	2004	Wet	June	--	699.8	688.4	11.4	1.6%	687.2	12.6	1.8%	686.1	13.7	2.0%	684.9	14.8	2.1%	683.8	16.0	2.3%	682.7	17.1	2.4%
ME 6	32 47 27	2004	Wet	July	--	366.6	354.2	12.4	3.4%	353.0	13.7	3.7%	351.7	14.9	4.1%	350.5	16.1	4.4%	349.2	17.4	4.7%	348.0	18.6	5.1%
ME 6	32 47 27	2004	Wet	August	--	235.2	223.4	11.8	5.0%	222.2	13.0	5.5%	221.0	14.2	6.0%	219.8	15.4	6.5%	218.6	16.6	7.0%	217.5	17.7	7.5%
ME 6	32 47 27	2004	Wet	September	Used in Summary Table Analysis	171.6	160.3	11.3	6.6%	159.2	12.4	7.2%	158.0	13.5	7.9%	156.9	14.7	8.5%	155.8	15.8	9.2%	154.6	17.0	9.9%
ME 6	32 47 27	2005	Above Normal	October	Used in Summary Table Analysis	7,798.0	7,789.0	9.0	0.1%	7,788.1	10.0	0.1%	7,787.2	10.9	0.1%	7,786.2	11.8	0.2%	7,785.3	12.7	0.2%	7,784.4	13.7	0.2%
ME 6	32 47 27	2005	Above Normal	November	Used in Summary Table Analysis	2,274.7	2,267.5	7.2	0.3%	2,266.8	7.9	0.3%	2,266.1	8.6	0.4%	2,265.4	9.3	0.4%	2,264.6	10.1	0.4%	2,263.9	10.8	0.5%
ME 6	32 47 27	2005	Above Normal	December	--	21,355.3	21,349.5	5.8	0.0%	21,348.4	6.9	0.0%	21,348.4	6.9	0.0%	21,347.2	8.1	0.0%	21,347.2	8.1	0.0%	21,346.1	9.3	0.0%
ME 6	32 47 27	2005	Above Normal	January	--	22,642.4	22,636.6	5.8	0.0%	22,635.4	6.9	0.0%	22,635.4	6.9	0.0%	22,634.3	8.1	0.0%	22,634.3	8.1	0.0%	22,634.3	8.1	0.0%
ME 6	32 47 27	2005	Above Normal	February	--	14,057.9	14,053.2	4.6	0.0%	14,052.1	5.8	0.0%	14,052.1	5.8	0.0%	14,052.1	5.8	0.0%	14,050.9	6.9	0.0%	14,050.9	6.9	0.0%
ME 6	32 47 27	2005	Above Normal	March	--	28,763.9	28,759.3	4.6	0.0%	28,759.3	4.6	0.0%	28,758.1	5.8	0.0%	28,758.1	5.8	0.0%	28,758.1	5.8	0.0%	28,756.9	6.9	0.0%
ME 6	32 47 27	2005	Above Normal	April	--	21,574.1	21,569.4	4.6	0.0%	21,569.4	4.6	0.0%	21,568.3	5.8	0.0%	21,568.3	5.8	0.0%	21,567.1	6.9	0.0%	21,567.1	6.9	0.0%
ME 6	32 47 27	2005	Above Normal	May	--	19,724.5	19,715.3	9.3	0.0%	19,714.1	10.4	0.1%	19,713.0	11.6	0.1%	19,711.8	12.7	0.1%	19,711.8	12.7	0.1%	19,710.6	13.9	0.1%
ME 6	32 47 27	2005	Above Normal	June	--	16,053.2	16,040.5	12.7	0.1%	16,038.2	15.0	0.1%	16,037.0	16.2	0.1%	16,035.9	17.4	0.1%	16,034.7	18.5	0.1%	16,033.6	19.7	0.1%
ME 6	32 47 27	2005	Above Normal	July	--	2,867.6	2,854.7	12.8	0.4%	2,853.5	14.1	0.5%	2,852.2	15.4	0.5%	2,850.9	16.7	0.6%	2,849.7	17.9	0.6%	2,848.4	19.2	0.7%
ME 6	32 47 27	2005	Above Normal	August	--	995.1	983.3	11.7	1.2%	982.2	12.9	1.3%	981.0	14.1	1.4%	979.8	15.2	1.5%	978.7	16.4	1.6%	977.5	17.6	1.8%
ME 6	32 47 27	2005	Above Normal	September	Used in Summary Table Analysis	536.6	526.1	10.5	2.0%	525.1	11.5	2.1%	524.0	12.6	2.3%	523.0	13.6	2.5%	521.9	14.7	2.7%	520.9	15.7	2.9%
ME 6	32 47 27	2006	Wet	October	Used in Summary Table Analysis	648.0	639.4	8.6	1.3%	638.5	9.4	1.5%	637.7	10.3	1.6%	636.8	11.2	1.7%	635.9	12.0	1.9%	635.1	12.9	2.0%
ME 6	32 47 27	2006	Wet	November	Used in Summary Table Analysis	9,457.9	9,451.2	6.7	0.1%	9,450.5	7.4	0.1%	9,449.8	8.1	0.1%	9,449.1	8.8	0.1%	9,448.4	9.5	0.1%	9,447.7	10.2	0.1%
ME 6	32 47 27	2006	Wet	December	--	43,993.1	43,987.3	5.8	0.0%	43,986.1	6.9	0.0%	43,986.1	6.9	0.0%	43,985.0	8.1	0.0%	43,985.0	8.1	0.0%	43,983.8	9.3	0.0%
ME 6	32 47 27	2006	Wet	January	--	46,743.1	46,737.3	5.8	0.0%	46,737.3	5.8	0.0%	46,736.1	6.9	0.0%	46,736.1	6.9	0.0%	46,735.0	8.1	0.0%	46,735.0	8.1	0.0%
ME 6	32 47 27	2006	Wet	February	--	26,809.0	26,804.4	4.6	0.0%	26,804.4	4.6	0.0%	26,803.2	5.8	0.0%	26,803.2	5.8	0.0%	26,802.1	6.9	0.0%	26,802.1	6.9	0.0%
ME 6	32 47 27	2006	Wet	March	--	47,511.6	47,506.9	4.6	0.0%	47,506.9	4.6	0.0%	47,505.8	5.8	0.0%	47,505.8	5.8	0.0%	47,505.8	5.8	0.0%	47,504.6	6.9	0.0%
ME 6	32 47 27	2006	Wet	April	--	30,567.1	30,562.5	4.6	0.0%	30,562.5	4.6	0.0%	30,561.3	5.8	0.0%	30,561.3	5.8	0.0%	30,561.3	5.8	0.0%	30,560.2	6.9	0.0%
ME 6	32 47 27	2006	Wet	May	--	14,288.2	14,282.4	5.8	0.0%	14,282.4	5.8	0.0%	14,281.3	6.9	0.0%	14,281.3	6.9	0.0%	14,280.1	8.1	0.1%	14,280.1	8.1	0.1%
ME 6	32 47 27	2006	Wet	June	--	3,557.6	3,546.3	11.3	0.3%	3,545.3	12.4	0.3%	3,544.1	13.5	0.4%	3,542.9	14.7	0.4%	3,541.9	15.7	0.4%	3,540.7	16.9	0.5%
ME 6	32 47 27	2006	Wet	July	--	1,293.1	1,280.8	12.3	0.9%	1,279.6	13.4	1.0%	1,278.4	14.7	1.1%	1,277.2	15.9	1.2%	1,275.9	17.1	1.3%	1,274.8	18.3	1.4%
ME 6	32 47 27	2006	Wet	August	--	679.2	667.2	12.0	1.8%	666.0	13.2	1.9%	664.8	14.4	2.1%	663.6	15.6	2.3%	662.4	16.8	2.5%	661.2	18.0	2.7%
ME 6	32 47 27	2006	Wet	September	Used in Summary Table Analysis	439.1	428.5	10.6	2.4%	427.4	11.7	2.7%	426.4	12.8	2.9%	425.3	13.8	3.1%	424.2	14.9	3.4%	423.2	16.0	3.6%
ME 6	32 47 27	2007	Above Normal	October	Used in Summary Table Analysis	285.6	276.9	8.7	3.1%	276.0	9.6	3.4%	275.1	10.5	3.7%	274.3	11.4	4.0%	273.4	12.2	4.3%	272.5	13.1	4.6%
ME 6	32 47 27	2007	Above Normal	November	Used in Summary Table Analysis	8,800.6	8,793.5	7.1	0.1%	8,792.8	7.8	0.1%	8,792.1	8.4	0.1%	8,791.4	9.1	0.1%	8,790.6	10.0	0.1%	8,789.9	10.6	0.1%
ME 6	32 47 27	2007	Above Normal	December	--	20,680.6	20,674.8	5.8	0.0%	20,673.6	6.9	0.0%	20,672.5	8.1	0.0%	20,672.5	8.1	0.0%	20,671.3	9.3	0.0%	20,671.3	9.3	0.0%
ME 6	32 47 27	2007	Above Normal	January	--	10,323.1	10,317.8	5.3	0.1%	10,317.2	5.9	0.1%	10,316.7	6.5	0.1%	10,316.2	6.9	0.1%	10,315.6	7.5	0.1%	10,315.0	8.1	0.1%
ME 6	32 47 27	2007	Above Normal	February	--	30,875.0	30,869.2	5.8	0.0%	30,869.2	5.8	0.0%	30,868.1	6.9	0.0%	30,868.1	6.9	0.0%	30,866.9	8.1	0.0%	30,866.9	8.1	0.0%
ME 6	32 47 27	2007	Above Normal	March	--	13,153.9	13,149.3	4.6	0.0%	13,148.1	5.8	0.0%	13,148.1	5.8	0.0%	13,147.0	6.9	0.1%	13,147.0	6.9	0.1%	13,147.0	6.9	0.1%
ME 6	32 47 27	2007	Above Normal	April	--	11,584.5	11,576.4	8.1	0.1%	11,575.2	9.3	0.1%	11,574.1	10.4	0.1%	11,573.3	11.2	0.1%	11,572.5	12.0	0.1%	11,571.5	13.0	0.1%
ME 6	32 47 27	2007	Above Normal	May	--	4,163.1	4,152.7	10.4	0.3%	4,151.6	11.5	0.3%	4,150.6	12.5	0.3%	4,149.5	13.5	0.3%	4,148.4	14.7	0.4%	4,147.3	15.7	0.4%
ME 6	32 47 27	2007	Above Normal	June	--	1,515.7	1,503.0	12.7	0.8%	1,501.7	14.0	0.9%	1,500.5	15.3	1.0%	1,499.2	16.6	1.1%	1,497.9	17.8	1.2%	1,496.6	19.1	1.3%
ME 6	32 47 27	2007	Above Normal	July	--	504.8	491.7	13.0	2.6%	490.4	14.3	2.8%	489.1	15.6	3.1%	487.8	16.9	3.4%	486.5	18.2	3.6%	485.2	19.5	3.9%
ME 6	32 47 27	2007	Above Normal	August	--	233.4	221.6	11.9	5.1%	220.4	13.0	5.6%	219.2	14.2	6.1%	218.0	15.4	6.6%	216.9	16.6	7.1%	215.7	17.8	7.6%
ME 6	32 47 27	2007	Above Normal	September	Used in Summary Table Analysis	161.1	149.8	11.3	7.0%	148.7	12.4	7.7%	147.5	13.6	8.4%	146.4	14.7	9.1%	145.3	15.8	9.8%	144.2	16.9	10.5%
ME 6	32 47 27	2008	Dry	October	Used in Summary Table Analysis	3,484.0	3,474.7	9.4	0.3%	3,473.7	10.3	0.3%	3,472.8	11.2	0.3%	3,471.9	12.2	0.3%	3,470.9	13.1	0.4%	3,470.0	14.0	0.4%
ME 6	32 47 27	2008	Dry	November	Used in Summary Table Analysis	3,322.8	3,315.5	7.3	0.2%	3,314.8	8.0	0.2%	3,314.1	8.7	0.3%	3,313.3	9.5	0.3%	3,312.6	10.2	0.3%	3,311.9	10.9	0.3%
ME 6	32 47 27	2008	Dry	December	--	23,478.0	23,472.2	5.8	0.0%	23,471.1	6.9	0.0%	23,471.1	6.9	0.0%	23,469.9	8.1	0.0%	23,469.9	8.1	0.0%	23,468.8	9.3	0.0%
ME 6	32 47 27	2008	Dry	January	--	37,866.9	37,861.1	5.8	0.0%	37,860.0	6.9	0.0%	37,860.0	6.9	0.0%	37,858.8	8.1	0.0%	37,858.8	8.1	0.0%	37,857.6	9.3	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 47 27	2008	Dry	February	--	26,351.9	26,347.2	4.6	0.0%	26,346.1	5.8	0.0%	26,346.1	5.8	0.0%	26,346.1	5.8	0.0%	26,344.9	6.9	0.0%	26,344.9	6.9	0.0%
ME 6	32 47 27	2008	Dry	March	--	11,833.3	11,828.7	4.6	0.0%	11,827.5	5.8	0.0%	11,827.5	5.8	0.0%	11,826.4	6.9	0.1%	11,826.4	6.9	0.1%	11,826.4	6.9	0.1%
ME 6	32 47 27	2008	Dry	April	--	9,048.5	9,039.6	8.9	0.1%	9,038.7	9.8	0.1%	9,037.7	10.8	0.1%	9,036.9	11.6	0.1%	9,036.0	12.5	0.1%	9,035.1	13.4	0.1%
ME 6	32 47 27	2008	Dry	May	--	1,359.1	1,349.4	9.7	0.7%	1,348.5	10.6	0.8%	1,347.6	11.6	0.9%	1,346.5	12.6	0.9%	1,345.6	13.5	1.0%	1,344.6	14.6	1.1%
ME 6	32 47 27	2008	Dry	June	--	447.0	433.0	14.0	3.1%	431.6	15.4	3.4%	430.2	16.8	3.8%	428.9	18.2	4.1%	427.5	19.6	4.4%	426.1	20.9	4.7%
ME 6	32 47 27	2008	Dry	July	--	264.8	250.8	14.0	5.3%	249.4	15.4	5.8%	248.0	16.8	6.4%	246.6	18.2	6.9%	245.2	19.6	7.4%	243.8	21.0	7.9%
ME 6	32 47 27	2008	Dry	August	--	188.6	174.9	13.7	7.3%	173.5	15.1	8.0%	172.2	16.5	8.7%	170.8	17.8	9.5%	169.4	19.2	10.2%	168.0	20.6	10.9%
ME 6	32 47 27	2008	Dry	September	Used in Summary Table Analysis	150.1	136.9	13.3	8.8%	135.5	14.6	9.7%	134.2	15.9	10.6%	132.9	17.3	11.5%	131.5	18.6	12.4%	130.2	19.9	13.3%
ME 6	32 47 27	2009	Critical	October	Used in Summary Table Analysis	936.7	926.1	10.6	1.1%	925.0	11.7	1.3%	924.0	12.8	1.4%	922.9	13.9	1.5%	921.8	14.9	1.6%	920.7	16.0	1.7%
ME 6	32 47 27	2009	Critical	November	Used in Summary Table Analysis	5,599.7	5,591.3	8.3	0.1%	5,590.5	9.1	0.2%	5,589.7	10.0	0.2%	5,588.9	10.8	0.2%	5,588.0	11.7	0.2%	5,587.2	12.5	0.2%
ME 6	32 47 27	2009	Critical	December	--	12,348.4	12,340.3	8.1	0.1%	12,340.3	8.1	0.1%	12,339.1	9.3	0.1%	12,339.1	9.3	0.1%	12,338.0	10.4	0.1%	12,336.8	11.6	0.1%
ME 6	32 47 27	2009	Critical	January	--	8,849.9	8,843.6	6.3	0.1%	8,842.9	6.9	0.1%	8,842.4	7.5	0.1%	8,841.7	8.2	0.1%	8,841.1	8.8	0.1%	8,840.4	9.5	0.1%
ME 6	32 47 27	2009	Critical	February	--	22,768.5	22,762.7	5.8	0.0%	22,762.7	5.8	0.0%	22,761.6	6.9	0.0%	22,761.6	6.9	0.0%	22,760.4	8.1	0.0%	22,760.4	8.1	0.0%
ME 6	32 47 27	2009	Critical	March	--	21,236.1	21,231.5	4.6	0.0%	21,230.3	5.8	0.0%	21,230.3	5.8	0.0%	21,229.2	6.9	0.0%	21,229.2	6.9	0.0%	21,229.2	6.9	0.0%
ME 6	32 47 27	2009	Critical	April	--	10,111.5	10,102.1	9.4	0.1%	10,101.2	10.3	0.1%	10,100.2	11.2	0.1%	10,099.4	12.0	0.1%	10,098.5	13.0	0.1%	10,097.5	14.0	0.1%
ME 6	32 47 27	2009	Critical	May	--	15,644.7	15,633.1	11.6	0.1%	15,631.9	12.7	0.1%	15,630.8	13.9	0.1%	15,629.6	15.0	0.1%	15,628.5	16.2	0.1%	15,627.3	17.4	0.1%
ME 6	32 47 27	2009	Critical	June	--	3,170.4	3,155.6	14.8	0.5%	3,154.2	16.2	0.5%	3,152.7	17.7	0.6%	3,151.2	19.2	0.6%	3,149.7	20.7	0.7%	3,148.3	22.1	0.7%
ME 6	32 47 27	2009	Critical	July	--	1,272.7	1,258.6	14.1	1.1%	1,257.2	15.5	1.2%	1,255.7	17.0	1.3%	1,254.3	18.4	1.4%	1,252.9	19.8	1.6%	1,251.5	21.2	1.7%
ME 6	32 47 27	2009	Critical	August	--	679.3	665.5	13.8	2.0%	664.1	15.2	2.2%	662.7	16.6	2.4%	661.3	18.0	2.7%	660.0	19.3	2.8%	658.6	20.7	3.0%
ME 6	32 47 27	2009	Critical	September	Used in Summary Table Analysis	399.7	387.2	12.5	3.1%	386.0	13.8	3.4%	384.7	15.0	3.8%	383.4	16.3	4.1%	382.2	17.5	4.4%	381.0	18.8	4.7%
ME 6	32 47 27	2010	Below Normal	October	Used in Summary Table Analysis	6,104.2	6,093.3	10.9	0.2%	6,092.2	11.9	0.2%	6,091.1	13.1	0.2%	6,090.0	14.1	0.2%	6,089.0	15.2	0.2%	6,087.8	16.3	0.3%
ME 6	32 47 27	2010	Below Normal	November	Used in Summary Table Analysis	8,351.5	8,342.8	8.7	0.1%	8,342.0	9.5	0.1%	8,341.1	10.4	0.1%	8,340.3	11.2	0.1%	8,339.4	12.2	0.1%	8,338.5	13.0	0.2%
ME 6	32 47 27	2010	Below Normal	December	--	12,476.9	12,469.9	6.9	0.1%	12,468.8	8.1	0.1%	12,467.6	9.3	0.1%	12,467.6	9.3	0.1%	12,466.4	10.4	0.1%	12,466.4	10.4	0.1%
ME 6	32 47 27	2010	Below Normal	January	--	36,640.0	36,634.3	5.8	0.0%	36,633.1	6.9	0.0%	36,633.1	6.9	0.0%	36,631.9	8.1	0.0%	36,630.8	9.3	0.0%	36,630.8	9.3	0.0%
ME 6	32 47 27	2010	Below Normal	February	--	27,360.0	27,354.2	5.8	0.0%	27,354.2	5.8	0.0%	27,353.0	6.9	0.0%	27,353.0	6.9	0.0%	27,351.9	8.1	0.0%	27,351.9	8.1	0.0%
ME 6	32 47 27	2010	Below Normal	March	--	28,937.5	28,932.9	4.6	0.0%	28,931.7	5.8	0.0%	28,931.7	5.8	0.0%	28,930.6	6.9	0.0%	28,930.6	6.9	0.0%	28,929.4	8.1	0.0%
ME 6	32 47 27	2010	Below Normal	April	--	40,200.2	40,195.6	4.6	0.0%	40,194.4	5.8	0.0%	40,194.4	5.8	0.0%	40,193.3	6.9	0.0%	40,193.3	6.9	0.0%	40,192.1	8.1	0.0%
ME 6	32 47 27	2010	Below Normal	May	--	20,413.2	20,402.8	10.4	0.1%	20,401.6	11.6	0.1%	20,401.6	11.6	0.1%	20,400.5	12.7	0.1%	20,399.3	13.9	0.1%	20,398.1	15.0	0.1%
ME 6	32 47 27	2010	Below Normal	June	--	9,464.9	9,450.8	14.1	0.1%	9,449.4	15.5	0.2%	9,448.0	16.9	0.2%	9,446.6	18.3	0.2%	9,445.3	19.7	0.2%	9,443.8	21.2	0.2%
ME 6	32 47 27	2010	Below Normal	July	--	1,463.7	1,450.7	13.0	0.9%	1,449.4	14.2	1.0%	1,448.0	15.6	1.1%	1,446.8	16.9	1.2%	1,445.5	18.2	1.2%	1,444.2	19.4	1.3%
ME 6	32 47 27	2010	Below Normal	August	--	581.5	569.3	12.1	2.1%	568.1	13.3	2.3%	566.9	14.6	2.5%	565.7	15.8	2.7%	564.6	16.9	2.9%	563.3	18.1	3.1%
ME 6	32 47 27	2010	Below Normal	September	Used in Summary Table Analysis	664.2	652.7	11.5	1.7%	651.5	12.7	1.9%	650.3	13.9	2.1%	649.2	15.0	2.3%	648.0	16.2	2.4%	646.9	17.3	2.6%
ME 6	32 47 27	2011	Wet	October	Used in Summary Table Analysis	9,726.7	9,717.9	8.8	0.1%	9,717.0	9.7	0.1%	9,716.1	10.6	0.1%	9,715.3	11.5	0.1%	9,714.4	12.4	0.1%	9,713.4	13.3	0.1%
ME 6	32 47 27	2011	Wet	November	Used in Summary Table Analysis	14,325.2	14,318.3	6.9	0.0%	14,317.1	8.1	0.1%	14,316.0	9.3	0.1%	14,316.0	9.3	0.1%	14,314.8	10.4	0.1%	14,314.8	10.4	0.1%
ME 6	32 47 27	2011	Wet	December	--	34,123.8	34,116.9	6.9	0.0%	34,116.9	6.9	0.0%	34,115.7	8.1	0.0%	34,115.7	8.1	0.0%	34,114.6	9.3	0.0%	34,114.6	9.3	0.0%
ME 6	32 47 27	2011	Wet	January	--	14,236.1	14,230.3	5.8	0.0%	14,230.3	5.8	0.0%	14,229.2	6.9	0.0%	14,229.2	6.9	0.0%	14,228.0	8.1	0.1%	14,228.0	8.1	0.1%
ME 6	32 47 27	2011	Wet	February	--	20,847.2	20,842.6	4.6	0.0%	20,842.6	4.6	0.0%	20,841.4	5.8	0.0%	20,841.4	5.8	0.0%	20,840.3	6.9	0.0%	20,840.3	6.9	0.0%
ME 6	32 47 27	2011	Wet	March	--	52,284.7	52,280.1	4.6	0.0%	52,280.1	4.6	0.0%	52,278.9	5.8	0.0%	52,278.9	5.8	0.0%	52,277.8	6.9	0.0%	52,277.8	6.9	0.0%
ME 6	32 47 27	2011	Wet	April	--	24,895.8	24,891.2	4.6	0.0%	24,890.0	5.8	0.0%	24,890.0	5.8	0.0%	24,890.0	5.8	0.0%	24,888.9	6.9	0.0%	24,888.9	6.9	0.0%
ME 6	32 47 27	2011	Wet	May	--	11,429.4	11,420.4	9.0	0.1%	11,419.4	10.0	0.1%	11,418.5	10.9	0.1%	11,417.7	11.7	0.1%	11,416.7	12.7	0.1%	11,415.7	13.7	0.1%
ME 6	32 47 27	2011	Wet	June	--	7,103.5	7,089.8	13.7	0.2%	7,088.4	15.0	0.2%	7,087.0	16.4	0.2%	7,085.8	17.7	0.2%	7,084.4	19.1	0.3%	7,083.0	20.5	0.3%
ME 6	32 47 27	2011	Wet	July	--	1,835.3	1,821.5	13.8	0.8%	1,820.1	15.2	0.8%	1,818.8	16.6	0.9%	1,817.5	17.8	1.0%	1,816.0	19.3	1.1%	1,814.7	20.6	1.1%
ME 6	32 47 27	2011	Wet	August	--	787.6	775.7	11.9	1.5%	774.5	13.1	1.7%	773.3	14.3	1.8%	772.1	15.5	2.0%	770.9	16.7	2.1%	769.8	17.8	2.3%
ME 6	32 47 27	2011	Wet	September	Used in Summary Table Analysis	444.3	433.4	10.9	2.5%	432.3	12.0	2.7%	431.2	13.1	2.9%	430.1	14.2	3.2%	429.0	15.3	3.4%	427.9	16.4	3.7%
ME 6	32 47 27	2012	Below Normal	October	Used in Summary Table Analysis	4,590.7	4,581.7	9.0	0.2%	4,580.8	10.0	0.2%	4,580.0	10.8	0.2%	4,579.1	11.7	0.3%	4,578.1	12.6	0.3%	4,577.2	13.5	0.3%
ME 6	32 47 27	2012	Below Normal	November	Used in Summary Table Analysis	8,335.4	8,328.2	7.2	0.1%	8,327.5	7.9	0.1%	8,326.9	8.6	0.1%	8,326.0	9.4	0.1%	8,325.3	10.1	0.1%	8,324.7	10.8	0.1%
ME 6	32 47 27	2012	Below Normal	December	--	5,227.2	5,221.2	6.0	0.1%	5,220.5	6.7	0.1%	5,219.9	7.3	0.1%	5,219.3	7.9	0.2%	5,218.6	8.6	0.2%	5,218.1	9.1	0.2%
ME 6	32 47 27	2012	Below Normal	January	--	20,392.4	20,386.6	5.8	0.0%	20,385.4	6.9	0.0%	20,385.4	6.9	0.0%	20,384.3	8.1	0.0%	20,384.3	8.1	0.0%	20,383.1	9.3	0.0%
ME 6	32 47 27	2012	Below Normal	February	--	18,292.8	18,288.2	4.6	0.0%	18,287.0	5.8	0.0%	18,287.0	5.8	0.0%	18,285.9	6.9	0.0%	18,285.9	6.9	0.0%	18,284.7	8.1	0.0%
ME 6	32 47 27	2012	Below Normal	March	--	45,750.0	45,744.2	5.8	0.0%	45,744.2	5.8	0.0%	45,744.2	5.8	0.0%	45,743.1	6.9	0.0%	45,743.1	6.9	0.0%	45,741.9	8.1	0.0%
ME 6	32 47 27	2012	Below Normal	April	--	26,976.9	26,972.2	4.6	0.0%	26,972.2	4.6	0.0%	26,971.1	5.8	0.0%	26,971.1	5.8	0.0%	26,969.9	6.9	0.0%	26,969.9	6.9	0.0%
ME 6	32 47 27	2012	Below Normal	May	--	7,511.6	7,502.5	9.0	0.1%	7,501.6	10.0	0.1%	7,500.7	10.9	0.1%	7,499.8	11.8	0.2%	7,499.0	12.6	0.2%	7,498.1	13.4	0.2%
ME 6	32 47 27	2012	Below Normal	June	--	5,562.4	5,548.5	13.9	0.2%	5,547.1	15.3	0.3%	5,545.6	16.8	0.3%	5,544.3	18.1	0.3%	5,542.9	19.4	0.3%	5,541.6	20.8	0.4%
ME 6	32 47 27	2012	Below Normal	July	--	2,253.6	2,240.3	13.3	0.6%	2,238.9	14.7	0.7%	2,237.6	16.0	0.7%	2,236.2	17.4	0.8%	2,235.0	18.6	0.8%	2,233.6	20.0	0.9%
ME 6	32 47 27	2012	Below Normal	August	--	396.9	385.9	11.0	2.8%	384.8	12.1	3.0%	383.7	13.1	3.3%	382.6	14.2	3.6%	381.5	15.3	3.9%	380.5	16.4	4.1%
ME 6	32 47 27	2012	Below Normal	September	Used in Summary Table Analysis	259.5	249.7	9.8	3.8%	248.7	10.8	4.2%	247.7	11.8	4.5%	246.7	12.8	4.9%	245.8	13.8	5.3%	244.8	14.8	5.7%
ME 6	32 47 27	2013	Below Normal	October	Used in Summary Table Analysis	1,945.1	1,936.5	8.7	0.4%	1,935.6	9.5	0.5%	1,934.7	10.4	0.5%	1,933.9	11.2	0.6%	1,933.0	12.2	0.6%	1,932.1	13.1	0.7%
ME 6	32 47 27	2013	Below Normal	November	Used in Summary Table Analysis	14,863.4	14,856.5	6.9	0.0%	14,855.3	8.1	0.1%	14,854.2	9.3	0.1%	14,854.2	9.3	0.1%	14,853.0	10.4	0.1%	14,853.0	10.4	0.1%
ME 6	32 47 27	2013	Below Normal	December	--	60,384.3	60,378.5	5.8	0.0%	60,377.3	6.9	0.0%	60,377.3	6.9	0.0%	60,376.2	8.1	0.0%	60,376.2	8.1	0.0%	60,375.0	9.3	0.0%
ME 6	32 47 27	2013	Below Normal	January	--	22,314.8	22,309.0	5.8	0.0%	22,309.0	5.8	0.0%	22,307.9	6.9	0.0%	22,307.9	6.9	0.0%	22,306.7	8.1	0.0%	22,306.7	8.1	0.0%
ME 6	32 47 27	2013	Below Normal	February	--	8,900.0	8,895.1	4.9	0.1%	8,894.6	5.4	0.1%	8,894.1	5.9	0.1%	8,893.6	6.4	0.1%	8,893.2	6.8	0.1%	8,892.6	7.4	0.1%
ME 6	32 47 27	2013	Below Normal	March	--	10,413.4	10,408.8	4.6	0.0%	10,408.3	5.1	0.0%	10,407.9	5.6	0.1%	10,407.4	6.0	0.1%	10,406.9	6.5	0.1%	10,406.5	6.9	0.1%
ME 6	32 47 27	2013	Below Normal	April	--	8,317.6	8,308.9	8.7	0.1%	8,308.1	9.5	0.1%	8,307.2	10.4	0.1%	8,306.4	11.2	0.1%	8,305.4	12.2	0.1%	8,304.6	13.0	0.2%
ME 6	32 47 27	2013	Below Normal	May	--	4,464.7	4,454.3	10.4	0.2%	4,453.2	11.5	0.3%	4,452.2	12.5	0.3%	4,451.2	13.5	0.3%	4,450.1	14.6	0.3%	4,449.1	15.6	0.3%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 47 27	2013	Below Normal	June	--	2,123.3	2,110.6	12.6	0.6%	2,109.4	13.9	0.7%	2,108.1	15.2	0.7%	2,106.8	16.4	0.8%	2,105.6	17.7	0.8%	2,104.3	19.0	0.9%
ME 6	32 47 27	2013	Below Normal	July	--	725.3	712.8	12.5	1.7%	711.5	13.8	1.9%	710.3	15.0	2.1%	709.0	16.3	2.2%	707.8	17.5	2.4%	706.5	18.8	2.6%
ME 6	32 47 27	2013	Below Normal	August	--	349.5	337.7	11.8	3.4%	336.6	13.0	3.7%	335.4	14.2	4.0%	334.2	15.3	4.4%	333.0	16.5	4.7%	331.9	17.7	5.1%
ME 6	32 47 27	2013	Below Normal	September	Used in Summary Table Analysis	4,836.7	4,824.4	12.3	0.3%	4,823.1	13.5	0.3%	4,822.0	14.7	0.3%	4,820.7	16.0	0.3%	4,819.6	17.1	0.4%	4,818.3	18.4	0.4%
ME 6	32 47 27	2014	Critical	October	Used in Summary Table Analysis	284.6	275.5	9.1	3.2%	274.6	10.0	3.5%	273.7	10.9	3.8%	272.8	11.8	4.1%	271.9	12.7	4.5%	271.0	13.6	4.8%
ME 6	32 47 27	2014	Critical	November	Used in Summary Table Analysis	1,566.0	1,558.7	7.3	0.5%	1,558.0	8.0	0.5%	1,557.3	8.7	0.6%	1,556.5	9.5	0.6%	1,555.8	10.2	0.7%	1,555.1	10.9	0.7%
ME 6	32 47 27	2014	Critical	December	--	1,607.3	1,600.9	6.4	0.4%	1,600.3	6.9	0.4%	1,599.7	7.6	0.5%	1,599.1	8.2	0.5%	1,598.4	8.9	0.6%	1,597.8	9.5	0.6%
ME 6	32 47 27	2014	Critical	January	--	2,850.3	2,844.7	5.7	0.2%	2,844.1	6.3	0.2%	2,843.6	6.7	0.2%	2,843.1	7.3	0.3%	2,842.5	7.9	0.3%	2,841.9	8.4	0.3%
ME 6	32 47 27	2014	Critical	February	--	15,834.5	15,828.7	5.8	0.0%	15,828.7	5.8	0.0%	15,827.5	6.9	0.0%	15,827.5	6.9	0.0%	15,826.4	8.1	0.1%	15,826.4	8.1	0.1%
ME 6	32 47 27	2014	Critical	March	--	31,589.1	31,584.5	4.6	0.0%	31,584.5	4.6	0.0%	31,583.3	5.8	0.0%	31,583.3	5.8	0.0%	31,582.2	6.9	0.0%	31,582.2	6.9	0.0%
ME 6	32 47 27	2014	Critical	April	--	13,025.5	13,016.2	9.3	0.1%	13,015.0	10.4	0.1%	13,013.9	11.6	0.1%	13,012.7	12.7	0.1%	13,012.7	12.7	0.1%	13,011.6	13.9	0.1%
ME 6	32 47 27	2014	Critical	May	--	5,211.1	5,200.0	11.1	0.2%	5,199.0	12.2	0.2%	5,197.8	13.3	0.3%	5,196.8	14.4	0.3%	5,195.6	15.5	0.3%	5,194.4	16.7	0.3%
ME 6	32 47 27	2014	Critical	June	--	1,208.7	1,193.4	15.3	1.3%	1,191.9	16.8	1.4%	1,190.4	18.3	1.5%	1,188.8	19.9	1.6%	1,187.3	21.4	1.8%	1,185.8	22.9	1.9%
ME 6	32 47 27	2014	Critical	July	--	553.8	539.4	14.3	2.6%	538.0	15.8	2.8%	536.6	17.2	3.1%	535.1	18.6	3.4%	533.7	20.0	3.6%	532.3	21.4	3.9%
ME 6	32 47 27	2014	Critical	August	--	357.6	343.8	13.8	3.8%	342.4	15.1	4.2%	341.1	16.5	4.6%	339.7	17.9	5.0%	338.3	19.2	5.4%	336.9	20.6	5.8%
ME 6	32 47 27	2014	Critical	September	Used in Summary Table Analysis	2,599.2	2,585.6	13.5	0.5%	2,584.3	14.9	0.6%	2,582.9	16.3	0.6%	2,581.6	17.6	0.7%	2,580.2	19.0	0.7%	2,578.8	20.4	0.8%
ME 6	32 47 27	2015	Dry	October	Used in Summary Table Analysis	11,452.2	11,441.8	10.4	0.1%	11,440.7	11.5	0.1%	11,439.7	12.5	0.1%	11,438.0	14.2	0.1%	11,436.9	15.3	0.1%	11,435.9	16.3	0.1%
ME 6	32 47 27	2015	Dry	November	Used in Summary Table Analysis	9,132.6	9,124.5	8.1	0.1%	9,123.7	8.9	0.1%	9,122.9	9.7	0.1%	9,122.1	10.5	0.1%	9,121.2	11.5	0.1%	9,120.4	12.3	0.1%
ME 6	32 47 27	2015	Dry	December	--	32,965.3	32,958.3	6.9	0.0%	32,958.3	6.9	0.0%	32,957.2	8.1	0.0%	32,956.0	9.3	0.0%	32,956.0	9.3	0.0%	32,954.9	10.4	0.0%
ME 6	32 47 27	2015	Dry	January	--	14,630.8	14,623.8	6.9	0.0%	14,623.8	6.9	0.0%	14,622.7	8.1	0.1%	14,622.7	8.1	0.1%	14,621.5	9.3	0.1%	14,621.5	9.3	0.1%
ME 6	32 47 27	2015	Dry	February	--	27,372.7	27,366.9	5.8	0.0%	27,365.7	6.9	0.0%	27,365.7	6.9	0.0%	27,364.6	8.1	0.0%	27,364.6	8.1	0.0%	27,364.6	8.1	0.0%
ME 6	32 47 27	2015	Dry	March	--	11,603.0	11,598.4	4.6	0.0%	11,598.4	4.6	0.0%	11,597.2	5.8	0.0%	11,597.2	5.8	0.0%	11,597.2	5.8	0.0%	11,596.1	6.9	0.1%
ME 6	32 47 27	2015	Dry	April	--	8,477.1	8,467.8	9.3	0.1%	8,466.9	10.2	0.1%	8,466.0	11.1	0.1%	8,465.0	12.0	0.1%	8,464.1	13.0	0.2%	8,463.2	13.9	0.2%
ME 6	32 47 27	2015	Dry	May	--	1,512.8	1,502.0	10.9	0.7%	1,500.9	11.9	0.8%	1,499.8	13.1	0.9%	1,498.7	14.1	0.9%	1,497.7	15.2	1.0%	1,496.5	16.3	1.1%
ME 6	32 47 27	2015	Dry	June	--	659.3	645.1	14.2	2.2%	643.7	15.6	2.4%	642.3	17.0	2.6%	640.8	18.5	2.8%	639.4	19.9	3.0%	638.0	21.3	3.2%
ME 6	32 47 27	2015	Dry	July	--	276.0	261.9	14.1	5.1%	260.5	15.5	5.6%	259.0	16.9	6.1%	257.6	18.3	6.6%	256.2	19.7	7.2%	254.8	21.2	7.7%
ME 6	32 47 27	2015	Dry	August	--	175.4	161.7	13.7	7.8%	160.3	15.1	8.6%	159.0	16.4	9.4%	157.6	17.8	10.2%	156.2	19.2	10.9%	154.8	20.6	11.7%
ME 6	32 47 27	2015	Dry	September	Used in Summary Table Analysis	128.6	116.3	12.3	9.6%	115.1	13.6	10.6%	113.8	14.8	11.5%	112.5	16.1	12.5%	111.3	17.4	13.5%	110.0	18.6	14.5%
ME 6	32 47 27	2016	Above Normal	October	Used in Summary Table Analysis	93.6	83.1	10.5	11.2%	82.0	11.6	12.4%	80.9	12.7	13.5%	80.3	13.2	14.1%	79.4	14.2	15.1%	78.0	15.6	16.7%
ME 6	32 47 27	2016	Above Normal	November	Used in Summary Table Analysis	3,948.6	3,940.5	8.1	0.2%	3,939.7	8.9	0.2%	3,938.9	9.7	0.2%	3,938.0	10.6	0.3%	3,937.0	11.6	0.3%	3,936.2	12.4	0.3%
ME 6	32 47 27	2016	Above Normal	December	--	37,028.9	37,020.8	8.1	0.0%	37,020.8	8.1	0.0%	37,019.7	9.3	0.0%	37,018.5	10.4	0.0%	37,018.5	10.4	0.0%	37,017.4	11.6	0.0%
ME 6	32 47 27	2016	Above Normal	January	--	57,741.9	57,735.0	6.9	0.0%	57,733.8	8.1	0.0%	57,733.8	8.1	0.0%	57,732.6	9.3	0.0%	57,732.6	9.3	0.0%	57,731.5	10.4	0.0%
ME 6	32 47 27	2016	Above Normal	February	--	24,336.8	24,331.0	5.8	0.0%	24,331.0	5.8	0.0%	24,329.9	6.9	0.0%	24,329.9	6.9	0.0%	24,328.7	8.1	0.0%	24,328.7	8.1	0.0%
ME 6	32 47 27	2016	Above Normal	March	--	41,975.7	41,971.1	4.6	0.0%	41,969.9	5.8	0.0%	41,969.9	5.8	0.0%	41,968.8	6.9	0.0%	41,968.8	6.9	0.0%	41,967.6	8.1	0.0%
ME 6	32 47 27	2016	Above Normal	April	--	18,592.6	18,588.0	4.6	0.0%	18,586.8	5.8	0.0%	18,586.8	5.8	0.0%	18,586.8	5.8	0.0%	18,585.6	6.9	0.0%	18,585.6	6.9	0.0%
ME 6	32 47 27	2016	Above Normal	May	--	5,235.5	5,229.9	5.7	0.1%	5,229.3	6.3	0.1%	5,228.7	6.8	0.1%	5,228.1	7.4	0.1%	5,227.5	8.0	0.2%	5,227.0	8.6	0.2%
ME 6	32 47 27	2016	Above Normal	June	--	1,519.0	1,508.1	10.9	0.7%	1,507.1	11.9	0.8%	1,505.9	13.1	0.9%	1,504.9	14.1	0.9%	1,503.7	15.3	1.0%	1,502.7	16.3	1.1%
ME 6	32 47 27	2016	Above Normal	July	--	833.7	821.4	12.3	1.5%	820.2	13.5	1.6%	819.0	14.7	1.8%	817.7	16.0	1.9%	816.5	17.2	2.1%	815.3	18.4	2.2%
ME 6	32 47 27	2016	Above Normal	August	--	502.8	490.7	12.2	2.4%	489.5	13.4	2.7%	488.3	14.6	2.9%	487.0	15.8	3.1%	485.8	17.0	3.4%	484.6	18.2	3.6%
ME 6	32 47 27	2016	Above Normal	September	Used in Summary Table Analysis	338.7	327.8	10.9	3.2%	326.7	12.0	3.6%	325.6	13.1	3.9%	324.5	14.2	4.2%	323.4	15.3	4.5%	322.3	16.4	4.9%
ME 6	32 47 27	2017	Wet	October	Used in Summary Table Analysis	18,445.6	18,436.3	9.3	0.1%	18,436.3	9.3	0.1%	18,435.2	10.4	0.1%	18,434.0	11.6	0.1%	18,432.9	12.7	0.1%	18,431.7	13.9	0.1%
ME 6	32 47 27	2017	Wet	November	Used in Summary Table Analysis	19,000.0	18,993.1	6.9	0.0%	18,991.9	8.1	0.0%	18,991.9	8.1	0.0%	18,990.7	9.3	0.0%	18,989.6	10.4	0.1%	18,989.6	10.4	0.1%
ME 6	32 47 27	2017	Wet	December	--	24,385.4	24,379.6	5.8	0.0%	24,378.5	6.9	0.0%	24,378.5	6.9	0.0%	24,377.3	8.1	0.0%	24,377.3	8.1	0.0%	24,376.2	9.3	0.0%
ME 6	32 47 27	2017	Wet	January	--	107,699.1	107,693.3	5.8	0.0%	107,693.3	5.8	0.0%	107,692.1	6.9	0.0%	107,692.1	6.9	0.0%	107,691.0	8.1	0.0%	107,691.0	8.1	0.0%
ME 6	32 47 27	2017	Wet	February	--	82,302.1	82,297.5	4.6	0.0%	82,296.3	5.8	0.0%	82,296.3	5.8	0.0%	82,295.1	6.9	0.0%	82,295.1	6.9	0.0%	82,294.0	8.1	0.0%
ME 6	32 47 27	2017	Wet	March	--	27,419.0	27,414.4	4.6	0.0%	27,414.4	4.6	0.0%	27,413.2	5.8	0.0%	27,413.2	5.8	0.0%	27,413.2	5.8	0.0%	27,412.0	6.9	0.0%
ME 6	32 47 27	2017	Wet	April	--	23,093.8	23,089.1	4.6	0.0%	23,089.1	4.6	0.0%	23,088.0	5.8	0.0%	23,088.0	5.8	0.0%	23,086.8	6.9	0.0%	23,086.8	6.9	0.0%
ME 6	32 47 27	2017	Wet	May	--	6,278.9	6,273.3	5.7	0.1%	6,272.7	6.3	0.1%	6,272.1	6.8	0.1%	6,271.5	7.4	0.1%	6,270.9	8.0	0.1%	6,270.4	8.6	0.1%
ME 6	32 47 27	2017	Wet	June	--	2,138.0	2,126.9	11.1	0.5%	2,125.8	12.2	0.6%	2,124.7	13.3	0.6%	2,123.6	14.4	0.7%	2,122.5	15.5	0.7%	2,121.3	16.7	0.8%
ME 6	32 47 27	2017	Wet	July	--	948.2	935.9	12.3	1.3%	934.7	13.6	1.4%	933.4	14.8	1.6%	932.2	16.1	1.7%	931.0	17.3	1.8%	929.7	18.5	2.0%
ME 6	32 47 27	2017	Wet	August	--	520.5	508.4	12.1	2.3%	507.2	13.3	2.6%	506.0	14.5	2.8%	504.7	15.8	3.0%	503.5	17.0	3.3%	502.3	18.2	3.5%
ME 6	32 47 27	2017	Wet	September	Used in Summary Table Analysis	334.8	323.5	11.3	3.4%	322.4	12.4	3.7%	321.3	13.5	4.0%	320.2	14.7	4.4%	319.0	15.8	4.7%	317.9	16.9	5.1%
ME 6	32 47 27	2018	Above Normal	October	Used in Summary Table Analysis	287.5	279.3	8.2	2.9%	278.0	9.5	3.3%	277.0	10.5	3.7%	275.8	11.7	4.1%	274.8	12.7	4.4%	273.9	13.6	4.7%
ME 6	32 47 27	2018	Above Normal	November	Used in Summary Table Analysis	10,972.7	10,965.5	7.2	0.1%	10,964.8	7.9	0.1%	10,964.0	8.7	0.1%	10,963.3	9.4	0.1%	10,962.6	10.1	0.1%	10,961.9	10.8	0.1%
ME 6	32 47 27	2018	Above Normal	December	--	5,464.9	5,458.9	6.0	0.1%	5,458.3	6.6	0.1%	5,457.6	7.3	0.1%	5,457.1	7.9	0.1%	5,456.5	8.4	0.2%	5,455.8	9.1	0.2%
ME 6	32 47 27	2018	Above Normal	January	--	18,089.1	18,084.5	4.6	0.0%	18,083.3	5.8	0.0%	18,083.3	5.8	0.0%	18,082.2	6.9	0.0%	18,082.2	6.9	0.0%	18,081.0	8.1	0.0%
ME 6	32 47 27	2018	Above Normal	February	--	7,613.5	7,608.9	4.6	0.1%	7,608.4	5.1	0.1%	7,608.0	5.6	0.1%	7,607.4	6.1	0.1%	7,606.9	6.6	0.1%	7,606.5	7.1	0.1%
ME 6	32 47 27	2018	Above Normal	March	--	20,899.3	20,894.7	4.6	0.0%	20,894.7	4.6	0.0%	20,894.7	4.6	0.0%	20,893.5	5.8	0.0%	20,893.5	5.8	0.0%	20,892.4	6.9	0.0%
ME 6	32 47 27	2018	Above Normal	April	--	32,434.0	32,430.6	3.5	0.0%	32,429.4	4.6	0.0%	32,429.4	4.6	0.0%	32,429.4	4.6	0.0%	32,428.2	5.8	0.0%	32,428.2	5.8	0.0%
ME 6	32 47 27	2018	Above Normal	May	--	6,997.2	6,988.7	8.6	0.1%	6,987.7	9.5	0.1%	6,986.8	10.4	0.1%	6,986.0	11.2	0.2%	6,985.2	12.0	0.2%	6,984.3	13.0	0.2%
ME 6	32 47 27	2018	Above Normal	June	--	1,924.4	1,913.1	11.3	0.6%	1,911.9	12.5	0.6%	1,910.8	13.7	0.7%	1,909.6	14.8	0.8%	1,908.4	16.0	0.8%	1,907.4	17.0	0.9%
ME 6	32 47 27	2018	Above Normal	July	--	793.2	780.7	12.5	1.6%	779.5	13.7	1.7%	778.2	14.9	1.9%	777.0	16.2	2.0%	775.8	17.4	2.2%	774.5	18.7	2.4%
ME 6	32 47 27	2018	Above Normal	August	--	454.5	442.8	11.7	2.6%	441.6	12.9	2.8%	440.5	14.0	3.1%	439.3	15.2	3.3%	438.1	16.4	3.6%	437.0	17.5	3.9%
ME 6	32 47 27	2018	Above Normal	September	Used in Summary Table Analysis	311.2	299.9	11.3	3.6%	298.8	12.4	4.0%	297.6	13.5	4.4%	296.5	14.7	4.7%	295.4	15.8	5.1%	294.2	16.9	5.4%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 47 27	2019	Below Normal	October	Used in Summary Table Analysis	217.1	208.2	9.0	4.1%	207.2	9.9	4.6%	206.4	10.7	4.9%	205.5	11.7	5.4%	204.6	12.5	5.8%	203.7	13.4	6.2%
ME 6	32 47 27	2019	Below Normal	November	Used in Summary Table Analysis	6,743.5	6,736.3	7.2	0.1%	6,735.5	8.0	0.1%	6,734.8	8.7	0.1%	6,734.1	9.4	0.1%	6,733.3	10.2	0.2%	6,732.6	10.9	0.2%
ME 6	32 47 27	2019	Below Normal	December	--	14,866.9	14,861.1	5.8	0.0%	14,860.0	6.9	0.0%	14,860.0	6.9	0.0%	14,858.8	8.1	0.1%	14,858.8	8.1	0.1%	14,857.6	9.3	0.1%
ME 6	32 47 27	2019	Below Normal	January	--	35,625.0	35,619.2	5.8	0.0%	35,618.1	6.9	0.0%	35,618.1	6.9	0.0%	35,616.9	8.1	0.0%	35,616.9	8.1	0.0%	35,616.9	8.1	0.0%
ME 6	32 47 27	2019	Below Normal	February	--	142,349.5	142,349.5	0.0	0.0%	142,349.5	0.0	0.0%	142,349.5	0.0	0.0%	142,349.5	0.0	0.0%	142,349.5	0.0	0.0%	142,349.5	0.0	0.0%
ME 6	32 47 27	2019	Below Normal	March	--	42,539.4	42,534.7	4.6	0.0%	42,533.6	5.8	0.0%	42,533.6	5.8	0.0%	42,533.6	5.8	0.0%	42,532.4	6.9	0.0%	42,532.4	6.9	0.0%
ME 6	32 47 27	2019	Below Normal	April	--	15,334.5	15,329.9	4.6	0.0%	15,329.9	4.6	0.0%	15,329.9	4.6	0.0%	15,328.7	5.8	0.0%	15,328.7	5.8	0.0%	15,327.5	6.9	0.0%
ME 6	32 47 27	2019	Below Normal	May	--	17,248.8	17,239.6	9.3	0.1%	17,238.4	10.4	0.1%	17,237.3	11.6	0.1%	17,237.3	11.6	0.1%	17,236.1	12.7	0.1%	17,235.0	13.9	0.1%
ME 6	32 47 27	2019	Below Normal	June	--	4,244.9	4,232.8	12.2	0.3%	4,231.5	13.4	0.3%	4,230.3	14.6	0.3%	4,229.1	15.9	0.4%	4,227.8	17.1	0.4%	4,226.6	18.3	0.4%
ME 6	32 47 27	2019	Below Normal	July	--	1,375.2	1,362.8	12.4	0.9%	1,361.6	13.7	1.0%	1,360.3	14.9	1.1%	1,359.0	16.2	1.2%	1,357.8	17.5	1.3%	1,356.5	18.8	1.4%
ME 6	32 47 27	2019	Below Normal	August	--	609.9	598.0	12.0	2.0%	596.7	13.2	2.2%	595.5	14.4	2.4%	594.4	15.6	2.6%	593.1	16.8	2.7%	591.9	18.0	2.9%
ME 6	32 47 27	2019	Below Normal	September	Used in Summary Table Analysis	474.5	463.3	11.2	2.4%	462.1	12.4	2.6%	461.0	13.5	2.8%	459.9	14.6	3.1%	458.7	15.7	3.3%	457.6	16.9	3.6%
ME 6	32 47 27	2020	Dry	October	Used in Summary Table Analysis	365.3	356.7	8.6	2.3%	355.8	9.4	2.6%	355.0	10.3	2.8%	354.1	11.2	3.1%	353.2	12.0	3.3%	352.4	12.9	3.5%
ME 6	32 47 27	2020	Dry	November	Used in Summary Table Analysis	336.4	329.7	6.8	2.0%	329.0	7.5	2.2%	328.3	8.1	2.4%	327.6	8.8	2.6%	326.9	9.5	2.8%	326.2	10.2	3.0%
ME 6	32 47 27	2020	Dry	December	--	13,578.7	13,571.8	6.9	0.1%	13,571.8	6.9	0.1%	13,570.6	8.1	0.1%	13,570.6	8.1	0.1%	13,569.4	9.3	0.1%	13,569.4	9.3	0.1%
ME 6	32 47 27	2020	Dry	January	--	22,560.2	22,555.6	4.6	0.0%	22,554.4	5.8	0.0%	22,554.4	5.8	0.0%	22,553.2	6.9	0.0%	22,553.2	6.9	0.0%	22,552.1	8.1	0.0%
ME 6	32 47 27	2020	Dry	February	--	7,425.6	7,420.7	4.9	0.1%	7,420.3	5.3	0.1%	7,419.8	5.8	0.1%	7,419.2	6.4	0.1%	7,418.8	6.8	0.1%	7,418.3	7.3	0.1%
ME 6	32 47 27	2020	Dry	March	--	7,287.7	7,283.2	4.5	0.1%	7,282.8	5.0	0.1%	7,282.3	5.4	0.1%	7,281.8	5.9	0.1%	7,281.4	6.4	0.1%	7,280.9	6.8	0.1%
ME 6	32 47 27	2020	Dry	April	--	5,530.8	5,521.8	9.0	0.2%	5,520.8	10.0	0.2%	5,519.9	10.9	0.2%	5,519.0	11.8	0.2%	5,518.1	12.7	0.2%	5,517.1	13.7	0.2%
ME 6	32 47 27	2020	Dry	May	--	7,438.1	7,427.1	11.0	0.1%	7,426.0	12.0	0.2%	7,424.9	13.2	0.2%	7,423.7	14.4	0.2%	7,422.7	15.4	0.2%	7,421.5	16.6	0.2%
ME 6	32 47 27	2020	Dry	June	--	2,108.4	2,093.9	14.6	0.7%	2,092.4	16.1	0.8%	2,091.0	17.5	0.8%	2,089.5	19.0	0.9%	2,088.0	20.5	1.0%	2,086.6	21.9	1.0%
ME 6	32 47 27	2020	Dry	July	--	805.6	791.1	14.6	1.8%	789.6	16.0	2.0%	788.2	17.5	2.2%	786.7	18.9	2.3%	785.3	20.4	2.5%	783.8	21.8	2.7%
ME 6	32 47 27	2020	Dry	August	--	408.9	394.5	14.4	3.5%	393.1	15.9	3.9%	391.6	17.3	4.2%	390.2	18.8	4.6%	388.7	20.2	4.9%	387.3	21.7	5.3%
ME 6	32 47 27	2020	Dry	September	Used in Summary Table Analysis	258.2	245.1	13.1	5.1%	243.8	14.4	5.6%	242.5	15.7	6.1%	241.1	17.0	6.6%	239.8	18.3	7.1%	238.5	19.7	7.6%
ME 7	32 44 30	2000	Above Normal	October	Used in Summary Table Analysis	838.1	828.6	9.4	1.1%	827.7	10.4	1.2%	826.8	11.3	1.3%	825.8	12.3	1.5%	824.9	13.2	1.6%	823.9	14.1	1.7%
ME 7	32 44 30	2000	Above Normal	November	Used in Summary Table Analysis	12,409.7	12,402.8	6.9	0.1%	12,401.6	8.1	0.1%	12,400.5	9.3	0.1%	12,400.5	9.3	0.1%	12,399.3	10.4	0.1%	12,398.1	11.6	0.1%
ME 7	32 44 30	2000	Above Normal	December	--	10,967.0	10,960.8	6.3	0.1%	10,960.2	6.8	0.1%	10,959.5	7.5	0.1%	10,958.9	8.1	0.1%	10,958.2	8.8	0.1%	10,957.5	9.5	0.1%
ME 7	32 44 30	2000	Above Normal	January	--	29,061.3	29,055.6	5.8	0.0%	29,054.4	6.9	0.0%	29,054.4	6.9	0.0%	29,053.2	8.1	0.0%	29,053.2	8.1	0.0%	29,052.1	9.3	0.0%
ME 7	32 44 30	2000	Above Normal	February	--	37,357.6	37,353.0	4.6	0.0%	37,353.0	4.6	0.0%	37,351.9	5.8	0.0%	37,351.9	5.8	0.0%	37,350.7	6.9	0.0%	37,350.7	6.9	0.0%
ME 7	32 44 30	2000	Above Normal	March	--	18,415.5	18,410.9	4.6	0.0%	18,409.7	5.8	0.0%	18,409.7	5.8	0.0%	18,409.7	5.8	0.0%	18,408.6	6.9	0.0%	18,408.6	6.9	0.0%
ME 7	32 44 30	2000	Above Normal	April	--	12,392.4	12,387.7	4.6	0.0%	12,387.7	4.6	0.0%	12,386.6	5.8	0.0%	12,386.6	5.8	0.0%	12,386.6	5.8	0.0%	12,385.4	6.9	0.1%
ME 7	32 44 30	2000	Above Normal	May	--	7,160.4	7,151.4	9.0	0.1%	7,150.5	10.0	0.1%	7,149.5	10.9	0.2%	7,148.6	11.8	0.2%	7,147.7	12.7	0.2%	7,146.8	13.7	0.2%
ME 7	32 44 30	2000	Above Normal	June	--	2,639.9	2,626.3	13.7	0.5%	2,624.9	15.0	0.6%	2,623.5	16.4	0.6%	2,622.1	17.8	0.7%	2,620.7	19.2	0.7%	2,619.3	20.6	0.8%
ME 7	32 44 30	2000	Above Normal	July	--	1,008.2	995.3	12.9	1.3%	993.9	14.2	1.4%	992.7	15.5	1.5%	991.4	16.8	1.7%	990.1	18.1	1.8%	988.8	19.4	1.9%
ME 7	32 44 30	2000	Above Normal	August	--	539.1	526.8	12.3	2.3%	525.6	13.5	2.5%	524.4	14.7	2.7%	523.2	15.9	3.0%	522.0	17.1	3.2%	520.7	18.4	3.4%
ME 7	32 44 30	2000	Above Normal	September	Used in Summary Table Analysis	310.9	299.8	11.0	3.5%	298.7	12.1	3.9%	297.6	13.2	4.3%	296.5	14.3	4.6%	295.4	15.4	5.0%	294.3	16.5	5.3%
ME 7	32 44 30	2001	Dry	October	Used in Summary Table Analysis	3,887.2	3,878.0	9.1	0.2%	3,877.1	10.1	0.3%	3,876.2	11.0	0.3%	3,875.2	11.9	0.3%	3,874.3	12.8	0.3%	3,873.4	13.8	0.4%
ME 7	32 44 30	2001	Dry	November	Used in Summary Table Analysis	6,236.7	6,229.3	7.4	0.1%	6,228.6	8.1	0.1%	6,227.9	8.8	0.1%	6,227.1	9.6	0.2%	6,226.4	10.3	0.2%	6,225.6	11.1	0.2%
ME 7	32 44 30	2001	Dry	December	--	8,951.4	8,945.1	6.3	0.1%	8,944.4	6.9	0.1%	8,943.9	7.5	0.1%	8,943.2	8.2	0.1%	8,942.6	8.8	0.1%	8,941.9	9.5	0.1%
ME 7	32 44 30	2001	Dry	January	--	13,002.3	12,996.5	5.8	0.0%	12,995.4	6.9	0.1%	12,995.4	6.9	0.1%	12,994.2	8.1	0.1%	12,994.2	8.1	0.1%	12,993.1	9.3	0.1%
ME 7	32 44 30	2001	Dry	February	--	17,606.5	17,601.9	4.6	0.0%	17,600.7	5.8	0.0%	17,600.7	5.8	0.0%	17,599.5	6.9	0.0%	17,599.5	6.9	0.0%	17,598.4	8.1	0.0%
ME 7	32 44 30	2001	Dry	March	--	12,366.9	12,362.3	4.6	0.0%	12,362.3	4.6	0.0%	12,362.3	4.6	0.0%	12,361.1	5.8	0.0%	12,361.1	5.8	0.0%	12,360.0	6.9	0.1%
ME 7	32 44 30	2001	Dry	April	--	11,046.2	11,036.8	9.4	0.1%	11,035.9	10.3	0.1%	11,035.0	11.2	0.1%	11,034.0	12.2	0.1%	11,033.1	13.1	0.1%	11,032.2	14.0	0.1%
ME 7	32 44 30	2001	Dry	May	--	2,642.5	2,631.4	11.1	0.4%	2,630.2	12.3	0.5%	2,629.1	13.4	0.5%	2,628.0	14.5	0.5%	2,626.9	15.6	0.6%	2,625.8	16.7	0.6%
ME 7	32 44 30	2001	Dry	June	--	2,697.9	2,682.3	15.6	0.6%	2,680.8	17.1	0.6%	2,679.2	18.8	0.7%	2,677.5	20.4	0.8%	2,676.0	21.9	0.8%	2,674.4	23.5	0.9%
ME 7	32 44 30	2001	Dry	July	--	728.1	713.1	15.0	2.1%	711.6	16.5	2.3%	710.1	18.0	2.5%	708.6	19.5	2.7%	707.1	21.0	2.9%	705.6	22.5	3.1%
ME 7	32 44 30	2001	Dry	August	--	186.1	171.5	14.6	7.8%	170.0	16.1	8.6%	168.5	17.6	9.5%	167.0	19.1	10.3%	165.5	20.5	11.0%	164.1	22.0	11.8%
ME 7	32 44 30	2001	Dry	September	Used in Summary Table Analysis	109.8	96.5	13.3	12.1%	95.2	14.6	13.3%	93.8	16.0	14.6%	92.4	17.4	15.9%	91.1	18.7	17.1%	89.7	20.1	18.3%
ME 7	32 44 30	2002	Below Normal	October	Used in Summary Table Analysis	280.8	269.6	11.3	4.0%	268.4	12.4	4.4%	267.3	13.6	4.8%	266.0	14.8	5.3%	264.9	15.9	5.7%	263.8	17.1	6.1%
ME 7	32 44 30	2002	Below Normal	November	Used in Summary Table Analysis	12,175.9	12,166.7	9.3	0.1%	12,165.5	10.4	0.1%	12,164.4	11.6	0.1%	12,164.4	11.6	0.1%	12,163.2	12.7	0.1%	12,162.0	13.9	0.1%
ME 7	32 44 30	2002	Below Normal	December	--	36,119.2	36,111.1	8.1	0.0%	36,110.0	9.3	0.0%	36,110.0	9.3	0.0%	36,108.8	10.4	0.0%	36,107.6	11.6	0.0%	36,107.6	11.6	0.0%
ME 7	32 44 30	2002	Below Normal	January	--	31,152.8	31,145.8	6.9	0.0%	31,145.8	6.9	0.0%	31,144.7	8.1	0.0%	31,143.5	9.3	0.0%	31,143.5	9.3	0.0%	31,142.4	10.4	0.0%
ME 7	32 44 30	2002	Below Normal	February	--	24,843.8	24,838.0	5.8	0.0%	24,836.8	6.9	0.0%	24,835.6	8.1	0.0%	24,835.6	8.1	0.0%	24,834.5	9.3	0.0%	24,834.5	9.3	0.0%
ME 7	32 44 30	2002	Below Normal	March	--	17,909.7	17,903.9	5.8	0.0%	17,903.9	5.8	0.0%	17,902.8	6.9	0.0%	17,902.8	6.9	0.0%	17,901.6	8.1	0.0%	17,901.6	8.1	0.0%
ME 7	32 44 30	2002	Below Normal	April	--	9,977.1	9,967.7	9.4	0.1%	9,966.7	10.4	0.1%	9,965.7	11.3	0.1%	9,964.7	12.4	0.1%	9,963.8	13.3	0.1%	9,962.8	14.2	0.1%
ME 7	32 44 30	2002	Below Normal	May	--	3,341.1	3,329.9	11.2	0.3%	3,328.8	12.3	0.4%	3,327.7	13.4	0.4%	3,326.5	14.6	0.4%	3,325.3	15.7	0.5%	3,324.3	16.8	0.5%
ME 7	32 44 30	2002	Below Normal	June	--	867.0	854.0	13.0	1.5%	852.7	14.3	1.7%	851.3	15.7	1.8%	850.0	17.0	2.0%	848.7	18.3	2.1%	847.4	19.6	2.3%
ME 7	32 44 30	2002	Below Normal	July	--	376.3	362.9	13.5	3.6%	361.5	14.8	3.9%	360.2	16.2	4.3%	358.8	17.5	4.7%	357.5	18.9	5.0%	356.1	20.2	5.4%
ME 7	32 44 30	2002	Below Normal	August	--	242.8	230.1	12.8	5.3%	228.8	14.1	5.8%	227.5	15.3	6.3%	226.2	16.6	6.9%	224.9	17.9	7.4%	223.6	19.2	7.9%
ME 7	32 44 30	2002	Below Normal	September	Used in Summary Table Analysis	179.0	166.8	12.2	6.8%	165.6	13.4	7.5%	164.4	14.7	8.2%	163.1	15.9	8.9%	161.9	17.1	9.6%	160.7	18.4	10.3%
ME 7	32 44 30	2003	Wet	October	Used in Summary Table Analysis	143.7	133.5	10.2	7.1%	132.5	11.2	7.8%	131.5	12.2	8.5%	130.4	13.3	9.2%	129.4	14.3	9.9%	128.4	15.3	10.6%
ME 7	32 44 30	2003	Wet	November	Used in Summary Table Analysis	914.7	906.4	8.3	0.9%	905.6	9.1	1.0%	904.8	10.0	1.1%	903.9	10.8	1.2%	903.1	11.7	1.3%	902.2	12.5	1.4%
ME 7	32 44 30	2003	Wet	December	--	57,843.8	57,835.6	8.1	0.0%	57,835.6	8.1	0.0%	57,834.5	9.3	0.0%	57,833.3	10.4	0.0%	57,833.3	10.4	0.0%	57,832.2	11.6	0.0%
ME 7	32 44 30	2003	Wet	January	--	31,739.6	31,733.8	5.8	0.0%	31,732.6	6.9	0.0%	31,732.6	6.9	0.0%	31,731.5	8.1	0.0%	31,730.3	9.3	0.0%	31,730.3	9.3	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 44 30	2003	Wet	February	--	20,465.3	20,459.5	5.8	0.0%	20,459.5	5.8	0.0%	20,458.3	6.9	0.0%	20,458.3	6.9	0.0%	20,457.2	8.1	0.0%	20,457.2	8.1	0.0%
ME 7	32 44 30	2003	Wet	March	--	24,208.3	24,202.5	5.8	0.0%	24,202.5	5.8	0.0%	24,201.4	6.9	0.0%	24,201.4	6.9	0.0%	24,200.2	8.1	0.0%	24,200.2	8.1	0.0%
ME 7	32 44 30	2003	Wet	April	--	43,338.0	43,333.3	4.6	0.0%	43,333.3	4.6	0.0%	43,332.2	5.8	0.0%	43,332.2	5.8	0.0%	43,331.0	6.9	0.0%	43,331.0	6.9	0.0%
ME 7	32 44 30	2003	Wet	May	--	12,281.3	12,270.8	10.4	0.1%	12,270.8	10.4	0.1%	12,269.7	11.6	0.1%	12,268.5	12.7	0.1%	12,267.4	13.9	0.1%	12,266.2	15.0	0.1%
ME 7	32 44 30	2003	Wet	June	--	3,183.3	3,170.8	12.5	0.4%	3,169.6	13.8	0.4%	3,168.3	15.0	0.5%	3,167.1	16.2	0.5%	3,165.9	17.5	0.5%	3,164.6	18.8	0.6%
ME 7	32 44 30	2003	Wet	July	--	1,493.3	1,480.0	13.3	0.9%	1,478.7	14.6	1.0%	1,477.3	16.0	1.1%	1,476.0	17.2	1.2%	1,474.7	18.6	1.2%	1,473.4	19.9	1.3%
ME 7	32 44 30	2003	Wet	August	--	778.6	765.6	13.0	1.7%	764.3	14.2	1.8%	763.0	15.5	2.0%	761.7	16.9	2.2%	760.4	18.2	2.3%	759.1	19.5	2.5%
ME 7	32 44 30	2003	Wet	September	Used in Summary Table Analysis	475.2	463.9	11.3	2.4%	462.7	12.4	2.6%	461.6	13.6	2.9%	460.4	14.7	3.1%	459.3	15.9	3.3%	458.2	17.0	3.6%
ME 7	32 44 30	2004	Wet	October	Used in Summary Table Analysis	341.6	332.2	9.4	2.8%	331.3	10.4	3.0%	330.3	11.3	3.3%	329.4	12.3	3.6%	328.4	13.2	3.9%	327.5	14.2	4.2%
ME 7	32 44 30	2004	Wet	November	Used in Summary Table Analysis	5,925.5	5,917.7	7.8	0.1%	5,917.0	8.4	0.1%	5,916.2	9.3	0.2%	5,915.4	10.1	0.2%	5,914.6	10.9	0.2%	5,913.8	11.7	0.2%
ME 7	32 44 30	2004	Wet	December	--	36,840.3	36,833.3	6.9	0.0%	36,832.2	8.1	0.0%	36,832.2	8.1	0.0%	36,831.0	9.3	0.0%	36,829.9	10.4	0.0%	36,829.9	10.4	0.0%
ME 7	32 44 30	2004	Wet	January	--	31,831.0	31,825.2	5.8	0.0%	31,825.2	5.8	0.0%	31,824.1	6.9	0.0%	31,824.1	6.9	0.0%	31,822.9	8.1	0.0%	31,822.9	8.1	0.0%
ME 7	32 44 30	2004	Wet	February	--	38,581.0	38,576.4	4.6	0.0%	38,575.2	5.8	0.0%	38,575.2	5.8	0.0%	38,574.1	6.9	0.0%	38,574.1	6.9	0.0%	38,572.9	8.1	0.0%
ME 7	32 44 30	2004	Wet	March	--	16,585.6	16,579.9	5.8	0.0%	16,579.9	5.8	0.0%	16,579.9	5.8	0.0%	16,578.7	6.9	0.0%	16,578.7	6.9	0.0%	16,577.5	8.1	0.0%
ME 7	32 44 30	2004	Wet	April	--	9,498.4	9,494.0	4.4	0.0%	9,493.5	4.9	0.1%	9,493.1	5.3	0.1%	9,492.6	5.8	0.1%	9,492.1	6.3	0.1%	9,491.7	6.7	0.1%
ME 7	32 44 30	2004	Wet	May	--	3,459.7	3,450.6	9.1	0.3%	3,449.7	10.1	0.3%	3,448.7	11.0	0.3%	3,447.8	11.9	0.3%	3,446.9	12.8	0.4%	3,445.9	13.8	0.4%
ME 7	32 44 30	2004	Wet	June	--	704.5	692.5	11.9	1.7%	691.4	13.1	1.9%	690.2	14.3	2.0%	689.0	15.5	2.2%	687.8	16.7	2.4%	686.6	17.8	2.5%
ME 7	32 44 30	2004	Wet	July	--	372.2	359.2	13.0	3.5%	357.9	14.3	3.8%	356.6	15.6	4.2%	355.3	16.9	4.6%	354.0	18.2	4.9%	352.7	19.5	5.3%
ME 7	32 44 30	2004	Wet	August	--	240.6	228.2	12.4	5.2%	226.9	13.6	5.7%	225.7	14.9	6.2%	224.4	16.1	6.7%	223.2	17.4	7.2%	221.9	18.6	7.7%
ME 7	32 44 30	2004	Wet	September	Used in Summary Table Analysis	176.7	164.8	11.9	6.7%	163.6	13.1	7.4%	162.4	14.3	8.1%	161.2	15.5	8.8%	160.0	16.7	9.4%	158.8	17.9	10.1%
ME 7	32 44 30	2005	Above Normal	October	Used in Summary Table Analysis	7,840.0	7,830.4	9.6	0.1%	7,829.5	10.5	0.1%	7,828.5	11.6	0.1%	7,827.5	12.5	0.2%	7,826.5	13.5	0.2%	7,825.6	14.5	0.2%
ME 7	32 44 30	2005	Above Normal	November	Used in Summary Table Analysis	2,282.3	2,274.8	7.5	0.3%	2,274.0	8.3	0.4%	2,273.3	9.0	0.4%	2,272.5	9.8	0.4%	2,271.6	10.6	0.5%	2,270.9	11.3	0.5%
ME 7	32 44 30	2005	Above Normal	December	--	21,471.1	21,465.3	5.8	0.0%	21,464.1	6.9	0.0%	21,463.0	8.1	0.0%	21,463.0	8.1	0.0%	21,461.8	9.3	0.0%	21,460.6	10.4	0.0%
ME 7	32 44 30	2005	Above Normal	January	--	22,732.6	22,726.9	5.8	0.0%	22,725.7	6.9	0.0%	22,725.7	6.9	0.0%	22,724.5	8.1	0.0%	22,724.5	8.1	0.0%	22,723.4	9.3	0.0%
ME 7	32 44 30	2005	Above Normal	February	--	14,075.2	14,070.6	4.6	0.0%	14,070.6	4.6	0.0%	14,069.4	5.8	0.0%	14,069.4	5.8	0.0%	14,068.3	6.9	0.0%	14,068.3	6.9	0.0%
ME 7	32 44 30	2005	Above Normal	March	--	28,833.3	28,828.7	4.6	0.0%	28,828.7	4.6	0.0%	28,828.7	4.6	0.0%	28,827.5	5.8	0.0%	28,827.5	5.8	0.0%	28,826.4	6.9	0.0%
ME 7	32 44 30	2005	Above Normal	April	--	21,619.2	21,615.7	3.5	0.0%	21,614.6	4.6	0.0%	21,614.6	4.6	0.0%	21,613.4	5.8	0.0%	21,613.4	5.8	0.0%	21,613.4	5.8	0.0%
ME 7	32 44 30	2005	Above Normal	May	--	19,778.9	19,769.7	9.3	0.0%	19,768.5	10.4	0.1%	19,767.4	11.6	0.1%	19,767.4	11.6	0.1%	19,766.2	12.7	0.1%	19,765.0	13.9	0.1%
ME 7	32 44 30	2005	Above Normal	June	--	16,118.1	16,104.2	13.9	0.1%	16,103.0	15.0	0.1%	16,101.9	16.2	0.1%	16,099.5	18.5	0.1%	16,098.4	19.7	0.1%	16,097.2	20.8	0.1%
ME 7	32 44 30	2005	Above Normal	July	--	2,870.5	2,857.1	13.4	0.5%	2,855.8	14.7	0.5%	2,854.4	16.1	0.6%	2,853.1	17.4	0.6%	2,851.7	18.8	0.7%	2,850.3	20.1	0.7%
ME 7	32 44 30	2005	Above Normal	August	--	1,001.3	989.0	12.3	1.2%	987.8	13.5	1.4%	986.6	14.8	1.5%	985.3	16.0	1.6%	984.1	17.2	1.7%	982.9	18.4	1.8%
ME 7	32 44 30	2005	Above Normal	September	Used in Summary Table Analysis	542.8	531.8	11.0	2.0%	530.7	12.2	2.2%	529.5	13.3	2.4%	528.5	14.4	2.6%	527.3	15.5	2.9%	526.2	16.6	3.1%
ME 7	32 44 30	2006	Wet	October	Used in Summary Table Analysis	654.7	645.6	9.1	1.4%	644.7	10.0	1.5%	643.8	10.9	1.7%	642.9	11.8	1.8%	642.0	12.7	1.9%	641.1	13.7	2.1%
ME 7	32 44 30	2006	Wet	November	Used in Summary Table Analysis	9,512.5	9,505.3	7.2	0.1%	9,504.6	7.9	0.1%	9,503.9	8.6	0.1%	9,503.1	9.4	0.1%	9,502.4	10.1	0.1%	9,501.7	10.8	0.1%
ME 7	32 44 30	2006	Wet	December	--	44,165.5	44,159.7	5.8	0.0%	44,158.6	6.9	0.0%	44,157.4	8.1	0.0%	44,157.4	8.1	0.0%	44,156.3	9.3	0.0%	44,156.3	9.3	0.0%
ME 7	32 44 30	2006	Wet	January	--	46,898.1	46,892.4	5.8	0.0%	46,891.2	6.9	0.0%	46,891.2	6.9	0.0%	46,890.0	8.1	0.0%	46,890.0	8.1	0.0%	46,888.9	9.3	0.0%
ME 7	32 44 30	2006	Wet	February	--	26,876.2	26,871.5	4.6	0.0%	26,870.4	5.8	0.0%	26,870.4	5.8	0.0%	26,870.4	5.8	0.0%	26,869.2	6.9	0.0%	26,869.2	6.9	0.0%
ME 7	32 44 30	2006	Wet	March	--	47,635.4	47,630.8	4.6	0.0%	47,630.8	4.6	0.0%	47,629.6	5.8	0.0%	47,629.6	5.8	0.0%	47,628.5	6.9	0.0%	47,628.5	6.9	0.0%
ME 7	32 44 30	2006	Wet	April	--	30,615.7	30,612.3	3.5	0.0%	30,611.1	4.6	0.0%	30,611.1	4.6	0.0%	30,611.1	4.6	0.0%	30,610.0	5.8	0.0%	30,610.0	5.8	0.0%
ME 7	32 44 30	2006	Wet	May	--	14,317.1	14,312.5	4.6	0.0%	14,311.3	5.8	0.0%	14,311.3	5.8	0.0%	14,310.2	6.9	0.0%	14,310.2	6.9	0.0%	14,309.0	8.1	0.1%
ME 7	32 44 30	2006	Wet	June	--	3,563.0	3,551.3	11.7	0.3%	3,550.2	12.7	0.4%	3,549.0	14.0	0.4%	3,547.8	15.2	0.4%	3,546.6	16.3	0.5%	3,545.5	17.5	0.5%
ME 7	32 44 30	2006	Wet	July	--	1,299.9	1,287.2	12.7	1.0%	1,285.9	14.0	1.1%	1,284.6	15.3	1.2%	1,283.3	16.6	1.3%	1,282.1	17.8	1.4%	1,280.8	19.1	1.5%
ME 7	32 44 30	2006	Wet	August	--	686.1	673.6	12.6	1.8%	672.3	13.9	2.0%	671.0	15.1	2.2%	669.7	16.4	2.4%	668.4	17.7	2.6%	667.2	18.9	2.8%
ME 7	32 44 30	2006	Wet	September	Used in Summary Table Analysis	445.6	434.4	11.2	2.5%	433.3	12.3	2.8%	432.1	13.5	3.0%	431.0	14.6	3.3%	429.9	15.7	3.5%	428.8	16.9	3.8%
ME 7	32 44 30	2007	Above Normal	October	Used in Summary Table Analysis	291.4	282.2	9.3	3.2%	281.2	10.2	3.5%	280.3	11.1	3.8%	279.4	12.1	4.1%	278.4	13.0	4.5%	277.5	13.9	4.8%
ME 7	32 44 30	2007	Above Normal	November	Used in Summary Table Analysis	8,848.8	8,841.3	7.5	0.1%	8,840.6	8.2	0.1%	8,839.8	9.0	0.1%	8,839.1	9.7	0.1%	8,838.3	10.5	0.1%	8,837.5	11.3	0.1%
ME 7	32 44 30	2007	Above Normal	December	--	20,775.5	20,768.5	6.9	0.0%	20,768.5	6.9	0.0%	20,767.4	8.1	0.0%	20,767.4	8.1	0.0%	20,766.2	9.3	0.0%	20,765.0	10.4	0.1%
ME 7	32 44 30	2007	Above Normal	January	--	10,349.2	10,343.5	5.7	0.1%	10,343.1	6.1	0.1%	10,342.5	6.7	0.1%	10,341.9	7.3	0.1%	10,341.3	7.9	0.1%	10,340.7	8.4	0.1%
ME 7	32 44 30	2007	Above Normal	February	--	30,981.5	30,975.7	5.8	0.0%	30,975.7	5.8	0.0%	30,974.5	6.9	0.0%	30,974.5	6.9	0.0%	30,973.4	8.1	0.0%	30,973.4	8.1	0.0%
ME 7	32 44 30	2007	Above Normal	March	--	13,172.5	13,167.8	4.6	0.0%	13,167.8	4.6	0.0%	13,166.7	5.8	0.0%	13,166.7	5.8	0.0%	13,165.5	6.9	0.1%	13,165.5	6.9	0.1%
ME 7	32 44 30	2007	Above Normal	April	--	11,604.2	11,594.9	9.3	0.1%	11,593.8	10.4	0.1%	11,592.6	11.6	0.1%	11,592.6	11.6	0.1%	11,591.4	12.7	0.1%	11,590.3	13.9	0.1%
ME 7	32 44 30	2007	Above Normal	May	--	4,172.8	4,162.0	10.8	0.3%	4,161.0	11.8	0.3%	4,160.0	12.8	0.3%	4,158.9	13.9	0.3%	4,157.8	15.0	0.4%	4,156.7	16.1	0.4%
ME 7	32 44 30	2007	Above Normal	June	--	1,523.6	1,510.3	13.3	0.9%	1,508.9	14.7	1.0%	1,507.6	16.0	1.0%	1,506.3	17.4	1.1%	1,505.0	18.6	1.2%	1,503.6	20.0	1.3%
ME 7	32 44 30	2007	Above Normal	July	--	509.6	496.0	13.6	2.7%	494.6	15.0	2.9%	493.3	16.4	3.2%	491.9	17.7	3.5%	490.6	19.1	3.7%	489.2	20.5	4.0%
ME 7	32 44 30	2007	Above Normal	August	--	238.9	226.5	12.5	5.2%	225.2	13.7	5.7%	224.0	14.9	6.3%	222.7	16.2	6.8%	221.5	17.4	7.3%	220.2	18.7	7.8%
ME 7	32 44 30	2007	Above Normal	September	Used in Summary Table Analysis	166.6	154.7	11.9	7.1%	153.5	13.1	7.9%	152.3	14.3	8.6%	151.1	15.5	9.3%	149.9	16.7	10.0%	148.7	17.9	10.7%
ME 7	32 44 30	2008	Dry	October	Used in Summary Table Analysis	3,503.2	3,493.3	10.0	0.3%	3,492.4	10.9	0.3%	3,491.3	11.9	0.3%	3,490.4	12.8	0.4%	3,489.4	13.9	0.4%	3,488.3	14.9	0.4%
ME 7	32 44 30	2008	Dry	November	Used in Summary Table Analysis	3,341.0	3,333.3	7.6	0.2%	3,332.5	8.4	0.3%	3,331.8	9.1	0.3%	3,331.0	10.0	0.3%	3,330.2	10.8	0.3%	3,329.4	11.6	0.3%
ME 7	32 44 30	2008	Dry	December	--	23,601.9	23,594.9	6.9	0.0%	23,593.8	8.1	0.0%	23,593.8	8.1	0.0%	23,592.6	9.3	0.0%	23,592.6	9.3	0.0%	23,591.4	10.4	0.0%
ME 7	32 44 30	2008	Dry	January	--	37,985.0	37,978.0	6.9	0.0%	37,978.0	6.9	0.0%	37,976.9	8.1	0.0%	37,976.9	8.1	0.0%	37,975.7	9.3	0.0%	37,975.7	9.3	0.0%
ME 7	32 44 30	2008	Dry	February	--	26,380.8	26,376.2	4.6	0.0%	26,375.0	5.8	0.0%	26,375.0	5.8	0.0%	26,373.8	6.9	0.0%	26,373.8	6.9	0.0%	26,373.8	6.9	0.0%
ME 7	32 44 30	2008	Dry	March	--	11,847.2	11,842.6	4.6	0.0%	11,842.6	4.6	0.0%	11,841.4	5.8	0.0%	11,841.4	5.8	0.0%	11,840.3	6.9	0.1%	11,840.3	6.9	0.1%
ME 7	32 44 30	2008	Dry	April	--	9,061.3	9,052.1	9.3	0.1%	9,051.3	10.1	0.1%	9,050.3	11.0	0.1%	9,049.4	11.9	0.1%	9,048.5	12.8	0.1%	9,047.6	13.8	0.2%
ME 7	32 44 30	2008	Dry	May	--	1,360.6	1,350.7	10.0	0.7%	1,349.7	11.0	0.8%	1,348.6	12.0	0.9%	1,347.7	13.0	1.0%	1,346.6	14.0	1.0%	1,345.6	15.0	1.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 44 30	2008	Dry	June	--	452.1	437.5	14.7	3.2%	436.0	16.1	3.6%	434.5	17.6	3.9%	433.1	19.0	4.2%	431.6	20.5	4.5%	430.2	21.9	4.9%
ME 7	32 44 30	2008	Dry	July	--	269.7	254.9	14.8	5.5%	253.4	16.3	6.0%	252.0	17.7	6.6%	250.5	19.2	7.1%	249.0	20.7	7.7%	247.5	22.2	8.2%
ME 7	32 44 30	2008	Dry	August	--	193.7	179.2	14.5	7.5%	177.7	15.9	8.2%	176.3	17.4	9.0%	174.8	18.8	9.7%	173.4	20.3	10.5%	171.9	21.7	11.2%
ME 7	32 44 30	2008	Dry	September	Used in Summary Table Analysis	155.1	141.0	14.1	9.1%	139.6	15.5	10.0%	138.2	16.9	10.9%	136.8	18.3	11.8%	135.4	19.7	12.7%	133.9	21.1	13.6%
ME 7	32 44 30	2009	Critical	October	Used in Summary Table Analysis	942.9	931.6	11.3	1.2%	930.4	12.5	1.3%	929.2	13.6	1.4%	928.1	14.8	1.6%	926.9	16.0	1.7%	925.8	17.1	1.8%
ME 7	32 44 30	2009	Critical	November	Used in Summary Table Analysis	5,631.8	5,622.9	8.9	0.2%	5,622.1	9.7	0.2%	5,621.2	10.6	0.2%	5,620.3	11.6	0.2%	5,619.3	12.5	0.2%	5,618.5	13.3	0.2%
ME 7	32 44 30	2009	Critical	December	--	12,412.0	12,405.1	6.9	0.1%	12,403.9	8.1	0.1%	12,402.8	9.3	0.1%	12,402.8	9.3	0.1%	12,401.6	10.4	0.1%	12,400.5	11.6	0.1%
ME 7	32 44 30	2009	Critical	January	--	8,869.7	8,863.0	6.7	0.1%	8,862.4	7.3	0.1%	8,861.7	8.0	0.1%	8,861.0	8.7	0.1%	8,860.3	9.4	0.1%	8,859.6	10.1	0.1%
ME 7	32 44 30	2009	Critical	February	--	22,822.9	22,817.1	5.8	0.0%	22,817.1	5.8	0.0%	22,816.0	6.9	0.0%	22,816.0	6.9	0.0%	22,814.8	8.1	0.0%	22,814.8	8.1	0.0%
ME 7	32 44 30	2009	Critical	March	--	21,276.6	21,272.0	4.6	0.0%	21,270.8	5.8	0.0%	21,270.8	5.8	0.0%	21,269.7	6.9	0.0%	21,269.7	6.9	0.0%	21,268.5	8.1	0.0%
ME 7	32 44 30	2009	Critical	April	--	10,117.9	10,108.3	9.6	0.1%	10,107.3	10.6	0.1%	10,106.4	11.6	0.1%	10,105.6	12.4	0.1%	10,104.5	13.4	0.1%	10,103.6	14.4	0.1%
ME 7	32 44 30	2009	Critical	May	--	15,666.7	15,655.1	11.6	0.1%	15,653.9	12.7	0.1%	15,652.8	13.9	0.1%	15,651.6	15.0	0.1%	15,650.5	16.2	0.1%	15,649.3	17.4	0.1%
ME 7	32 44 30	2009	Critical	June	--	3,175.3	3,160.0	15.4	0.5%	3,158.4	16.9	0.5%	3,156.8	18.5	0.6%	3,155.2	20.1	0.6%	3,153.7	21.6	0.7%	3,152.2	23.1	0.7%
ME 7	32 44 30	2009	Critical	July	--	1,278.0	1,263.0	15.0	1.2%	1,261.6	16.4	1.3%	1,260.1	17.9	1.4%	1,258.4	19.6	1.5%	1,257.1	20.9	1.6%	1,255.6	22.5	1.8%
ME 7	32 44 30	2009	Critical	August	--	684.8	670.2	14.6	2.1%	668.8	16.0	2.3%	667.3	17.5	2.6%	665.8	19.0	2.8%	664.4	20.4	3.0%	663.0	21.8	3.2%
ME 7	32 44 30	2009	Critical	September	Used in Summary Table Analysis	405.0	391.7	13.3	3.3%	390.3	14.6	3.6%	389.0	15.9	3.9%	387.7	17.3	4.3%	386.4	18.6	4.6%	385.0	19.9	4.9%
ME 7	32 44 30	2010	Below Normal	October	Used in Summary Table Analysis	6,111.3	6,099.8	11.6	0.2%	6,098.6	12.7	0.2%	6,097.5	13.9	0.2%	6,096.3	15.0	0.2%	6,095.3	16.1	0.3%	6,094.1	17.2	0.3%
ME 7	32 44 30	2010	Below Normal	November	Used in Summary Table Analysis	8,374.1	8,364.8	9.3	0.1%	8,363.9	10.2	0.1%	8,363.0	11.1	0.1%	8,362.0	12.0	0.1%	8,361.1	13.0	0.2%	8,360.2	13.9	0.2%
ME 7	32 44 30	2010	Below Normal	December	--	12,519.7	12,512.7	6.9	0.1%	12,511.6	8.1	0.1%	12,510.4	9.3	0.1%	12,510.4	9.3	0.1%	12,509.3	10.4	0.1%	12,508.1	11.6	0.1%
ME 7	32 44 30	2010	Below Normal	January	--	36,780.1	36,773.1	6.9	0.0%	36,772.0	8.1	0.0%	36,770.8	9.3	0.0%	36,770.8	9.3	0.0%	36,769.7	10.4	0.0%	36,769.7	10.4	0.0%
ME 7	32 44 30	2010	Below Normal	February	--	27,400.5	27,394.7	5.8	0.0%	27,393.5	6.9	0.0%	27,393.5	6.9	0.0%	27,392.4	8.1	0.0%	27,392.4	8.1	0.0%	27,391.2	9.3	0.0%
ME 7	32 44 30	2010	Below Normal	March	--	28,973.4	28,967.6	5.8	0.0%	28,967.6	5.8	0.0%	28,966.4	6.9	0.0%	28,966.4	6.9	0.0%	28,965.3	8.1	0.0%	28,965.3	8.1	0.0%
ME 7	32 44 30	2010	Below Normal	April	--	40,265.0	40,259.3	5.8	0.0%	40,259.3	5.8	0.0%	40,258.1	6.9	0.0%	40,258.1	6.9	0.0%	40,256.9	8.1	0.0%	40,256.9	8.1	0.0%
ME 7	32 44 30	2010	Below Normal	May	--	20,461.8	20,452.5	9.3	0.0%	20,451.4	10.4	0.1%	20,450.2	11.6	0.1%	20,449.1	12.7	0.1%	20,447.9	13.9	0.1%	20,447.9	13.9	0.1%
ME 7	32 44 30	2010	Below Normal	June	--	9,505.1	9,490.4	14.7	0.2%	9,489.0	16.1	0.2%	9,487.5	17.6	0.2%	9,486.1	19.0	0.2%	9,484.6	20.5	0.2%	9,483.1	22.0	0.2%
ME 7	32 44 30	2010	Below Normal	July	--	1,468.8	1,455.2	13.5	0.9%	1,453.8	14.9	1.0%	1,452.4	16.3	1.1%	1,451.0	17.7	1.2%	1,449.7	19.1	1.3%	1,448.4	20.4	1.4%
ME 7	32 44 30	2010	Below Normal	August	--	587.9	575.2	12.7	2.2%	573.9	14.0	2.4%	572.6	15.3	2.6%	571.4	16.5	2.8%	570.2	17.7	3.0%	568.9	19.0	3.2%
ME 7	32 44 30	2010	Below Normal	September	Used in Summary Table Analysis	670.8	658.7	12.1	1.8%	657.5	13.3	2.0%	656.2	14.6	2.2%	655.0	15.8	2.4%	653.8	17.0	2.5%	652.6	18.2	2.7%
ME 7	32 44 30	2011	Wet	October	Used in Summary Table Analysis	9,759.8	9,750.5	9.4	0.1%	9,749.5	10.3	0.1%	9,748.6	11.2	0.1%	9,747.7	12.2	0.1%	9,746.8	13.1	0.1%	9,745.8	14.0	0.1%
ME 7	32 44 30	2011	Wet	November	Used in Summary Table Analysis	14,361.1	14,354.2	6.9	0.0%	14,353.0	8.1	0.1%	14,351.9	9.3	0.1%	14,351.9	9.3	0.1%	14,350.7	10.4	0.1%	14,349.5	11.6	0.1%
ME 7	32 44 30	2011	Wet	December	--	34,265.0	34,258.1	6.9	0.0%	34,258.1	6.9	0.0%	34,256.9	8.1	0.0%	34,256.9	8.1	0.0%	34,255.8	9.3	0.0%	34,255.8	9.3	0.0%
ME 7	32 44 30	2011	Wet	January	--	14,262.7	14,258.1	4.6	0.0%	14,256.9	5.8	0.0%	14,256.9	5.8	0.0%	14,255.8	6.9	0.0%	14,255.8	6.9	0.0%	14,254.6	8.1	0.1%
ME 7	32 44 30	2011	Wet	February	--	20,876.2	20,870.4	5.8	0.0%	20,870.4	5.8	0.0%	20,869.2	6.9	0.0%	20,869.2	6.9	0.0%	20,869.2	6.9	0.0%	20,868.1	8.1	0.0%
ME 7	32 44 30	2011	Wet	March	--	52,378.5	52,373.8	4.6	0.0%	52,372.7	5.8	0.0%	52,372.7	5.8	0.0%	52,372.7	5.8	0.0%	52,371.5	6.9	0.0%	52,371.5	6.9	0.0%
ME 7	32 44 30	2011	Wet	April	--	24,928.2	24,923.6	4.6	0.0%	24,922.5	5.8	0.0%	24,922.5	5.8	0.0%	24,921.3	6.9	0.0%	24,921.3	6.9	0.0%	24,921.3	6.9	0.0%
ME 7	32 44 30	2011	Wet	May	--	11,446.3	11,437.2	9.1	0.1%	11,436.2	10.1	0.1%	11,435.3	11.0	0.1%	11,434.4	11.9	0.1%	11,433.4	12.8	0.1%	11,432.5	13.8	0.1%
ME 7	32 44 30	2011	Wet	June	--	7,120.8	7,106.7	14.1	0.2%	7,105.2	15.6	0.2%	7,103.8	17.0	0.2%	7,102.4	18.4	0.3%	7,101.0	19.8	0.3%	7,099.7	21.2	0.3%
ME 7	32 44 30	2011	Wet	July	--	1,839.4	1,825.1	14.2	0.8%	1,823.6	15.7	0.9%	1,822.2	17.1	0.9%	1,820.8	18.5	1.0%	1,819.3	20.0	1.1%	1,817.9	21.4	1.2%
ME 7	32 44 30	2011	Wet	August	--	793.3	780.8	12.4	1.6%	779.6	13.7	1.7%	778.4	14.9	1.9%	777.1	16.1	2.0%	775.9	17.4	2.2%	774.6	18.6	2.3%
ME 7	32 44 30	2011	Wet	September	Used in Summary Table Analysis	450.0	438.5	11.5	2.6%	437.3	12.7	2.8%	436.2	13.8	3.1%	435.0	14.9	3.3%	433.9	16.1	3.6%	432.7	17.2	3.8%
ME 7	32 44 30	2012	Below Normal	October	Used in Summary Table Analysis	4,609.0	4,599.5	9.5	0.2%	4,598.6	10.4	0.2%	4,597.6	11.5	0.2%	4,596.6	12.4	0.3%	4,595.7	13.3	0.3%	4,594.8	14.2	0.3%
ME 7	32 44 30	2012	Below Normal	November	Used in Summary Table Analysis	8,369.4	8,361.8	7.6	0.1%	8,361.1	8.3	0.1%	8,360.3	9.1	0.1%	8,359.5	10.0	0.1%	8,358.8	10.6	0.1%	8,358.0	11.5	0.1%
ME 7	32 44 30	2012	Below Normal	December	--	5,243.3	5,236.9	6.4	0.1%	5,236.3	6.9	0.1%	5,235.6	7.6	0.1%	5,235.0	8.3	0.2%	5,234.4	8.9	0.2%	5,233.7	9.6	0.2%
ME 7	32 44 30	2012	Below Normal	January	--	20,485.0	20,479.2	5.8	0.0%	20,479.2	5.8	0.0%	20,478.0	6.9	0.0%	20,478.0	6.9	0.0%	20,476.9	8.1	0.0%	20,476.9	8.1	0.0%
ME 7	32 44 30	2012	Below Normal	February	--	18,320.6	18,314.8	5.8	0.0%	18,314.8	5.8	0.0%	18,313.7	6.9	0.0%	18,313.7	6.9	0.0%	18,312.5	8.1	0.0%	18,312.5	8.1	0.0%
ME 7	32 44 30	2012	Below Normal	March	--	45,858.8	45,853.0	5.8	0.0%	45,853.0	5.8	0.0%	45,851.9	6.9	0.0%	45,851.9	6.9	0.0%	45,851.9	6.9	0.0%	45,850.7	8.1	0.0%
ME 7	32 44 30	2012	Below Normal	April	--	27,016.2	27,011.6	4.6	0.0%	27,011.6	4.6	0.0%	27,010.4	5.8	0.0%	27,010.4	5.8	0.0%	27,010.4	5.8	0.0%	27,009.3	6.9	0.0%
ME 7	32 44 30	2012	Below Normal	May	--	7,522.5	7,513.2	9.3	0.1%	7,512.3	10.2	0.1%	7,511.3	11.1	0.1%	7,510.4	12.0	0.2%	7,509.6	12.8	0.2%	7,508.7	13.8	0.2%
ME 7	32 44 30	2012	Below Normal	June	--	5,579.7	5,565.3	14.5	0.3%	5,563.9	15.9	0.3%	5,562.4	17.4	0.3%	5,561.0	18.8	0.3%	5,559.6	20.1	0.4%	5,558.1	21.6	0.4%
ME 7	32 44 30	2012	Below Normal	July	--	2,265.3	2,251.4	13.9	0.6%	2,250.0	15.3	0.7%	2,248.6	16.7	0.7%	2,247.2	18.1	0.8%	2,245.8	19.4	0.9%	2,244.4	20.8	0.9%
ME 7	32 44 30	2012	Below Normal	August	--	401.7	390.2	11.5	2.9%	389.0	12.7	3.1%	387.9	13.8	3.4%	386.8	14.9	3.7%	385.6	16.1	4.0%	384.5	17.2	4.3%
ME 7	32 44 30	2012	Below Normal	September	Used in Summary Table Analysis	265.1	254.7	10.4	3.9%	253.7	11.4	4.3%	252.6	12.5	4.7%	251.6	13.5	5.1%	250.5	14.5	5.5%	249.5	15.6	5.9%
ME 7	32 44 30	2013	Below Normal	October	Used in Summary Table Analysis	1,958.0	1,949.0	9.0	0.5%	1,948.0	10.0	0.5%	1,947.1	10.9	0.6%	1,946.2	11.8	0.6%	1,945.3	12.7	0.7%	1,944.3	13.7	0.7%
ME 7	32 44 30	2013	Below Normal	November	Used in Summary Table Analysis	14,923.6	14,916.7	6.9	0.0%	14,915.5	8.1	0.1%	14,914.4	9.3	0.1%	14,914.4	9.3	0.1%	14,913.2	10.4	0.1%	14,912.0	11.6	0.1%
ME 7	32 44 30	2013	Below Normal	December	--	60,516.2	60,509.3	6.9	0.0%	60,508.1	8.1	0.0%	60,508.1	8.1	0.0%	60,506.9	9.3	0.0%	60,506.9	9.3	0.0%	60,505.8	10.4	0.0%
ME 7	32 44 30	2013	Below Normal	January	--	22,351.9	22,347.2	4.6	0.0%	22,346.1	5.8	0.0%	22,346.1	5.8	0.0%	22,344.9	6.9	0.0%	22,344.9	6.9	0.0%	22,343.8	8.1	0.0%
ME 7	32 44 30	2013	Below Normal	February	--	8,919.6	8,914.6	5.0	0.1%	8,914.0	5.6	0.1%	8,913.5	6.0	0.1%	8,913.1	6.5	0.1%	8,912.5	7.1	0.1%	8,912.0	7.5	0.1%
ME 7	32 44 30	2013	Below Normal	March	--	10,442.9	10,438.1	4.9	0.0%	10,437.6	5.3	0.1%	10,437.2	5.8	0.1%	10,436.7	6.3	0.1%	10,436.1	6.8	0.1%	10,435.6	7.3	0.1%
ME 7	32 44 30	2013	Below Normal	April	--	8,328.1	8,319.3	8.8	0.1%	8,318.5	9.6	0.1%	8,317.6	10.5	0.1%	8,316.7	11.5	0.1%	8,315.9	12.3	0.1%	8,314.9	13.2	0.2%
ME 7	32 44 30	2013	Below Normal	May	--	4,477.8	4,467.0	10.8	0.2%	4,466.0	11.8	0.3%	4,464.9	12.8	0.3%	4,463.8	14.0	0.3%	4,462.7	15.0	0.3%	4,461.7	16.1	0.4%
ME 7	32 44 30	2013	Below Normal	June	--	2,129.5	2,116.2	13.3	0.6%	2,114.9	14.6	0.7%	2,113.7	15.9	0.7%	2,112.3	17.2	0.8%	2,111.0	18.5	0.9%	2,109.6	19.9	0.9%
ME 7	32 44 30	2013	Below Normal	July	--	729.5	716.4	13.1	1.8%	715.1	14.4	2.0%	713.8	15.7	2.2%	712.5	17.0	2.3%	711.2	18.4	2.5%	709.8	19.7	2.7%
ME 7	32 44 30	2013	Below Normal	August	--	354.6	342.2	12.4	3.5%	341.0	13.6	3.8%	339.7	14.9	4.2%	338.5	16.1	4.5%	337.3	17.3	4.9%	336.0	18.6	5.2%
ME 7	32 44 30	2013	Below Normal	September	Used in Summary Table Analysis	4,855.3	4,842.5	12.8	0.3%	4,841.2	14.1	0.3%	4,839.9	15.4	0.3%	4,838.5	16.8	0.3%	4,837.3	18.1	0.4%	4,836.0	19.3	0.4%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 44 30	2014	Critical	October	Used in Summary Table Analysis	287.4	277.8	9.6	3.3%	276.8	10.5	3.7%	275.9	11.5	4.0%	274.9	12.5	4.3%	273.9	13.4	4.7%	273.0	14.4	5.0%
ME 7	32 44 30	2014	Critical	November	Used in Summary Table Analysis	1,577.1	1,569.4	7.6	0.5%	1,568.6	8.4	0.5%	1,567.8	9.3	0.6%	1,567.1	10.0	0.6%	1,566.3	10.8	0.7%	1,565.5	11.6	0.7%
ME 7	32 44 30	2014	Critical	December	--	1,614.8	1,608.2	6.6	0.4%	1,607.5	7.3	0.5%	1,606.8	8.0	0.5%	1,606.3	8.6	0.5%	1,605.6	9.3	0.6%	1,604.9	10.0	0.6%
ME 7	32 44 30	2014	Critical	January	--	2,861.7	2,855.8	5.9	0.2%	2,855.2	6.5	0.2%	2,854.6	7.1	0.2%	2,854.1	7.6	0.3%	2,853.5	8.2	0.3%	2,852.9	8.8	0.3%
ME 7	32 44 30	2014	Critical	February	--	15,862.3	15,857.6	4.6	0.0%	15,856.5	5.8	0.0%	15,856.5	5.8	0.0%	15,855.3	6.9	0.0%	15,855.3	6.9	0.0%	15,854.2	8.1	0.1%
ME 7	32 44 30	2014	Critical	March	--	31,625.0	31,620.4	4.6	0.0%	31,619.2	5.8	0.0%	31,619.2	5.8	0.0%	31,618.1	6.9	0.0%	31,618.1	6.9	0.0%	31,616.9	8.1	0.0%
ME 7	32 44 30	2014	Critical	April	--	13,038.2	13,028.9	9.3	0.1%	13,027.8	10.4	0.1%	13,026.6	11.6	0.1%	13,025.5	12.7	0.1%	13,024.3	13.9	0.1%	13,023.1	15.0	0.1%
ME 7	32 44 30	2014	Critical	May	--	5,220.3	5,208.9	11.3	0.2%	5,207.8	12.5	0.2%	5,206.7	13.5	0.3%	5,205.6	14.7	0.3%	5,204.4	15.9	0.3%	5,203.2	17.0	0.3%
ME 7	32 44 30	2014	Critical	June	--	1,214.0	1,198.0	16.0	1.3%	1,196.5	17.5	1.4%	1,194.9	19.1	1.6%	1,193.3	20.7	1.7%	1,191.7	22.3	1.8%	1,190.2	23.8	2.0%
ME 7	32 44 30	2014	Critical	July	--	558.2	543.2	15.0	2.7%	541.7	16.6	3.0%	540.2	18.1	3.2%	538.7	19.5	3.5%	537.2	21.0	3.8%	535.7	22.5	4.0%
ME 7	32 44 30	2014	Critical	August	--	362.6	348.2	14.4	4.0%	346.7	15.9	4.4%	345.3	17.3	4.8%	343.9	18.8	5.2%	342.4	20.2	5.6%	341.0	21.7	6.0%
ME 7	32 44 30	2014	Critical	September	Used in Summary Table Analysis	2,609.6	2,595.4	14.2	0.5%	2,593.9	15.7	0.6%	2,592.5	17.1	0.7%	2,591.0	18.6	0.7%	2,589.6	20.0	0.8%	2,588.2	21.4	0.8%
ME 7	32 44 30	2015	Dry	October	Used in Summary Table Analysis	11,483.8	11,472.7	11.1	0.1%	11,471.5	12.3	0.1%	11,470.5	13.3	0.1%	11,468.6	15.2	0.1%	11,467.6	16.2	0.1%	11,466.4	17.4	0.2%
ME 7	32 44 30	2015	Dry	November	Used in Summary Table Analysis	9,164.8	9,156.3	8.6	0.1%	9,155.4	9.4	0.1%	9,154.5	10.3	0.1%	9,153.7	11.1	0.1%	9,152.8	12.0	0.1%	9,152.0	12.8	0.1%
ME 7	32 44 30	2015	Dry	December	--	33,081.0	33,074.1	6.9	0.0%	33,072.9	8.1	0.0%	33,072.9	8.1	0.0%	33,071.8	9.3	0.0%	33,070.6	10.4	0.0%	33,070.6	10.4	0.0%
ME 7	32 44 30	2015	Dry	January	--	14,648.1	14,642.4	5.8	0.0%	14,641.2	6.9	0.0%	14,641.2	6.9	0.0%	14,640.0	8.1	0.1%	14,640.0	8.1	0.1%	14,638.9	9.3	0.1%
ME 7	32 44 30	2015	Dry	February	--	27,419.0	27,413.2	5.8	0.0%	27,413.2	5.8	0.0%	27,412.0	6.9	0.0%	27,412.0	6.9	0.0%	27,410.9	8.1	0.0%	27,410.9	8.1	0.0%
ME 7	32 44 30	2015	Dry	March	--	11,615.7	11,611.1	4.6	0.0%	11,610.0	5.8	0.0%	11,610.0	5.8	0.0%	11,608.8	6.9	0.1%	11,608.8	6.9	0.1%	11,607.6	8.1	0.1%
ME 7	32 44 30	2015	Dry	April	--	8,508.4	8,499.1	9.4	0.1%	8,498.1	10.3	0.1%	8,497.2	11.2	0.1%	8,496.2	12.3	0.1%	8,495.3	13.2	0.2%	8,494.3	14.1	0.2%
ME 7	32 44 30	2015	Dry	May	--	1,516.0	1,504.7	11.2	0.7%	1,503.6	12.4	0.8%	1,502.5	13.4	0.9%	1,501.4	14.6	1.0%	1,500.2	15.7	1.0%	1,499.1	16.9	1.1%
ME 7	32 44 30	2015	Dry	June	--	663.5	648.6	14.9	2.2%	647.1	16.3	2.5%	645.6	17.8	2.7%	644.2	19.3	2.9%	642.7	20.8	3.1%	641.2	22.3	3.4%
ME 7	32 44 30	2015	Dry	July	--	280.4	265.5	14.9	5.3%	264.0	16.4	5.8%	262.5	17.8	6.4%	261.0	19.3	6.9%	259.5	20.8	7.4%	258.1	22.3	8.0%
ME 7	32 44 30	2015	Dry	August	--	180.3	165.9	14.4	8.0%	164.5	15.9	8.8%	163.0	17.3	9.6%	161.6	18.8	10.4%	160.1	20.2	11.2%	158.7	21.7	12.0%
ME 7	32 44 30	2015	Dry	September	Used in Summary Table Analysis	133.2	120.2	13.0	9.8%	118.9	14.3	10.8%	117.6	15.6	11.7%	116.2	17.0	12.8%	114.9	18.4	13.8%	113.5	19.7	14.8%
ME 7	32 44 30	2016	Above Normal	October	Used in Summary Table Analysis	98.0	86.9	11.1	11.3%	85.7	12.2	12.5%	84.6	13.3	13.6%	84.0	14.0	14.3%	83.0	15.0	15.3%	81.5	16.5	16.8%
ME 7	32 44 30	2016	Above Normal	November	Used in Summary Table Analysis	3,977.7	3,969.1	8.6	0.2%	3,968.3	9.4	0.2%	3,967.4	10.3	0.3%	3,966.3	11.3	0.3%	3,965.5	12.2	0.3%	3,964.6	13.1	0.3%
ME 7	32 44 30	2016	Above Normal	December	--	37,164.4	37,156.3	8.1	0.0%	37,156.3	8.1	0.0%	37,155.1	9.3	0.0%	37,153.9	10.4	0.0%	37,153.9	10.4	0.0%	37,152.8	11.6	0.0%
ME 7	32 44 30	2016	Above Normal	January	--	57,880.8	57,875.0	5.8	0.0%	57,873.8	6.9	0.0%	57,873.8	6.9	0.0%	57,872.7	8.1	0.0%	57,871.5	9.3	0.0%	57,871.5	9.3	0.0%
ME 7	32 44 30	2016	Above Normal	February	--	24,360.0	24,354.2	5.8	0.0%	24,354.2	5.8	0.0%	24,353.0	6.9	0.0%	24,353.0	6.9	0.0%	24,351.9	8.1	0.0%	24,351.9	8.1	0.0%
ME 7	32 44 30	2016	Above Normal	March	--	42,042.8	42,037.0	5.8	0.0%	42,037.0	5.8	0.0%	42,035.9	6.9	0.0%	42,035.9	6.9	0.0%	42,034.7	8.1	0.0%	42,034.7	8.1	0.0%
ME 7	32 44 30	2016	Above Normal	April	--	18,611.1	18,606.5	4.6	0.0%	18,606.5	4.6	0.0%	18,605.3	5.8	0.0%	18,605.3	5.8	0.0%	18,604.2	6.9	0.0%	18,604.2	6.9	0.0%
ME 7	32 44 30	2016	Above Normal	May	--	5,243.9	5,238.1	5.8	0.1%	5,237.5	6.4	0.1%	5,236.9	6.9	0.1%	5,236.3	7.5	0.1%	5,235.8	8.1	0.2%	5,235.1	8.8	0.2%
ME 7	32 44 30	2016	Above Normal	June	--	1,524.3	1,513.0	11.3	0.7%	1,511.8	12.5	0.8%	1,510.6	13.7	0.9%	1,509.5	14.8	1.0%	1,508.3	16.0	1.0%	1,507.3	17.0	1.1%
ME 7	32 44 30	2016	Above Normal	July	--	839.4	826.5	12.9	1.5%	825.2	14.2	1.7%	823.9	15.4	1.8%	822.6	16.7	2.0%	821.3	18.0	2.1%	820.0	19.3	2.3%
ME 7	32 44 30	2016	Above Normal	August	--	508.6	495.8	12.8	2.5%	494.6	14.1	2.8%	493.3	15.4	3.0%	492.0	16.7	3.3%	490.7	17.9	3.5%	489.4	19.2	3.8%
ME 7	32 44 30	2016	Above Normal	September	Used in Summary Table Analysis	344.3	332.7	11.6	3.4%	331.5	12.7	3.7%	330.4	13.9	4.0%	329.2	15.1	4.4%	328.0	16.2	4.7%	326.9	17.4	5.0%
ME 7	32 44 30	2017	Wet	October	Used in Summary Table Analysis	18,501.2	18,491.9	9.3	0.1%	18,490.7	10.4	0.1%	18,489.6	11.6	0.1%	18,488.4	12.7	0.1%	18,487.3	13.9	0.1%	18,486.1	15.0	0.1%
ME 7	32 44 30	2017	Wet	November	Used in Summary Table Analysis	19,059.0	19,052.1	6.9	0.0%	19,050.9	8.1	0.0%	19,050.9	8.1	0.0%	19,049.8	9.3	0.0%	19,048.6	10.4	0.1%	19,048.6	10.4	0.1%
ME 7	32 44 30	2017	Wet	December	--	24,476.9	24,471.1	5.8	0.0%	24,469.9	6.9	0.0%	24,468.8	8.1	0.0%	24,468.8	8.1	0.0%	24,467.6	9.3	0.0%	24,467.6	9.3	0.0%
ME 7	32 44 30	2017	Wet	January	--	107,964.1	107,958.3	5.8	0.0%	107,957.2	6.9	0.0%	107,957.2	6.9	0.0%	107,956.0	8.1	0.0%	107,956.0	8.1	0.0%	107,954.9	9.3	0.0%
ME 7	32 44 30	2017	Wet	February	--	82,456.0	82,451.4	4.6	0.0%	82,450.2	5.8	0.0%	82,450.2	5.8	0.0%	82,449.1	6.9	0.0%	82,449.1	6.9	0.0%	82,447.9	8.1	0.0%
ME 7	32 44 30	2017	Wet	March	--	27,468.8	27,463.0	5.8	0.0%	27,463.0	5.8	0.0%	27,461.8	6.9	0.0%	27,461.8	6.9	0.0%	27,461.8	6.9	0.0%	27,460.6	8.1	0.0%
ME 7	32 44 30	2017	Wet	April	--	23,147.0	23,142.4	4.6	0.0%	23,142.4	4.6	0.0%	23,141.2	5.8	0.0%	23,141.2	5.8	0.0%	23,141.2	5.8	0.0%	23,140.0	6.9	0.0%
ME 7	32 44 30	2017	Wet	May	--	6,282.5	6,276.7	5.8	0.1%	6,276.2	6.4	0.1%	6,275.6	6.9	0.1%	6,275.0	7.5	0.1%	6,274.3	8.2	0.1%	6,273.7	8.8	0.1%
ME 7	32 44 30	2017	Wet	June	--	2,147.3	2,135.9	11.5	0.5%	2,134.7	12.6	0.6%	2,133.6	13.8	0.6%	2,132.4	14.9	0.7%	2,131.3	16.1	0.7%	2,130.1	17.2	0.8%
ME 7	32 44 30	2017	Wet	July	--	955.1	942.2	12.9	1.4%	940.9	14.2	1.5%	939.6	15.5	1.6%	938.3	16.8	1.8%	937.0	18.1	1.9%	935.7	19.4	2.0%
ME 7	32 44 30	2017	Wet	August	--	527.3	514.6	12.7	2.4%	513.3	14.0	2.7%	512.1	15.3	2.9%	510.8	16.5	3.1%	509.5	17.8	3.4%	508.3	19.1	3.6%
ME 7	32 44 30	2017	Wet	September	Used in Summary Table Analysis	340.9	329.0	11.9	3.5%	327.9	13.1	3.8%	326.7	14.2	4.2%	325.5	15.4	4.5%	324.3	16.6	4.9%	323.1	17.8	5.2%
ME 7	32 44 30	2018	Above Normal	October	Used in Summary Table Analysis	293.5	284.8	8.7	3.0%	283.5	10.1	3.4%	282.4	11.1	3.8%	281.1	12.4	4.2%	280.1	13.4	4.6%	279.1	14.4	4.9%
ME 7	32 44 30	2018	Above Normal	November	Used in Summary Table Analysis	11,035.4	11,027.9	7.5	0.1%	11,027.1	8.3	0.1%	11,026.3	9.1	0.1%	11,025.6	9.8	0.1%	11,024.8	10.6	0.1%	11,024.0	11.5	0.1%
ME 7	32 44 30	2018	Above Normal	December	--	5,472.5	5,466.1	6.4	0.1%	5,465.5	6.9	0.1%	5,464.8	7.6	0.1%	5,464.1	8.3	0.2%	5,463.5	8.9	0.2%	5,462.8	9.6	0.2%
ME 7	32 44 30	2018	Above Normal	January	--	18,195.6	18,189.8	5.8	0.0%	18,188.7	6.9	0.0%	18,188.7	6.9	0.0%	18,187.5	8.1	0.0%	18,187.5	8.1	0.0%	18,186.3	9.3	0.1%
ME 7	32 44 30	2018	Above Normal	February	--	7,620.3	7,615.3	5.0	0.1%	7,614.8	5.4	0.1%	7,614.4	5.9	0.1%	7,613.8	6.5	0.1%	7,613.3	6.9	0.1%	7,612.8	7.4	0.1%
ME 7	32 44 30	2018	Above Normal	March	--	20,968.8	20,964.1	4.6	0.0%	20,963.0	5.8	0.0%	20,963.0	5.8	0.0%	20,961.8	6.9	0.0%	20,961.8	6.9	0.0%	20,961.8	6.9	0.0%
ME 7	32 44 30	2018	Above Normal	April	--	32,513.9	32,509.3	4.6	0.0%	32,509.3	4.6	0.0%	32,509.3	4.6	0.0%	32,508.1	5.8	0.0%	32,508.1	5.8	0.0%	32,506.9	6.9	0.0%
ME 7	32 44 30	2018	Above Normal	May	--	7,001.3	6,992.5	8.8	0.1%	6,991.6	9.7	0.1%	6,990.6	10.6	0.2%	6,989.8	11.5	0.2%	6,988.9	12.4	0.2%	6,988.0	13.3	0.2%
ME 7	32 44 30	2018	Above Normal	June	--	1,929.7	1,917.9	11.8	0.6%	1,916.8	13.0	0.7%	1,915.6	14.1	0.7%	1,914.4	15.4	0.8%	1,913.2	16.6	0.9%	1,912.0	17.7	0.9%
ME 7	32 44 30	2018	Above Normal	July	--	799.2	786.1	13.1	1.6%	784.8	14.4	1.8%	783.5	15.7	2.0%	782.2	17.0	2.1%	780.9	18.3	2.3%	779.6	19.6	2.5%
ME 7	32 44 30	2018	Above Normal	August	--	460.5	448.2	12.3	2.7%	447.0	13.5	2.9%	445.8	14.7	3.2%	444.5	16.0	3.5%	443.3	17.2	3.7%	442.1	18.4	4.0%
ME 7	32 44 30	2018	Above Normal	September	Used in Summary Table Analysis	316.9	305.0	11.9	3.8%	303.8	13.1	4.1%	302.6	14.3	4.5%	301.4	15.5	4.9%	300.2	16.7	5.3%	299.0	17.9	5.6%
ME 7	32 44 30	2019	Below Normal	October	Used in Summary Table Analysis	222.1	212.6	9.5	4.3%	211.6	10.5	4.7%	210.7	11.4	5.1%	209.7	12.4	5.6%	208.8	13.3	6.0%	207.9	14.2	6.4%
ME 7	32 44 30	2019	Below Normal	November	Used in Summary Table Analysis	6,785.6	6,778.0	7.6	0.1%	6,777.2	8.4	0.1%	6,776.4	9.3	0.1%	6,775.7	10.0	0.1%	6,774.9	10.8	0.2%	6,774.1	11.6	0.2%
ME 7	32 44 30	2019	Below Normal	December	--	14,936.3	14,929.4	6.9	0.0%	14,929.4	6.9	0.0%	14,928.2	8.1	0.1%	14,927.1	9.3	0.1%	14,927.1	9.3	0.1%	14,925.9	10.4	0.1%
ME 7	32 44 30	2019	Below Normal	January	--	35,761.6	35,755.8	5.8	0.0%	35,755.8	5.8	0.0%	35,754.6	6.9	0.0%	35,754.6	6.9	0.0%	35,753.5	8.1	0.0%	35,753.5	8.1	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 44 30	2019	Below Normal	February	--	142,500.0	142,488.4	11.6	0.0%	142,488.4	11.6	0.0%	142,488.4	11.6	0.0%	142,488.4	11.6	0.0%	142,488.4	11.6	0.0%	142,488.4	11.6	0.0%
ME 7	32 44 30	2019	Below Normal	March	--	42,613.4	42,608.8	4.6	0.0%	42,607.6	5.8	0.0%	42,607.6	5.8	0.0%	42,606.5	6.9	0.0%	42,606.5	6.9	0.0%	42,606.5	6.9	0.0%
ME 7	32 44 30	2019	Below Normal	April	--	15,356.5	15,351.9	4.6	0.0%	15,351.9	4.6	0.0%	15,350.7	5.8	0.0%	15,350.7	5.8	0.0%	15,350.7	5.8	0.0%	15,349.5	6.9	0.0%
ME 7	32 44 30	2019	Below Normal	May	--	17,354.2	17,344.9	9.3	0.1%	17,343.8	10.4	0.1%	17,342.6	11.6	0.1%	17,341.4	12.7	0.1%	17,341.4	12.7	0.1%	17,340.3	13.9	0.1%
ME 7	32 44 30	2019	Below Normal	June	--	4,247.2	4,234.5	12.7	0.3%	4,233.2	14.0	0.3%	4,231.9	15.3	0.4%	4,230.7	16.6	0.4%	4,229.4	17.8	0.4%	4,228.1	19.1	0.4%
ME 7	32 44 30	2019	Below Normal	July	--	1,382.3	1,369.1	13.2	1.0%	1,367.8	14.5	1.0%	1,366.6	15.7	1.1%	1,365.2	17.1	1.2%	1,363.9	18.4	1.3%	1,362.6	19.7	1.4%
ME 7	32 44 30	2019	Below Normal	August	--	616.6	604.1	12.6	2.0%	602.8	13.8	2.2%	601.6	15.1	2.4%	600.3	16.3	2.7%	599.0	17.6	2.9%	597.8	18.9	3.1%
ME 7	32 44 30	2019	Below Normal	September	Used in Summary Table Analysis	480.5	468.7	11.8	2.5%	467.5	13.0	2.7%	466.4	14.2	3.0%	465.2	15.3	3.2%	464.0	16.6	3.4%	462.8	17.7	3.7%
ME 7	32 44 30	2020	Dry	October	Used in Summary Table Analysis	370.4	361.3	9.1	2.5%	360.4	10.0	2.7%	359.5	10.9	2.9%	358.6	11.8	3.2%	357.7	12.8	3.4%	356.7	13.7	3.7%
ME 7	32 44 30	2020	Dry	November	Used in Summary Table Analysis	344.2	337.0	7.2	2.1%	336.2	7.9	2.3%	335.5	8.7	2.5%	334.8	9.4	2.7%	334.0	10.1	2.9%	333.3	10.9	3.2%
ME 7	32 44 30	2020	Dry	December	--	13,678.2	13,672.5	5.8	0.0%	13,671.3	6.9	0.1%	13,671.3	6.9	0.1%	13,670.1	8.1	0.1%	13,670.1	8.1	0.1%	13,669.0	9.3	0.1%
ME 7	32 44 30	2020	Dry	January	--	22,638.9	22,633.1	5.8	0.0%	22,633.1	5.8	0.0%	22,631.9	6.9	0.0%	22,631.9	6.9	0.0%	22,630.8	8.1	0.0%	22,630.8	8.1	0.0%
ME 7	32 44 30	2020	Dry	February	--	7,430.6	7,425.5	5.1	0.1%	7,425.0	5.6	0.1%	7,424.4	6.1	0.1%	7,424.0	6.6	0.1%	7,423.4	7.2	0.1%	7,422.9	7.6	0.1%
ME 7	32 44 30	2020	Dry	March	--	7,304.3	7,299.5	4.7	0.1%	7,299.1	5.2	0.1%	7,298.6	5.7	0.1%	7,298.1	6.1	0.1%	7,297.6	6.7	0.1%	7,297.1	7.2	0.1%
ME 7	32 44 30	2020	Dry	April	--	5,548.7	5,539.5	9.3	0.2%	5,538.4	10.3	0.2%	5,537.5	11.2	0.2%	5,536.6	12.2	0.2%	5,535.6	13.1	0.2%	5,534.7	14.0	0.3%
ME 7	32 44 30	2020	Dry	May	--	7,460.5	7,449.3	11.2	0.2%	7,448.1	12.4	0.2%	7,447.0	13.5	0.2%	7,445.8	14.7	0.2%	7,444.7	15.9	0.2%	7,443.5	17.0	0.2%
ME 7	32 44 30	2020	Dry	June	--	2,111.3	2,096.1	15.3	0.7%	2,094.6	16.8	0.8%	2,093.1	18.3	0.9%	2,091.4	19.9	0.9%	2,089.9	21.4	1.0%	2,088.4	22.9	1.1%
ME 7	32 44 30	2020	Dry	July	--	810.6	795.3	15.3	1.9%	793.8	16.9	2.1%	792.2	18.4	2.3%	790.7	19.9	2.5%	789.2	21.4	2.6%	787.7	23.0	2.8%
ME 7	32 44 30	2020	Dry	August	--	414.1	398.9	15.2	3.7%	397.4	16.7	4.0%	395.9	18.2	4.4%	394.4	19.7	4.8%	392.9	21.3	5.1%	391.3	22.8	5.5%
ME 7	32 44 30	2020	Dry	September	Used in Summary Table Analysis	263.3	249.4	13.9	5.3%	248.0	15.3	5.8%	246.6	16.7	6.3%	245.2	18.0	6.9%	243.8	19.4	7.4%	242.4	20.8	7.9%
ME 7	32 43 31	2000	Above Normal	October	Used in Summary Table Analysis	840.9	831.2	9.6	1.1%	830.3	10.6	1.3%	829.3	11.6	1.4%	828.3	12.5	1.5%	827.3	13.5	1.6%	826.4	14.5	1.7%
ME 7	32 43 31	2000	Above Normal	November	Used in Summary Table Analysis	12,436.3	12,429.4	6.9	0.1%	12,428.2	8.1	0.1%	12,427.1	9.3	0.1%	12,425.9	10.4	0.1%	12,425.9	10.4	0.1%	12,424.8	11.6	0.1%
ME 7	32 43 31	2000	Above Normal	December	--	10,981.7	10,975.3	6.4	0.1%	10,974.8	6.9	0.1%	10,974.1	7.6	0.1%	10,973.4	8.3	0.1%	10,972.8	8.9	0.1%	10,972.1	9.6	0.1%
ME 7	32 43 31	2000	Above Normal	January	--	29,104.2	29,098.4	5.8	0.0%	29,098.4	5.8	0.0%	29,097.2	6.9	0.0%	29,097.2	6.9	0.0%	29,096.1	8.1	0.0%	29,096.1	8.1	0.0%
ME 7	32 43 31	2000	Above Normal	February	--	37,387.7	37,381.9	5.8	0.0%	37,381.9	5.8	0.0%	37,380.8	6.9	0.0%	37,380.8	6.9	0.0%	37,379.6	8.1	0.0%	37,379.6	8.1	0.0%
ME 7	32 43 31	2000	Above Normal	March	--	18,424.8	18,420.1	4.6	0.0%	18,420.1	4.6	0.0%	18,420.1	4.6	0.0%	18,419.0	5.8	0.0%	18,419.0	5.8	0.0%	18,417.8	6.9	0.0%
ME 7	32 43 31	2000	Above Normal	April	--	12,400.5	12,395.8	4.6	0.0%	12,395.8	4.6	0.0%	12,394.7	5.8	0.0%	12,394.7	5.8	0.0%	12,394.7	5.8	0.0%	12,393.5	6.9	0.1%
ME 7	32 43 31	2000	Above Normal	May	--	7,167.4	7,158.2	9.1	0.1%	7,157.3	10.1	0.1%	7,156.5	10.9	0.2%	7,155.6	11.8	0.2%	7,154.6	12.7	0.2%	7,153.7	13.7	0.2%
ME 7	32 43 31	2000	Above Normal	June	--	2,643.5	2,629.6	13.9	0.5%	2,628.1	15.4	0.6%	2,626.7	16.8	0.6%	2,625.3	18.2	0.7%	2,624.0	19.6	0.7%	2,622.6	20.9	0.8%
ME 7	32 43 31	2000	Above Normal	July	--	1,010.6	997.4	13.2	1.3%	996.1	14.5	1.4%	994.8	15.8	1.6%	993.5	17.1	1.7%	992.1	18.4	1.8%	990.8	19.8	2.0%
ME 7	32 43 31	2000	Above Normal	August	--	541.5	529.0	12.5	2.3%	527.8	13.7	2.5%	526.5	15.0	2.8%	525.3	16.2	3.0%	524.0	17.5	3.2%	522.8	18.7	3.5%
ME 7	32 43 31	2000	Above Normal	September	Used in Summary Table Analysis	313.1	301.8	11.3	3.6%	300.7	12.4	4.0%	299.6	13.5	4.3%	298.4	14.6	4.7%	297.3	15.8	5.0%	296.2	16.9	5.4%
ME 7	32 43 31	2001	Dry	October	Used in Summary Table Analysis	3,894.4	3,885.0	9.5	0.2%	3,884.0	10.4	0.3%	3,883.1	11.3	0.3%	3,882.2	12.3	0.3%	3,881.1	13.3	0.3%	3,880.2	14.2	0.4%
ME 7	32 43 31	2001	Dry	November	Used in Summary Table Analysis	6,247.5	6,239.9	7.5	0.1%	6,239.2	8.2	0.1%	6,238.4	9.0	0.1%	6,237.7	9.7	0.2%	6,236.9	10.5	0.2%	6,236.1	11.3	0.2%
ME 7	32 43 31	2001	Dry	December	--	8,962.4	8,955.9	6.5	0.1%	8,955.3	7.1	0.1%	8,954.6	7.8	0.1%	8,953.9	8.4	0.1%	8,953.4	9.0	0.1%	8,952.7	9.7	0.1%
ME 7	32 43 31	2001	Dry	January	--	13,020.8	13,016.2	4.6	0.0%	13,015.0	5.8	0.0%	13,015.0	5.8	0.0%	13,013.9	6.9	0.1%	13,013.9	6.9	0.1%	13,012.7	8.1	0.1%
ME 7	32 43 31	2001	Dry	February	--	17,619.2	17,614.6	4.6	0.0%	17,613.4	5.8	0.0%	17,613.4	5.8	0.0%	17,613.4	5.8	0.0%	17,612.3	6.9	0.0%	17,612.3	6.9	0.0%
ME 7	32 43 31	2001	Dry	March	--	12,375.0	12,370.4	4.6	0.0%	12,369.2	5.8	0.0%	12,369.2	5.8	0.0%	12,369.2	5.8	0.0%	12,368.1	6.9	0.1%	12,368.1	6.9	0.1%
ME 7	32 43 31	2001	Dry	April	--	11,053.9	11,044.6	9.4	0.1%	11,043.6	10.3	0.1%	11,042.6	11.3	0.1%	11,041.7	12.3	0.1%	11,040.7	13.2	0.1%	11,039.8	14.1	0.1%
ME 7	32 43 31	2001	Dry	May	--	2,644.1	2,632.8	11.3	0.4%	2,631.6	12.5	0.5%	2,630.4	13.7	0.5%	2,629.4	14.7	0.6%	2,628.2	15.9	0.6%	2,627.1	17.0	0.6%
ME 7	32 43 31	2001	Dry	June	--	2,703.2	2,687.4	15.9	0.6%	2,685.8	17.5	0.6%	2,684.1	19.1	0.7%	2,682.5	20.7	0.8%	2,680.9	22.3	0.8%	2,679.4	23.8	0.9%
ME 7	32 43 31	2001	Dry	July	--	729.9	714.6	15.3	2.1%	713.0	16.8	2.3%	711.4	18.4	2.5%	709.9	19.9	2.7%	708.4	21.5	2.9%	706.9	23.0	3.1%
ME 7	32 43 31	2001	Dry	August	--	188.1	173.3	14.9	7.9%	171.7	16.4	8.7%	170.2	18.0	9.6%	168.6	19.5	10.4%	167.2	21.0	11.2%	165.7	22.5	11.9%
ME 7	32 43 31	2001	Dry	September	Used in Summary Table Analysis	111.9	98.3	13.6	12.1%	96.9	15.0	13.4%	95.5	16.4	14.6%	94.0	17.9	16.0%	92.7	19.2	17.1%	91.4	20.5	18.4%
ME 7	32 43 31	2002	Below Normal	October	Used in Summary Table Analysis	283.1	271.5	11.5	4.1%	270.4	12.7	4.5%	269.2	13.9	4.9%	267.8	15.2	5.4%	266.7	16.3	5.8%	265.5	17.5	6.2%
ME 7	32 43 31	2002	Below Normal	November	Used in Summary Table Analysis	12,189.8	12,180.6	9.3	0.1%	12,179.4	10.4	0.1%	12,178.2	11.6	0.1%	12,178.2	11.6	0.1%	12,177.1	12.7	0.1%	12,175.9	13.9	0.1%
ME 7	32 43 31	2002	Below Normal	December	--	36,158.6	36,150.5	8.1	0.0%	36,149.3	9.3	0.0%	36,149.3	9.3	0.0%	36,148.1	10.4	0.0%	36,147.0	11.6	0.0%	36,145.8	12.7	0.0%
ME 7	32 43 31	2002	Below Normal	January	--	31,178.2	31,171.3	6.9	0.0%	31,170.1	8.1	0.0%	31,170.1	8.1	0.0%	31,169.0	9.3	0.0%	31,169.0	9.3	0.0%	31,167.8	10.4	0.0%
ME 7	32 43 31	2002	Below Normal	February	--	24,858.8	24,853.0	5.8	0.0%	24,853.0	5.8	0.0%	24,851.9	6.9	0.0%	24,851.9	6.9	0.0%	24,850.7	8.1	0.0%	24,850.7	8.1	0.0%
ME 7	32 43 31	2002	Below Normal	March	--	17,922.5	17,916.7	5.8	0.0%	17,916.7	5.8	0.0%	17,915.5	6.9	0.0%	17,914.4	8.1	0.0%	17,914.4	8.1	0.0%	17,913.2	9.3	0.1%
ME 7	32 43 31	2002	Below Normal	April	--	9,983.0	9,973.5	9.5	0.1%	9,972.5	10.5	0.1%	9,971.5	11.5	0.1%	9,970.5	12.5	0.1%	9,969.6	13.4	0.1%	9,968.6	14.4	0.1%
ME 7	32 43 31	2002	Below Normal	May	--	3,344.1	3,332.9	11.2	0.3%	3,331.7	12.4	0.4%	3,330.6	13.5	0.4%	3,329.4	14.7	0.4%	3,328.2	15.9	0.5%	3,327.1	17.0	0.5%
ME 7	32 43 31	2002	Below Normal	June	--	869.2	855.8	13.3	1.5%	854.5	14.6	1.7%	853.2	16.0	1.8%	851.8	17.3	2.0%	850.5	18.7	2.1%	849.1	20.0	2.3%
ME 7	32 43 31	2002	Below Normal	July	--	378.5	364.7	13.7	3.6%	363.4	15.1	4.0%	362.0	16.5	4.4%	360.6	17.9	4.7%	359.2	19.3	5.1%	357.8	20.6	5.5%
ME 7	32 43 31	2002	Below Normal	August	--	245.1	232.1	13.1	5.3%	230.8	14.4	5.9%	229.4	15.7	6.4%	228.1	17.0	6.9%	226.8	18.3	7.5%	225.5	19.6	8.0%
ME 7	32 43 31	2002	Below Normal	September	Used in Summary Table Analysis	181.2	168.7	12.5	6.9%	167.4	13.8	7.6%	166.2	15.0	8.3%	164.9	16.3	9.0%	163.6	17.5	9.7%	162.4	18.8	10.4%
ME 7	32 43 31	2003	Wet	October	Used in Summary Table Analysis	145.8	135.4	10.4	7.1%	134.3	11.5	7.9%	133.3	12.5	8.6%	132.2	13.6	9.3%	131.1	14.6	10.0%	130.1	15.7	10.8%
ME 7	32 43 31	2003	Wet	November	Used in Summary Table Analysis	917.2	908.7	8.5	0.9%	907.8	9.4	1.0%	907.0	10.2	1.1%	906.1	11.1	1.2%	905.2	12.0	1.3%	904.4	12.9	1.4%
ME 7	32 43 31	2003	Wet	December	--	57,934.0	57,927.1	6.9	0.0%	57,925.9	8.1	0.0%	57,925.9	8.1	0.0%	57,924.8	9.3	0.0%	57,923.6	10.4	0.0%	57,923.6	10.4	0.0%
ME 7	32 43 31	2003	Wet	January	--	31,759.3	31,753.5	5.8	0.0%	31,752.3	6.9	0.0%	31,752.3	6.9	0.0%	31,751.2	8.1	0.0%	31,750.0	9.3	0.0%	31,750.0	9.3	0.0%
ME 7	32 43 31	2003	Wet	February	--	20,476.9	20,471.1	5.8	0.0%	20,469.9	6.9	0.0%	20,469.9	6.9	0.0%	20,468.8	8.1	0.0%	20,468.8	8.1	0.0%	20,467.6	9.3	0.0%
ME 7	32 43 31	2003	Wet	March	--	24,224.5	24,219.9	4.6	0.0%	24,218.8	5.8	0.0%	24,218.8	5.8	0.0%	24,217.6	6.9	0.0%	24,217.6	6.9	0.0%	24,216.4	8.1	0.0%
ME 7	32 43 31	2003	Wet	April	--	43,377.3	43,372.7	4.6	0.0%	43,371.5	5.8	0.0%	43,371.5	5.8	0.0%	43,370.4	6.9	0.0%	43,370.4	6.9	0.0%	43,369.2	8.1	0.0%
ME 7	32 43 31	2003	Wet	May	--	12,287.0	12,277.8	9.3	0.1%	12,276.6	10.4	0.1%	12,275.5	11.6	0.1%	12,274.3	12.7	0.1%	12,273.1	13.9	0.1%	12,272.0	15.0	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 43 31	2003	Wet	June	--	3,186.0	3,173.3	12.7	0.4%	3,172.0	14.0	0.4%	3,170.7	15.3	0.5%	3,169.4	16.6	0.5%	3,168.2	17.8	0.6%	3,167.0	19.0	0.6%
ME 7	32 43 31	2003	Wet	July	--	1,496.1	1,482.5	13.5	0.9%	1,481.1	14.9	1.0%	1,479.7	16.3	1.1%	1,478.4	17.7	1.2%	1,477.1	19.0	1.3%	1,475.7	20.4	1.4%
ME 7	32 43 31	2003	Wet	August	--	781.1	767.9	13.2	1.7%	766.6	14.5	1.9%	765.3	15.8	2.0%	763.9	17.2	2.2%	762.6	18.5	2.4%	761.3	19.9	2.5%
ME 7	32 43 31	2003	Wet	September	Used in Summary Table Analysis	477.6	466.0	11.6	2.4%	464.8	12.7	2.7%	463.7	13.9	2.9%	462.5	15.1	3.2%	461.4	16.2	3.4%	460.2	17.4	3.6%
ME 7	32 43 31	2004	Wet	October	Used in Summary Table Analysis	344.0	334.3	9.7	2.8%	333.4	10.6	3.1%	332.4	11.6	3.4%	331.4	12.6	3.7%	330.4	13.6	3.9%	329.4	14.5	4.2%
ME 7	32 43 31	2004	Wet	November	Used in Summary Table Analysis	5,936.9	5,929.1	7.9	0.1%	5,928.2	8.7	0.1%	5,927.4	9.5	0.2%	5,926.6	10.3	0.2%	5,925.8	11.1	0.2%	5,925.0	11.9	0.2%
ME 7	32 43 31	2004	Wet	December	--	36,886.6	36,879.6	6.9	0.0%	36,879.6	6.9	0.0%	36,878.5	8.1	0.0%	36,877.3	9.3	0.0%	36,877.3	9.3	0.0%	36,876.2	10.4	0.0%
ME 7	32 43 31	2004	Wet	January	--	31,863.4	31,857.6	5.8	0.0%	31,857.6	5.8	0.0%	31,856.5	6.9	0.0%	31,856.5	6.9	0.0%	31,855.3	8.1	0.0%	31,855.3	8.1	0.0%
ME 7	32 43 31	2004	Wet	February	--	38,612.3	38,607.6	4.6	0.0%	38,606.5	5.8	0.0%	38,606.5	5.8	0.0%	38,605.3	6.9	0.0%	38,605.3	6.9	0.0%	38,604.2	8.1	0.0%
ME 7	32 43 31	2004	Wet	March	--	16,591.4	16,586.8	4.6	0.0%	16,586.8	4.6	0.0%	16,585.6	5.8	0.0%	16,585.6	5.8	0.0%	16,584.5	6.9	0.0%	16,584.5	6.9	0.0%
ME 7	32 43 31	2004	Wet	April	--	9,503.9	9,499.4	4.5	0.0%	9,499.0	5.0	0.1%	9,498.5	5.4	0.1%	9,498.0	5.9	0.1%	9,497.6	6.4	0.1%	9,497.1	6.8	0.1%
ME 7	32 43 31	2004	Wet	May	--	3,464.4	3,455.1	9.3	0.3%	3,454.2	10.2	0.3%	3,453.2	11.1	0.3%	3,452.3	12.0	0.3%	3,451.4	13.0	0.4%	3,450.5	13.9	0.4%
ME 7	32 43 31	2004	Wet	June	--	706.6	694.4	12.2	1.7%	693.2	13.4	1.9%	692.0	14.6	2.1%	690.8	15.8	2.2%	689.6	17.0	2.4%	688.4	18.2	2.6%
ME 7	32 43 31	2004	Wet	July	--	374.5	361.3	13.3	3.6%	359.9	14.6	3.9%	358.6	16.0	4.3%	357.3	17.3	4.6%	355.9	18.6	5.0%	354.6	20.0	5.3%
ME 7	32 43 31	2004	Wet	August	--	242.8	230.1	12.7	5.2%	228.9	13.9	5.7%	227.6	15.2	6.3%	226.3	16.5	6.8%	225.0	17.8	7.3%	223.8	19.0	7.8%
ME 7	32 43 31	2004	Wet	September	Used in Summary Table Analysis	178.8	166.6	12.2	6.8%	165.4	13.4	7.5%	164.2	14.6	8.2%	163.0	15.8	8.8%	161.7	17.1	9.5%	160.5	18.3	10.2%
ME 7	32 43 31	2005	Above Normal	October	Used in Summary Table Analysis	7,854.6	7,844.8	9.8	0.1%	7,843.8	10.9	0.1%	7,842.8	11.8	0.2%	7,841.8	12.8	0.2%	7,840.7	13.9	0.2%	7,839.8	14.8	0.2%
ME 7	32 43 31	2005	Above Normal	November	Used in Summary Table Analysis	2,285.5	2,277.8	7.8	0.3%	2,277.0	8.6	0.4%	2,276.2	9.4	0.4%	2,275.3	10.2	0.4%	2,274.7	10.9	0.5%	2,273.8	11.7	0.5%
ME 7	32 43 31	2005	Above Normal	December	--	21,510.4	21,503.5	6.9	0.0%	21,503.5	6.9	0.0%	21,502.3	8.1	0.0%	21,502.3	8.1	0.0%	21,501.2	9.3	0.0%	21,500.0	10.4	0.0%
ME 7	32 43 31	2005	Above Normal	January	--	22,762.7	22,756.9	5.8	0.0%	22,756.9	5.8	0.0%	22,755.8	6.9	0.0%	22,755.8	6.9	0.0%	22,754.6	8.1	0.0%	22,754.6	8.1	0.0%
ME 7	32 43 31	2005	Above Normal	February	--	14,082.2	14,077.5	4.6	0.0%	14,076.4	5.8	0.0%	14,076.4	5.8	0.0%	14,076.4	5.8	0.0%	14,075.2	6.9	0.0%	14,075.2	6.9	0.0%
ME 7	32 43 31	2005	Above Normal	March	--	28,858.8	28,853.0	5.8	0.0%	28,853.0	5.8	0.0%	28,853.0	5.8	0.0%	28,851.9	6.9	0.0%	28,851.9	6.9	0.0%	28,850.7	8.1	0.0%
ME 7	32 43 31	2005	Above Normal	April	--	21,636.6	21,631.9	4.6	0.0%	21,630.8	5.8	0.0%	21,630.8	5.8	0.0%	21,629.6	6.9	0.0%	21,629.6	6.9	0.0%	21,629.6	6.9	0.0%
ME 7	32 43 31	2005	Above Normal	May	--	19,798.6	19,789.4	9.3	0.0%	19,788.2	10.4	0.1%	19,787.0	11.6	0.1%	19,785.9	12.7	0.1%	19,784.7	13.9	0.1%	19,784.7	13.9	0.1%
ME 7	32 43 31	2005	Above Normal	June	--	16,141.2	16,126.2	15.0	0.1%	16,125.0	16.2	0.1%	16,123.8	17.4	0.1%	16,122.7	18.5	0.1%	16,120.4	20.8	0.1%	16,119.2	22.0	0.1%
ME 7	32 43 31	2005	Above Normal	July	--	2,872.2	2,858.6	13.7	0.5%	2,857.2	15.0	0.5%	2,855.8	16.4	0.6%	2,854.5	17.7	0.6%	2,853.1	19.1	0.7%	2,851.7	20.5	0.7%
ME 7	32 43 31	2005	Above Normal	August	--	1,004.0	991.5	12.5	1.2%	990.2	13.8	1.4%	988.9	15.0	1.5%	987.7	16.3	1.6%	986.4	17.5	1.7%	985.2	18.8	1.9%
ME 7	32 43 31	2005	Above Normal	September	Used in Summary Table Analysis	545.4	534.1	11.3	2.1%	533.0	12.4	2.3%	531.8	13.6	2.5%	530.7	14.7	2.7%	529.6	15.8	2.9%	528.4	16.9	3.1%
ME 7	32 43 31	2006	Wet	October	Used in Summary Table Analysis	657.4	648.1	9.3	1.4%	647.2	10.2	1.6%	646.3	11.2	1.7%	645.3	12.1	1.8%	644.4	13.0	2.0%	643.4	14.0	2.1%
ME 7	32 43 31	2006	Wet	November	Used in Summary Table Analysis	9,531.4	9,524.0	7.4	0.1%	9,523.3	8.1	0.1%	9,522.6	8.8	0.1%	9,521.8	9.6	0.1%	9,521.1	10.3	0.1%	9,520.3	11.1	0.1%
ME 7	32 43 31	2006	Wet	December	--	44,224.5	44,217.6	6.9	0.0%	44,216.4	8.1	0.0%	44,216.4	8.1	0.0%	44,215.3	9.3	0.0%	44,215.3	9.3	0.0%	44,214.1	10.4	0.0%
ME 7	32 43 31	2006	Wet	January	--	46,951.4	46,945.6	5.8	0.0%	46,944.4	6.9	0.0%	46,944.4	6.9	0.0%	46,943.3	8.1	0.0%	46,943.3	8.1	0.0%	46,942.1	9.3	0.0%
ME 7	32 43 31	2006	Wet	February	--	26,900.5	26,894.7	5.8	0.0%	26,894.7	5.8	0.0%	26,893.5	6.9	0.0%	26,893.5	6.9	0.0%	26,892.4	8.1	0.0%	26,892.4	8.1	0.0%
ME 7	32 43 31	2006	Wet	March	--	47,678.2	47,673.6	4.6	0.0%	47,673.6	4.6	0.0%	47,672.5	5.8	0.0%	47,672.5	5.8	0.0%	47,671.3	6.9	0.0%	47,671.3	6.9	0.0%
ME 7	32 43 31	2006	Wet	April	--	30,634.3	30,629.6	4.6	0.0%	30,629.6	4.6	0.0%	30,628.5	5.8	0.0%	30,628.5	5.8	0.0%	30,627.3	6.9	0.0%	30,627.3	6.9	0.0%
ME 7	32 43 31	2006	Wet	May	--	14,328.7	14,322.9	5.8	0.0%	14,321.8	6.9	0.0%	14,321.8	6.9	0.0%	14,320.6	8.1	0.1%	14,320.6	8.1	0.1%	14,319.4	9.3	0.1%
ME 7	32 43 31	2006	Wet	June	--	3,565.6	3,553.7	11.9	0.3%	3,552.5	13.1	0.4%	3,551.4	14.2	0.4%	3,550.1	15.5	0.4%	3,549.0	16.7	0.5%	3,547.8	17.8	0.5%
ME 7	32 43 31	2006	Wet	July	--	1,302.9	1,289.8	13.1	1.0%	1,288.5	14.4	1.1%	1,287.3	15.6	1.2%	1,286.0	16.9	1.3%	1,284.6	18.3	1.4%	1,283.3	19.6	1.5%
ME 7	32 43 31	2006	Wet	August	--	688.9	676.1	12.9	1.9%	674.8	14.2	2.1%	673.5	15.4	2.2%	672.2	16.8	2.4%	670.9	18.1	2.6%	669.6	19.3	2.8%
ME 7	32 43 31	2006	Wet	September	Used in Summary Table Analysis	448.2	436.7	11.5	2.6%	435.6	12.6	2.8%	434.4	13.8	3.1%	433.3	14.9	3.3%	432.1	16.1	3.6%	431.0	17.2	3.8%
ME 7	32 43 31	2007	Above Normal	October	Used in Summary Table Analysis	293.8	284.3	9.5	3.2%	283.3	10.4	3.5%	282.4	11.4	3.9%	281.4	12.3	4.2%	280.5	13.3	4.5%	279.5	14.3	4.9%
ME 7	32 43 31	2007	Above Normal	November	Used in Summary Table Analysis	8,865.6	8,857.9	7.8	0.1%	8,857.1	8.6	0.1%	8,856.4	9.3	0.1%	8,855.6	10.1	0.1%	8,854.7	10.9	0.1%	8,853.9	11.7	0.1%
ME 7	32 43 31	2007	Above Normal	December	--	20,807.9	20,800.9	6.9	0.0%	20,800.9	6.9	0.0%	20,799.8	8.1	0.0%	20,799.8	8.1	0.0%	20,798.6	9.3	0.0%	20,797.5	10.4	0.1%
ME 7	32 43 31	2007	Above Normal	January	--	10,358.8	10,353.0	5.8	0.1%	10,352.4	6.4	0.1%	10,351.9	6.9	0.1%	10,351.3	7.5	0.1%	10,350.7	8.1	0.1%	10,350.1	8.7	0.1%
ME 7	32 43 31	2007	Above Normal	February	--	31,017.4	31,012.7	4.6	0.0%	31,011.6	5.8	0.0%	31,011.6	5.8	0.0%	31,010.4	6.9	0.0%	31,010.4	6.9	0.0%	31,009.3	8.1	0.0%
ME 7	32 43 31	2007	Above Normal	March	--	13,180.6	13,174.8	5.8	0.0%	13,174.8	5.8	0.0%	13,173.6	6.9	0.1%	13,173.6	6.9	0.1%	13,173.6	6.9	0.1%	13,172.5	8.1	0.1%
ME 7	32 43 31	2007	Above Normal	April	--	11,611.1	11,601.9	9.3	0.1%	11,600.7	10.4	0.1%	11,600.7	10.4	0.1%	11,599.5	11.6	0.1%	11,598.4	12.7	0.1%	11,597.2	13.9	0.1%
ME 7	32 43 31	2007	Above Normal	May	--	4,176.9	4,166.0	10.9	0.3%	4,164.9	11.9	0.3%	4,163.8	13.1	0.3%	4,162.7	14.1	0.3%	4,161.6	15.3	0.4%	4,160.5	16.3	0.4%
ME 7	32 43 31	2007	Above Normal	June	--	1,526.9	1,513.2	13.7	0.9%	1,511.8	15.0	1.0%	1,510.4	16.4	1.1%	1,509.1	17.7	1.2%	1,507.8	19.1	1.3%	1,506.4	20.5	1.3%
ME 7	32 43 31	2007	Above Normal	July	--	511.8	497.9	13.9	2.7%	496.5	15.3	3.0%	495.1	16.7	3.3%	493.7	18.1	3.5%	492.3	19.5	3.8%	490.9	20.9	4.1%
ME 7	32 43 31	2007	Above Normal	August	--	241.2	228.5	12.7	5.3%	227.2	14.0	5.8%	225.9	15.3	6.3%	224.7	16.5	6.9%	223.4	17.8	7.4%	222.1	19.1	7.9%
ME 7	32 43 31	2007	Above Normal	September	Used in Summary Table Analysis	168.8	156.6	12.2	7.2%	155.4	13.4	7.9%	154.2	14.6	8.7%	153.0	15.8	9.4%	151.7	17.1	10.1%	150.5	18.3	10.8%
ME 7	32 43 31	2008	Dry	October	Used in Summary Table Analysis	3,510.1	3,500.0	10.1	0.3%	3,499.0	11.1	0.3%	3,497.9	12.2	0.3%	3,496.9	13.2	0.4%	3,495.9	14.1	0.4%	3,494.9	15.2	0.4%
ME 7	32 43 31	2008	Dry	November	Used in Summary Table Analysis	3,347.6	3,339.8	7.8	0.2%	3,339.0	8.6	0.3%	3,338.2	9.4	0.3%	3,337.4	10.2	0.3%	3,336.6	11.0	0.3%	3,335.8	11.8	0.4%
ME 7	32 43 31	2008	Dry	December	--	23,643.5	23,636.6	6.9	0.0%	23,636.6	6.9	0.0%	23,635.4	8.1	0.0%	23,634.3	9.3	0.0%	23,634.3	9.3	0.0%	23,633.1	10.4	0.0%
ME 7	32 43 31	2008	Dry	January	--	38,025.5	38,018.5	6.9	0.0%	38,018.5	6.9	0.0%	38,017.4	8.1	0.0%	38,017.4	8.1	0.0%	38,016.2	9.3	0.0%	38,016.2	9.3	0.0%
ME 7	32 43 31	2008	Dry	February	--	26,392.4	26,386.6	5.8	0.0%	26,386.6	5.8	0.0%	26,385.4	6.9	0.0%	26,385.4	6.9	0.0%	26,384.3	8.1	0.0%	26,384.3	8.1	0.0%
ME 7	32 43 31	2008	Dry	March	--	11,853.0	11,848.4	4.6	0.0%	11,848.4	4.6	0.0%	11,847.2	5.8	0.0%	11,847.2	5.8	0.0%	11,846.1	6.9	0.1%	11,846.1	6.9	0.1%
ME 7	32 43 31	2008	Dry	April	--	9,066.4	9,057.2	9.3	0.1%	9,056.3	10.2	0.1%	9,055.3	11.1	0.1%	9,054.4	12.0	0.1%	9,053.5	13.0	0.1%	9,052.5	13.9	0.2%
ME 7	32 43 31	2008	Dry	May	--	1,361.8	1,351.6	10.2	0.7%	1,350.7	11.1	0.8%	1,349.7	12.2	0.9%	1,348.6	13.2	1.0%	1,347.6	14.2	1.0%	1,346.6	15.2	1.1%
ME 7	32 43 31	2008	Dry	June	--	454.3	439.3	15.0	3.3%	437.8	16.5	3.6%	436.4	18.0	4.0%	434.9	19.5	4.3%	433.4	21.0	4.6%	431.9	22.4	4.9%
ME 7	32 43 31	2008	Dry	July	--	271.8	256.7	15.1	5.6%	255.2	16.6	6.1%	253.7	18.1	6.7%	252.1	19.7	7.2%	250.6	21.2	7.8%	249.1	22.7	8.3%
ME 7	32 43 31	2008	Dry	August	--	195.8	180.9	14.8	7.6%	179.4	16.3	8.3%	178.0	17.8	9.1%	176.5	19.3	9.9%	175.0	20.8	10.6%	173.5	22.2	11.4%
ME 7	32 43 31	2008	Dry	September	Used in Summary Table Analysis	157.1	142.7	14.4	9.2%	141.3	15.9	10.1%	139.8	17.3	11.0%	138.4	18.8	11.9%	136.9	20.2	12.9%	135.5	21.7	13.8%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 43 31	2009	Critical	October	Used in Summary Table Analysis	945.4	933.7	11.6	1.2%	932.5	12.8	1.4%	931.4	14.0	1.5%	930.2	15.2	1.6%	929.0	16.4	1.7%	927.8	17.6	1.9%
ME 7	32 43 31	2009	Critical	November	Used in Summary Table Analysis	5,643.1	5,634.0	9.0	0.2%	5,633.1	10.0	0.2%	5,632.2	10.9	0.2%	5,631.3	11.8	0.2%	5,630.3	12.7	0.2%	5,629.4	13.7	0.2%
ME 7	32 43 31	2009	Critical	December	--	12,434.0	12,427.1	6.9	0.1%	12,425.9	8.1	0.1%	12,424.8	9.3	0.1%	12,424.8	9.3	0.1%	12,423.6	10.4	0.1%	12,422.5	11.6	0.1%
ME 7	32 43 31	2009	Critical	January	--	8,877.0	8,870.3	6.7	0.1%	8,869.6	7.4	0.1%	8,868.9	8.1	0.1%	8,868.2	8.8	0.1%	8,867.5	9.5	0.1%	8,866.8	10.2	0.1%
ME 7	32 43 31	2009	Critical	February	--	22,842.6	22,836.8	5.8	0.0%	22,835.6	6.9	0.0%	22,835.6	6.9	0.0%	22,834.5	8.1	0.0%	22,834.5	8.1	0.0%	22,833.3	9.3	0.0%
ME 7	32 43 31	2009	Critical	March	--	21,291.7	21,285.9	5.8	0.0%	21,285.9	5.8	0.0%	21,284.7	6.9	0.0%	21,284.7	6.9	0.0%	21,284.7	6.9	0.0%	21,283.6	8.1	0.0%
ME 7	32 43 31	2009	Critical	April	--	10,120.9	10,111.3	9.6	0.1%	10,110.3	10.6	0.1%	10,109.4	11.6	0.1%	10,108.4	12.5	0.1%	10,107.5	13.4	0.1%	10,106.5	14.5	0.1%
ME 7	32 43 31	2009	Critical	May	--	15,674.8	15,663.2	11.6	0.1%	15,662.0	12.7	0.1%	15,660.9	13.9	0.1%	15,659.7	15.0	0.1%	15,658.6	16.2	0.1%	15,657.4	17.4	0.1%
ME 7	32 43 31	2009	Critical	June	--	3,177.8	3,162.0	15.7	0.5%	3,160.4	17.4	0.5%	3,158.8	19.0	0.6%	3,157.2	20.6	0.6%	3,155.7	22.1	0.7%	3,154.2	23.6	0.7%
ME 7	32 43 31	2009	Critical	July	--	1,280.3	1,265.0	15.3	1.2%	1,263.5	16.8	1.3%	1,261.9	18.4	1.4%	1,260.4	19.9	1.6%	1,258.9	21.4	1.7%	1,257.4	22.9	1.8%
ME 7	32 43 31	2009	Critical	August	--	687.1	672.2	14.9	2.2%	670.7	16.4	2.4%	669.2	17.9	2.6%	667.7	19.4	2.8%	666.3	20.8	3.0%	664.8	22.3	3.2%
ME 7	32 43 31	2009	Critical	September	Used in Summary Table Analysis	407.2	393.5	13.6	3.3%	392.2	15.0	3.7%	390.8	16.4	4.0%	389.4	17.7	4.4%	388.1	19.1	4.7%	386.7	20.4	5.0%
ME 7	32 43 31	2010	Below Normal	October	Used in Summary Table Analysis	6,114.4	6,102.5	11.8	0.2%	6,101.4	13.0	0.2%	6,100.1	14.2	0.2%	6,099.0	15.4	0.3%	6,097.8	16.6	0.3%	6,096.6	17.7	0.3%
ME 7	32 43 31	2010	Below Normal	November	Used in Summary Table Analysis	8,382.3	8,372.8	9.5	0.1%	8,371.9	10.4	0.1%	8,370.9	11.3	0.1%	8,369.9	12.4	0.1%	8,369.0	13.3	0.2%	8,368.1	14.2	0.2%
ME 7	32 43 31	2010	Below Normal	December	--	12,534.7	12,527.8	6.9	0.1%	12,526.6	8.1	0.1%	12,525.5	9.3	0.1%	12,524.3	10.4	0.1%	12,524.3	10.4	0.1%	12,523.1	11.6	0.1%
ME 7	32 43 31	2010	Below Normal	January	--	36,827.5	36,820.6	6.9	0.0%	36,819.4	8.1	0.0%	36,818.3	9.3	0.0%	36,818.3	9.3	0.0%	36,817.1	10.4	0.0%	36,817.1	10.4	0.0%
ME 7	32 43 31	2010	Below Normal	February	--	27,415.5	27,408.6	6.9	0.0%	27,408.6	6.9	0.0%	27,407.4	8.1	0.0%	27,407.4	8.1	0.0%	27,406.3	9.3	0.0%	27,406.3	9.3	0.0%
ME 7	32 43 31	2010	Below Normal	March	--	28,986.1	28,980.3	5.8	0.0%	28,980.3	5.8	0.0%	28,979.2	6.9	0.0%	28,979.2	6.9	0.0%	28,978.0	8.1	0.0%	28,978.0	8.1	0.0%
ME 7	32 43 31	2010	Below Normal	April	--	40,287.0	40,282.4	4.6	0.0%	40,281.3	5.8	0.0%	40,281.3	5.8	0.0%	40,280.1	6.9	0.0%	40,280.1	6.9	0.0%	40,278.9	8.1	0.0%
ME 7	32 43 31	2010	Below Normal	May	--	20,480.3	20,469.9	10.4	0.1%	20,468.8	11.6	0.1%	20,467.6	12.7	0.1%	20,466.4	13.9	0.1%	20,465.3	15.0	0.1%	20,465.3	15.0	0.1%
ME 7	32 43 31	2010	Below Normal	June	--	9,519.3	9,504.5	14.8	0.2%	9,503.0	16.3	0.2%	9,501.5	17.8	0.2%	9,500.0	19.3	0.2%	9,498.5	20.8	0.2%	9,497.0	22.3	0.2%
ME 7	32 43 31	2010	Below Normal	July	--	1,471.2	1,457.3	13.9	0.9%	1,455.9	15.3	1.0%	1,454.4	16.8	1.1%	1,453.1	18.1	1.2%	1,451.7	19.4	1.3%	1,450.3	20.8	1.4%
ME 7	32 43 31	2010	Below Normal	August	--	590.6	577.6	13.0	2.2%	576.3	14.2	2.4%	575.0	15.6	2.6%	573.7	16.9	2.9%	572.5	18.1	3.1%	571.2	19.4	3.3%
ME 7	32 43 31	2010	Below Normal	September	Used in Summary Table Analysis	673.5	661.1	12.4	1.8%	659.9	13.6	2.0%	658.6	14.9	2.2%	657.4	16.1	2.4%	656.1	17.3	2.6%	654.9	18.6	2.8%
ME 7	32 43 31	2011	Wet	October	Used in Summary Table Analysis	9,771.5	9,761.9	9.6	0.1%	9,761.0	10.5	0.1%	9,760.1	11.5	0.1%	9,759.1	12.4	0.1%	9,758.1	13.4	0.1%	9,757.2	14.4	0.1%
ME 7	32 43 31	2011	Wet	November	Used in Summary Table Analysis	14,373.8	14,366.9	6.9	0.0%	14,365.7	8.1	0.1%	14,364.6	9.3	0.1%	14,364.6	9.3	0.1%	14,363.4	10.4	0.1%	14,362.3	11.6	0.1%
ME 7	32 43 31	2011	Wet	December	--	34,312.5	34,306.7	5.8	0.0%	34,305.6	6.9	0.0%	34,305.6	6.9	0.0%	34,304.4	8.1	0.0%	34,304.4	8.1	0.0%	34,303.2	9.3	0.0%
ME 7	32 43 31	2011	Wet	January	--	14,273.1	14,268.5	4.6	0.0%	14,267.4	5.8	0.0%	14,267.4	5.8	0.0%	14,266.2	6.9	0.0%	14,266.2	6.9	0.0%	14,265.0	8.1	0.1%
ME 7	32 43 31	2011	Wet	February	--	20,886.6	20,880.8	5.8	0.0%	20,880.8	5.8	0.0%	20,879.6	6.9	0.0%	20,879.6	6.9	0.0%	20,879.6	6.9	0.0%	20,878.5	8.1	0.0%
ME 7	32 43 31	2011	Wet	March	--	52,410.9	52,406.3	4.6	0.0%	52,406.3	4.6	0.0%	52,405.1	5.8	0.0%	52,405.1	5.8	0.0%	52,405.1	5.8	0.0%	52,403.9	6.9	0.0%
ME 7	32 43 31	2011	Wet	April	--	24,939.8	24,935.2	4.6	0.0%	24,934.0	5.8	0.0%	24,934.0	5.8	0.0%	24,934.0	5.8	0.0%	24,932.9	6.9	0.0%	24,932.9	6.9	0.0%
ME 7	32 43 31	2011	Wet	May	--	11,453.0	11,443.8	9.3	0.1%	11,442.8	10.2	0.1%	11,441.9	11.1	0.1%	11,441.0	12.0	0.1%	11,439.9	13.1	0.1%	11,439.0	14.0	0.1%
ME 7	32 43 31	2011	Wet	June	--	7,127.4	7,113.0	14.5	0.2%	7,111.6	15.9	0.2%	7,110.1	17.4	0.2%	7,108.7	18.8	0.3%	7,107.3	20.1	0.3%	7,105.8	21.6	0.3%
ME 7	32 43 31	2011	Wet	July	--	1,841.4	1,826.9	14.6	0.8%	1,825.3	16.1	0.9%	1,824.0	17.5	0.9%	1,822.5	19.0	1.0%	1,820.9	20.5	1.1%	1,819.6	21.9	1.2%
ME 7	32 43 31	2011	Wet	August	--	795.7	783.0	12.7	1.6%	781.7	13.9	1.8%	780.5	15.2	1.9%	779.2	16.5	2.1%	777.9	17.7	2.2%	776.7	19.0	2.4%
ME 7	32 43 31	2011	Wet	September	Used in Summary Table Analysis	452.3	440.6	11.7	2.6%	439.4	12.9	2.9%	438.2	14.1	3.1%	437.1	15.3	3.4%	435.9	16.4	3.6%	434.7	17.6	3.9%
ME 7	32 43 31	2012	Below Normal	October	Used in Summary Table Analysis	4,615.6	4,605.9	9.7	0.2%	4,605.0	10.6	0.2%	4,603.9	11.7	0.3%	4,603.0	12.6	0.3%	4,602.1	13.5	0.3%	4,601.0	14.6	0.3%
ME 7	32 43 31	2012	Below Normal	November	Used in Summary Table Analysis	8,381.4	8,373.7	7.6	0.1%	8,372.9	8.4	0.1%	8,372.1	9.3	0.1%	8,371.4	10.0	0.1%	8,370.6	10.8	0.1%	8,369.8	11.6	0.1%
ME 7	32 43 31	2012	Below Normal	December	--	5,249.3	5,242.8	6.5	0.1%	5,242.2	7.1	0.1%	5,241.6	7.8	0.1%	5,240.9	8.4	0.2%	5,240.3	9.0	0.2%	5,239.6	9.7	0.2%
ME 7	32 43 31	2012	Below Normal	January	--	20,517.4	20,511.6	5.8	0.0%	20,510.4	6.9	0.0%	20,510.4	6.9	0.0%	20,509.3	8.1	0.0%	20,509.3	8.1	0.0%	20,508.1	9.3	0.0%
ME 7	32 43 31	2012	Below Normal	February	--	18,329.9	18,325.2	4.6	0.0%	18,324.1	5.8	0.0%	18,324.1	5.8	0.0%	18,324.1	5.8	0.0%	18,322.9	6.9	0.0%	18,322.9	6.9	0.0%
ME 7	32 43 31	2012	Below Normal	March	--	45,895.8	45,891.2	4.6	0.0%	45,890.0	5.8	0.0%	45,890.0	5.8	0.0%	45,888.9	6.9	0.0%	45,888.9	6.9	0.0%	45,887.7	8.1	0.0%
ME 7	32 43 31	2012	Below Normal	April	--	27,031.3	27,026.6	4.6	0.0%	27,025.5	5.8	0.0%	27,025.5	5.8	0.0%	27,024.3	6.9	0.0%	27,024.3	6.9	0.0%	27,024.3	6.9	0.0%
ME 7	32 43 31	2012	Below Normal	May	--	7,527.1	7,517.7	9.4	0.1%	7,516.8	10.3	0.1%	7,515.9	11.2	0.1%	7,514.9	12.2	0.2%	7,514.0	13.1	0.2%	7,513.2	13.9	0.2%
ME 7	32 43 31	2012	Below Normal	June	--	5,586.2	5,571.6	14.6	0.3%	5,570.1	16.1	0.3%	5,568.6	17.6	0.3%	5,567.2	19.0	0.3%	5,565.7	20.5	0.4%	5,564.4	21.9	0.4%
ME 7	32 43 31	2012	Below Normal	July	--	2,269.9	2,255.7	14.2	0.6%	2,254.3	15.6	0.7%	2,252.9	17.0	0.7%	2,251.4	18.5	0.8%	2,250.0	19.9	0.9%	2,248.6	21.3	0.9%
ME 7	32 43 31	2012	Below Normal	August	--	403.8	392.0	11.8	2.9%	390.9	12.9	3.2%	389.7	14.1	3.5%	388.6	15.2	3.8%	387.4	16.4	4.1%	386.3	17.5	4.3%
ME 7	32 43 31	2012	Below Normal	September	Used in Summary Table Analysis	267.4	256.8	10.6	4.0%	255.7	11.7	4.4%	254.7	12.7	4.8%	253.6	13.8	5.2%	252.5	14.9	5.6%	251.5	15.9	6.0%
ME 7	32 43 31	2013	Below Normal	October	Used in Summary Table Analysis	1,962.8	1,953.5	9.4	0.5%	1,952.5	10.3	0.5%	1,951.6	11.2	0.6%	1,950.7	12.2	0.6%	1,949.8	13.1	0.7%	1,948.8	14.0	0.7%
ME 7	32 43 31	2013	Below Normal	November	Used in Summary Table Analysis	14,944.4	14,937.5	6.9	0.0%	14,936.3	8.1	0.1%	14,935.2	9.3	0.1%	14,935.2	9.3	0.1%	14,934.0	10.4	0.1%	14,932.9	11.6	0.1%
ME 7	32 43 31	2013	Below Normal	December	--	60,561.3	60,554.4	6.9	0.0%	60,554.4	6.9	0.0%	60,553.2	8.1	0.0%	60,552.1	9.3	0.0%	60,552.1	9.3	0.0%	60,550.9	10.4	0.0%
ME 7	32 43 31	2013	Below Normal	January	--	22,365.7	22,361.1	4.6	0.0%	22,360.0	5.8	0.0%	22,360.0	5.8	0.0%	22,358.8	6.9	0.0%	22,358.8	6.9	0.0%	22,357.6	8.1	0.0%
ME 7	32 43 31	2013	Below Normal	February	--	8,927.1	8,922.0	5.1	0.1%	8,921.5	5.6	0.1%	8,920.9	6.1	0.1%	8,920.4	6.7	0.1%	8,919.9	7.2	0.1%	8,919.4	7.6	0.1%
ME 7	32 43 31	2013	Below Normal	March	--	10,453.6	10,448.7	4.9	0.0%	10,448.3	5.3	0.1%	10,447.8	5.8	0.1%	10,447.2	6.4	0.1%	10,446.8	6.8	0.1%	10,446.3	7.3	0.1%
ME 7	32 43 31	2013	Below Normal	April	--	8,332.5	8,323.7	8.8	0.1%	8,322.8	9.7	0.1%	8,321.9	10.6	0.1%	8,321.1	11.5	0.1%	8,320.1	12.4	0.1%	8,319.2	13.3	0.2%
ME 7	32 43 31	2013	Below Normal	May	--	4,482.9	4,472.0	10.9	0.2%	4,470.8	12.0	0.3%	4,469.8	13.1	0.3%	4,468.8	14.1	0.3%	4,467.6	15.3	0.3%	4,466.6	16.3	0.4%
ME 7	32 43 31	2013	Below Normal	June	--	2,132.2	2,118.6	13.5	0.6%	2,117.4	14.8	0.7%	2,116.0	16.2	0.8%	2,114.6	17.6	0.8%	2,113.3	18.9	0.9%	2,111.9	20.3	0.9%
ME 7	32 43 31	2013	Below Normal	July	--	731.5	718.1	13.4	1.8%	716.7	14.7	2.0%	715.4	16.1	2.2%	714.1	17.4	2.4%	712.7	18.7	2.6%	711.4	20.1	2.7%
ME 7	32 43 31	2013	Below Normal	August	--	356.7	344.1	12.7	3.5%	342.8	13.9	3.9%	341.6	15.2	4.3%	340.3	16.4	4.6%	339.0	17.7	5.0%	337.8	19.0	5.3%
ME 7	32 43 31	2013	Below Normal	September	Used in Summary Table Analysis	4,862.2	4,849.0	13.2	0.3%	4,847.7	14.5	0.3%	4,846.3	15.9	0.3%	4,845.0	17.1	0.4%	4,843.6	18.5	0.4%	4,842.4	19.8	0.4%
ME 7	32 43 31	2014	Critical	October	Used in Summary Table Analysis	288.8	279.0	9.8	3.4%	278.0	10.8	3.7%	277.1	11.8	4.1%	276.1	12.8	4.4%	275.1	13.8	4.8%	274.1	14.7	5.1%
ME 7	32 43 31	2014	Critical	November	Used in Summary Table Analysis	1,581.3	1,573.4	7.9	0.5%	1,572.7	8.6	0.5%	1,571.9	9.4	0.6%	1,571.1	10.2	0.6%	1,570.3	11.0	0.7%	1,569.4	11.8	0.7%
ME 7	32 43 31	2014	Critical	December	--	1,617.8	1,611.1	6.7	0.4%	1,610.4	7.4	0.5%	1,609.7	8.1	0.5%	1,609.0	8.8	0.5%	1,608.3	9.5	0.6%	1,607.8	10.1	0.6%
ME 7	32 43 31	2014	Critical	January	--	2,866.0	2,860.1	5.9	0.2%	2,859.5	6.5	0.2%	2,858.8	7.2	0.3%	2,858.2	7.8	0.3%	2,857.6	8.3	0.3%	2,857.1	8.9	0.3%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 43 31	2014	Critical	February	--	15,872.7	15,868.1	4.6	0.0%	15,866.9	5.8	0.0%	15,866.9	5.8	0.0%	15,865.7	6.9	0.0%	15,865.7	6.9	0.0%	15,864.6	8.1	0.1%
ME 7	32 43 31	2014	Critical	March	--	31,637.7	31,633.1	4.6	0.0%	31,631.9	5.8	0.0%	31,631.9	5.8	0.0%	31,631.9	5.8	0.0%	31,630.8	6.9	0.0%	31,630.8	6.9	0.0%
ME 7	32 43 31	2014	Critical	April	--	13,042.8	13,033.6	9.3	0.1%	13,032.4	10.4	0.1%	13,031.3	11.6	0.1%	13,031.3	11.6	0.1%	13,030.1	12.7	0.1%	13,028.9	13.9	0.1%
ME 7	32 43 31	2014	Critical	May	--	5,224.1	5,212.6	11.5	0.2%	5,211.5	12.6	0.2%	5,210.3	13.8	0.3%	5,209.1	14.9	0.3%	5,208.0	16.1	0.3%	5,206.8	17.2	0.3%
ME 7	32 43 31	2014	Critical	June	--	1,216.3	1,200.1	16.2	1.3%	1,198.5	17.8	1.5%	1,196.9	19.4	1.6%	1,195.3	21.1	1.7%	1,193.6	22.7	1.9%	1,192.0	24.3	2.0%
ME 7	32 43 31	2014	Critical	July	--	560.2	544.9	15.4	2.7%	543.3	16.9	3.0%	541.8	18.4	3.3%	540.3	20.0	3.6%	538.7	21.5	3.8%	537.2	23.0	4.1%
ME 7	32 43 31	2014	Critical	August	--	364.8	350.0	14.8	4.0%	348.6	16.3	4.5%	347.1	17.7	4.9%	345.6	19.2	5.3%	344.1	20.7	5.7%	342.7	22.2	6.1%
ME 7	32 43 31	2014	Critical	September	Used in Summary Table Analysis	2,613.5	2,599.0	14.6	0.6%	2,597.5	16.1	0.6%	2,596.1	17.5	0.7%	2,594.6	19.0	0.7%	2,593.1	20.5	0.8%	2,591.7	21.9	0.8%
ME 7	32 43 31	2015	Dry	October	Used in Summary Table Analysis	11,495.0	11,483.7	11.3	0.1%	11,482.5	12.5	0.1%	11,481.4	13.7	0.1%	11,479.6	15.4	0.1%	11,478.5	16.6	0.1%	11,477.3	17.7	0.2%
ME 7	32 43 31	2015	Dry	November	Used in Summary Table Analysis	9,176.4	9,167.6	8.8	0.1%	9,166.8	9.6	0.1%	9,165.9	10.5	0.1%	9,164.9	11.5	0.1%	9,164.1	12.3	0.1%	9,163.2	13.2	0.1%
ME 7	32 43 31	2015	Dry	December	--	33,120.4	33,113.4	6.9	0.0%	33,112.3	8.1	0.0%	33,112.3	8.1	0.0%	33,111.1	9.3	0.0%	33,110.0	10.4	0.0%	33,110.0	10.4	0.0%
ME 7	32 43 31	2015	Dry	January	--	14,656.3	14,649.3	6.9	0.0%	14,648.1	8.1	0.1%	14,648.1	8.1	0.1%	14,647.0	9.3	0.1%	14,647.0	9.3	0.1%	14,645.8	10.4	0.1%
ME 7	32 43 31	2015	Dry	February	--	27,436.3	27,430.6	5.8	0.0%	27,429.4	6.9	0.0%	27,429.4	6.9	0.0%	27,428.2	8.1	0.0%	27,428.2	8.1	0.0%	27,427.1	9.3	0.0%
ME 7	32 43 31	2015	Dry	March	--	11,620.4	11,615.7	4.6	0.0%	11,614.6	5.8	0.0%	11,614.6	5.8	0.0%	11,614.6	5.8	0.0%	11,613.4	6.9	0.1%	11,613.4	6.9	0.1%
ME 7	32 43 31	2015	Dry	April	--	8,519.7	8,510.3	9.4	0.1%	8,509.3	10.4	0.1%	8,508.3	11.3	0.1%	8,507.4	12.3	0.1%	8,506.5	13.2	0.2%	8,505.4	14.2	0.2%
ME 7	32 43 31	2015	Dry	May	--	1,517.6	1,506.3	11.3	0.7%	1,505.2	12.4	0.8%	1,504.1	13.5	0.9%	1,502.9	14.7	1.0%	1,501.7	15.9	1.0%	1,500.6	17.0	1.1%
ME 7	32 43 31	2015	Dry	June	--	665.4	650.2	15.2	2.3%	648.7	16.7	2.5%	647.2	18.2	2.7%	645.7	19.7	3.0%	644.2	21.3	3.2%	642.6	22.8	3.4%
ME 7	32 43 31	2015	Dry	July	--	282.3	267.1	15.2	5.4%	265.6	16.7	5.9%	264.1	18.2	6.5%	262.5	19.8	7.0%	261.0	21.3	7.5%	259.5	22.8	8.1%
ME 7	32 43 31	2015	Dry	August	--	182.4	167.7	14.7	8.1%	166.2	16.2	8.9%	164.7	17.7	9.7%	163.3	19.2	10.5%	161.8	20.7	11.3%	160.3	22.1	12.1%
ME 7	32 43 31	2015	Dry	September	Used in Summary Table Analysis	135.2	121.8	13.3	9.9%	120.5	14.7	10.9%	119.1	16.0	11.9%	117.7	17.4	12.9%	116.4	18.8	13.9%	115.0	20.2	14.9%
ME 7	32 43 31	2016	Above Normal	October	Used in Summary Table Analysis	99.8	88.5	11.3	11.3%	87.3	12.5	12.5%	86.2	13.6	13.7%	85.5	14.3	14.3%	84.5	15.3	15.4%	83.0	16.8	16.9%
ME 7	32 43 31	2016	Above Normal	November	Used in Summary Table Analysis	3,987.8	3,979.1	8.8	0.2%	3,978.2	9.6	0.2%	3,977.3	10.5	0.3%	3,976.3	11.6	0.3%	3,975.3	12.5	0.3%	3,974.5	13.3	0.3%
ME 7	32 43 31	2016	Above Normal	December	--	37,210.6	37,202.5	8.1	0.0%	37,202.5	8.1	0.0%	37,201.4	9.3	0.0%	37,200.2	10.4	0.0%	37,199.1	11.6	0.0%	37,199.1	11.6	0.0%
ME 7	32 43 31	2016	Above Normal	January	--	57,929.4	57,922.5	6.9	0.0%	57,922.5	6.9	0.0%	57,921.3	8.1	0.0%	57,920.1	9.3	0.0%	57,920.1	9.3	0.0%	57,919.0	10.4	0.0%
ME 7	32 43 31	2016	Above Normal	February	--	24,369.2	24,363.4	5.8	0.0%	24,362.3	6.9	0.0%	24,362.3	6.9	0.0%	24,361.1	8.1	0.0%	24,361.1	8.1	0.0%	24,360.0	9.3	0.0%
ME 7	32 43 31	2016	Above Normal	March	--	42,066.0	42,061.3	4.6	0.0%	42,060.2	5.8	0.0%	42,060.2	5.8	0.0%	42,059.0	6.9	0.0%	42,059.0	6.9	0.0%	42,057.9	8.1	0.0%
ME 7	32 43 31	2016	Above Normal	April	--	18,619.2	18,613.4	5.8	0.0%	18,613.4	5.8	0.0%	18,613.4	5.8	0.0%	18,612.3	6.9	0.0%	18,612.3	6.9	0.0%	18,611.1	8.1	0.0%
ME 7	32 43 31	2016	Above Normal	May	--	5,247.6	5,241.7	5.9	0.1%	5,241.1	6.5	0.1%	5,240.5	7.1	0.1%	5,239.9	7.6	0.1%	5,239.2	8.3	0.2%	5,238.7	8.9	0.2%
ME 7	32 43 31	2016	Above Normal	June	--	1,526.6	1,515.2	11.5	0.8%	1,514.0	12.6	0.8%	1,512.8	13.8	0.9%	1,511.7	14.9	1.0%	1,510.5	16.1	1.1%	1,509.4	17.2	1.1%
ME 7	32 43 31	2016	Above Normal	July	--	841.8	828.6	13.1	1.6%	827.3	14.5	1.7%	826.0	15.8	1.9%	824.7	17.1	2.0%	823.4	18.4	2.2%	822.1	19.7	2.3%
ME 7	32 43 31	2016	Above Normal	August	--	511.0	498.0	13.1	2.6%	496.7	14.4	2.8%	495.3	15.7	3.1%	494.0	17.0	3.3%	492.7	18.3	3.6%	491.4	19.6	3.8%
ME 7	32 43 31	2016	Above Normal	September	Used in Summary Table Analysis	346.6	334.7	11.9	3.4%	333.5	13.0	3.8%	332.3	14.2	4.1%	331.1	15.4	4.5%	330.0	16.6	4.8%	328.8	17.8	5.1%
ME 7	32 43 31	2017	Wet	October	Used in Summary Table Analysis	18,520.8	18,510.4	10.4	0.1%	18,509.3	11.6	0.1%	18,508.1	12.7	0.1%	18,506.9	13.9	0.1%	18,506.9	13.9	0.1%	18,505.8	15.0	0.1%
ME 7	32 43 31	2017	Wet	November	Used in Summary Table Analysis	19,079.9	19,072.9	6.9	0.0%	19,071.8	8.1	0.0%	19,070.6	9.3	0.0%	19,070.6	9.3	0.0%	19,069.4	10.4	0.1%	19,068.3	11.6	0.1%
ME 7	32 43 31	2017	Wet	December	--	24,508.1	24,502.3	5.8	0.0%	24,501.2	6.9	0.0%	24,501.2	6.9	0.0%	24,500.0	8.1	0.0%	24,498.8	9.3	0.0%	24,498.8	9.3	0.0%
ME 7	32 43 31	2017	Wet	January	--	108,054.4	108,048.6	5.8	0.0%	108,047.5	6.9	0.0%	108,047.5	6.9	0.0%	108,046.3	8.1	0.0%	108,046.3	8.1	0.0%	108,045.1	9.3	0.0%
ME 7	32 43 31	2017	Wet	February	--	82,509.3	82,504.6	4.6	0.0%	82,503.5	5.8	0.0%	82,503.5	5.8	0.0%	82,502.3	6.9	0.0%	82,502.3	6.9	0.0%	82,501.2	8.1	0.0%
ME 7	32 43 31	2017	Wet	March	--	27,486.1	27,481.5	4.6	0.0%	27,480.3	5.8	0.0%	27,480.3	5.8	0.0%	27,479.2	6.9	0.0%	27,479.2	6.9	0.0%	27,478.0	8.1	0.0%
ME 7	32 43 31	2017	Wet	April	--	23,165.5	23,162.0	3.5	0.0%	23,160.9	4.6	0.0%	23,160.9	4.6	0.0%	23,159.7	5.8	0.0%	23,159.7	5.8	0.0%	23,159.7	5.8	0.0%
ME 7	32 43 31	2017	Wet	May	--	6,284.7	6,278.9	5.8	0.1%	6,278.2	6.5	0.1%	6,277.7	7.1	0.1%	6,277.1	7.6	0.1%	6,276.4	8.3	0.1%	6,275.8	8.9	0.1%
ME 7	32 43 31	2017	Wet	June	--	2,151.2	2,139.5	11.7	0.5%	2,138.3	12.8	0.6%	2,137.2	14.0	0.7%	2,136.0	15.2	0.7%	2,134.7	16.4	0.8%	2,133.6	17.6	0.8%
ME 7	32 43 31	2017	Wet	July	--	958.0	944.8	13.2	1.4%	943.5	14.5	1.5%	942.2	15.8	1.7%	940.8	17.1	1.8%	939.5	18.4	1.9%	938.2	19.8	2.1%
ME 7	32 43 31	2017	Wet	August	--	530.1	517.1	13.0	2.5%	515.8	14.3	2.7%	514.5	15.6	2.9%	513.2	16.9	3.2%	511.9	18.2	3.4%	510.6	19.5	3.7%
ME 7	32 43 31	2017	Wet	September	Used in Summary Table Analysis	343.4	331.3	12.1	3.5%	330.0	13.3	3.9%	328.8	14.6	4.2%	327.6	15.8	4.6%	326.4	17.0	4.9%	325.2	18.2	5.3%
ME 7	32 43 31	2018	Above Normal	October	Used in Summary Table Analysis	295.9	287.0	8.9	3.0%	285.6	10.3	3.5%	284.5	11.4	3.9%	283.3	12.7	4.3%	282.2	13.8	4.6%	281.2	14.8	5.0%
ME 7	32 43 31	2018	Above Normal	November	Used in Summary Table Analysis	11,056.9	11,049.2	7.8	0.1%	11,048.5	8.4	0.1%	11,047.7	9.3	0.1%	11,046.9	10.1	0.1%	11,046.1	10.9	0.1%	11,045.3	11.7	0.1%
ME 7	32 43 31	2018	Above Normal	December	--	5,475.7	5,469.2	6.5	0.1%	5,468.5	7.2	0.1%	5,467.9	7.8	0.1%	5,467.2	8.4	0.2%	5,466.6	9.1	0.2%	5,465.9	9.8	0.2%
ME 7	32 43 31	2018	Above Normal	January	--	18,231.5	18,225.7	5.8	0.0%	18,224.5	6.9	0.0%	18,223.4	8.1	0.0%	18,223.4	8.1	0.0%	18,222.2	9.3	0.1%	18,222.2	9.3	0.1%
ME 7	32 43 31	2018	Above Normal	February	--	7,623.3	7,618.3	5.0	0.1%	7,617.8	5.4	0.1%	7,617.4	5.9	0.1%	7,616.8	6.5	0.1%	7,616.3	6.9	0.1%	7,615.7	7.5	0.1%
ME 7	32 43 31	2018	Above Normal	March	--	20,991.9	20,987.3	4.6	0.0%	20,987.3	4.6	0.0%	20,986.1	5.8	0.0%	20,986.1	5.8	0.0%	20,986.1	5.8	0.0%	20,985.0	6.9	0.0%
ME 7	32 43 31	2018	Above Normal	April	--	32,541.7	32,537.0	4.6	0.0%	32,537.0	4.6	0.0%	32,537.0	4.6	0.0%	32,535.9	5.8	0.0%	32,535.9	5.8	0.0%	32,534.7	6.9	0.0%
ME 7	32 43 31	2018	Above Normal	May	--	7,003.6	6,994.7	8.9	0.1%	6,993.8	9.8	0.1%	6,992.8	10.8	0.2%	6,992.0	11.6	0.2%	6,991.1	12.5	0.2%	6,990.2	13.4	0.2%
ME 7	32 43 31	2018	Above Normal	June	--	1,932.3	1,920.1	12.2	0.6%	1,919.0	13.3	0.7%	1,917.7	14.6	0.8%	1,916.6	15.7	0.8%	1,915.4	16.9	0.9%	1,914.1	18.2	0.9%
ME 7	32 43 31	2018	Above Normal	July	--	801.7	788.4	13.3	1.7%	787.0	14.7	1.8%	785.7	16.0	2.0%	784.4	17.3	2.2%	783.0	18.7	2.3%	781.7	20.0	2.5%
ME 7	32 43 31	2018	Above Normal	August	--	463.0	450.4	12.5	2.7%	449.2	13.8	3.0%	447.9	15.1	3.3%	446.7	16.3	3.5%	445.4	17.6	3.8%	444.1	18.8	4.1%
ME 7	32 43 31	2018	Above Normal	September	Used in Summary Table Analysis	319.2	307.1	12.1	3.8%	305.8	13.4	4.2%	304.6	14.6	4.6%	303.4	15.8	4.9%	302.2	17.0	5.3%	301.0	18.3	5.7%
ME 7	32 43 31	2019	Below Normal	October	Used in Summary Table Analysis	224.2	214.5	9.7	4.3%	213.5	10.8	4.8%	212.5	11.7	5.2%	211.5	12.7	5.7%	210.6	13.6	6.1%	209.6	14.6	6.5%
ME 7	32 43 31	2019	Below Normal	November	Used in Summary Table Analysis	6,800.2	6,792.5	7.8	0.1%	6,791.7	8.6	0.1%	6,790.9	9.4	0.1%	6,790.0	10.2	0.1%	6,789.2	11.0	0.2%	6,788.4	11.8	0.2%
ME 7	32 43 31	2019	Below Normal	December	--	14,959.5	14,953.7	5.8	0.0%	14,952.5	6.9	0.0%	14,951.4	8.1	0.1%	14,951.4	8.1	0.1%	14,950.2	9.3	0.1%	14,950.2	9.3	0.1%
ME 7	32 43 31	2019	Below Normal	January	--	35,809.0	35,803.2	5.8	0.0%	35,802.1	6.9	0.0%	35,802.1	6.9	0.0%	35,800.9	8.1	0.0%	35,800.9	8.1	0.0%	35,799.8	9.3	0.0%
ME 7	32 43 31	2019	Below Normal	February	--	142,546.3	142,546.3	0.0	0.0%	142,546.3	0.0	0.0%	142,546.3	0.0	0.0%	142,546.3	0.0	0.0%	142,546.3	0.0	0.0%	142,534.7	11.6	0.0%
ME 7	32 43 31	2019	Below Normal	March	--	42,638.9	42,634.3	4.6	0.0%	42,634.3	4.6	0.0%	42,633.1	5.8	0.0%	42,633.1	5.8	0.0%	42,631.9	6.9	0.0%	42,631.9	6.9	0.0%
ME 7	32 43 31	2019	Below Normal	April	--	15,364.6	15,360.0	4.6	0.0%	15,360.0	4.6	0.0%	15,360.0	4.6	0.0%	15,358.8	5.8	0.0%	15,358.8	5.8	0.0%	15,357.6	6.9	0.0%
ME 7	32 43 31	2019	Below Normal	May	--	17,390.0	17,380.8	9.3	0.1%	17,379.6	10.4	0.1%	17,378.5	11.6	0.1%	17,377.3	12.7	0.1%	17,377.3	12.7	0.1%	17,376.2	13.9	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							Existing Conditions			10% Pumping Increase			20% Pumping Increase			30% Pumping Increase			40% Pumping Increase			50% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 43 31	2019	Below Normal	June	--	4,248.8	4,235.9	13.0	0.3%	4,234.6	14.2	0.3%	4,233.2	15.6	0.4%	4,231.9	16.9	0.4%	4,230.7	18.2	0.4%	4,229.3	19.6	0.5%
ME 7	32 43 31	2019	Below Normal	July	--	1,385.2	1,371.8	13.4	1.0%	1,370.5	14.7	1.1%	1,369.1	16.1	1.2%	1,367.8	17.4	1.3%	1,366.4	18.8	1.4%	1,365.2	20.0	1.4%
ME 7	32 43 31	2019	Below Normal	August	--	619.4	606.6	12.8	2.1%	605.3	14.1	2.3%	604.0	15.4	2.5%	602.7	16.7	2.7%	601.4	18.0	2.9%	600.2	19.3	3.1%
ME 7	32 43 31	2019	Below Normal	September	Used in Summary Table Analysis	483.0	471.0	12.1	2.5%	469.7	13.3	2.7%	468.5	14.5	3.0%	467.3	15.7	3.2%	466.1	16.9	3.5%	464.9	18.1	3.8%
ME 7	32 43 31	2020	Dry	October	Used in Summary Table Analysis	372.6	363.3	9.3	2.5%	362.3	10.2	2.7%	361.4	11.2	3.0%	360.4	12.1	3.3%	359.5	13.1	3.5%	358.5	14.0	3.8%
ME 7	32 43 31	2020	Dry	November	Used in Summary Table Analysis	347.2	339.8	7.3	2.1%	339.0	8.1	2.3%	338.3	8.9	2.6%	337.5	9.6	2.8%	336.8	10.4	3.0%	336.0	11.1	3.2%
ME 7	32 43 31	2020	Dry	December	--	13,713.0	13,706.0	6.9	0.1%	13,706.0	6.9	0.1%	13,704.9	8.1	0.1%	13,703.7	9.3	0.1%	13,703.7	9.3	0.1%	13,702.5	10.4	0.1%
ME 7	32 43 31	2020	Dry	January	--	22,666.7	22,660.9	5.8	0.0%	22,659.7	6.9	0.0%	22,659.7	6.9	0.0%	22,658.6	8.1	0.0%	22,658.6	8.1	0.0%	22,657.4	9.3	0.0%
ME 7	32 43 31	2020	Dry	February	--	7,433.1	7,428.0	5.1	0.1%	7,427.5	5.6	0.1%	7,427.0	6.1	0.1%	7,426.4	6.7	0.1%	7,425.9	7.2	0.1%	7,425.3	7.8	0.1%
ME 7	32 43 31	2020	Dry	March	--	7,310.5	7,305.8	4.7	0.1%	7,305.3	5.2	0.1%	7,304.9	5.7	0.1%	7,304.3	6.3	0.1%	7,303.8	6.7	0.1%	7,303.4	7.2	0.1%
ME 7	32 43 31	2020	Dry	April	--	5,555.4	5,546.1	9.4	0.2%	5,545.1	10.3	0.2%	5,544.1	11.3	0.2%	5,543.2	12.3	0.2%	5,542.2	13.2	0.2%	5,541.3	14.1	0.3%
ME 7	32 43 31	2020	Dry	May	--	7,468.8	7,457.4	11.3	0.2%	7,456.3	12.5	0.2%	7,455.1	13.7	0.2%	7,453.9	14.8	0.2%	7,452.8	16.0	0.2%	7,451.6	17.1	0.2%
ME 7	32 43 31	2020	Dry	June	--	2,112.8	2,097.3	15.5	0.7%	2,095.8	17.0	0.8%	2,094.2	18.6	0.9%	2,092.7	20.1	1.0%	2,091.1	21.8	1.0%	2,089.6	23.3	1.1%
ME 7	32 43 31	2020	Dry	July	--	812.8	797.2	15.7	1.9%	795.6	17.2	2.1%	794.0	18.8	2.3%	792.5	20.3	2.5%	790.9	21.9	2.7%	789.3	23.5	2.9%
ME 7	32 43 31	2020	Dry	August	--	416.3	400.8	15.5	3.7%	399.3	17.1	4.1%	397.7	18.6	4.5%	396.1	20.2	4.8%	394.6	21.7	5.2%	393.0	23.3	5.6%
ME 7	32 43 31	2020	Dry	September	Used in Summary Table Analysis	265.4	251.2	14.2	5.4%	249.8	15.6	5.9%	248.3	17.1	6.4%	246.9	18.5	7.0%	245.5	19.9	7.5%	244.1	21.4	8.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 62 27	2000	Above Normal	October	Used in Summary Table Analysis	380.5	377.9	2.6	0.7%	377.6	3.0	0.8%	376.9	3.7	1.0%	376.1	4.4	1.2%	375.3	5.2	1.4%	374.5	6.0	1.6%
ME 1	48 62 27	2000	Above Normal	November	Used in Summary Table Analysis	8,151.3	8,149.1	2.2	0.0%	8,148.8	2.4	0.0%	8,148.3	3.0	0.0%	8,147.7	3.6	0.0%	8,147.1	4.2	0.1%	8,146.4	4.9	0.1%
ME 1	48 62 27	2000	Above Normal	December	--	4,770.1	4,768.5	1.6	0.0%	4,768.3	1.9	0.0%	4,767.7	2.4	0.1%	4,767.2	2.9	0.1%	4,766.8	3.4	0.1%	4,766.2	3.9	0.1%
ME 1	48 62 27	2000	Above Normal	January	--	14,959.5	14,958.3	1.2	0.0%	14,958.3	1.2	0.0%	14,958.3	1.2	0.0%	14,957.2	2.3	0.0%	14,957.2	2.3	0.0%	14,956.0	3.5	0.0%
ME 1	48 62 27	2000	Above Normal	February	--	16,283.6	16,282.4	1.2	0.0%	16,281.3	2.3	0.0%	16,281.3	2.3	0.0%	16,281.3	2.3	0.0%	16,280.1	3.5	0.0%	16,280.1	3.5	0.0%
ME 1	48 62 27	2000	Above Normal	March	--	5,733.6	5,732.5	1.0	0.0%	5,732.4	1.2	0.0%	5,732.1	1.5	0.0%	5,731.7	1.9	0.0%	5,731.5	2.1	0.0%	5,731.1	2.4	0.0%
ME 1	48 62 27	2000	Above Normal	April	--	5,364.2	5,363.4	0.8	0.0%	5,363.3	0.9	0.0%	5,363.1	1.2	0.0%	5,362.8	1.4	0.0%	5,362.5	1.7	0.0%	5,362.3	2.0	0.0%
ME 1	48 62 27	2000	Above Normal	May	--	2,751.9	2,747.1	4.7	0.2%	2,746.5	5.3	0.2%	2,745.1	6.7	0.2%	2,743.8	8.1	0.3%	2,742.4	9.5	0.3%	2,741.1	10.8	0.4%
ME 1	48 62 27	2000	Above Normal	June	--	602.9	597.0	5.9	1.0%	596.2	6.7	1.1%	594.5	8.4	1.4%	592.8	10.0	1.7%	591.2	11.7	1.9%	589.5	13.4	2.2%
ME 1	48 62 27	2000	Above Normal	July	--	68.5	65.4	3.1	4.5%	65.0	3.5	5.2%	64.1	4.4	6.4%	63.3	5.2	7.7%	62.5	6.1	8.9%	61.7	6.9	10.1%
ME 1	48 62 27	2000	Above Normal	August	--	55.3	52.4	2.9	5.3%	52.0	3.3	6.0%	51.1	4.2	7.5%	50.3	5.0	9.0%	49.5	5.8	10.5%	48.7	6.6	11.9%
ME 1	48 62 27	2000	Above Normal	September	Used in Summary Table Analysis	48.9	46.3	2.6	5.2%	46.0	2.9	6.0%	45.2	3.7	7.5%	44.5	4.4	9.0%	43.8	5.1	10.5%	43.0	5.9	12.0%
ME 1	48 62 27	2001	Dry	October	Used in Summary Table Analysis	2,771.6	2,768.9	2.8	0.1%	2,768.5	3.1	0.1%	2,767.7	3.9	0.1%	2,766.9	4.7	0.2%	2,766.1	5.6	0.2%	2,765.3	6.4	0.2%
ME 1	48 62 27	2001	Dry	November	Used in Summary Table Analysis	3,308.9	3,306.8	2.1	0.1%	3,306.5	2.4	0.1%	3,305.9	3.0	0.1%	3,305.3	3.6	0.1%	3,304.7	4.2	0.1%	3,304.1	4.9	0.1%
ME 1	48 62 27	2001	Dry	December	--	4,924.0	4,922.2	1.7	0.0%	4,922.0	2.0	0.0%	4,921.5	2.4	0.0%	4,920.9	3.0	0.1%	4,920.5	3.5	0.1%	4,919.9	4.1	0.1%
ME 1	48 62 27	2001	Dry	January	--	6,508.2	6,506.7	1.5	0.0%	6,506.6	1.6	0.0%	6,506.1	2.1	0.0%	6,505.7	2.5	0.0%	6,505.3	2.9	0.0%	6,504.9	3.4	0.1%
ME 1	48 62 27	2001	Dry	February	--	8,597.5	8,596.2	1.3	0.0%	8,596.1	1.4	0.0%	8,595.7	1.7	0.0%	8,595.4	2.1	0.0%	8,595.0	2.4	0.0%	8,594.7	2.8	0.0%
ME 1	48 62 27	2001	Dry	March	--	5,147.5	5,146.4	1.0	0.0%	5,146.3	1.2	0.0%	5,145.9	1.5	0.0%	5,145.6	1.9	0.0%	5,145.4	2.1	0.0%	5,145.0	2.4	0.0%
ME 1	48 62 27	2001	Dry	April	--	5,085.8	5,080.4	5.3	0.1%	5,079.6	6.1	0.1%	5,078.0	7.8	0.2%	5,076.5	9.3	0.2%	5,074.9	10.9	0.2%	5,073.4	12.4	0.2%
ME 1	48 62 27	2001	Dry	May	--	603.3	598.9	4.4	0.7%	598.2	5.0	0.8%	596.9	6.3	1.0%	595.7	7.6	1.3%	594.4	8.8	1.5%	593.2	10.1	1.7%
ME 1	48 62 27	2001	Dry	June	--	1,342.2	1,335.6	6.6	0.5%	1,334.7	7.5	0.6%	1,332.9	9.4	0.7%	1,331.0	11.2	0.8%	1,329.2	13.1	1.0%	1,327.3	14.9	1.1%
ME 1	48 62 27	2001	Dry	July	--	66.6	63.0	3.6	5.3%	62.5	4.0	6.1%	61.5	5.0	7.5%	60.6	6.0	9.0%	59.6	7.0	10.5%	58.6	8.0	12.0%
ME 1	48 62 27	2001	Dry	August	--	53.3	49.6	3.7	7.0%	49.1	4.3	8.0%	48.0	5.3	10.0%	46.9	6.4	12.0%	45.9	7.4	13.9%	44.8	8.5	15.9%
ME 1	48 62 27	2001	Dry	September	Used in Summary Table Analysis	47.7	44.3	3.4	7.1%	43.8	3.9	8.1%	42.8	4.8	10.1%	41.9	5.8	12.2%	40.9	6.8	14.2%	39.9	7.8	16.3%
ME 1	48 62 27	2002	Below Normal	October	Used in Summary Table Analysis	135.9	132.2	3.7	2.7%	131.7	4.2	3.1%	130.6	5.3	3.9%	129.5	6.3	4.7%	128.5	7.4	5.4%	127.4	8.5	6.2%
ME 1	48 62 27	2002	Below Normal	November	Used in Summary Table Analysis	7,269.7	7,266.9	2.8	0.0%	7,266.4	3.2	0.0%	7,265.6	4.1	0.1%	7,264.8	4.9	0.1%	7,264.0	5.7	0.1%	7,263.2	6.5	0.1%
ME 1	48 62 27	2002	Below Normal	December	--	13,850.7	13,847.2	3.5	0.0%	13,847.2	3.5	0.0%	13,847.2	3.5	0.0%	13,846.1	4.6	0.0%	13,844.9	5.8	0.0%	13,844.9	5.8	0.0%
ME 1	48 62 27	2002	Below Normal	January	--	9,657.3	9,655.2	2.1	0.0%	9,655.0	2.3	0.0%	9,654.3	3.0	0.0%	9,653.7	3.6	0.0%	9,653.1	4.2	0.0%	9,652.5	4.7	0.0%
ME 1	48 62 27	2002	Below Normal	February	--	8,380.2	8,378.5	1.7	0.0%	8,378.2	2.0	0.0%	8,377.7	2.5	0.0%	8,377.2	3.0	0.0%	8,376.6	3.6	0.0%	8,376.2	4.1	0.0%
ME 1	48 62 27	2002	Below Normal	March	--	7,244.0	7,242.6	1.4	0.0%	7,242.4	1.6	0.0%	7,242.0	2.0	0.0%	7,241.6	2.4	0.0%	7,241.2	2.8	0.0%	7,240.7	3.2	0.0%
ME 1	48 62 27	2002	Below Normal	April	--	4,277.9	4,273.0	4.9	0.1%	4,272.3	5.6	0.1%	4,270.9	6.9	0.2%	4,269.6	8.3	0.2%	4,268.2	9.7	0.2%	4,266.8	11.1	0.3%
ME 1	48 62 27	2002	Below Normal	May	--	1,138.0	1,134.0	4.0	0.4%	1,133.4	4.6	0.4%	1,132.2	5.7	0.5%	1,131.1	6.8	0.6%	1,130.0	8.0	0.7%	1,128.8	9.1	0.8%
ME 1	48 62 27	2002	Below Normal	June	--	193.8	189.2	4.7	2.4%	188.5	5.3	2.8%	187.2	6.7	3.4%	185.9	8.0	4.1%	184.5	9.3	4.8%	183.3	10.6	5.5%
ME 1	48 62 27	2002	Below Normal	July	--	56.7	53.4	3.3	5.9%	52.9	3.8	6.7%	52.0	4.7	8.4%	51.1	5.7	10.0%	50.1	6.6	11.6%	49.2	7.5	13.3%
ME 1	48 62 27	2002	Below Normal	August	--	50.5	47.3	3.2	6.4%	46.8	3.7	7.3%	45.9	4.6	9.1%	45.0	5.5	10.9%	44.1	6.4	12.7%	43.2	7.4	14.6%
ME 1	48 62 27	2002	Below Normal	September	Used in Summary Table Analysis	46.5	43.6	2.9	6.2%	43.2	3.3	7.1%	42.3	4.1	8.9%	41.5	5.0	10.7%	40.7	5.8	12.5%	39.8	6.6	14.3%
ME 1	48 62 27	2003	Wet	October	Used in Summary Table Analysis	34.8	31.8	3.0	8.6%	31.4	3.4	9.9%	30.5	4.3	12.4%	29.6	5.2	14.9%	28.7	6.1	17.5%	27.8	7.0	20.0%
ME 1	48 62 27	2003	Wet	November	Used in Summary Table Analysis	620.0	617.6	2.3	0.4%	617.3	2.7	0.4%	616.6	3.4	0.6%	615.8	4.1	0.7%	615.3	4.7	0.8%	614.6	5.4	0.9%
ME 1	48 62 27	2003	Wet	December	--	29,729.2	29,728.0	1.2	0.0%	29,726.9	2.3	0.0%	29,726.9	2.3	0.0%	29,725.7	3.5	0.0%	29,725.7	3.5	0.0%	29,724.5	4.6	0.0%
ME 1	48 62 27	2003	Wet	January	--	7,596.1	7,594.3	1.7	0.0%	7,594.1	2.0	0.0%	7,593.6	2.4	0.0%	7,593.2	2.9	0.0%	7,592.6	3.5	0.0%	7,592.1	3.9	0.1%
ME 1	48 62 27	2003	Wet	February	--	5,526.9	5,525.5	1.4	0.0%	5,525.2	1.6	0.0%	5,524.9	2.0	0.0%	5,524.4	2.4	0.0%	5,524.0	2.9	0.1%	5,523.6	3.2	0.1%
ME 1	48 62 27	2003	Wet	March	--	11,054.9	11,053.6	1.3	0.0%	11,053.5	1.4	0.0%	11,053.1	1.7	0.0%	11,052.8	2.1	0.0%	11,052.3	2.5	0.0%	11,052.0	2.9	0.0%
ME 1	48 62 27	2003	Wet	April	--	21,741.9	21,740.7	1.2	0.0%	21,740.7	1.2	0.0%	21,740.7	1.2	0.0%	21,739.6	2.3	0.0%	21,739.6	2.3	0.0%	21,739.6	2.3	0.0%
ME 1	48 62 27	2003	Wet	May	--	2,078.5	2,073.5	5.0	0.2%	2,072.8	5.7	0.3%	2,071.6	6.8	0.3%	2,070.4	8.1	0.4%	2,069.0	9.5	0.5%	2,067.6	10.9	0.5%
ME 1	48 62 27	2003	Wet	June	--	78.4	75.5	3.0	3.8%	75.1	3.4	4.3%	74.3	4.1	5.2%	73.6	4.8	6.2%	72.9	5.5	7.1%	72.2	6.3	8.0%
ME 1	48 62 27	2003	Wet	July	--	62.4	59.1	3.3	5.2%	58.7	3.7	5.9%	57.8	4.6	7.4%	56.9	5.5	8.9%	56.0	6.4	10.3%	55.0	7.4	11.8%
ME 1	48 62 27	2003	Wet	August	--	63.9	60.3	3.6	5.7%	59.7	4.2	6.5%	58.7	5.2	8.2%	57.6	6.3	9.8%	56.6	7.3	11.5%	55.4	8.5	13.4%
ME 1	48 62 27	2003	Wet	September	Used in Summary Table Analysis	48.8	46.2	2.6	5.3%	45.8	2.9	6.0%	45.1	3.7	7.5%	44.4	4.4	9.0%	43.7	5.1	10.5%	42.9	5.9	12.0%
ME 1	48 62 27	2004	Wet	October	Used in Summary Table Analysis	36.0	33.4	2.6	7.3%	33.1	3.0	8.3%	32.3	3.7	10.4%	31.5	4.5	12.5%	30.8	5.3	14.6%	30.0	6.0	16.7%
ME 1	48 62 27	2004	Wet	November	Used in Summary Table Analysis	4,121.1	4,119.0	2.1	0.1%	4,118.6	2.4	0.1%	4,118.1	3.0	0.1%	4,117.4	3.7	0.1%	4,116.8	4.3	0.1%	4,116.1	5.0	0.1%
ME 1	48 62 27	2004	Wet	December	--	18,019.7	18,017.4	2.3	0.0%	18,017.4	2.3	0.0%	18,016.2	3.5	0.0%	18,016.2	3.5	0.0%	18,015.0	4.6	0.0%	18,015.0	4.6	0.0%
ME 1	48 62 27	2004	Wet	January	--	10,196.3	10,194.8	1.5	0.0%	10,194.6	1.7	0.0%	10,194.1	2.2	0.0%	10,193.6	2.7	0.0%	10,193.3	3.0	0.0%	10,192.8	3.5	0.0%
ME 1	48 62 27	2004	Wet	February	--	17,441.0	17,439.8	1.2	0.0%	17,439.8	1.2	0.0%	17,438.7	2.3	0.0%	17,438.7	2.3	0.0%	17,438.7	2.3	0.0%	17,437.5	3.5	0.0%
ME 1	48 62 27	2004	Wet	March	--	4,147.7	4,146.6	1.0	0.0%	4,146.5	1.2	0.0%	4,146.2	1.5	0.0%	4,145.9	1.7	0.0%	4,145.6	2.1	0.1%	4,145.3	2.4	0.1%
ME 1	48 62 27	2004	Wet	April	--	3,533.6	3,532.8	0.8	0.0%	3,532.6	0.9	0.0%	3,532.4	1.2	0.0%	3,532.1	1.5	0.0%	3,531.8	1.7	0.0%	3,531.6	2.0	0.1%
ME 1	48 62 27	2004	Wet	May	--	1,054.5	1,049.8	4.7	0.4%	1,049.1	5.4	0.5%	1,047.8	6.7	0.6%	1,046.4	8.1	0.8%	1,045.1	9.4	0.9%	1,043.7	10.8	1.0%
ME 1	48 62 27	2004	Wet	June	--	68.8	66.3	2.5	3.6%	65.9	2.8	4.1%	65.2	3.5	5.1%	64.5	4.2	6.1%	63.8	4.9	7.1%	63.2	5.6	8.1%
ME 1	48 62 27	2004	Wet	July	--	55.9	52.7	3.2	5.6%	52.3	3.6	6.4%	51.4	4.5	8.0%	50.5	5.4	9.6%	49.6	6.2	11.2%	48.7	7.1	12.8%
ME 1	48 62 27	2004	Wet	August	--	49.2	46.2	3.0	6.0%	45.8	3.4	6.9%	45.0	4.2	8.6%	44.1	5.1	10.3%	43.3	5.9	12.0%	42.5	6.8	13.7%
ME 1	48 62 27	2004	Wet	September	Used in Summary Table Analysis	43.1	39.3	3.8	8.8%	38.8	4.3	10.0%	37.7	5.4	12.5%	36.6	6.5	15.1%	35.5	7.6	17.6%	34.4	8.7	20.2%
ME 1	48 62 27	2005	Above Normal	October	Used in Summary Table Analysis	5,793.5	5,790.6	2.9	0.0%	5,790.3	3.2	0.1%	5,789.5	4.1	0.1%	5,788.7	4.9	0.1%	5,787.7	5.8	0.1%	5,786.9	6.6	0.1%
ME 1	48 62 27	2005	Above Normal	November	Used in Summary Table Analysis	959.5	957.4	2.1	0.2%	957.0	2.4	0.3%	956.4	3.1	0.3%	955.8	3.7	0.4%	955.2	4.3	0.4%	954.6	4.9	0.5%
ME 1	48 62 27	2005	Above Normal	December	--	11,813.7	11,812.5	1.2	0.0%	11,811.3	2.3	0.0%	11,811.3	2.3	0.0%	11,810.2	3.5	0.0%	11,810.2	3.5	0.0%	11,810.2	3.5	0.0%
ME 1	48 62 27	2005	Above Normal	January	--	8,355.4	8,353.9	1.5	0.0%	8,353.7	1.7	0.0%	8,353.2	2.2	0.0%	8,352.8	2.7	0.0%	8,352.4	3.0	0.0%	8,352.0	3.5	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 62 27	2005	Above Normal	February	--	4,628.9	4,627.7	1.3	0.0%	4,627.5	1.4	0.0%	4,627.1	1.9	0.0%	4,626.7	2.2	0.0%	4,626.5	2.4	0.1%	4,626.2	2.8	0.1%
ME 1	48 62 27	2005	Above Normal	March	--	14,200.2	14,199.1	1.2	0.0%	14,199.1	1.2	0.0%	14,199.1	1.2	0.0%	14,197.9	2.3	0.0%	14,197.9	2.3	0.0%	14,197.9	2.3	0.0%
ME 1	48 62 27	2005	Above Normal	April	--	9,180.0	9,179.1	0.9	0.0%	9,178.9	1.0	0.0%	9,178.6	1.4	0.0%	9,178.4	1.6	0.0%	9,178.0	2.0	0.0%	9,177.8	2.2	0.0%
ME 1	48 62 27	2005	Above Normal	May	--	8,471.5	8,466.4	5.1	0.1%	8,465.7	5.8	0.1%	8,464.2	7.3	0.1%	8,462.8	8.7	0.1%	8,461.3	10.2	0.1%	8,460.0	11.6	0.1%
ME 1	48 62 27	2005	Above Normal	June	--	6,334.0	6,327.8	6.3	0.1%	6,327.0	7.1	0.1%	6,325.2	8.8	0.1%	6,323.5	10.5	0.2%	6,321.8	12.3	0.2%	6,320.0	14.0	0.2%
ME 1	48 62 27	2005	Above Normal	July	--	91.8	87.9	3.9	4.2%	87.3	4.4	4.8%	86.3	5.5	6.0%	85.2	6.6	7.2%	84.1	7.6	8.3%	83.1	8.7	9.5%
ME 1	48 62 27	2005	Above Normal	August	--	64.8	61.9	2.9	4.5%	61.5	3.3	5.1%	60.6	4.2	6.4%	59.8	5.0	7.7%	59.0	5.8	9.0%	58.1	6.6	10.3%
ME 1	48 62 27	2005	Above Normal	September	Used in Summary Table Analysis	54.8	52.2	2.6	4.7%	51.8	2.9	5.3%	51.1	3.7	6.7%	50.4	4.4	8.0%	49.7	5.1	9.3%	48.9	5.8	10.7%
ME 1	48 62 27	2006	Wet	October	Used in Summary Table Analysis	247.6	244.9	2.7	1.1%	244.5	3.0	1.2%	243.8	3.8	1.5%	243.0	4.6	1.9%	242.2	5.3	2.2%	241.4	6.1	2.5%
ME 1	48 62 27	2006	Wet	November	Used in Summary Table Analysis	6,495.8	6,494.0	1.9	0.0%	6,493.6	2.2	0.0%	6,493.1	2.8	0.0%	6,492.5	3.4	0.1%	6,491.9	3.9	0.1%	6,491.3	4.5	0.1%
ME 1	48 62 27	2006	Wet	December	--	19,958.3	19,956.0	2.3	0.0%	19,956.0	2.3	0.0%	19,956.0	2.3	0.0%	19,954.9	3.5	0.0%	19,954.9	3.5	0.0%	19,953.7	4.6	0.0%
ME 1	48 62 27	2006	Wet	January	--	16,843.8	16,842.6	1.2	0.0%	16,842.6	1.2	0.0%	16,841.4	2.3	0.0%	16,841.4	2.3	0.0%	16,840.3	3.5	0.0%	16,840.3	3.5	0.0%
ME 1	48 62 27	2006	Wet	February	--	9,294.4	9,293.4	1.0	0.0%	9,293.2	1.3	0.0%	9,292.8	1.6	0.0%	9,292.5	2.0	0.0%	9,292.1	2.3	0.0%	9,291.8	2.7	0.0%
ME 1	48 62 27	2006	Wet	March	--	23,150.5	23,149.3	1.2	0.0%	23,149.3	1.2	0.0%	23,149.3	1.2	0.0%	23,149.3	1.2	0.0%	23,148.1	2.3	0.0%	23,148.1	2.3	0.0%
ME 1	48 62 27	2006	Wet	April	--	11,453.2	11,452.3	0.9	0.0%	11,452.2	1.0	0.0%	11,452.0	1.3	0.0%	11,451.7	1.5	0.0%	11,451.5	1.7	0.0%	11,451.2	2.1	0.0%
ME 1	48 62 27	2006	Wet	May	--	4,628.2	4,626.6	1.6	0.0%	4,626.4	1.9	0.0%	4,625.9	2.3	0.1%	4,625.3	2.9	0.1%	4,624.9	3.4	0.1%	4,624.4	3.8	0.1%
ME 1	48 62 27	2006	Wet	June	--	561.9	556.7	5.3	0.9%	555.9	6.0	1.1%	554.5	7.5	1.3%	553.0	8.9	1.6%	551.6	10.3	1.8%	550.2	11.8	2.1%
ME 1	48 62 27	2006	Wet	July	--	74.6	71.5	3.1	4.2%	71.0	3.6	4.8%	70.2	4.4	5.9%	69.3	5.3	7.1%	68.5	6.1	8.2%	67.6	7.0	9.3%
ME 1	48 62 27	2006	Wet	August	--	60.4	57.4	3.0	5.0%	57.0	3.4	5.6%	56.2	4.2	7.0%	55.4	5.0	8.4%	54.5	5.9	9.7%	53.7	6.7	11.1%
ME 1	48 62 27	2006	Wet	September	Used in Summary Table Analysis	53.0	50.4	2.6	4.8%	50.1	2.9	5.5%	49.4	3.6	6.8%	48.7	4.3	8.2%	48.0	5.1	9.5%	47.2	5.8	10.9%
ME 1	48 62 27	2007	Above Normal	October	Used in Summary Table Analysis	43.8	41.2	2.6	5.9%	40.8	3.0	6.7%	40.1	3.7	8.4%	39.3	4.5	10.2%	38.6	5.2	11.9%	37.8	6.0	13.6%
ME 1	48 62 27	2007	Above Normal	November	Used in Summary Table Analysis	5,881.8	5,879.7	2.1	0.0%	5,879.4	2.4	0.0%	5,878.8	3.0	0.1%	5,878.1	3.7	0.1%	5,877.4	4.4	0.1%	5,876.9	5.0	0.1%
ME 1	48 62 27	2007	Above Normal	December	--	10,860.9	10,859.0	1.9	0.0%	10,858.7	2.2	0.0%	10,858.1	2.8	0.0%	10,857.6	3.2	0.0%	10,856.8	4.1	0.0%	10,856.4	4.5	0.0%
ME 1	48 62 27	2007	Above Normal	January	--	2,463.4	2,461.9	1.5	0.1%	2,461.7	1.7	0.1%	2,461.3	2.1	0.1%	2,460.9	2.5	0.1%	2,460.4	3.0	0.1%	2,460.0	3.5	0.1%
ME 1	48 62 27	2007	Above Normal	February	--	17,594.9	17,593.8	1.2	0.0%	17,593.8	1.2	0.0%	17,593.8	1.2	0.0%	17,592.6	2.3	0.0%	17,592.6	2.3	0.0%	17,592.6	2.3	0.0%
ME 1	48 62 27	2007	Above Normal	March	--	5,045.7	5,044.6	1.2	0.0%	5,044.4	1.3	0.0%	5,044.1	1.6	0.0%	5,043.9	1.9	0.0%	5,043.5	2.2	0.0%	5,043.2	2.5	0.1%
ME 1	48 62 27	2007	Above Normal	April	--	6,482.5	6,477.8	4.7	0.1%	6,477.1	5.4	0.1%	6,475.7	6.8	0.1%	6,474.4	8.1	0.1%	6,473.0	9.5	0.1%	6,471.6	10.9	0.2%
ME 1	48 62 27	2007	Above Normal	May	--	1,264.5	1,260.8	3.7	0.3%	1,260.3	4.2	0.3%	1,259.1	5.3	0.4%	1,258.1	6.4	0.5%	1,256.9	7.5	0.6%	1,255.9	8.6	0.7%
ME 1	48 62 27	2007	Above Normal	June	--	458.8	453.2	5.5	1.2%	452.4	6.3	1.4%	450.9	7.9	1.7%	449.3	9.5	2.1%	447.7	11.0	2.4%	446.2	12.6	2.7%
ME 1	48 62 27	2007	Above Normal	July	--	107.3	103.3	4.0	3.8%	102.7	4.6	4.3%	101.6	5.7	5.3%	100.5	6.8	6.4%	99.4	7.9	7.4%	98.3	9.0	8.4%
ME 1	48 62 27	2007	Above Normal	August	--	53.5	50.5	3.1	5.8%	50.0	3.5	6.6%	49.2	4.4	8.2%	48.3	5.2	9.8%	47.4	6.1	11.4%	46.6	7.0	13.0%
ME 1	48 62 27	2007	Above Normal	September	Used in Summary Table Analysis	48.5	45.8	2.8	5.7%	45.4	3.2	6.5%	44.6	4.0	8.2%	43.8	4.8	9.8%	43.0	5.5	11.4%	42.2	6.4	13.1%
ME 1	48 62 27	2008	Dry	October	Used in Summary Table Analysis	2,917.7	2,914.8	2.9	0.1%	2,914.4	3.4	0.1%	2,913.5	4.2	0.1%	2,912.7	5.0	0.2%	2,911.8	5.9	0.2%	2,911.0	6.7	0.2%
ME 1	48 62 27	2008	Dry	November	Used in Summary Table Analysis	2,156.0	2,153.8	2.2	0.1%	2,153.6	2.4	0.1%	2,152.9	3.1	0.1%	2,152.2	3.8	0.2%	2,151.6	4.4	0.2%	2,150.9	5.1	0.2%
ME 1	48 62 27	2008	Dry	December	--	14,186.3	14,184.0	2.3	0.0%	14,184.0	2.3	0.0%	14,184.0	2.3	0.0%	14,182.9	3.5	0.0%	14,182.9	3.5	0.0%	14,181.7	4.6	0.0%
ME 1	48 62 27	2008	Dry	January	--	15,875.0	15,872.7	2.3	0.0%	15,872.7	2.3	0.0%	15,872.7	2.3	0.0%	15,871.5	3.5	0.0%	15,871.5	3.5	0.0%	15,870.4	4.6	0.0%
ME 1	48 62 27	2008	Dry	February	--	6,489.9	6,488.7	1.3	0.0%	6,488.4	1.5	0.0%	6,488.1	1.9	0.0%	6,487.6	2.3	0.0%	6,487.3	2.7	0.0%	6,486.9	3.0	0.0%
ME 1	48 62 27	2008	Dry	March	--	3,163.8	3,162.7	1.0	0.0%	3,162.6	1.2	0.0%	3,162.3	1.5	0.0%	3,161.9	1.9	0.1%	3,161.7	2.1	0.1%	3,161.3	2.4	0.1%
ME 1	48 62 27	2008	Dry	April	--	4,317.8	4,312.4	5.4	0.1%	4,311.6	6.3	0.1%	4,310.1	7.8	0.2%	4,308.6	9.3	0.2%	4,306.9	10.9	0.3%	4,305.4	12.4	0.3%
ME 1	48 62 27	2008	Dry	May	--	76.0	73.3	2.7	3.5%	73.0	3.1	4.0%	72.2	3.8	5.0%	71.5	4.5	5.9%	71.0	5.1	6.6%	70.4	5.6	7.3%
ME 1	48 62 27	2008	Dry	June	--	75.7	70.1	5.7	7.5%	69.2	6.5	8.6%	67.7	8.1	10.7%	66.1	9.7	12.8%	64.5	11.3	14.9%	62.9	12.8	17.0%
ME 1	48 62 27	2008	Dry	July	--	48.1	44.1	4.0	8.3%	43.6	4.5	9.4%	42.4	5.7	11.8%	41.3	6.8	14.1%	40.2	7.9	16.4%	39.1	9.0	18.7%
ME 1	48 62 27	2008	Dry	August	--	44.6	40.7	3.9	8.7%	40.1	4.4	9.9%	39.0	5.5	12.4%	37.9	6.6	14.9%	36.8	7.8	17.4%	35.7	8.9	19.9%
ME 1	48 62 27	2008	Dry	September	Used in Summary Table Analysis	33.3	28.4	4.9	14.7%	27.7	5.6	16.9%	26.3	7.0	21.1%	24.8	8.4	25.3%	23.4	9.8	29.6%	22.0	11.3	33.8%
ME 1	48 62 27	2009	Critical	October	Used in Summary Table Analysis	650.9	647.2	3.7	0.6%	646.6	4.3	0.7%	645.5	5.4	0.8%	644.4	6.5	1.0%	643.6	7.3	1.1%	642.5	8.4	1.3%
ME 1	48 62 27	2009	Critical	November	Used in Summary Table Analysis	3,864.9	3,862.3	2.7	0.1%	3,861.8	3.1	0.1%	3,861.1	3.8	0.1%	3,860.3	4.6	0.1%	3,859.5	5.4	0.1%	3,858.7	6.3	0.2%
ME 1	48 62 27	2009	Critical	December	--	7,165.9	7,163.5	2.3	0.0%	7,163.2	2.7	0.0%	7,162.3	3.6	0.1%	7,161.6	4.3	0.1%	7,160.9	5.0	0.1%	7,160.3	5.6	0.1%
ME 1	48 62 27	2009	Critical	January	--	4,429.4	4,427.5	1.9	0.0%	4,427.2	2.2	0.0%	4,426.6	2.8	0.1%	4,426.0	3.4	0.1%	4,425.6	3.8	0.1%	4,425.0	4.4	0.1%
ME 1	48 62 27	2009	Critical	February	--	13,515.0	13,512.7	2.3	0.0%	13,512.7	2.3	0.0%	13,512.7	2.3	0.0%	13,511.6	3.5	0.0%	13,511.6	3.5	0.0%	13,510.4	4.6	0.0%
ME 1	48 62 27	2009	Critical	March	--	10,992.5	10,991.1	1.4	0.0%	10,990.9	1.6	0.0%	10,990.5	2.0	0.0%	10,990.2	2.3	0.0%	10,989.7	2.8	0.0%	10,989.4	3.1	0.0%
ME 1	48 62 27	2009	Critical	April	--	4,796.2	4,790.6	5.6	0.1%	4,789.8	6.4	0.1%	4,788.2	8.0	0.2%	4,786.6	9.6	0.2%	4,785.0	11.2	0.2%	4,783.3	12.8	0.3%
ME 1	48 62 27	2009	Critical	May	--	10,345.9	10,340.9	5.1	0.0%	10,340.2	5.8	0.1%	10,338.8	7.2	0.1%	10,337.4	8.6	0.1%	10,335.6	10.3	0.1%	10,334.1	11.8	0.1%
ME 1	48 62 27	2009	Critical	June	--	336.9	330.2	6.6	2.0%	329.3	7.6	2.3%	327.3	9.5	2.8%	325.4	11.5	3.4%	323.5	13.4	4.0%	321.5	15.3	4.5%
ME 1	48 62 27	2009	Critical	July	--	68.3	64.2	4.0	5.9%	63.7	4.6	6.7%	62.6	5.7	8.3%	61.5	6.8	9.9%	60.4	7.8	11.5%	59.4	8.9	13.0%
ME 1	48 62 27	2009	Critical	August	--	54.2	50.4	3.9	7.1%	49.8	4.4	8.1%	48.7	5.5	10.1%	47.6	6.6	12.1%	46.5	7.7	14.1%	45.4	8.8	16.2%
ME 1	48 62 27	2009	Critical	September	Used in Summary Table Analysis	48.2	44.8	3.4	7.1%	44.3	3.9	8.1%	43.3	4.9	10.2%	42.3	5.9	12.2%	41.3	6.9	14.2%	40.3	7.9	16.3%
ME 1	48 62 27	2010	Below Normal	October	Used in Summary Table Analysis	5,087.3	5,083.7	3.6	0.1%	5,083.2	4.1	0.1%	5,082.2	5.1	0.1%	5,081.1	6.1	0.1%	5,080.2	7.1	0.1%	5,079.2	8.1	0.2%
ME 1	48 62 27	2010	Below Normal	November	Used in Summary Table Analysis	6,061.6	6,058.8	2.8	0.0%	6,058.4	3.1	0.1%	6,057.6	3.9	0.1%	6,056.8	4.7	0.1%	6,056.0	5.6	0.1%	6,055.2	6.4	0.1%
ME 1	48 62 27	2010	Below Normal	December	--	6,261.1	6,258.9	2.2	0.0%	6,258.6	2.5	0.0%	6,257.9	3.2	0.1%	6,257.2	3.9	0.1%	6,256.5	4.6	0.1%	6,255.8	5.3	0.1%
ME 1	48 62 27	2010	Below Normal	January	--	17,998.8	17,996.5	2.3	0.0%	17,996.5	2.3	0.0%	17,996.5	2.3	0.0%	17,995.4	3.5	0.0%	17,995.4	3.5	0.0%	17,994.2	4.6	0.0%
ME 1	48 62 27	2010	Below Normal	February	--	11,604.2	11,601.9	2.3	0.0%	11,601.9	2.3	0.0%	11,601.9	2.3	0.0%	11,600.7	3.5	0.0%	11,600.7	3.5	0.0%	11,600.7	3.5	0.0%
ME 1	48 62 27	2010	Below Normal	March	--	15,943.3	15,942.1	1.2	0.0%	15,942.1	1.2	0.0%	15,941.0	2.3	0.0%	15,941.0	2.3	0.0%	15,941.0	2.3	0.0%	15,939.8	3.5	0.0%
ME 1	48 62 27	2010	Below Normal	April	--	22,751.2	22,750.0	1.2	0.0%	22,750.0	1.2	0.0%	22,750.0	1.2	0.0%	22,750.0	1.2	0.0%	22,748.8	2.3	0.0%	22,748.8	2.3	0.0%
ME 1	48 62 27	2010	Below Normal	May	--	6,388.7	6,383.6	5.1	0.1%	6,382.8	5.9	0.1%	6,381.3	7.4	0.1%	6,379.7	8.9	0.1%	6,378.2	10.4	0.2%	6,376.7	11.9	0.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 62 27	2010	Below Normal	June	--	3,599.0	3,592.6	6.4	0.2%	3,591.7	7.3	0.2%	3,589.9	9.0	0.3%	3,588.2	10.8	0.3%	3,586.5	12.5	0.3%	3,584.7	14.2	0.4%
ME 1	48 62 27	2010	Below Normal	July	--	88.4	84.6	3.8	4.3%	84.1	4.3	4.9%	83.0	5.4	6.1%	81.9	6.5	7.4%	80.7	7.6	8.6%	79.9	8.5	9.6%
ME 1	48 62 27	2010	Below Normal	August	--	66.3	63.3	3.1	4.6%	62.8	3.5	5.3%	61.9	4.4	6.7%	61.1	5.3	7.9%	60.2	6.1	9.2%	59.3	7.0	10.6%
ME 1	48 62 27	2010	Below Normal	September	Used in Summary Table Analysis	319.5	315.5	4.0	1.3%	314.9	4.6	1.4%	313.7	5.8	1.8%	312.6	6.9	2.1%	311.4	8.0	2.5%	310.3	9.2	2.9%
ME 1	48 62 27	2011	Wet	October	Used in Summary Table Analysis	7,127.0	7,124.3	2.7	0.0%	7,124.0	3.0	0.0%	7,123.1	3.8	0.1%	7,122.5	4.5	0.1%	7,121.6	5.3	0.1%	7,120.8	6.1	0.1%
ME 1	48 62 27	2011	Wet	November	Used in Summary Table Analysis	6,143.3	6,141.2	2.1	0.0%	6,140.9	2.4	0.0%	6,140.3	3.0	0.0%	6,139.7	3.6	0.1%	6,139.0	4.3	0.1%	6,138.4	4.9	0.1%
ME 1	48 62 27	2011	Wet	December	--	17,415.5	17,413.2	2.3	0.0%	17,413.2	2.3	0.0%	17,413.2	2.3	0.0%	17,412.0	3.5	0.0%	17,412.0	3.5	0.0%	17,410.9	4.6	0.0%
ME 1	48 62 27	2011	Wet	January	--	3,454.4	3,453.1	1.3	0.0%	3,452.9	1.5	0.0%	3,452.5	1.9	0.1%	3,452.1	2.3	0.1%	3,451.6	2.8	0.1%	3,451.3	3.1	0.1%
ME 1	48 62 27	2011	Wet	February	--	10,677.4	10,676.2	1.3	0.0%	10,675.9	1.5	0.0%	10,675.6	1.9	0.0%	10,675.2	2.2	0.0%	10,674.9	2.5	0.0%	10,674.5	2.9	0.0%
ME 1	48 62 27	2011	Wet	March	--	28,556.7	28,555.6	1.2	0.0%	28,555.6	1.2	0.0%	28,554.4	2.3	0.0%	28,554.4	2.3	0.0%	28,554.4	2.3	0.0%	28,554.4	2.3	0.0%
ME 1	48 62 27	2011	Wet	April	--	11,030.7	11,029.7	0.9	0.0%	11,029.6	1.0	0.0%	11,029.3	1.4	0.0%	11,029.1	1.6	0.0%	11,028.7	2.0	0.0%	11,028.5	2.2	0.0%
ME 1	48 62 27	2011	Wet	May	--	4,788.8	4,784.1	4.6	0.1%	4,783.4	5.3	0.1%	4,782.1	6.7	0.1%	4,780.6	8.2	0.2%	4,779.3	9.5	0.2%	4,777.8	11.0	0.2%
ME 1	48 62 27	2011	Wet	June	--	3,122.9	3,116.7	6.3	0.2%	3,115.9	7.1	0.2%	3,114.1	8.8	0.3%	3,112.4	10.5	0.3%	3,110.6	12.3	0.4%	3,108.9	14.0	0.4%
ME 1	48 62 27	2011	Wet	July	--	215.1	209.7	5.4	2.5%	208.9	6.2	2.9%	207.4	7.7	3.6%	205.9	9.2	4.3%	204.3	10.8	5.0%	202.8	12.3	5.7%
ME 1	48 62 27	2011	Wet	August	--	65.2	62.3	2.9	4.5%	61.8	3.3	5.1%	61.0	4.2	6.4%	60.2	5.0	7.7%	59.3	5.8	8.9%	58.5	6.6	10.2%
ME 1	48 62 27	2011	Wet	September	Used in Summary Table Analysis	54.8	52.2	2.6	4.7%	51.8	2.9	5.3%	51.1	3.6	6.6%	50.4	4.3	7.9%	49.7	5.1	9.2%	49.0	5.8	10.5%
ME 1	48 62 27	2012	Below Normal	October	Used in Summary Table Analysis	3,519.2	3,516.7	2.5	0.1%	3,516.3	2.9	0.1%	3,515.6	3.6	0.1%	3,514.8	4.4	0.1%	3,514.1	5.1	0.1%	3,513.3	5.9	0.2%
ME 1	48 62 27	2012	Below Normal	November	Used in Summary Table Analysis	4,803.2	4,801.2	2.1	0.0%	4,800.9	2.3	0.0%	4,800.2	3.0	0.1%	4,799.7	3.6	0.1%	4,799.1	4.2	0.1%	4,798.4	4.9	0.1%
ME 1	48 62 27	2012	Below Normal	December	--	1,952.0	1,950.2	1.7	0.1%	1,950.0	2.0	0.1%	1,949.5	2.4	0.1%	1,949.1	2.9	0.1%	1,948.5	3.5	0.2%	1,948.0	3.9	0.2%
ME 1	48 62 27	2012	Below Normal	January	--	11,396.2	11,394.7	1.5	0.0%	11,394.6	1.6	0.0%	11,394.1	2.1	0.0%	11,393.8	2.4	0.0%	11,393.3	2.9	0.0%	11,392.8	3.4	0.0%
ME 1	48 62 27	2012	Below Normal	February	--	6,636.2	6,635.1	1.2	0.0%	6,634.8	1.4	0.0%	6,634.5	1.7	0.0%	6,634.1	2.1	0.0%	6,633.8	2.4	0.0%	6,633.4	2.8	0.0%
ME 1	48 62 27	2012	Below Normal	March	--	25,053.2	25,052.1	1.2	0.0%	25,052.1	1.2	0.0%	25,050.9	2.3	0.0%	25,050.9	2.3	0.0%	25,050.9	2.3	0.0%	25,049.8	3.5	0.0%
ME 1	48 62 27	2012	Below Normal	April	--	12,476.9	12,475.7	1.2	0.0%	12,475.7	1.2	0.0%	12,475.7	1.2	0.0%	12,474.5	2.3	0.0%	12,474.5	2.3	0.0%	12,474.5	2.3	0.0%
ME 1	48 62 27	2012	Below Normal	May	--	2,041.2	2,036.3	4.9	0.2%	2,035.6	5.6	0.3%	2,034.3	6.9	0.3%	2,032.9	8.3	0.4%	2,031.5	9.7	0.5%	2,030.1	11.1	0.5%
ME 1	48 62 27	2012	Below Normal	June	--	3,028.2	3,022.0	6.3	0.2%	3,021.1	7.2	0.2%	3,019.3	8.9	0.3%	3,017.6	10.6	0.4%	3,015.9	12.4	0.4%	3,014.0	14.2	0.5%
ME 1	48 62 27	2012	Below Normal	July	--	1,079.9	1,074.4	5.5	0.5%	1,073.6	6.3	0.6%	1,072.0	7.8	0.7%	1,070.5	9.4	0.9%	1,068.9	11.0	1.0%	1,067.4	12.5	1.2%
ME 1	48 62 27	2012	Below Normal	August	--	72.1	69.2	2.9	4.0%	68.9	3.3	4.5%	68.0	4.1	5.6%	67.2	4.9	6.8%	66.4	5.7	7.9%	65.6	6.5	9.0%
ME 1	48 62 27	2012	Below Normal	September	Used in Summary Table Analysis	58.6	56.0	2.6	4.5%	55.7	3.0	5.1%	54.9	3.7	6.3%	54.2	4.4	7.5%	53.5	5.1	8.7%	52.8	5.8	10.0%
ME 1	48 62 27	2013	Below Normal	October	Used in Summary Table Analysis	1,478.7	1,475.8	2.9	0.2%	1,475.5	3.2	0.2%	1,474.7	4.1	0.3%	1,473.8	4.9	0.3%	1,473.0	5.7	0.4%	1,472.1	6.6	0.4%
ME 1	48 62 27	2013	Below Normal	November	Used in Summary Table Analysis	9,451.6	9,449.4	2.2	0.0%	9,449.1	2.5	0.0%	9,448.5	3.1	0.0%	9,447.8	3.8	0.0%	9,447.1	4.5	0.0%	9,446.5	5.1	0.1%
ME 1	48 62 27	2013	Below Normal	December	--	32,023.1	32,020.8	2.3	0.0%	32,020.8	2.3	0.0%	32,019.7	3.5	0.0%	32,019.7	3.5	0.0%	32,018.5	4.6	0.0%	32,018.5	4.6	0.0%
ME 1	48 62 27	2013	Below Normal	January	--	4,806.3	4,804.9	1.4	0.0%	4,804.6	1.6	0.0%	4,804.2	2.1	0.0%	4,803.7	2.5	0.1%	4,803.2	3.0	0.1%	4,802.8	3.5	0.1%
ME 1	48 62 27	2013	Below Normal	February	--	3,058.8	3,057.5	1.3	0.0%	3,057.3	1.5	0.0%	3,056.9	1.9	0.1%	3,056.5	2.3	0.1%	3,056.1	2.7	0.1%	3,055.7	3.1	0.1%
ME 1	48 62 27	2013	Below Normal	March	--	5,617.1	5,616.1	1.0	0.0%	5,615.9	1.3	0.0%	5,615.6	1.5	0.0%	5,615.3	1.9	0.0%	5,614.9	2.2	0.0%	5,614.6	2.5	0.0%
ME 1	48 62 27	2013	Below Normal	April	--	4,383.1	4,378.5	4.6	0.1%	4,377.8	5.3	0.1%	4,376.5	6.6	0.2%	4,375.2	7.9	0.2%	4,374.0	9.1	0.2%	4,372.6	10.5	0.2%
ME 1	48 62 27	2013	Below Normal	May	--	2,265.5	2,261.7	3.8	0.2%	2,261.2	4.3	0.2%	2,260.1	5.4	0.2%	2,259.0	6.5	0.3%	2,257.9	7.6	0.3%	2,256.8	8.7	0.4%
ME 1	48 62 27	2013	Below Normal	June	--	1,010.3	1,004.8	5.5	0.5%	1,004.0	6.3	0.6%	1,002.4	7.9	0.8%	1,000.8	9.4	0.9%	999.2	11.0	1.1%	997.7	12.6	1.2%
ME 1	48 62 27	2013	Below Normal	July	--	68.1	64.9	3.2	4.7%	64.5	3.6	5.3%	63.6	4.5	6.6%	62.7	5.4	7.9%	61.9	6.2	9.1%	61.0	7.1	10.4%
ME 1	48 62 27	2013	Below Normal	August	--	55.1	52.0	3.1	5.6%	51.6	3.5	6.4%	50.7	4.4	8.0%	49.8	5.3	9.6%	48.9	6.2	11.2%	48.0	7.1	12.8%
ME 1	48 62 27	2013	Below Normal	September	Used in Summary Table Analysis	3,820.4	3,816.1	4.3	0.1%	3,815.4	5.0	0.1%	3,814.2	6.1	0.2%	3,813.0	7.4	0.2%	3,811.7	8.7	0.2%	3,810.4	10.0	0.3%
ME 1	48 62 27	2014	Critical	October	Used in Summary Table Analysis	89.3	86.6	2.8	3.1%	86.2	3.2	3.6%	85.3	4.0	4.5%	84.5	4.8	5.4%	83.7	5.6	6.3%	82.9	6.5	7.2%
ME 1	48 62 27	2014	Critical	November	Used in Summary Table Analysis	1,146.0	1,143.8	2.2	0.2%	1,143.5	2.5	0.2%	1,142.8	3.2	0.3%	1,142.2	3.8	0.3%	1,141.5	4.5	0.4%	1,140.9	5.1	0.4%
ME 1	48 62 27	2014	Critical	December	--	915.0	913.2	1.7	0.2%	913.0	2.0	0.2%	912.5	2.5	0.3%	911.9	3.0	0.3%	911.4	3.6	0.4%	910.9	4.1	0.4%
ME 1	48 62 27	2014	Critical	January	--	1,812.0	1,810.5	1.5	0.1%	1,810.3	1.7	0.1%	1,810.0	2.1	0.1%	1,809.5	2.5	0.1%	1,809.0	3.0	0.2%	1,808.6	3.5	0.2%
ME 1	48 62 27	2014	Critical	February	--	9,847.8	9,846.4	1.4	0.0%	9,846.3	1.5	0.0%	9,845.9	1.9	0.0%	9,845.5	2.3	0.0%	9,845.1	2.7	0.0%	9,844.7	3.1	0.0%
ME 1	48 62 27	2014	Critical	March	--	14,798.6	14,797.5	1.2	0.0%	14,797.5	1.2	0.0%	14,797.5	1.2	0.0%	14,797.5	1.2	0.0%	14,796.3	2.3	0.0%	14,796.3	2.3	0.0%
ME 1	48 62 27	2014	Critical	April	--	3,617.5	3,612.2	5.3	0.1%	3,611.3	6.1	0.2%	3,610.0	7.5	0.2%	3,608.4	9.0	0.2%	3,606.8	10.6	0.3%	3,605.2	12.3	0.3%
ME 1	48 62 27	2014	Critical	May	--	1,846.1	1,841.4	4.6	0.3%	1,840.9	5.2	0.3%	1,839.5	6.6	0.4%	1,838.2	7.9	0.4%	1,836.9	9.1	0.5%	1,835.6	10.4	0.6%
ME 1	48 62 27	2014	Critical	June	--	120.6	113.9	6.6	5.5%	113.0	7.6	6.3%	111.2	9.4	7.8%	109.3	11.3	9.3%	107.5	13.1	10.9%	105.6	15.0	12.4%
ME 1	48 62 27	2014	Critical	July	--	57.0	53.2	3.8	6.7%	52.7	4.4	7.7%	51.6	5.5	9.6%	50.5	6.6	11.5%	49.4	7.6	13.4%	48.3	8.7	15.3%
ME 1	48 62 27	2014	Critical	August	--	49.6	45.8	3.8	7.7%	45.3	4.4	8.8%	44.2	5.5	11.0%	43.1	6.5	13.2%	42.0	7.6	15.4%	40.9	8.7	17.6%
ME 1	48 62 27	2014	Critical	September	Used in Summary Table Analysis	2,098.1	2,092.8	5.3	0.3%	2,092.1	6.0	0.3%	2,090.6	7.5	0.4%	2,089.1	9.0	0.4%	2,087.6	10.5	0.5%	2,086.0	12.2	0.6%
ME 1	48 62 27	2015	Dry	October	Used in Summary Table Analysis	8,226.7	8,222.5	4.3	0.1%	8,221.9	4.9	0.1%	8,220.8	5.9	0.1%	8,219.7	7.1	0.1%	8,218.6	8.1	0.1%	8,217.4	9.4	0.1%
ME 1	48 62 27	2015	Dry	November	Used in Summary Table Analysis	4,147.0	4,144.2	2.8	0.1%	4,143.9	3.1	0.1%	4,143.1	3.9	0.1%	4,142.2	4.7	0.1%	4,141.4	5.6	0.1%	4,140.7	6.3	0.2%
ME 1	48 62 27	2015	Dry	December	--	15,217.6	15,215.3	2.3	0.0%	15,215.3	2.3	0.0%	15,214.1	3.5	0.0%	15,214.1	3.5	0.0%	15,213.0	4.6	0.0%	15,211.8	5.8	0.0%
ME 1	48 62 27	2015	Dry	January	--	2,392.7	2,391.0	1.7	0.1%	2,390.7	2.0	0.1%	2,390.2	2.5	0.1%	2,389.7	3.0	0.1%	2,389.1	3.6	0.1%	2,388.5	4.2	0.2%
ME 1	48 62 27	2015	Dry	February	--	15,027.8	15,026.6	1.2	0.0%	15,025.5	2.3	0.0%	15,025.5	2.3	0.0%	15,025.5	2.3	0.0%	15,024.3	3.5	0.0%	15,024.3	3.5	0.0%
ME 1	48 62 27	2015	Dry	March	--	4,129.6	4,128.4	1.3	0.0%	4,128.1	1.5	0.0%	4,127.8	1.9	0.0%	4,127.4	2.2	0.1%	4,127.1	2.5	0.1%	4,126.7	2.9	0.1%
ME 1	48 62 27	2015	Dry	April	--	4,470.7	4,465.2	5.6	0.1%	4,464.4	6.4	0.1%	4,462.7	8.0	0.2%	4,461.1	9.6	0.2%	4,459.6	11.1	0.2%	4,458.0	12.7	0.3%
ME 1	48 62 27	2015	Dry	May	--	141.3	136.7	4.5	3.2%	136.1	5.2	3.7%	134.8	6.4	4.6%	133.5	7.7	5.5%	132.2	9.0	6.4%	130.9	10.4	7.3%
ME 1	48 62 27	2015	Dry	June	--	175.4	169.6	5.9	3.4%	168.8	6.7	3.8%	167.1	8.3	4.7%	165.5	9.9	5.7%	163.9	11.6	6.6%	162.3	13.2	7.5%
ME 1	48 62 27	2015	Dry	July	--	53.0	48.9	4.0	7.6%	48.4	4.6	8.7%	47.2	5.7	10.8%	46.1	6.9	13.0%	45.0	8.0	15.1%	43.9	9.1	17.2%
ME 1	48 62 27	2015	Dry	August	--	47.4	43.5	3.9	8.2%	42.9	4.5	9.4%	41.8	5.6	11.7%	40.7	6.7	14.1%	39.6	7.8	16.4%	38.5	8.9	18.8%
ME 1	48 62 27	2015	Dry	September	Used in Summary Table Analysis	45.7	42.2	3.5	7.7%	41.7	4.0	8.8%	40.2	5.6	12.2%	38.9	6.9	15.0%	37.4	8.4	18.3%	35.9	9.8	21.4%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 62 27	2016	Above Normal	October	Used in Summary Table Analysis	37.6	32.6	5.0	13.2%	31.9	5.7	15.1%	30.6	7.0	18.6%	29.3	8.3	22.1%	28.1	9.5	25.3%	27.0	10.6	28.1%
ME 1	48 62 27	2016	Above Normal	November	Used in Summary Table Analysis	2,977.0	2,974.2	2.8	0.1%	2,973.8	3.1	0.1%	2,973.0	3.9	0.1%	2,972.2	4.7	0.2%	2,971.4	5.6	0.2%	2,970.6	6.4	0.2%
ME 1	48 62 27	2016	Above Normal	December	--	19,766.2	19,763.9	2.3	0.0%	19,762.7	3.5	0.0%	19,762.7	3.5	0.0%	19,761.6	4.6	0.0%	19,761.6	4.6	0.0%	19,760.4	5.8	0.0%
ME 1	48 62 27	2016	Above Normal	January	--	20,850.7	20,849.5	1.2	0.0%	20,848.4	2.3	0.0%	20,848.4	2.3	0.0%	20,847.2	3.5	0.0%	20,847.2	3.5	0.0%	20,846.1	4.6	0.0%
ME 1	48 62 27	2016	Above Normal	February	--	5,489.1	5,487.6	1.5	0.0%	5,487.4	1.7	0.0%	5,486.9	2.2	0.0%	5,486.5	2.7	0.0%	5,486.0	3.1	0.1%	5,485.6	3.5	0.1%
ME 1	48 62 27	2016	Above Normal	March	--	20,191.0	20,189.8	1.2	0.0%	20,189.8	1.2	0.0%	20,189.8	1.2	0.0%	20,188.7	2.3	0.0%	20,188.7	2.3	0.0%	20,187.5	3.5	0.0%
ME 1	48 62 27	2016	Above Normal	April	--	5,666.4	5,665.3	1.2	0.0%	5,665.2	1.3	0.0%	5,664.8	1.6	0.0%	5,664.5	2.0	0.0%	5,664.1	2.3	0.0%	5,663.8	2.7	0.0%
ME 1	48 62 27	2016	Above Normal	May	--	1,239.8	1,238.1	1.7	0.1%	1,237.8	2.0	0.2%	1,237.4	2.4	0.2%	1,236.9	2.9	0.2%	1,236.3	3.5	0.3%	1,235.9	3.9	0.3%
ME 1	48 62 27	2016	Above Normal	June	--	80.3	76.0	4.2	5.3%	75.4	4.8	6.0%	74.3	5.9	7.4%	73.1	7.1	8.9%	72.0	8.3	10.3%	70.8	9.4	11.7%
ME 1	48 62 27	2016	Above Normal	July	--	59.9	56.7	3.2	5.3%	56.2	3.7	6.1%	55.4	4.5	7.6%	54.5	5.4	9.1%	53.6	6.3	10.5%	52.7	7.2	12.0%
ME 1	48 62 27	2016	Above Normal	August	--	51.1	48.0	3.1	6.0%	47.6	3.5	6.8%	46.7	4.3	8.5%	45.9	5.2	10.2%	45.0	6.1	11.9%	44.2	6.9	13.6%
ME 1	48 62 27	2016	Above Normal	September	Used in Summary Table Analysis	47.3	44.7	2.6	5.5%	43.7	3.6	7.6%	42.7	4.6	9.7%	41.6	5.7	12.1%	40.5	6.8	14.3%	39.5	7.8	16.6%
ME 1	48 62 27	2017	Wet	October	Used in Summary Table Analysis	12,827.5	12,825.2	2.3	0.0%	12,824.1	3.5	0.0%	12,824.1	3.5	0.0%	12,822.9	4.6	0.0%	12,820.6	6.9	0.1%	12,820.6	6.9	0.1%
ME 1	48 62 27	2017	Wet	November	Used in Summary Table Analysis	7,380.0	7,377.8	2.2	0.0%	7,377.4	2.5	0.0%	7,376.7	3.2	0.0%	7,376.0	3.9	0.1%	7,375.5	4.5	0.1%	7,374.8	5.2	0.1%
ME 1	48 62 27	2017	Wet	December	--	9,425.5	9,423.6	1.9	0.0%	9,423.4	2.1	0.0%	9,422.8	2.7	0.0%	9,422.2	3.2	0.0%	9,421.6	3.8	0.0%	9,421.2	4.3	0.0%
ME 1	48 62 27	2017	Wet	January	--	35,022.0	35,020.8	1.2	0.0%	35,019.7	2.3	0.0%	35,019.7	2.3	0.0%	35,019.7	2.3	0.0%	35,018.5	3.5	0.0%	35,018.5	3.5	0.0%
ME 1	48 62 27	2017	Wet	February	--	33,784.7	33,783.6	1.2	0.0%	33,783.6	1.2	0.0%	33,783.6	1.2	0.0%	33,782.4	2.3	0.0%	33,782.4	2.3	0.0%	33,782.4	2.3	0.0%
ME 1	48 62 27	2017	Wet	March	--	6,422.2	6,421.2	1.0	0.0%	6,420.9	1.3	0.0%	6,420.7	1.5	0.0%	6,420.4	1.9	0.0%	6,420.0	2.2	0.0%	6,419.7	2.5	0.0%
ME 1	48 62 27	2017	Wet	April	--	8,124.2	8,123.3	0.9	0.0%	8,123.1	1.0	0.0%	8,122.9	1.3	0.0%	8,122.7	1.5	0.0%	8,122.5	1.7	0.0%	8,122.2	2.0	0.0%
ME 1	48 62 27	2017	Wet	May	--	192.4	190.8	1.6	0.8%	190.6	1.8	0.9%	190.2	2.3	1.2%	189.7	2.7	1.4%	189.2	3.2	1.7%	188.8	3.7	1.9%
ME 1	48 62 27	2017	Wet	June	--	182.7	177.6	5.1	2.8%	176.9	5.8	3.2%	175.4	7.2	3.9%	174.0	8.7	4.7%	172.6	10.0	5.5%	171.2	11.4	6.3%
ME 1	48 62 27	2017	Wet	July	--	55.9	52.8	3.1	5.5%	52.4	3.5	6.3%	51.5	4.3	7.8%	50.7	5.2	9.3%	49.8	6.0	10.8%	49.0	6.9	12.3%
ME 1	48 62 27	2017	Wet	August	--	51.2	48.2	3.0	5.8%	47.8	3.4	6.7%	47.0	4.3	8.3%	46.1	5.1	9.9%	45.3	5.9	11.6%	44.5	6.8	13.2%
ME 1	48 62 27	2017	Wet	September	Used in Summary Table Analysis	46.4	42.7	3.7	8.0%	42.2	4.2	9.1%	41.1	5.3	11.4%	40.1	6.4	13.7%	39.0	7.4	16.0%	38.0	8.5	18.3%
ME 1	48 62 27	2018	Above Normal	October	Used in Summary Table Analysis	53.6	50.8	2.8	5.2%	50.4	3.2	6.0%	49.6	4.0	7.4%	48.8	4.8	9.0%	48.0	5.6	10.5%	47.2	6.4	12.0%
ME 1	48 62 27	2018	Above Normal	November	Used in Summary Table Analysis	7,127.7	7,125.6	2.1	0.0%	7,125.3	2.3	0.0%	7,124.8	2.9	0.0%	7,124.1	3.6	0.1%	7,123.5	4.2	0.1%	7,122.9	4.7	0.1%
ME 1	48 62 27	2018	Above Normal	December	--	613.0	611.4	1.6	0.3%	611.2	1.8	0.3%	610.8	2.3	0.4%	610.3	2.7	0.4%	609.8	3.2	0.5%	609.3	3.7	0.6%
ME 1	48 62 27	2018	Above Normal	January	--	9,033.8	9,032.4	1.4	0.0%	9,032.2	1.6	0.0%	9,031.8	2.0	0.0%	9,031.4	2.4	0.0%	9,030.9	2.9	0.0%	9,030.4	3.4	0.0%
ME 1	48 62 27	2018	Above Normal	February	--	727.0	726.0	1.0	0.1%	725.8	1.2	0.2%	725.5	1.5	0.2%	725.2	1.9	0.3%	724.8	2.2	0.3%	724.5	2.6	0.4%
ME 1	48 62 27	2018	Above Normal	March	--	9,553.8	9,552.8	1.0	0.0%	9,552.7	1.2	0.0%	9,552.4	1.4	0.0%	9,552.1	1.7	0.0%	9,551.7	2.1	0.0%	9,551.5	2.3	0.0%
ME 1	48 62 27	2018	Above Normal	April	--	17,384.3	17,383.1	1.2	0.0%	17,383.1	1.2	0.0%	17,381.9	2.3	0.0%	17,381.9	2.3	0.0%	17,381.9	2.3	0.0%	17,381.9	2.3	0.0%
ME 1	48 62 27	2018	Above Normal	May	--	725.0	720.2	4.8	0.7%	719.5	5.5	0.8%	718.3	6.7	0.9%	716.9	8.1	1.1%	715.7	9.3	1.3%	714.6	10.4	1.4%
ME 1	48 62 27	2018	Above Normal	June	--	64.8	62.1	2.7	4.1%	61.7	3.1	4.7%	61.0	3.8	5.8%	60.3	4.5	6.9%	59.6	5.2	8.0%	58.8	5.9	9.1%
ME 1	48 62 27	2018	Above Normal	July	--	53.8	50.6	3.2	5.9%	50.1	3.6	6.8%	49.2	4.5	8.4%	48.3	5.4	10.1%	47.5	6.3	11.7%	46.6	7.2	13.3%
ME 1	48 62 27	2018	Above Normal	August	--	49.4	46.4	3.0	6.0%	46.0	3.4	6.9%	45.2	4.2	8.6%	44.3	5.1	10.3%	43.5	5.9	12.0%	42.6	6.8	13.7%
ME 1	48 62 27	2018	Above Normal	September	Used in Summary Table Analysis	42.9	39.2	3.7	8.7%	38.6	4.3	10.0%	37.5	5.4	12.5%	36.5	6.4	15.0%	35.4	7.5	17.5%	34.3	8.6	20.1%
ME 1	48 62 27	2019	Below Normal	October	Used in Summary Table Analysis	57.5	54.4	3.0	5.3%	54.0	3.4	6.0%	53.1	4.3	7.6%	52.1	5.3	9.3%	51.4	6.1	10.6%	50.5	7.0	12.1%
ME 1	48 62 27	2019	Below Normal	November	Used in Summary Table Analysis	4,560.6	4,558.6	2.1	0.0%	4,558.2	2.4	0.1%	4,557.5	3.1	0.1%	4,556.9	3.7	0.1%	4,556.3	4.4	0.1%	4,555.7	5.0	0.1%
ME 1	48 62 27	2019	Below Normal	December	--	7,083.3	7,081.6	1.7	0.0%	7,081.3	2.1	0.0%	7,080.8	2.5	0.0%	7,080.2	3.1	0.0%	7,079.7	3.6	0.1%	7,079.2	4.2	0.1%
ME 1	48 62 27	2019	Below Normal	January	--	16,199.1	16,196.8	2.3	0.0%	16,196.8	2.3	0.0%	16,196.8	2.3	0.0%	16,195.6	3.5	0.0%	16,195.6	3.5	0.0%	16,195.6	3.5	0.0%
ME 1	48 62 27	2019	Below Normal	February	--	44,743.1	44,741.9	1.2	0.0%	44,741.9	1.2	0.0%	44,741.9	1.2	0.0%	44,740.7	2.3	0.0%	44,740.7	2.3	0.0%	44,740.7	2.3	0.0%
ME 1	48 62 27	2019	Below Normal	March	--	10,377.0	10,375.8	1.2	0.0%	10,375.7	1.3	0.0%	10,375.3	1.6	0.0%	10,375.0	2.0	0.0%	10,374.7	2.3	0.0%	10,374.3	2.7	0.0%
ME 1	48 62 27	2019	Below Normal	April	--	3,490.0	3,489.1	0.9	0.0%	3,489.0	1.0	0.0%	3,488.8	1.3	0.0%	3,488.5	1.5	0.0%	3,488.2	1.9	0.1%	3,488.0	2.1	0.1%
ME 1	48 62 27	2019	Below Normal	May	--	6,610.0	6,605.1	4.9	0.1%	6,604.4	5.6	0.1%	6,603.0	6.9	0.1%	6,601.6	8.3	0.1%	6,600.1	9.8	0.1%	6,598.7	11.2	0.2%
ME 1	48 62 27	2019	Below Normal	June	--	81.6	78.0	3.7	4.5%	77.4	4.2	5.1%	76.5	5.1	6.3%	75.8	5.8	7.1%	75.1	6.5	8.0%	74.4	7.2	8.9%
ME 1	48 62 27	2019	Below Normal	July	--	64.0	60.8	3.2	5.0%	60.4	3.7	5.7%	59.5	4.5	7.1%	58.6	5.4	8.5%	57.7	6.3	9.9%	56.8	7.2	11.3%
ME 1	48 62 27	2019	Below Normal	August	--	53.9	50.9	2.9	5.5%	50.5	3.4	6.3%	49.7	4.2	7.8%	48.8	5.0	9.4%	48.0	5.9	10.9%	47.1	6.7	12.5%
ME 1	48 62 27	2019	Below Normal	September	Used in Summary Table Analysis	124.6	120.8	3.7	3.0%	120.3	4.3	3.4%	119.2	5.4	4.3%	118.1	6.4	5.2%	117.1	7.5	6.0%	116.0	8.6	6.9%
ME 1	48 62 27	2020	Dry	October	Used in Summary Table Analysis	157.7	155.1	2.6	1.6%	154.8	3.0	1.9%	154.0	3.7	2.4%	153.2	4.5	2.9%	152.5	5.3	3.3%	151.7	6.1	3.8%
ME 1	48 62 27	2020	Dry	November	Used in Summary Table Analysis	85.1	83.5	1.5	1.8%	83.3	1.8	2.1%	82.8	2.2	2.6%	82.4	2.7	3.2%	81.9	3.2	3.7%	81.4	3.7	4.3%
ME 1	48 62 27	2020	Dry	December	--	7,846.3	7,844.7	1.6	0.0%	7,844.4	1.9	0.0%	7,844.0	2.3	0.0%	7,843.4	2.9	0.0%	7,842.9	3.4	0.0%	7,842.5	3.8	0.0%
ME 1	48 62 27	2020	Dry	January	--	8,976.4	8,975.0	1.4	0.0%	8,974.8	1.6	0.0%	8,974.3	2.1	0.0%	8,973.8	2.5	0.0%	8,973.4	3.0	0.0%	8,972.9	3.5	0.0%
ME 1	48 62 27	2020	Dry	February	--	253.9	252.8	1.1	0.4%	252.6	1.3	0.5%	252.3	1.6	0.6%	251.9	2.0	0.8%	251.6	2.4	0.9%	251.3	2.7	1.0%
ME 1	48 62 27	2020	Dry	March	--	2,657.1	2,656.1	0.9	0.0%	2,655.9	1.2	0.0%	2,655.7	1.4	0.1%	2,655.3	1.7	0.1%	2,655.0	2.1	0.1%	2,654.7	2.3	0.1%
ME 1	48 62 27	2020	Dry	April	--	2,150.1	2,144.8	5.3	0.2%	2,144.1	6.0	0.3%	2,142.6	7.5	0.3%	2,141.1	9.0	0.4%	2,139.5	10.6	0.5%	2,138.0	12.2	0.6%
ME 1	48 62 27	2020	Dry	May	--	3,756.1	3,751.6	4.5	0.1%	3,750.9	5.2	0.1%	3,749.7	6.5	0.2%	3,748.3	7.9	0.2%	3,747.0	9.1	0.2%	3,745.7	10.4	0.3%
ME 1	48 62 27	2020	Dry	June	--	91.8	85.5	6.3	6.9%	84.7	7.1	7.8%	83.3	8.6	9.3%	81.8	10.0	10.9%	80.4	11.5	12.5%	78.9	13.0	14.1%
ME 1	48 62 27	2020	Dry	July	--	54.1	50.3	3.8	7.0%	49.8	4.3	8.0%	48.7	5.4	10.0%	47.6	6.5	12.0%	46.5	7.6	14.0%	45.4	8.7	16.0%
ME 1	48 62 27	2020	Dry	August	--	47.0	43.2	3.8	8.1%	42.7	4.3	9.2%	41.6	5.4	11.5%	40.5	6.5	13.8%	39.4	7.6	16.1%	38.4	8.7	18.5%
ME 1	48 62 27	2020	Dry	September	Used in Summary Table Analysis	44.7	41.2	3.4	7.7%	40.7	3.9	8.8%	38.9	5.8	12.9%	37.6	7.1	15.8%	36.1	8.6	19.2%	34.6	10.0	22.4%
ME 1	48 61 28	2000	Above Normal	October	Used in Summary Table Analysis	382.0	379.4	2.6	0.7%	379.0	3.0	0.8%	378.3	3.7	1.0%	377.5	4.5	1.2%	376.7	5.3	1.4%	375.9	6.1	1.6%
ME 1	48 61 28	2000	Above Normal	November	Used in Summary Table Analysis	8,171.5	8,169.3	2.2	0.0%	8,169.1	2.4	0.0%	8,168.5	3.0	0.0%	8,167.8	3.7	0.0%	8,167.2	4.3	0.1%	8,166.7	4.9	0.1%
ME 1	48 61 28	2000	Above Normal	December	--	4,781.5	4,779.9	1.6	0.0%	4,779.6	1.9	0.0%	4,779.2	2.3	0.0%	4,778.6	2.9	0.1%	4,778.1	3.4	0.1%	4,777.5	3.9	0.1%
ME 1	48 61 28	2000	Above Normal	January	--	14,993.1	14,991.9	1.2	0.0%	14,991.9	1.2	0.0%	14,990.7	2.3	0.0%	14,990.7	2.3	0.0%	14,989.6	3.5	0.0%	14,989.6	3.5	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 61 28	2000	Above Normal	February	--	16,317.1	16,316.0	1.2	0.0%	16,316.0	1.2	0.0%	16,314.8	2.3	0.0%	16,314.8	2.3	0.0%	16,314.8	2.3	0.0%	16,313.7	3.5	0.0%
ME 1	48 61 28	2000	Above Normal	March	--	5,745.5	5,744.6	0.9	0.0%	5,744.3	1.2	0.0%	5,744.1	1.4	0.0%	5,743.8	1.7	0.0%	5,743.5	2.0	0.0%	5,743.2	2.3	0.0%
ME 1	48 61 28	2000	Above Normal	April	--	5,376.9	5,376.0	0.8	0.0%	5,375.9	0.9	0.0%	5,375.7	1.2	0.0%	5,375.3	1.5	0.0%	5,375.1	1.7	0.0%	5,374.9	2.0	0.0%
ME 1	48 61 28	2000	Above Normal	May	--	2,761.7	2,757.1	4.6	0.2%	2,756.4	5.3	0.2%	2,755.0	6.7	0.2%	2,753.6	8.1	0.3%	2,752.2	9.5	0.3%	2,750.8	10.9	0.4%
ME 1	48 61 28	2000	Above Normal	June	--	605.1	599.2	5.9	1.0%	598.3	6.8	1.1%	596.6	8.5	1.4%	594.9	10.2	1.7%	593.2	11.9	2.0%	591.5	13.6	2.2%
ME 1	48 61 28	2000	Above Normal	July	--	68.9	65.7	3.2	4.6%	65.2	3.6	5.3%	64.4	4.5	6.6%	63.5	5.4	7.8%	62.7	6.2	9.0%	61.8	7.1	10.3%
ME 1	48 61 28	2000	Above Normal	August	--	55.8	52.8	3.0	5.4%	52.4	3.4	6.1%	51.5	4.3	7.7%	50.7	5.1	9.1%	49.9	5.9	10.6%	49.0	6.8	12.1%
ME 1	48 61 28	2000	Above Normal	September	Used in Summary Table Analysis	49.4	46.8	2.6	5.3%	46.4	3.0	6.1%	45.7	3.8	7.6%	44.9	4.5	9.1%	44.2	5.2	10.6%	43.4	6.0	12.1%
ME 1	48 61 28	2001	Dry	October	Used in Summary Table Analysis	2,777.0	2,774.2	2.8	0.1%	2,773.7	3.2	0.1%	2,773.0	3.9	0.1%	2,772.2	4.7	0.2%	2,771.4	5.6	0.2%	2,770.6	6.4	0.2%
ME 1	48 61 28	2001	Dry	November	Used in Summary Table Analysis	3,317.2	3,315.2	2.1	0.1%	3,314.8	2.4	0.1%	3,314.2	3.0	0.1%	3,313.7	3.6	0.1%	3,313.1	4.2	0.1%	3,312.4	4.9	0.1%
ME 1	48 61 28	2001	Dry	December	--	4,932.4	4,930.7	1.7	0.0%	4,930.4	2.0	0.0%	4,929.9	2.5	0.1%	4,929.4	3.0	0.1%	4,928.9	3.5	0.1%	4,928.4	4.1	0.1%
ME 1	48 61 28	2001	Dry	January	--	6,524.3	6,522.9	1.4	0.0%	6,522.7	1.6	0.0%	6,522.2	2.1	0.0%	6,521.8	2.5	0.0%	6,521.4	2.9	0.0%	6,520.9	3.4	0.1%
ME 1	48 61 28	2001	Dry	February	--	8,614.4	8,613.1	1.3	0.0%	8,613.0	1.4	0.0%	8,612.6	1.7	0.0%	8,612.3	2.1	0.0%	8,611.8	2.5	0.0%	8,611.5	2.9	0.0%
ME 1	48 61 28	2001	Dry	March	--	5,158.2	5,157.2	1.0	0.0%	5,157.1	1.2	0.0%	5,156.7	1.5	0.0%	5,156.4	1.9	0.0%	5,156.1	2.1	0.0%	5,155.8	2.4	0.0%
ME 1	48 61 28	2001	Dry	April	--	5,099.2	5,093.8	5.4	0.1%	5,092.9	6.3	0.1%	5,091.3	7.9	0.2%	5,089.8	9.4	0.2%	5,088.2	11.0	0.2%	5,086.7	12.5	0.2%
ME 1	48 61 28	2001	Dry	May	--	604.4	599.9	4.5	0.7%	599.3	5.1	0.8%	598.0	6.4	1.1%	596.7	7.7	1.3%	595.4	8.9	1.5%	594.1	10.2	1.7%
ME 1	48 61 28	2001	Dry	June	--	1,344.1	1,337.4	6.7	0.5%	1,336.5	7.6	0.6%	1,334.5	9.6	0.7%	1,332.6	11.5	0.9%	1,330.8	13.3	1.0%	1,328.9	15.2	1.1%
ME 1	48 61 28	2001	Dry	July	--	66.6	63.0	3.6	5.5%	62.5	4.1	6.2%	61.5	5.1	7.7%	60.5	6.1	9.2%	59.5	7.2	10.7%	58.4	8.2	12.3%
ME 1	48 61 28	2001	Dry	August	--	53.6	49.8	3.8	7.1%	49.2	4.4	8.1%	48.1	5.5	10.2%	47.1	6.5	12.2%	46.0	7.6	14.2%	44.9	8.7	16.2%
ME 1	48 61 28	2001	Dry	September	Used in Summary Table Analysis	48.1	44.6	3.5	7.2%	44.1	4.0	8.2%	43.1	4.9	10.3%	42.1	5.9	12.4%	41.1	6.9	14.4%	40.1	7.9	16.5%
ME 1	48 61 28	2002	Below Normal	October	Used in Summary Table Analysis	136.6	132.8	3.7	2.7%	132.3	4.2	3.1%	131.2	5.4	3.9%	130.1	6.5	4.7%	129.0	7.5	5.5%	127.9	8.6	6.3%
ME 1	48 61 28	2002	Below Normal	November	Used in Summary Table Analysis	7,283.1	7,280.2	2.9	0.0%	7,279.9	3.2	0.0%	7,279.1	4.1	0.1%	7,278.1	5.0	0.1%	7,277.3	5.8	0.1%	7,276.5	6.6	0.1%
ME 1	48 61 28	2002	Below Normal	December	--	13,884.3	13,881.9	2.3	0.0%	13,880.8	3.5	0.0%	13,880.8	3.5	0.0%	13,879.6	4.6	0.0%	13,878.5	5.8	0.0%	13,878.5	5.8	0.0%
ME 1	48 61 28	2002	Below Normal	January	--	9,677.1	9,675.0	2.1	0.0%	9,674.7	2.4	0.0%	9,674.1	3.0	0.0%	9,673.4	3.7	0.0%	9,672.8	4.3	0.0%	9,672.2	4.9	0.1%
ME 1	48 61 28	2002	Below Normal	February	--	8,397.2	8,395.5	1.7	0.0%	8,395.3	2.0	0.0%	8,394.7	2.5	0.0%	8,394.2	3.0	0.0%	8,393.6	3.6	0.0%	8,393.2	4.1	0.0%
ME 1	48 61 28	2002	Below Normal	March	--	7,261.5	7,260.1	1.4	0.0%	7,259.8	1.6	0.0%	7,259.5	2.0	0.0%	7,259.0	2.4	0.0%	7,258.6	2.9	0.0%	7,258.2	3.2	0.0%
ME 1	48 61 28	2002	Below Normal	April	--	4,287.6	4,282.6	5.0	0.1%	4,281.9	5.7	0.1%	4,280.6	7.1	0.2%	4,279.2	8.4	0.2%	4,277.8	9.8	0.2%	4,276.4	11.2	0.3%
ME 1	48 61 28	2002	Below Normal	May	--	1,141.7	1,137.6	4.1	0.4%	1,137.0	4.6	0.4%	1,135.9	5.8	0.5%	1,134.8	6.9	0.6%	1,133.6	8.1	0.7%	1,132.4	9.3	0.8%
ME 1	48 61 28	2002	Below Normal	June	--	193.9	189.1	4.8	2.5%	188.4	5.4	2.8%	187.1	6.8	3.5%	185.8	8.1	4.2%	184.4	9.4	4.9%	183.1	10.8	5.5%
ME 1	48 61 28	2002	Below Normal	July	--	57.0	53.6	3.4	6.0%	53.1	3.9	6.8%	52.1	4.9	8.5%	51.2	5.8	10.2%	50.2	6.8	11.9%	49.3	7.7	13.6%
ME 1	48 61 28	2002	Below Normal	August	--	51.0	47.7	3.3	6.5%	47.2	3.8	7.4%	46.2	4.7	9.2%	45.3	5.7	11.1%	44.4	6.6	12.9%	43.4	7.5	14.8%
ME 1	48 61 28	2002	Below Normal	September	Used in Summary Table Analysis	47.0	44.0	2.9	6.3%	43.6	3.4	7.2%	42.7	4.2	9.0%	41.9	5.1	10.8%	41.0	5.9	12.6%	40.2	6.8	14.5%
ME 1	48 61 28	2003	Wet	October	Used in Summary Table Analysis	35.3	32.3	3.0	8.6%	31.8	3.5	9.9%	30.9	4.4	12.4%	30.1	5.3	14.9%	29.2	6.2	17.5%	28.2	7.1	20.1%
ME 1	48 61 28	2003	Wet	November	Used in Summary Table Analysis	620.9	618.5	2.4	0.4%	618.2	2.8	0.4%	617.4	3.5	0.6%	616.7	4.2	0.7%	616.1	4.8	0.8%	615.4	5.5	0.9%
ME 1	48 61 28	2003	Wet	December	--	29,795.1	29,792.8	2.3	0.0%	29,792.8	2.3	0.0%	29,792.8	2.3	0.0%	29,791.7	3.5	0.0%	29,791.7	3.5	0.0%	29,790.5	4.6	0.0%
ME 1	48 61 28	2003	Wet	January	--	7,612.6	7,610.9	1.7	0.0%	7,610.6	2.0	0.0%	7,610.1	2.5	0.0%	7,609.6	3.0	0.0%	7,609.1	3.5	0.0%	7,608.6	4.1	0.1%
ME 1	48 61 28	2003	Wet	February	--	5,539.1	5,537.6	1.5	0.0%	5,537.4	1.7	0.0%	5,537.0	2.1	0.0%	5,536.6	2.5	0.0%	5,536.2	2.9	0.1%	5,535.8	3.4	0.1%
ME 1	48 61 28	2003	Wet	March	--	11,079.3	11,078.0	1.3	0.0%	11,077.9	1.4	0.0%	11,077.5	1.7	0.0%	11,077.2	2.1	0.0%	11,076.7	2.5	0.0%	11,076.4	2.9	0.0%
ME 1	48 61 28	2003	Wet	April	--	21,796.3	21,795.1	1.2	0.0%	21,794.0	2.3	0.0%	21,794.0	2.3	0.0%	21,794.0	2.3	0.0%	21,794.0	2.3	0.0%	21,792.8	3.5	0.0%
ME 1	48 61 28	2003	Wet	May	--	2,085.1	2,080.2	4.9	0.2%	2,079.4	5.7	0.3%	2,078.4	6.7	0.3%	2,077.0	8.1	0.4%	2,075.6	9.5	0.5%	2,074.2	10.9	0.5%
ME 1	48 61 28	2003	Wet	June	--	78.6	75.6	3.0	3.9%	75.2	3.4	4.4%	74.4	4.2	5.4%	73.7	5.0	6.3%	73.0	5.7	7.2%	72.2	6.5	8.2%
ME 1	48 61 28	2003	Wet	July	--	63.0	59.7	3.3	5.3%	59.2	3.8	6.0%	58.3	4.7	7.5%	57.3	5.7	9.0%	56.4	6.6	10.5%	55.4	7.6	12.0%
ME 1	48 61 28	2003	Wet	August	--	64.6	60.9	3.7	5.7%	60.3	4.3	6.6%	59.3	5.3	8.2%	58.2	6.4	9.9%	57.1	7.5	11.6%	55.9	8.7	13.5%
ME 1	48 61 28	2003	Wet	September	Used in Summary Table Analysis	49.4	46.7	2.6	5.4%	46.4	3.0	6.1%	45.6	3.8	7.6%	44.9	4.5	9.1%	44.1	5.3	10.6%	43.4	6.0	12.2%
ME 1	48 61 28	2004	Wet	October	Used in Summary Table Analysis	36.7	34.0	2.7	7.3%	33.6	3.0	8.3%	32.9	3.8	10.4%	32.1	4.6	12.5%	31.3	5.3	14.6%	30.5	6.1	16.7%
ME 1	48 61 28	2004	Wet	November	Used in Summary Table Analysis	4,127.8	4,125.7	2.1	0.1%	4,125.3	2.4	0.1%	4,124.7	3.1	0.1%	4,124.1	3.7	0.1%	4,123.4	4.4	0.1%	4,122.8	5.0	0.1%
ME 1	48 61 28	2004	Wet	December	--	18,060.2	18,057.9	2.3	0.0%	18,057.9	2.3	0.0%	18,056.7	3.5	0.0%	18,056.7	3.5	0.0%	18,055.6	4.6	0.0%	18,055.6	4.6	0.0%
ME 1	48 61 28	2004	Wet	January	--	10,221.3	10,219.8	1.5	0.0%	10,219.6	1.7	0.0%	10,219.2	2.1	0.0%	10,218.8	2.5	0.0%	10,218.3	3.0	0.0%	10,217.8	3.5	0.0%
ME 1	48 61 28	2004	Wet	February	--	17,475.7	17,474.5	1.2	0.0%	17,474.5	1.2	0.0%	17,474.5	1.2	0.0%	17,473.4	2.3	0.0%	17,473.4	2.3	0.0%	17,473.4	2.3	0.0%
ME 1	48 61 28	2004	Wet	March	--	4,157.1	4,156.0	1.0	0.0%	4,155.9	1.2	0.0%	4,155.7	1.4	0.0%	4,155.3	1.7	0.0%	4,155.0	2.1	0.1%	4,154.6	2.4	0.1%
ME 1	48 61 28	2004	Wet	April	--	3,542.5	3,541.7	0.8	0.0%	3,541.6	0.9	0.0%	3,541.2	1.3	0.0%	3,541.0	1.5	0.0%	3,540.7	1.7	0.0%	3,540.5	2.0	0.1%
ME 1	48 61 28	2004	Wet	May	--	1,058.6	1,053.8	4.7	0.4%	1,053.1	5.4	0.5%	1,051.8	6.8	0.6%	1,050.4	8.1	0.8%	1,049.1	9.5	0.9%	1,047.7	10.9	1.0%
ME 1	48 61 28	2004	Wet	June	--	68.8	66.3	2.5	3.7%	66.0	2.9	4.2%	65.2	3.6	5.3%	64.5	4.3	6.3%	63.8	5.0	7.3%	63.1	5.8	8.4%
ME 1	48 61 28	2004	Wet	July	--	56.2	53.0	3.2	5.7%	52.5	3.7	6.6%	51.6	4.6	8.2%	50.7	5.5	9.8%	49.8	6.4	11.4%	48.9	7.3	13.0%
ME 1	48 61 28	2004	Wet	August	--	49.7	46.7	3.0	6.1%	46.2	3.5	7.0%	45.4	4.3	8.7%	44.5	5.2	10.5%	43.6	6.1	12.2%	42.8	6.9	13.9%
ME 1	48 61 28	2004	Wet	September	Used in Summary Table Analysis	43.6	39.8	3.8	8.8%	39.2	4.4	10.1%	38.1	5.5	12.6%	37.0	6.6	15.1%	35.9	7.7	17.7%	34.8	8.8	20.3%
ME 1	48 61 28	2005	Above Normal	October	Used in Summary Table Analysis	5,807.1	5,804.2	2.9	0.0%	5,803.7	3.4	0.1%	5,802.9	4.2	0.1%	5,802.1	5.0	0.1%	5,801.3	5.8	0.1%	5,800.3	6.7	0.1%
ME 1	48 61 28	2005	Above Normal	November	Used in Summary Table Analysis	961.9	959.7	2.2	0.2%	959.4	2.5	0.3%	958.7	3.1	0.3%	958.1	3.8	0.4%	957.5	4.4	0.5%	956.9	5.0	0.5%
ME 1	48 61 28	2005	Above Normal	December	--	11,843.8	11,842.6	1.2	0.0%	11,842.6	1.2	0.0%	11,841.4	2.3	0.0%	11,841.4	2.3	0.0%	11,840.3	3.5	0.0%	11,840.3	3.5	0.0%
ME 1	48 61 28	2005	Above Normal	January	--	8,378.1	8,376.6	1.5	0.0%	8,376.4	1.7	0.0%	8,375.9	2.2	0.0%	8,375.5	2.7	0.0%	8,375.0	3.1	0.0%	8,374.5	3.6	0.0%
ME 1	48 61 28	2005	Above Normal	February	--	4,637.8	4,636.7	1.2	0.0%	4,636.5	1.4	0.0%	4,636.1	1.7	0.0%	4,635.8	2.1	0.0%	4,635.4	2.4	0.1%	4,635.1	2.8	0.1%
ME 1	48 61 28	2005	Above Normal	March	--	14,233.8	14,232.6	1.2	0.0%	14,232.6	1.2	0.0%	14,232.6	1.2	0.0%	14,231.5	2.3	0.0%	14,231.5	2.3	0.0%	14,231.5	2.3	0.0%
ME 1	48 61 28	2005	Above Normal	April	--	9,202.3	9,201.4	0.9	0.0%	9,201.3	1.0	0.0%	9,200.9	1.4	0.0%	9,200.7	1.6	0.0%	9,200.3	2.0	0.0%	9,200.1	2.2	0.0%
ME 1	48 61 28	2005	Above Normal	May	--	8,498.4	8,493.3	5.1	0.1%	8,492.6	5.8	0.1%	8,491.1	7.3	0.1%	8,489.7	8.7	0.1%	8,488.2	10.2	0.1%	8,486.8	11.6	0.1%

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							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 61 28	2005	Above Normal	June	--	6,358.1	6,351.9	6.3	0.1%	6,350.9	7.2	0.1%	6,349.2	8.9	0.1%	6,347.5	10.6	0.2%	6,345.6	12.5	0.2%	6,344.0	14.1	0.2%
ME 1	48 61 28	2005	Above Normal	July	--	91.3	87.3	4.0	4.3%	86.8	4.5	4.9%	85.7	5.6	6.1%	84.6	6.7	7.4%	83.5	7.8	8.5%	82.4	8.9	9.7%
ME 1	48 61 28	2005	Above Normal	August	--	65.2	62.2	3.0	4.6%	61.8	3.4	5.2%	61.0	4.3	6.6%	60.1	5.1	7.9%	59.3	6.0	9.2%	58.4	6.8	10.4%
ME 1	48 61 28	2005	Above Normal	September	Used in Summary Table Analysis	55.4	52.8	2.6	4.7%	52.4	3.0	5.4%	51.6	3.7	6.8%	50.9	4.5	8.1%	50.2	5.2	9.5%	49.4	6.0	10.8%
ME 1	48 61 28	2006	Wet	October	Used in Summary Table Analysis	248.9	246.2	2.7	1.1%	245.8	3.1	1.2%	245.1	3.9	1.6%	244.3	4.7	1.9%	243.5	5.4	2.2%	242.7	6.2	2.5%
ME 1	48 61 28	2006	Wet	November	Used in Summary Table Analysis	6,511.1	6,509.1	2.0	0.0%	6,508.8	2.3	0.0%	6,508.2	2.9	0.0%	6,507.6	3.5	0.1%	6,507.1	4.1	0.1%	6,506.5	4.6	0.1%
ME 1	48 61 28	2006	Wet	December	--	20,006.9	20,004.6	2.3	0.0%	20,004.6	2.3	0.0%	20,003.5	3.5	0.0%	20,003.5	3.5	0.0%	20,002.3	4.6	0.0%	20,002.3	4.6	0.0%
ME 1	48 61 28	2006	Wet	January	--	16,886.6	16,885.4	1.2	0.0%	16,884.3	2.3	0.0%	16,884.3	2.3	0.0%	16,884.3	2.3	0.0%	16,883.1	3.5	0.0%	16,883.1	3.5	0.0%
ME 1	48 61 28	2006	Wet	February	--	9,316.0	9,314.7	1.3	0.0%	9,314.6	1.4	0.0%	9,314.2	1.7	0.0%	9,313.9	2.1	0.0%	9,313.5	2.4	0.0%	9,313.2	2.8	0.0%
ME 1	48 61 28	2006	Wet	March	--	23,204.9	23,203.7	1.2	0.0%	23,202.5	2.3	0.0%	23,202.5	2.3	0.0%	23,202.5	2.3	0.0%	23,202.5	2.3	0.0%	23,201.4	3.5	0.0%
ME 1	48 61 28	2006	Wet	April	--	11,477.3	11,476.4	0.9	0.0%	11,476.3	1.0	0.0%	11,476.0	1.3	0.0%	11,475.8	1.5	0.0%	11,475.6	1.7	0.0%	11,475.2	2.1	0.0%
ME 1	48 61 28	2006	Wet	May	--	4,638.8	4,637.2	1.6	0.0%	4,636.9	1.9	0.0%	4,636.5	2.3	0.0%	4,636.0	2.8	0.1%	4,635.4	3.4	0.1%	4,635.0	3.8	0.1%
ME 1	48 61 28	2006	Wet	June	--	562.5	557.2	5.3	0.9%	556.4	6.1	1.1%	555.0	7.5	1.3%	553.5	9.0	1.6%	552.1	10.4	1.8%	550.6	11.9	2.1%
ME 1	48 61 28	2006	Wet	July	--	75.1	71.9	3.2	4.3%	71.4	3.6	4.9%	70.6	4.5	6.0%	69.7	5.4	7.2%	68.8	6.3	8.3%	68.0	7.1	9.5%
ME 1	48 61 28	2006	Wet	August	--	61.1	58.0	3.1	5.0%	57.6	3.5	5.7%	56.7	4.3	7.1%	55.9	5.2	8.5%	55.0	6.0	9.9%	54.2	6.9	11.2%
ME 1	48 61 28	2006	Wet	September	Used in Summary Table Analysis	53.7	51.1	2.6	4.9%	50.7	3.0	5.6%	50.0	3.7	6.9%	49.2	4.4	8.3%	48.5	5.2	9.6%	47.8	5.9	11.0%
ME 1	48 61 28	2007	Above Normal	October	Used in Summary Table Analysis	44.4	41.7	2.6	5.9%	41.4	3.0	6.8%	40.6	3.8	8.5%	39.8	4.5	10.2%	39.1	5.3	11.9%	38.3	6.1	13.7%
ME 1	48 61 28	2007	Above Normal	November	Used in Summary Table Analysis	5,895.4	5,893.2	2.2	0.0%	5,892.8	2.5	0.0%	5,892.2	3.1	0.1%	5,891.6	3.8	0.1%	5,890.9	4.5	0.1%	5,890.3	5.1	0.1%
ME 1	48 61 28	2007	Above Normal	December	--	10,887.2	10,885.2	2.0	0.0%	10,885.0	2.2	0.0%	10,884.4	2.8	0.0%	10,883.8	3.4	0.0%	10,883.1	4.1	0.0%	10,882.5	4.6	0.0%
ME 1	48 61 28	2007	Above Normal	January	--	2,469.3	2,467.8	1.5	0.1%	2,467.6	1.7	0.1%	2,467.2	2.1	0.1%	2,466.8	2.5	0.1%	2,466.3	3.0	0.1%	2,465.9	3.5	0.1%
ME 1	48 61 28	2007	Above Normal	February	--	17,635.4	17,634.3	1.2	0.0%	17,633.1	2.3	0.0%	17,633.1	2.3	0.0%	17,633.1	2.3	0.0%	17,631.9	3.5	0.0%	17,631.9	3.5	0.0%
ME 1	48 61 28	2007	Above Normal	March	--	5,055.1	5,053.9	1.2	0.0%	5,053.8	1.3	0.0%	5,053.6	1.5	0.0%	5,053.2	1.9	0.0%	5,052.9	2.2	0.0%	5,052.5	2.5	0.1%
ME 1	48 61 28	2007	Above Normal	April	--	6,495.5	6,490.7	4.7	0.1%	6,490.0	5.4	0.1%	6,488.7	6.8	0.1%	6,487.4	8.1	0.1%	6,486.0	9.5	0.1%	6,484.6	10.9	0.2%
ME 1	48 61 28	2007	Above Normal	May	--	1,269.0	1,265.2	3.8	0.3%	1,264.7	4.3	0.3%	1,263.5	5.4	0.4%	1,262.5	6.5	0.5%	1,261.3	7.6	0.6%	1,260.2	8.8	0.7%
ME 1	48 61 28	2007	Above Normal	June	--	459.3	453.6	5.6	1.2%	452.8	6.4	1.4%	451.3	8.0	1.7%	449.7	9.6	2.1%	448.1	11.2	2.4%	446.6	12.7	2.8%
ME 1	48 61 28	2007	Above Normal	July	--	107.6	103.5	4.1	3.8%	102.9	4.7	4.3%	101.8	5.8	5.4%	100.6	7.0	6.5%	99.5	8.1	7.5%	98.4	9.2	8.6%
ME 1	48 61 28	2007	Above Normal	August	--	53.9	50.8	3.2	5.9%	50.3	3.6	6.7%	49.4	4.5	8.3%	48.5	5.4	10.0%	47.7	6.3	11.6%	46.8	7.1	13.2%
ME 1	48 61 28	2007	Above Normal	September	Used in Summary Table Analysis	49.0	46.2	2.8	5.8%	45.8	3.2	6.6%	45.0	4.1	8.3%	44.2	4.9	9.9%	43.3	5.7	11.6%	42.5	6.5	13.3%
ME 1	48 61 28	2008	Dry	October	Used in Summary Table Analysis	2,923.5	2,920.5	3.0	0.1%	2,920.0	3.5	0.1%	2,919.2	4.3	0.1%	2,918.3	5.2	0.2%	2,917.5	6.0	0.2%	2,916.6	6.9	0.2%
ME 1	48 61 28	2008	Dry	November	Used in Summary Table Analysis	2,159.6	2,157.4	2.2	0.1%	2,157.1	2.5	0.1%	2,156.5	3.1	0.1%	2,155.8	3.8	0.2%	2,155.1	4.5	0.2%	2,154.5	5.1	0.2%
ME 1	48 61 28	2008	Dry	December	--	14,219.9	14,217.6	2.3	0.0%	14,217.6	2.3	0.0%	14,217.6	2.3	0.0%	14,216.4	3.5	0.0%	14,215.3	4.6	0.0%	14,215.3	4.6	0.0%
ME 1	48 61 28	2008	Dry	January	--	15,909.7	15,908.6	1.2	0.0%	15,907.4	2.3	0.0%	15,907.4	2.3	0.0%	15,907.4	2.3	0.0%	15,906.3	3.5	0.0%	15,906.3	3.5	0.0%
ME 1	48 61 28	2008	Dry	February	--	6,502.7	6,501.4	1.3	0.0%	6,501.2	1.5	0.0%	6,500.8	1.9	0.0%	6,500.5	2.2	0.0%	6,500.0	2.7	0.0%	6,499.7	3.0	0.0%
ME 1	48 61 28	2008	Dry	March	--	3,171.1	3,170.0	1.0	0.0%	3,169.9	1.2	0.0%	3,169.6	1.5	0.0%	3,169.2	1.9	0.1%	3,168.9	2.2	0.1%	3,168.6	2.4	0.1%
ME 1	48 61 28	2008	Dry	April	--	4,326.6	4,321.2	5.4	0.1%	4,320.4	6.3	0.1%	4,318.9	7.8	0.2%	4,317.2	9.4	0.2%	4,315.7	10.9	0.3%	4,314.1	12.5	0.3%
ME 1	48 61 28	2008	Dry	May	--	75.4	72.7	2.7	3.6%	72.3	3.1	4.2%	71.5	3.9	5.2%	70.8	4.6	6.1%	70.2	5.2	6.9%	69.7	5.7	7.6%
ME 1	48 61 28	2008	Dry	June	--	76.0	70.2	5.8	7.6%	69.4	6.6	8.7%	67.8	8.2	10.8%	66.2	9.8	12.9%	64.5	11.4	15.0%	62.9	13.0	17.2%
ME 1	48 61 28	2008	Dry	July	--	48.4	44.3	4.1	8.4%	43.8	4.6	9.6%	42.6	5.8	12.0%	41.5	6.9	14.3%	40.3	8.1	16.7%	39.2	9.2	19.0%
ME 1	48 61 28	2008	Dry	August	--	45.0	41.0	4.0	8.8%	40.5	4.5	10.1%	39.3	5.7	12.6%	38.2	6.8	15.1%	37.1	7.9	17.6%	35.9	9.1	20.1%
ME 1	48 61 28	2008	Dry	September	Used in Summary Table Analysis	33.8	28.8	5.0	14.8%	28.1	5.7	16.9%	26.6	7.1	21.1%	25.2	8.6	25.4%	23.8	10.0	29.6%	22.3	11.4	33.9%
ME 1	48 61 28	2009	Critical	October	Used in Summary Table Analysis	652.6	648.8	3.8	0.6%	648.2	4.4	0.7%	647.1	5.5	0.8%	646.0	6.6	1.0%	645.1	7.5	1.1%	644.0	8.6	1.3%
ME 1	48 61 28	2009	Critical	November	Used in Summary Table Analysis	3,874.8	3,872.0	2.8	0.1%	3,871.5	3.2	0.1%	3,870.7	4.1	0.1%	3,869.9	4.9	0.1%	3,869.2	5.6	0.1%	3,868.4	6.4	0.2%
ME 1	48 61 28	2009	Critical	December	--	7,184.4	7,181.9	2.4	0.0%	7,181.6	2.8	0.0%	7,180.8	3.6	0.0%	7,180.0	4.4	0.1%	7,179.3	5.1	0.1%	7,178.7	5.7	0.1%
ME 1	48 61 28	2009	Critical	January	--	4,435.0	4,433.0	2.0	0.0%	4,432.8	2.2	0.0%	4,432.2	2.8	0.1%	4,431.6	3.4	0.1%	4,431.0	3.9	0.1%	4,430.4	4.5	0.1%
ME 1	48 61 28	2009	Critical	February	--	13,541.7	13,539.4	2.3	0.0%	13,539.4	2.3	0.0%	13,539.4	2.3	0.0%	13,538.2	3.5	0.0%	13,538.2	3.5	0.0%	13,538.2	3.5	0.0%
ME 1	48 61 28	2009	Critical	March	--	11,012.7	11,011.3	1.4	0.0%	11,011.1	1.6	0.0%	11,010.8	2.0	0.0%	11,010.3	2.4	0.0%	11,010.0	2.8	0.0%	11,009.5	3.2	0.0%
ME 1	48 61 28	2009	Critical	April	--	4,801.4	4,795.8	5.6	0.1%	4,795.0	6.4	0.1%	4,793.4	8.0	0.2%	4,791.8	9.6	0.2%	4,790.2	11.2	0.2%	4,788.5	12.8	0.3%
ME 1	48 61 28	2009	Critical	May	--	10,363.4	10,358.2	5.2	0.1%	10,357.5	5.9	0.1%	10,356.1	7.3	0.1%	10,354.7	8.7	0.1%	10,352.9	10.5	0.1%	10,351.5	11.9	0.1%
ME 1	48 61 28	2009	Critical	June	--	336.7	329.9	6.7	2.0%	329.0	7.7	2.3%	327.0	9.7	2.9%	325.0	11.6	3.5%	323.1	13.6	4.0%	321.1	15.5	4.6%
ME 1	48 61 28	2009	Critical	July	--	68.7	64.5	4.1	6.0%	64.0	4.7	6.9%	62.8	5.8	8.5%	61.8	6.9	10.1%	60.6	8.0	11.7%	59.6	9.1	13.3%
ME 1	48 61 28	2009	Critical	August	--	54.8	50.8	4.0	7.2%	50.3	4.5	8.2%	49.1	5.6	10.3%	48.0	6.7	12.3%	46.9	7.9	14.3%	45.8	9.0	16.4%
ME 1	48 61 28	2009	Critical	September	Used in Summary Table Analysis	48.8	45.3	3.5	7.2%	44.7	4.0	8.2%	43.7	5.0	10.3%	42.7	6.0	12.3%	41.7	7.0	14.4%	40.7	8.0	16.5%
ME 1	48 61 28	2010	Below Normal	October	Used in Summary Table Analysis	5,090.3	5,086.7	3.6	0.1%	5,086.2	4.1	0.1%	5,085.2	5.1	0.1%	5,084.1	6.1	0.1%	5,083.2	7.1	0.1%	5,082.1	8.2	0.2%
ME 1	48 61 28	2010	Below Normal	November	Used in Summary Table Analysis	6,068.9	6,066.1	2.8	0.0%	6,065.6	3.2	0.1%	6,064.8	4.1	0.1%	6,064.0	4.9	0.1%	6,063.2	5.7	0.1%	6,062.4	6.5	0.1%
ME 1	48 61 28	2010	Below Normal	December	--	6,273.8	6,271.5	2.3	0.0%	6,271.2	2.7	0.0%	6,270.5	3.4	0.1%	6,269.8	4.1	0.1%	6,269.1	4.7	0.1%	6,268.4	5.4	0.1%
ME 1	48 61 28	2010	Below Normal	January	--	18,039.4	18,038.2	1.2	0.0%	18,038.2	1.2	0.0%	18,037.0	2.3	0.0%	18,037.0	2.3	0.0%	18,035.9	3.5	0.0%	18,035.9	3.5	0.0%
ME 1	48 61 28	2010	Below Normal	February	--	11,623.8	11,621.5	2.3	0.0%	11,621.5	2.3	0.0%	11,621.5	2.3	0.0%	11,620.4	3.5	0.0%	11,620.4	3.5	0.0%	11,620.4	3.5	0.0%
ME 1	48 61 28	2010	Below Normal	March	--	15,967.6	15,966.4	1.2	0.0%	15,966.4	1.2	0.0%	15,965.3	2.3	0.0%	15,965.3	2.3	0.0%	15,965.3	2.3	0.0%	15,964.1	3.5	0.0%
ME 1	48 61 28	2010	Below Normal	April	--	22,789.4	22,788.2	1.2	0.0%	22,788.2	1.2	0.0%	22,787.0	2.3	0.0%	22,787.0	2.3	0.0%	22,787.0	2.3	0.0%	22,785.9	3.5	0.0%
ME 1	48 61 28	2010	Below Normal	May	--	6,408.3	6,403.2	5.1	0.1%	6,402.4	5.9	0.1%	6,400.9	7.4	0.1%	6,399.4	8.9	0.1%	6,397.9	10.4	0.2%	6,396.3	12.0	0.2%
ME 1	48 61 28	2010	Below Normal	June	--	3,612.6	3,606.1	6.5	0.2%	3,605.2	7.4	0.2%	3,603.4	9.3	0.3%	3,601.6	11.0	0.3%	3,599.9	12.7	0.4%	3,598.1	14.5	0.4%
ME 1	48 61 28	2010	Below Normal	July	--	88.2	84.3	3.8	4.4%	83.7	4.4	5.0%	82.6	5.5	6.3%	81.5	6.7	7.5%	80.4	7.8	8.8%	79.5	8.7	9.8%
ME 1	48 61 28	2010	Below Normal	August	--	66.8	63.7	3.2	4.7%	63.2	3.6	5.4%	62.3	4.5	6.8%	61.4	5.4	8.1%	60.5	6.3	9.4%	59.6	7.2	10.8%
ME 1	48 61 28	2010	Below Normal	September	Used in Summary Table Analysis	320.7	316.6	4.1	1.3%	316.0	4.7	1.5%	314.8	5.8	1.8%	313.7	7.0	2.2%	312.5	8.1	2.5%	311.3	9.3	2.9%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 61 28	2011	Wet	October	Used in Summary Table Analysis	7,138.7	7,135.9	2.8	0.0%	7,135.5	3.1	0.0%	7,134.7	3.9	0.1%	7,134.0	4.6	0.1%	7,133.2	5.4	0.1%	7,132.4	6.3	0.1%
ME 1	48 61 28	2011	Wet	November	Used in Summary Table Analysis	6,155.2	6,153.0	2.2	0.0%	6,152.8	2.4	0.0%	6,152.1	3.1	0.1%	6,151.5	3.7	0.1%	6,150.8	4.4	0.1%	6,150.2	5.0	0.1%
ME 1	48 61 28	2011	Wet	December	--	17,456.0	17,454.9	1.2	0.0%	17,454.9	1.2	0.0%	17,453.7	2.3	0.0%	17,453.7	2.3	0.0%	17,452.5	3.5	0.0%	17,452.5	3.5	0.0%
ME 1	48 61 28	2011	Wet	January	--	3,461.1	3,460.0	1.2	0.0%	3,459.7	1.4	0.0%	3,459.3	1.9	0.1%	3,458.9	2.2	0.1%	3,458.4	2.7	0.1%	3,458.0	3.1	0.1%
ME 1	48 61 28	2011	Wet	February	--	10,692.9	10,691.6	1.4	0.0%	10,691.4	1.5	0.0%	10,691.1	1.9	0.0%	10,690.7	2.2	0.0%	10,690.3	2.7	0.0%	10,689.9	3.0	0.0%
ME 1	48 61 28	2011	Wet	March	--	28,608.8	28,607.6	1.2	0.0%	28,607.6	1.2	0.0%	28,607.6	1.2	0.0%	28,607.6	1.2	0.0%	28,606.5	2.3	0.0%	28,606.5	2.3	0.0%
ME 1	48 61 28	2011	Wet	April	--	11,049.4	11,048.5	0.9	0.0%	11,048.4	1.0	0.0%	11,048.0	1.4	0.0%	11,047.8	1.6	0.0%	11,047.5	2.0	0.0%	11,047.2	2.2	0.0%
ME 1	48 61 28	2011	Wet	May	--	4,800.1	4,795.4	4.7	0.1%	4,794.7	5.4	0.1%	4,793.3	6.8	0.1%	4,791.9	8.2	0.2%	4,790.5	9.6	0.2%	4,789.1	11.0	0.2%
ME 1	48 61 28	2011	Wet	June	--	3,130.9	3,124.5	6.4	0.2%	3,123.7	7.2	0.2%	3,121.9	9.0	0.3%	3,120.1	10.8	0.3%	3,118.4	12.5	0.4%	3,116.7	14.2	0.5%
ME 1	48 61 28	2011	Wet	July	--	215.0	209.5	5.5	2.6%	208.8	6.3	2.9%	207.2	7.8	3.6%	205.7	9.4	4.4%	204.1	10.9	5.1%	202.6	12.5	5.8%
ME 1	48 61 28	2011	Wet	August	--	65.6	62.6	3.0	4.6%	62.1	3.4	5.2%	61.3	4.3	6.5%	60.4	5.1	7.8%	59.6	6.0	9.1%	58.8	6.8	10.4%
ME 1	48 61 28	2011	Wet	September	Used in Summary Table Analysis	55.3	52.7	2.6	4.7%	52.3	3.0	5.4%	51.6	3.7	6.7%	50.9	4.4	8.0%	50.1	5.2	9.4%	49.4	5.9	10.7%
ME 1	48 61 28	2012	Below Normal	October	Used in Summary Table Analysis	3,523.8	3,521.3	2.5	0.1%	3,520.8	3.0	0.1%	3,520.1	3.7	0.1%	3,519.4	4.4	0.1%	3,518.6	5.2	0.1%	3,517.8	6.0	0.2%
ME 1	48 61 28	2012	Below Normal	November	Used in Summary Table Analysis	4,810.8	4,808.7	2.1	0.0%	4,808.3	2.4	0.1%	4,807.8	3.0	0.1%	4,807.2	3.6	0.1%	4,806.5	4.3	0.1%	4,805.9	4.9	0.1%
ME 1	48 61 28	2012	Below Normal	December	--	1,955.9	1,954.3	1.6	0.1%	1,954.1	1.9	0.1%	1,953.6	2.3	0.1%	1,953.0	2.9	0.1%	1,952.5	3.4	0.2%	1,952.0	3.9	0.2%
ME 1	48 61 28	2012	Below Normal	January	--	11,418.8	11,417.4	1.4	0.0%	11,417.1	1.6	0.0%	11,416.8	2.0	0.0%	11,416.3	2.4	0.0%	11,415.9	2.9	0.0%	11,415.4	3.4	0.0%
ME 1	48 61 28	2012	Below Normal	February	--	6,648.4	6,647.2	1.2	0.0%	6,647.0	1.4	0.0%	6,646.6	1.7	0.0%	6,646.3	2.1	0.0%	6,645.9	2.4	0.0%	6,645.6	2.8	0.0%
ME 1	48 61 28	2012	Below Normal	March	--	25,101.9	25,100.7	1.2	0.0%	25,100.7	1.2	0.0%	25,100.7	1.2	0.0%	25,099.5	2.3	0.0%	25,099.5	2.3	0.0%	25,099.5	2.3	0.0%
ME 1	48 61 28	2012	Below Normal	April	--	12,497.7	12,496.5	1.2	0.0%	12,496.5	1.2	0.0%	12,496.5	1.2	0.0%	12,495.4	2.3	0.0%	12,495.4	2.3	0.0%	12,495.4	2.3	0.0%
ME 1	48 61 28	2012	Below Normal	May	--	2,045.4	2,040.5	4.9	0.2%	2,039.8	5.6	0.3%	2,038.4	6.9	0.3%	2,036.9	8.4	0.4%	2,035.5	9.8	0.5%	2,034.1	11.2	0.5%
ME 1	48 61 28	2012	Below Normal	June	--	3,034.1	3,027.8	6.4	0.2%	3,026.9	7.3	0.2%	3,025.1	9.0	0.3%	3,023.4	10.8	0.4%	3,021.6	12.5	0.4%	3,019.8	14.4	0.5%
ME 1	48 61 28	2012	Below Normal	July	--	1,081.3	1,075.7	5.6	0.5%	1,075.0	6.4	0.6%	1,073.4	8.0	0.7%	1,071.8	9.5	0.9%	1,070.2	11.1	1.0%	1,068.6	12.7	1.2%
ME 1	48 61 28	2012	Below Normal	August	--	72.2	69.3	2.9	4.1%	68.9	3.3	4.6%	68.1	4.2	5.8%	67.2	5.0	6.9%	66.4	5.8	8.1%	65.6	6.7	9.2%
ME 1	48 61 28	2012	Below Normal	September	Used in Summary Table Analysis	59.1	56.4	2.7	4.5%	56.0	3.0	5.2%	55.3	3.8	6.4%	54.6	4.5	7.6%	53.8	5.2	8.9%	53.1	6.0	10.1%
ME 1	48 61 28	2013	Below Normal	October	Used in Summary Table Analysis	1,481.0	1,478.1	2.9	0.2%	1,477.8	3.2	0.2%	1,476.9	4.2	0.3%	1,476.0	5.0	0.3%	1,475.2	5.8	0.4%	1,474.4	6.6	0.4%
ME 1	48 61 28	2013	Below Normal	November	Used in Summary Table Analysis	9,471.1	9,468.9	2.2	0.0%	9,468.5	2.5	0.0%	9,467.9	3.1	0.0%	9,467.2	3.8	0.0%	9,466.6	4.5	0.0%	9,466.0	5.1	0.1%
ME 1	48 61 28	2013	Below Normal	December	--	32,061.3	32,059.0	2.3	0.0%	32,059.0	2.3	0.0%	32,059.0	2.3	0.0%	32,057.9	3.5	0.0%	32,056.7	4.6	0.0%	32,056.7	4.6	0.0%
ME 1	48 61 28	2013	Below Normal	January	--	4,815.9	4,814.5	1.4	0.0%	4,814.2	1.6	0.0%	4,813.8	2.1	0.0%	4,813.3	2.5	0.1%	4,812.8	3.0	0.1%	4,812.4	3.5	0.1%
ME 1	48 61 28	2013	Below Normal	February	--	3,064.5	3,063.1	1.4	0.0%	3,063.0	1.5	0.0%	3,062.5	2.0	0.1%	3,062.2	2.3	0.1%	3,061.8	2.7	0.1%	3,061.3	3.1	0.1%
ME 1	48 61 28	2013	Below Normal	March	--	5,628.8	5,627.8	1.0	0.0%	5,627.5	1.3	0.0%	5,627.2	1.6	0.0%	5,627.0	1.9	0.0%	5,626.6	2.2	0.0%	5,626.3	2.5	0.0%
ME 1	48 61 28	2013	Below Normal	April	--	4,390.7	4,386.1	4.6	0.1%	4,385.4	5.3	0.1%	4,384.1	6.6	0.2%	4,382.8	8.0	0.2%	4,381.5	9.3	0.2%	4,380.1	10.6	0.2%
ME 1	48 61 28	2013	Below Normal	May	--	2,269.2	2,265.3	3.9	0.2%	2,264.8	4.4	0.2%	2,263.7	5.6	0.2%	2,262.5	6.7	0.3%	2,261.5	7.8	0.3%	2,260.3	8.9	0.4%
ME 1	48 61 28	2013	Below Normal	June	--	1,010.5	1,005.0	5.6	0.6%	1,004.2	6.4	0.6%	1,002.6	8.0	0.8%	1,001.0	9.6	0.9%	999.4	11.1	1.1%	997.8	12.7	1.3%
ME 1	48 61 28	2013	Below Normal	July	--	68.2	64.9	3.3	4.8%	64.5	3.7	5.5%	63.6	4.6	6.7%	62.7	5.5	8.1%	61.8	6.4	9.4%	60.9	7.3	10.6%
ME 1	48 61 28	2013	Below Normal	August	--	55.5	52.3	3.2	5.7%	51.9	3.6	6.5%	51.0	4.5	8.1%	50.0	5.4	9.8%	49.1	6.3	11.4%	48.2	7.2	13.0%
ME 1	48 61 28	2013	Below Normal	September	Used in Summary Table Analysis	3,826.7	3,822.3	4.4	0.1%	3,821.6	5.1	0.1%	3,820.4	6.4	0.2%	3,819.1	7.6	0.2%	3,817.8	8.9	0.2%	3,816.6	10.2	0.3%
ME 1	48 61 28	2014	Critical	October	Used in Summary Table Analysis	88.9	86.1	2.8	3.2%	85.7	3.2	3.6%	84.8	4.1	4.6%	84.0	4.9	5.5%	83.2	5.8	6.5%	82.3	6.6	7.4%
ME 1	48 61 28	2014	Critical	November	Used in Summary Table Analysis	1,146.9	1,144.7	2.2	0.2%	1,144.3	2.6	0.2%	1,143.7	3.2	0.3%	1,143.0	3.9	0.3%	1,142.3	4.5	0.4%	1,141.7	5.2	0.5%
ME 1	48 61 28	2014	Critical	December	--	916.0	914.2	1.8	0.2%	914.0	2.0	0.2%	913.4	2.6	0.3%	912.9	3.1	0.3%	912.4	3.6	0.4%	911.9	4.2	0.5%
ME 1	48 61 28	2014	Critical	January	--	1,813.8	1,812.3	1.5	0.1%	1,812.0	1.7	0.1%	1,811.6	2.2	0.1%	1,811.2	2.5	0.1%	1,810.8	3.0	0.2%	1,810.3	3.5	0.2%
ME 1	48 61 28	2014	Critical	February	--	9,864.4	9,863.0	1.4	0.0%	9,862.7	1.6	0.0%	9,862.4	2.0	0.0%	9,862.0	2.3	0.0%	9,861.7	2.7	0.0%	9,861.2	3.1	0.0%
ME 1	48 61 28	2014	Critical	March	--	14,825.2	14,824.1	1.2	0.0%	14,822.9	2.3	0.0%	14,822.9	2.3	0.0%	14,822.9	2.3	0.0%	14,822.9	2.3	0.0%	14,821.8	3.5	0.0%
ME 1	48 61 28	2014	Critical	April	--	3,624.4	3,619.0	5.4	0.2%	3,618.2	6.3	0.2%	3,616.8	7.6	0.2%	3,615.3	9.1	0.3%	3,613.7	10.8	0.3%	3,612.0	12.4	0.3%
ME 1	48 61 28	2014	Critical	May	--	1,849.9	1,845.3	4.6	0.3%	1,844.7	5.2	0.3%	1,843.3	6.6	0.4%	1,842.0	7.9	0.4%	1,840.6	9.3	0.5%	1,839.4	10.5	0.6%
ME 1	48 61 28	2014	Critical	June	--	120.8	114.1	6.7	5.5%	113.2	7.6	6.3%	111.3	9.5	7.9%	109.4	11.4	9.4%	107.6	13.3	11.0%	105.7	15.1	12.5%
ME 1	48 61 28	2014	Critical	July	--	57.3	53.4	3.9	6.9%	52.8	4.5	7.8%	51.7	5.6	9.8%	50.6	6.7	11.7%	49.5	7.8	13.6%	48.4	8.9	15.6%
ME 1	48 61 28	2014	Critical	August	--	50.1	46.2	3.9	7.8%	45.6	4.5	8.9%	44.5	5.6	11.1%	43.4	6.7	13.4%	42.3	7.8	15.6%	41.2	8.9	17.8%
ME 1	48 61 28	2014	Critical	September	Used in Summary Table Analysis	2,100.0	2,094.6	5.4	0.3%	2,093.8	6.3	0.3%	2,092.4	7.6	0.4%	2,090.7	9.3	0.4%	2,089.2	10.8	0.5%	2,087.6	12.4	0.6%
ME 1	48 61 28	2015	Dry	October	Used in Summary Table Analysis	8,240.5	8,236.2	4.3	0.1%	8,235.5	5.0	0.1%	8,234.6	5.9	0.1%	8,233.3	7.2	0.1%	8,232.4	8.1	0.1%	8,231.0	9.5	0.1%
ME 1	48 61 28	2015	Dry	November	Used in Summary Table Analysis	4,155.9	4,153.0	2.9	0.1%	4,152.7	3.2	0.1%	4,151.9	4.1	0.1%	4,151.0	4.9	0.1%	4,150.2	5.7	0.1%	4,149.4	6.5	0.2%
ME 1	48 61 28	2015	Dry	December	--	15,250.0	15,247.7	2.3	0.0%	15,247.7	2.3	0.0%	15,246.5	3.5	0.0%	15,245.4	4.6	0.0%	15,245.4	4.6	0.0%	15,244.2	5.8	0.0%
ME 1	48 61 28	2015	Dry	January	--	2,397.3	2,395.5	1.9	0.1%	2,395.3	2.1	0.1%	2,394.8	2.5	0.1%	2,394.2	3.1	0.1%	2,393.6	3.7	0.2%	2,393.2	4.2	0.2%
ME 1	48 61 28	2015	Dry	February	--	15,054.4	15,053.2	1.2	0.0%	15,053.2	1.2	0.0%	15,052.1	2.3	0.0%	15,052.1	2.3	0.0%	15,050.9	3.5	0.0%	15,050.9	3.5	0.0%
ME 1	48 61 28	2015	Dry	March	--	4,137.6	4,136.3	1.3	0.0%	4,136.2	1.4	0.0%	4,135.8	1.9	0.0%	4,135.4	2.2	0.1%	4,135.1	2.5	0.1%	4,134.7	2.9	0.1%
ME 1	48 61 28	2015	Dry	April	--	4,484.1	4,478.6	5.6	0.1%	4,477.8	6.4	0.1%	4,476.2	8.0	0.2%	4,474.5	9.6	0.2%	4,472.9	11.2	0.3%	4,471.3	12.8	0.3%
ME 1	48 61 28	2015	Dry	May	--	141.5	136.9	4.6	3.3%	136.2	5.3	3.7%	134.9	6.5	4.6%	133.6	7.9	5.6%	132.3	9.2	6.5%	130.9	10.5	7.4%
ME 1	48 61 28	2015	Dry	June	--	175.5	169.6	6.0	3.4%	168.8	6.8	3.9%	167.1	8.4	4.8%	165.5	10.1	5.7%	163.8	11.7	6.7%	162.2	13.3	7.6%
ME 1	48 61 28	2015	Dry	July	--	53.3	49.2	4.1	7.7%	48.6	4.7	8.8%	47.5	5.9	11.0%	46.3	7.0	13.2%	45.1	8.2	15.3%	44.0	9.3	17.5%
ME 1	48 61 28	2015	Dry	August	--	47.8	43.8	4.0	8.4%	43.2	4.6	9.5%	42.1	5.7	11.9%	41.0	6.8	14.3%	39.8	8.0	16.7%	38.7	9.1	19.1%
ME 1	48 61 28	2015	Dry	September	Used in Summary Table Analysis	46.2	42.6	3.6	7.8%	42.1	4.1	8.9%	40.5	5.7	12.3%	39.2	7.0	15.2%	37.7	8.5	18.5%	36.2	10.0	21.6%
ME 1	48 61 28	2016	Above Normal	October	Used in Summary Table Analysis	38.1	33.1	5.0	13.2%	32.3	5.8	15.1%	31.0	7.1	18.6%	29.7	8.4	22.1%	28.4	9.6	25.3%	27.4	10.7	28.1%
ME 1	48 61 28	2016	Above Normal	November	Used in Summary Table Analysis	2,983.0	2,980.2	2.8	0.1%	2,979.9	3.1	0.1%	2,979.1	3.9	0.1%	2,978.1	4.9	0.2%	2,977.3	5.7	0.2%	2,976.5	6.5	0.2%
ME 1	48 61 28	2016	Above Normal	December	--	19,809.0	19,806.7	2.3	0.0%	19,805.6	3.5	0.0%	19,805.6	3.5	0.0%	19,804.4	4.6	0.0%	19,803.2	5.8	0.0%	19,803.2	5.8	0.0%
ME 1	48 61 28	2016	Above Normal	January	--	20,895.8	20,893.5	2.3	0.0%	20,893.5	2.3	0.0%	20,892.4	3.5	0.0%	20,892.4	3.5	0.0%	20,891.2	4.6	0.0%	20,891.2	4.6	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 61 28	2016	Above Normal	February	--	5,498.6	5,497.0	1.6	0.0%	5,496.8	1.9	0.0%	5,496.4	2.2	0.0%	5,495.9	2.7	0.0%	5,495.5	3.1	0.1%	5,495.1	3.5	0.1%
ME 1	48 61 28	2016	Above Normal	March	--	20,233.8	20,232.6	1.2	0.0%	20,232.6	1.2	0.0%	20,232.6	1.2	0.0%	20,231.5	2.3	0.0%	20,231.5	2.3	0.0%	20,230.3	3.5	0.0%
ME 1	48 61 28	2016	Above Normal	April	--	5,678.8	5,677.7	1.2	0.0%	5,677.5	1.3	0.0%	5,677.2	1.6	0.0%	5,676.9	2.0	0.0%	5,676.5	2.3	0.0%	5,676.2	2.7	0.0%
ME 1	48 61 28	2016	Above Normal	May	--	1,244.7	1,242.9	1.7	0.1%	1,242.7	2.0	0.2%	1,242.2	2.4	0.2%	1,241.8	2.9	0.2%	1,241.2	3.5	0.3%	1,240.7	3.9	0.3%
ME 1	48 61 28	2016	Above Normal	June	--	80.5	76.2	4.3	5.3%	75.6	4.9	6.0%	74.5	6.0	7.5%	73.3	7.2	8.9%	72.1	8.4	10.4%	70.9	9.5	11.8%
ME 1	48 61 28	2016	Above Normal	July	--	60.4	57.1	3.3	5.4%	56.6	3.7	6.2%	55.7	4.6	7.7%	54.8	5.5	9.2%	53.9	6.5	10.7%	53.0	7.4	12.2%
ME 1	48 61 28	2016	Above Normal	August	--	51.7	48.5	3.1	6.1%	48.1	3.6	6.9%	47.2	4.5	8.6%	46.3	5.3	10.3%	45.4	6.2	12.0%	44.5	7.1	13.8%
ME 1	48 61 28	2016	Above Normal	September	Used in Summary Table Analysis	47.9	45.2	2.7	5.6%	44.2	3.7	7.7%	43.2	4.7	9.7%	42.1	5.8	12.1%	41.0	6.9	14.4%	39.9	8.0	16.7%
ME 1	48 61 28	2017	Wet	October	Used in Summary Table Analysis	12,855.3	12,851.9	3.5	0.0%	12,851.9	3.5	0.0%	12,850.7	4.6	0.0%	12,849.5	5.8	0.0%	12,848.4	6.9	0.1%	12,847.2	8.1	0.1%
ME 1	48 61 28	2017	Wet	November	Used in Summary Table Analysis	7,398.1	7,395.9	2.2	0.0%	7,395.6	2.5	0.0%	7,394.9	3.2	0.0%	7,394.2	3.9	0.1%	7,393.5	4.6	0.1%	7,392.9	5.2	0.1%
ME 1	48 61 28	2017	Wet	December	--	9,449.3	9,447.5	1.9	0.0%	9,447.2	2.1	0.0%	9,446.6	2.7	0.0%	9,446.1	3.2	0.0%	9,445.5	3.8	0.0%	9,445.0	4.3	0.0%
ME 1	48 61 28	2017	Wet	January	--	35,086.8	35,085.6	1.2	0.0%	35,084.5	2.3	0.0%	35,084.5	2.3	0.0%	35,084.5	2.3	0.0%	35,083.3	3.5	0.0%	35,083.3	3.5	0.0%
ME 1	48 61 28	2017	Wet	February	--	33,828.7	33,827.5	1.2	0.0%	33,827.5	1.2	0.0%	33,826.4	2.3	0.0%	33,826.4	2.3	0.0%	33,826.4	2.3	0.0%	33,825.2	3.5	0.0%
ME 1	48 61 28	2017	Wet	March	--	6,441.1	6,440.0	1.0	0.0%	6,439.8	1.3	0.0%	6,439.6	1.5	0.0%	6,439.2	1.9	0.0%	6,438.9	2.2	0.0%	6,438.5	2.5	0.0%
ME 1	48 61 28	2017	Wet	April	--	8,151.6	8,150.7	0.9	0.0%	8,150.6	1.0	0.0%	8,150.3	1.3	0.0%	8,150.1	1.5	0.0%	8,149.9	1.7	0.0%	8,149.7	2.0	0.0%
ME 1	48 61 28	2017	Wet	May	--	193.3	191.6	1.6	0.8%	191.4	1.9	1.0%	191.0	2.3	1.2%	190.5	2.8	1.4%	190.0	3.2	1.7%	189.6	3.7	1.9%
ME 1	48 61 28	2017	Wet	June	--	183.1	178.0	5.1	2.8%	177.3	5.8	3.2%	175.8	7.3	4.0%	174.4	8.7	4.8%	173.0	10.1	5.5%	171.6	11.6	6.3%
ME 1	48 61 28	2017	Wet	July	--	56.4	53.3	3.2	5.6%	52.8	3.6	6.3%	52.0	4.4	7.9%	51.1	5.3	9.4%	50.2	6.2	11.0%	49.4	7.0	12.5%
ME 1	48 61 28	2017	Wet	August	--	51.8	48.8	3.1	5.9%	48.3	3.5	6.7%	47.5	4.4	8.4%	46.6	5.2	10.1%	45.8	6.1	11.7%	44.9	6.9	13.4%
ME 1	48 61 28	2017	Wet	September	Used in Summary Table Analysis	47.1	43.3	3.8	8.0%	42.8	4.3	9.2%	41.7	5.4	11.5%	40.6	6.5	13.8%	39.5	7.5	16.0%	38.4	8.6	18.3%
ME 1	48 61 28	2018	Above Normal	October	Used in Summary Table Analysis	54.8	52.0	2.8	5.2%	51.6	3.2	5.9%	50.8	4.1	7.4%	49.9	4.9	8.9%	49.1	5.7	10.4%	48.3	6.5	11.9%
ME 1	48 61 28	2018	Above Normal	November	Used in Summary Table Analysis	7,147.7	7,145.7	2.0	0.0%	7,145.4	2.3	0.0%	7,144.8	2.9	0.0%	7,144.1	3.6	0.1%	7,143.5	4.2	0.1%	7,142.9	4.7	0.1%
ME 1	48 61 28	2018	Above Normal	December	--	614.8	613.2	1.6	0.3%	613.0	1.8	0.3%	612.5	2.3	0.4%	612.0	2.8	0.5%	611.6	3.3	0.5%	611.0	3.8	0.6%
ME 1	48 61 28	2018	Above Normal	January	--	9,058.8	9,057.4	1.4	0.0%	9,057.2	1.6	0.0%	9,056.7	2.1	0.0%	9,056.4	2.4	0.0%	9,055.9	2.9	0.0%	9,055.4	3.4	0.0%
ME 1	48 61 28	2018	Above Normal	February	--	729.1	728.0	1.0	0.1%	727.8	1.2	0.2%	727.5	1.6	0.2%	727.1	1.9	0.3%	726.8	2.2	0.3%	726.5	2.6	0.4%
ME 1	48 61 28	2018	Above Normal	March	--	9,582.8	9,581.8	0.9	0.0%	9,581.6	1.2	0.0%	9,581.4	1.4	0.0%	9,581.0	1.7	0.0%	9,580.8	2.0	0.0%	9,580.4	2.3	0.0%
ME 1	48 61 28	2018	Above Normal	April	--	17,414.4	17,413.2	1.2	0.0%	17,413.2	1.2	0.0%	17,413.2	1.2	0.0%	17,412.0	2.3	0.0%	17,412.0	2.3	0.0%	17,412.0	2.3	0.0%
ME 1	48 61 28	2018	Above Normal	May	--	726.0	721.2	4.8	0.7%	720.5	5.5	0.8%	719.2	6.7	0.9%	717.8	8.1	1.1%	716.6	9.4	1.3%	715.5	10.5	1.4%
ME 1	48 61 28	2018	Above Normal	June	--	64.8	62.0	2.7	4.2%	61.6	3.1	4.8%	60.9	3.9	6.0%	60.2	4.6	7.1%	59.4	5.3	8.2%	58.7	6.1	9.4%
ME 1	48 61 28	2018	Above Normal	July	--	54.1	50.9	3.3	6.0%	50.4	3.7	6.9%	49.5	4.6	8.6%	48.6	5.5	10.2%	47.7	6.4	11.9%	46.8	7.3	13.6%
ME 1	48 61 28	2018	Above Normal	August	--	50.0	46.9	3.0	6.1%	46.5	3.5	7.0%	45.6	4.3	8.7%	44.8	5.2	10.4%	43.9	6.1	12.1%	43.0	6.9	13.9%
ME 1	48 61 28	2018	Above Normal	September	Used in Summary Table Analysis	43.5	39.7	3.8	8.7%	39.2	4.3	10.0%	38.1	5.4	12.5%	37.0	6.5	15.0%	35.9	7.6	17.6%	34.8	8.7	20.1%
ME 1	48 61 28	2019	Below Normal	October	Used in Summary Table Analysis	58.3	55.2	3.1	5.3%	54.8	3.5	6.0%	53.9	4.4	7.6%	52.9	5.4	9.3%	52.1	6.2	10.6%	51.2	7.1	12.1%
ME 1	48 61 28	2019	Below Normal	November	Used in Summary Table Analysis	4,573.7	4,571.5	2.2	0.0%	4,571.2	2.5	0.1%	4,570.5	3.2	0.1%	4,569.9	3.8	0.1%	4,569.2	4.5	0.1%	4,568.5	5.2	0.1%
ME 1	48 61 28	2019	Below Normal	December	--	7,103.8	7,102.0	1.9	0.0%	7,101.7	2.1	0.0%	7,101.2	2.7	0.0%	7,100.7	3.1	0.0%	7,100.1	3.7	0.1%	7,099.5	4.3	0.1%
ME 1	48 61 28	2019	Below Normal	January	--	16,232.6	16,230.3	2.3	0.0%	16,230.3	2.3	0.0%	16,230.3	2.3	0.0%	16,229.2	3.5	0.0%	16,229.2	3.5	0.0%	16,228.0	4.6	0.0%
ME 1	48 61 28	2019	Below Normal	February	--	44,789.4	44,788.2	1.2	0.0%	44,787.0	2.3	0.0%	44,787.0	2.3	0.0%	44,787.0	2.3	0.0%	44,785.9	3.5	0.0%	44,785.9	3.5	0.0%
ME 1	48 61 28	2019	Below Normal	March	--	10,405.6	10,404.4	1.2	0.0%	10,404.3	1.3	0.0%	10,403.9	1.6	0.0%	10,403.6	2.0	0.0%	10,403.2	2.3	0.0%	10,402.9	2.7	0.0%
ME 1	48 61 28	2019	Below Normal	April	--	3,501.0	3,500.1	0.9	0.0%	3,500.0	1.0	0.0%	3,499.8	1.3	0.0%	3,499.4	1.6	0.0%	3,499.2	1.9	0.1%	3,499.0	2.1	0.1%
ME 1	48 61 28	2019	Below Normal	May	--	6,640.2	6,635.3	4.9	0.1%	6,634.6	5.6	0.1%	6,633.1	7.1	0.1%	6,631.7	8.4	0.1%	6,630.3	9.8	0.1%	6,628.9	11.2	0.2%
ME 1	48 61 28	2019	Below Normal	June	--	81.1	77.4	3.7	4.6%	76.8	4.3	5.3%	75.9	5.2	6.4%	75.1	6.0	7.3%	74.4	6.6	8.2%	73.7	7.4	9.1%
ME 1	48 61 28	2019	Below Normal	July	--	64.5	61.2	3.3	5.1%	60.7	3.7	5.8%	59.8	4.6	7.2%	58.9	5.6	8.6%	58.0	6.5	10.1%	57.1	7.4	11.5%
ME 1	48 61 28	2019	Below Normal	August	--	54.5	51.4	3.0	5.5%	51.0	3.5	6.3%	50.1	4.3	7.9%	49.3	5.2	9.5%	48.4	6.0	11.1%	47.6	6.9	12.7%
ME 1	48 61 28	2019	Below Normal	September	Used in Summary Table Analysis	125.9	122.1	3.8	3.0%	121.6	4.4	3.5%	120.5	5.5	4.3%	119.4	6.5	5.2%	118.3	7.6	6.1%	117.2	8.7	6.9%
ME 1	48 61 28	2020	Dry	October	Used in Summary Table Analysis	158.7	156.0	2.7	1.7%	155.6	3.0	1.9%	154.8	3.8	2.4%	154.1	4.6	2.9%	153.3	5.4	3.4%	152.5	6.2	3.9%
ME 1	48 61 28	2020	Dry	November	Used in Summary Table Analysis	85.7	84.2	1.6	1.8%	83.9	1.8	2.1%	83.4	2.3	2.7%	83.0	2.8	3.2%	82.5	3.2	3.8%	82.0	3.7	4.4%
ME 1	48 61 28	2020	Dry	December	--	7,868.1	7,866.4	1.6	0.0%	7,866.2	1.9	0.0%	7,865.6	2.4	0.0%	7,865.2	2.9	0.0%	7,864.7	3.4	0.0%	7,864.1	3.9	0.1%
ME 1	48 61 28	2020	Dry	January	--	8,997.6	8,996.1	1.5	0.0%	8,995.8	1.7	0.0%	8,995.4	2.2	0.0%	8,994.9	2.7	0.0%	8,994.4	3.1	0.0%	8,994.0	3.6	0.0%
ME 1	48 61 28	2020	Dry	February	--	254.6	253.5	1.1	0.4%	253.3	1.3	0.5%	253.0	1.7	0.7%	252.6	2.0	0.8%	252.2	2.4	0.9%	251.9	2.7	1.1%
ME 1	48 61 28	2020	Dry	March	--	2,666.4	2,665.5	0.9	0.0%	2,665.3	1.2	0.0%	2,665.0	1.4	0.1%	2,664.7	1.7	0.1%	2,664.4	2.1	0.1%	2,664.1	2.3	0.1%
ME 1	48 61 28	2020	Dry	April	--	2,157.2	2,151.9	5.3	0.2%	2,151.2	6.0	0.3%	2,149.7	7.5	0.3%	2,148.0	9.1	0.4%	2,146.5	10.6	0.5%	2,145.0	12.2	0.6%
ME 1	48 61 28	2020	Dry	May	--	3,770.8	3,766.2	4.6	0.1%	3,765.6	5.2	0.1%	3,764.2	6.6	0.2%	3,763.0	7.9	0.2%	3,761.6	9.3	0.2%	3,760.3	10.5	0.3%
ME 1	48 61 28	2020	Dry	June	--	91.2	84.8	6.4	7.0%	83.9	7.2	7.9%	82.5	8.7	9.5%	81.0	10.1	11.1%	79.5	11.7	12.8%	78.0	13.2	14.5%
ME 1	48 61 28	2020	Dry	July	--	54.2	50.3	3.9	7.1%	49.8	4.4	8.2%	48.7	5.5	10.2%	47.5	6.6	12.3%	46.4	7.8	14.3%	45.3	8.9	16.4%
ME 1	48 61 28	2020	Dry	August	--	47.4	43.5	3.9	8.2%	43.0	4.4	9.4%	41.9	5.5	11.7%	40.7	6.7	14.0%	39.6	7.8	16.4%	38.5	8.9	18.7%
ME 1	48 61 28	2020	Dry	September	Used in Summary Table Analysis	45.1	41.6	3.5	7.8%	41.1	4.0	8.9%	39.3	5.9	13.0%	38.0	7.2	15.9%	36.4	8.7	19.3%	35.0	10.2	22.6%
ME 1	47 60 29	2000	Above Normal	October	Used in Summary Table Analysis	383.4	380.7	2.7	0.7%	380.3	3.0	0.8%	379.6	3.8	1.0%	378.8	4.6	1.2%	378.0	5.4	1.4%	377.2	6.2	1.6%
ME 1	47 60 29	2000	Above Normal	November	Used in Summary Table Analysis	8,191.2	8,189.0	2.2	0.0%	8,188.7	2.5	0.0%	8,188.1	3.1	0.0%	8,187.5	3.7	0.0%	8,186.8	4.4	0.1%	8,186.2	5.0	0.1%
ME 1	47 60 29	2000	Above Normal	December	--	4,792.5	4,790.7	1.7	0.0%	4,790.5	2.0	0.0%	4,790.0	2.4	0.1%	4,789.6	2.9	0.1%	4,789.0	3.5	0.1%	4,788.4	4.1	0.1%
ME 1	47 60 29	2000	Above Normal	January	--	15,025.5	15,023.1	2.3	0.0%	15,023.1	2.3	0.0%	15,023.1	2.3	0.0%	15,023.1	2.3	0.0%	15,022.0	3.5	0.0%	15,022.0	3.5	0.0%
ME 1	47 60 29	2000	Above Normal	February	--	16,349.5	16,348.4	1.2	0.0%	16,348.4	1.2	0.0%	16,348.4	1.2	0.0%	16,347.2	2.3	0.0%	16,347.2	2.3	0.0%	16,347.2	2.3	0.0%
ME 1	47 60 29	2000	Above Normal	March	--	5,756.9	5,755.9	1.0	0.0%	5,755.8	1.2	0.0%	5,755.4	1.5	0.0%	5,755.2	1.7	0.0%	5,754.9	2.1	0.0%	5,754.5	2.4	0.0%
ME 1	47 60 29	2000	Above Normal	April	--	5,388.9	5,388.1	0.8	0.0%	5,388.0	0.9	0.0%	5,387.7	1.2	0.0%	5,387.4	1.5	0.0%	5,387.2	1.7	0.0%	5,386.9	2.0	0.0%
ME 1	47 60 29	2000	Above Normal	May	--	2,771.1	2,766.4	4.6	0.2%	2,765.7	5.3	0.2%	2,764.4	6.7	0.2%	2,763.0	8.1	0.3%	2,761.6	9.5	0.3%	2,760.2	10.9	0.4%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 60 29	2000	Above Normal	June	--	607.1	601.1	6.0	1.0%	600.2	6.8	1.1%	598.5	8.6	1.4%	596.8	10.2	1.7%	595.1	11.9	2.0%	593.4	13.6	2.2%
ME 1	47 60 29	2000	Above Normal	July	--	69.1	65.9	3.2	4.7%	65.4	3.7	5.3%	64.5	4.6	6.6%	63.6	5.4	7.9%	62.8	6.3	9.1%	61.9	7.2	10.4%
ME 1	47 60 29	2000	Above Normal	August	--	56.2	53.1	3.0	5.4%	52.7	3.5	6.2%	51.8	4.3	7.7%	51.0	5.2	9.2%	50.2	6.0	10.7%	49.3	6.9	12.2%
ME 1	47 60 29	2000	Above Normal	September	Used in Summary Table Analysis	49.9	47.2	2.7	5.3%	46.8	3.0	6.1%	46.1	3.8	7.6%	45.3	4.6	9.1%	44.5	5.3	10.7%	43.8	6.1	12.2%
ME 1	47 60 29	2001	Dry	October	Used in Summary Table Analysis	2,782.1	2,779.3	2.8	0.1%	2,778.8	3.2	0.1%	2,778.0	4.1	0.1%	2,777.2	4.9	0.2%	2,776.4	5.7	0.2%	2,775.6	6.5	0.2%
ME 1	47 60 29	2001	Dry	November	Used in Summary Table Analysis	3,325.3	3,323.1	2.2	0.1%	3,322.9	2.4	0.1%	3,322.2	3.1	0.1%	3,321.6	3.7	0.1%	3,321.1	4.3	0.1%	3,320.4	5.0	0.1%
ME 1	47 60 29	2001	Dry	December	--	4,940.5	4,938.8	1.7	0.0%	4,938.5	2.0	0.0%	4,938.1	2.4	0.0%	4,937.5	3.0	0.1%	4,937.0	3.5	0.1%	4,936.5	4.1	0.1%
ME 1	47 60 29	2001	Dry	January	--	6,539.9	6,538.4	1.5	0.0%	6,538.2	1.7	0.0%	6,537.8	2.1	0.0%	6,537.4	2.5	0.0%	6,536.9	3.0	0.0%	6,536.5	3.5	0.1%
ME 1	47 60 29	2001	Dry	February	--	8,630.7	8,629.4	1.3	0.0%	8,629.2	1.5	0.0%	8,628.8	1.9	0.0%	8,628.5	2.2	0.0%	8,628.1	2.5	0.0%	8,627.8	2.9	0.0%
ME 1	47 60 29	2001	Dry	March	--	5,168.5	5,167.5	1.0	0.0%	5,167.4	1.2	0.0%	5,167.0	1.5	0.0%	5,166.8	1.7	0.0%	5,166.4	2.1	0.0%	5,166.1	2.4	0.0%
ME 1	47 60 29	2001	Dry	April	--	5,111.9	5,106.5	5.4	0.1%	5,105.7	6.3	0.1%	5,104.2	7.8	0.2%	5,102.5	9.4	0.2%	5,101.0	10.9	0.2%	5,099.4	12.5	0.2%
ME 1	47 60 29	2001	Dry	May	--	605.3	600.8	4.5	0.7%	600.1	5.2	0.9%	598.8	6.4	1.1%	597.5	7.8	1.3%	596.3	9.0	1.5%	595.0	10.3	1.7%
ME 1	47 60 29	2001	Dry	June	--	1,345.7	1,338.9	6.8	0.5%	1,338.0	7.8	0.6%	1,336.1	9.6	0.7%	1,334.1	11.6	0.9%	1,332.3	13.4	1.0%	1,330.4	15.3	1.1%
ME 1	47 60 29	2001	Dry	July	--	66.6	62.9	3.7	5.5%	62.4	4.2	6.3%	61.4	5.2	7.8%	60.4	6.2	9.4%	59.4	7.2	10.9%	58.3	8.3	12.5%
ME 1	47 60 29	2001	Dry	August	--	53.8	49.9	3.9	7.2%	49.4	4.4	8.2%	48.3	5.5	10.3%	47.2	6.6	12.3%	46.1	7.7	14.3%	45.0	8.8	16.4%
ME 1	47 60 29	2001	Dry	September	Used in Summary Table Analysis	48.4	44.9	3.5	7.2%	44.4	4.0	8.3%	43.4	5.0	10.3%	42.4	6.0	12.4%	41.4	7.0	14.5%	40.4	8.0	16.6%
ME 1	47 60 29	2002	Below Normal	October	Used in Summary Table Analysis	137.2	133.4	3.8	2.7%	132.9	4.3	3.1%	131.8	5.4	3.9%	130.7	6.5	4.7%	129.6	7.6	5.5%	128.5	8.7	6.3%
ME 1	47 60 29	2002	Below Normal	November	Used in Summary Table Analysis	7,296.2	7,293.2	3.0	0.0%	7,292.8	3.4	0.0%	7,292.0	4.2	0.1%	7,291.1	5.1	0.1%	7,290.3	5.9	0.1%	7,289.5	6.7	0.1%
ME 1	47 60 29	2002	Below Normal	December	--	13,917.8	13,914.4	3.5	0.0%	13,914.4	3.5	0.0%	13,913.2	4.6	0.0%	13,913.2	4.6	0.0%	13,912.0	5.8	0.0%	13,910.9	6.9	0.0%
ME 1	47 60 29	2002	Below Normal	January	--	9,696.2	9,694.1	2.1	0.0%	9,693.8	2.4	0.0%	9,693.2	3.0	0.0%	9,692.6	3.6	0.0%	9,691.9	4.3	0.0%	9,691.3	4.9	0.1%
ME 1	47 60 29	2002	Below Normal	February	--	8,413.7	8,411.9	1.7	0.0%	8,411.7	2.0	0.0%	8,411.1	2.5	0.0%	8,410.6	3.0	0.0%	8,410.1	3.6	0.0%	8,409.6	4.1	0.0%
ME 1	47 60 29	2002	Below Normal	March	--	7,278.2	7,276.9	1.4	0.0%	7,276.6	1.6	0.0%	7,276.3	2.0	0.0%	7,275.8	2.4	0.0%	7,275.3	2.9	0.0%	7,275.0	3.2	0.0%
ME 1	47 60 29	2002	Below Normal	April	--	4,296.8	4,291.8	5.0	0.1%	4,291.1	5.7	0.1%	4,289.7	7.1	0.2%	4,288.3	8.4	0.2%	4,286.9	9.8	0.2%	4,285.5	11.2	0.3%
ME 1	47 60 29	2002	Below Normal	May	--	1,145.1	1,141.0	4.1	0.4%	1,140.4	4.7	0.4%	1,139.2	5.9	0.5%	1,138.1	7.0	0.6%	1,136.9	8.2	0.7%	1,135.7	9.4	0.8%
ME 1	47 60 29	2002	Below Normal	June	--	193.7	188.9	4.8	2.5%	188.3	5.5	2.8%	186.9	6.8	3.5%	185.6	8.1	4.2%	184.2	9.5	4.9%	182.9	10.8	5.6%
ME 1	47 60 29	2002	Below Normal	July	--	57.1	53.7	3.5	6.1%	53.2	3.9	6.9%	52.2	4.9	8.6%	51.2	5.9	10.3%	50.3	6.9	12.0%	49.3	7.8	13.7%
ME 1	47 60 29	2002	Below Normal	August	--	51.3	48.0	3.3	6.5%	47.5	3.8	7.4%	46.5	4.8	9.3%	45.6	5.7	11.2%	44.6	6.7	13.0%	43.7	7.6	14.9%
ME 1	47 60 29	2002	Below Normal	September	Used in Summary Table Analysis	47.4	44.4	3.0	6.3%	44.0	3.4	7.2%	43.1	4.3	9.0%	42.3	5.1	10.8%	41.4	6.0	12.7%	40.5	6.9	14.5%
ME 1	47 60 29	2003	Wet	October	Used in Summary Table Analysis	35.8	32.8	3.1	8.6%	32.3	3.5	9.8%	31.4	4.4	12.3%	30.5	5.3	14.9%	29.6	6.2	17.4%	28.7	7.1	19.9%
ME 1	47 60 29	2003	Wet	November	Used in Summary Table Analysis	621.8	619.4	2.4	0.4%	619.0	2.8	0.4%	618.3	3.5	0.6%	617.6	4.2	0.7%	617.0	4.8	0.8%	616.3	5.5	0.9%
ME 1	47 60 29	2003	Wet	December	--	29,858.8	29,857.6	1.2	0.0%	29,857.6	1.2	0.0%	29,856.5	2.3	0.0%	29,855.3	3.5	0.0%	29,855.3	3.5	0.0%	29,854.2	4.6	0.0%
ME 1	47 60 29	2003	Wet	January	--	7,628.6	7,626.9	1.7	0.0%	7,626.6	2.0	0.0%	7,626.0	2.5	0.0%	7,625.6	3.0	0.0%	7,625.0	3.6	0.0%	7,624.5	4.1	0.1%
ME 1	47 60 29	2003	Wet	February	--	5,550.8	5,549.4	1.4	0.0%	5,549.2	1.6	0.0%	5,548.8	2.0	0.0%	5,548.4	2.4	0.0%	5,547.9	2.9	0.1%	5,547.6	3.2	0.1%
ME 1	47 60 29	2003	Wet	March	--	11,102.9	11,101.6	1.3	0.0%	11,101.5	1.4	0.0%	11,101.2	1.7	0.0%	11,100.7	2.2	0.0%	11,100.3	2.5	0.0%	11,100.0	2.9	0.0%
ME 1	47 60 29	2003	Wet	April	--	21,848.4	21,847.2	1.2	0.0%	21,847.2	1.2	0.0%	21,846.1	2.3	0.0%	21,846.1	2.3	0.0%	21,846.1	2.3	0.0%	21,844.9	3.5	0.0%
ME 1	47 60 29	2003	Wet	May	--	2,091.3	2,086.3	5.0	0.2%	2,085.6	5.7	0.3%	2,084.5	6.8	0.3%	2,083.1	8.2	0.4%	2,081.7	9.6	0.5%	2,080.3	11.0	0.5%
ME 1	47 60 29	2003	Wet	June	--	78.6	75.5	3.1	3.9%	75.1	3.5	4.4%	74.3	4.3	5.4%	73.6	5.0	6.4%	72.8	5.8	7.3%	72.1	6.5	8.3%
ME 1	47 60 29	2003	Wet	July	--	63.4	60.0	3.4	5.3%	59.6	3.8	6.1%	58.6	4.8	7.5%	57.7	5.7	9.0%	56.7	6.7	10.5%	55.8	7.6	12.1%
ME 1	47 60 29	2003	Wet	August	--	65.1	61.4	3.7	5.7%	60.8	4.3	6.6%	59.7	5.4	8.2%	58.7	6.5	9.9%	57.6	7.6	11.6%	56.3	8.8	13.5%
ME 1	47 60 29	2003	Wet	September	Used in Summary Table Analysis	49.9	47.2	2.7	5.4%	46.9	3.1	6.1%	46.1	3.8	7.6%	45.4	4.6	9.2%	44.6	5.3	10.7%	43.8	6.1	12.2%
ME 1	47 60 29	2004	Wet	October	Used in Summary Table Analysis	37.3	34.6	2.7	7.2%	34.2	3.1	8.2%	33.4	3.8	10.3%	32.6	4.6	12.4%	31.9	5.4	14.5%	31.1	6.2	16.6%
ME 1	47 60 29	2004	Wet	November	Used in Summary Table Analysis	4,134.3	4,132.1	2.2	0.1%	4,131.8	2.4	0.1%	4,131.1	3.1	0.1%	4,130.6	3.7	0.1%	4,129.9	4.4	0.1%	4,129.3	5.0	0.1%
ME 1	47 60 29	2004	Wet	December	--	18,099.5	18,097.2	2.3	0.0%	18,097.2	2.3	0.0%	18,096.1	3.5	0.0%	18,096.1	3.5	0.0%	18,094.9	4.6	0.0%	18,094.9	4.6	0.0%
ME 1	47 60 29	2004	Wet	January	--	10,245.6	10,244.1	1.5	0.0%	10,243.9	1.7	0.0%	10,243.4	2.2	0.0%	10,242.9	2.7	0.0%	10,242.5	3.1	0.0%	10,242.0	3.6	0.0%
ME 1	47 60 29	2004	Wet	February	--	17,510.4	17,509.3	1.2	0.0%	17,508.1	2.3	0.0%	17,508.1	2.3	0.0%	17,508.1	2.3	0.0%	17,506.9	3.5	0.0%	17,506.9	3.5	0.0%
ME 1	47 60 29	2004	Wet	March	--	4,166.0	4,164.9	1.0	0.0%	4,164.8	1.2	0.0%	4,164.6	1.4	0.0%	4,164.2	1.7	0.0%	4,163.9	2.1	0.1%	4,163.5	2.4	0.1%
ME 1	47 60 29	2004	Wet	April	--	3,550.9	3,550.1	0.8	0.0%	3,549.9	1.0	0.0%	3,549.7	1.3	0.0%	3,549.4	1.5	0.0%	3,549.2	1.7	0.0%	3,549.0	2.0	0.1%
ME 1	47 60 29	2004	Wet	May	--	1,062.3	1,057.5	4.8	0.4%	1,056.8	5.5	0.5%	1,055.5	6.8	0.6%	1,054.1	8.2	0.8%	1,052.7	9.5	0.9%	1,051.4	10.9	1.0%
ME 1	47 60 29	2004	Wet	June	--	68.8	66.2	2.6	3.8%	65.8	2.9	4.3%	65.1	3.7	5.3%	64.4	4.4	6.4%	63.7	5.1	7.4%	62.9	5.8	8.5%
ME 1	47 60 29	2004	Wet	July	--	56.5	53.2	3.3	5.8%	52.8	3.7	6.6%	51.8	4.7	8.2%	50.9	5.6	9.9%	50.0	6.5	11.5%	49.1	7.4	13.1%
ME 1	47 60 29	2004	Wet	August	--	50.1	47.0	3.1	6.1%	46.6	3.5	7.0%	45.7	4.4	8.8%	44.8	5.3	10.5%	44.0	6.1	12.2%	43.1	7.0	14.0%
ME 1	47 60 29	2004	Wet	September	Used in Summary Table Analysis	44.1	40.2	3.9	8.8%	39.7	4.4	10.0%	38.5	5.5	12.6%	37.4	6.7	15.1%	36.3	7.8	17.7%	35.2	8.9	20.2%
ME 1	47 60 29	2005	Above Normal	October	Used in Summary Table Analysis	5,820.1	5,817.2	2.9	0.0%	5,816.9	3.2	0.1%	5,816.0	4.2	0.1%	5,815.2	5.0	0.1%	5,814.4	5.8	0.1%	5,813.4	6.7	0.1%
ME 1	47 60 29	2005	Above Normal	November	Used in Summary Table Analysis	964.0	961.8	2.2	0.2%	961.5	2.5	0.3%	960.9	3.1	0.3%	960.2	3.8	0.4%	959.6	4.4	0.5%	959.0	5.0	0.5%
ME 1	47 60 29	2005	Above Normal	December	--	11,873.8	11,871.5	2.3	0.0%	11,871.5	2.3	0.0%	11,871.5	2.3	0.0%	11,870.4	3.5	0.0%	11,869.2	4.6	0.0%	11,869.2	4.6	0.0%
ME 1	47 60 29	2005	Above Normal	January	--	8,400.0	8,398.5	1.5	0.0%	8,398.3	1.7	0.0%	8,397.8	2.2	0.0%	8,397.3	2.7	0.0%	8,396.9	3.1	0.0%	8,396.4	3.6	0.0%
ME 1	47 60 29	2005	Above Normal	February	--	4,646.4	4,645.3	1.2	0.0%	4,645.0	1.4	0.0%	4,644.7	1.7	0.0%	4,644.2	2.2	0.0%	4,644.0	2.4	0.1%	4,643.6	2.8	0.1%
ME 1	47 60 29	2005	Above Normal	March	--	14,266.2	14,265.0	1.2	0.0%	14,265.0	1.2	0.0%	14,265.0	1.2	0.0%	14,263.9	2.3	0.0%	14,263.9	2.3	0.0%	14,263.9	2.3	0.0%
ME 1	47 60 29	2005	Above Normal	April	--	9,223.8	9,222.9	0.9	0.0%	9,222.7	1.2	0.0%	9,222.5	1.4	0.0%	9,222.1	1.7	0.0%	9,221.9	2.0	0.0%	9,221.5	2.3	0.0%
ME 1	47 60 29	2005	Above Normal	May	--	8,524.3	8,519.2	5.1	0.1%	8,518.4	5.9	0.1%	8,517.0	7.3	0.1%	8,515.5	8.8	0.1%	8,514.1	10.2	0.1%	8,512.6	11.7	0.1%
ME 1	47 60 29	2005	Above Normal	June	--	6,381.4	6,375.0	6.4	0.1%	6,374.1	7.3	0.1%	6,372.3	9.0	0.1%	6,370.5	10.9	0.2%	6,368.8	12.6	0.2%	6,367.0	14.4	0.2%
ME 1	47 60 29	2005	Above Normal	July	--	90.6	86.6	4.0	4.4%	86.0	4.6	5.0%	84.9	5.7	6.3%	83.8	6.8	7.5%	82.7	7.9	8.7%	81.6	9.0	9.9%
ME 1	47 60 29	2005	Above Normal	August	--	65.5	62.5	3.0	4.6%	62.1	3.5	5.3%	61.2	4.3	6.6%	60.3	5.2	7.9%	59.5	6.1	9.2%	58.6	6.9	10.5%
ME 1	47 60 29	2005	Above Normal	September	Used in Summary Table Analysis	55.9	53.3	2.7	4.7%	52.9	3.0	5.4%	52.1	3.8	6.8%	51.4	4.6	8.1%	50.6	5.3	9.5%	49.9	6.1	10.8%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 60 29	2006	Wet	October	Used in Summary Table Analysis	250.2	247.5	2.7	1.1%	247.1	3.1	1.2%	246.3	3.9	1.6%	245.5	4.7	1.9%	244.7	5.5	2.2%	243.9	6.3	2.5%
ME 1	47 60 29	2006	Wet	November	Used in Summary Table Analysis	6,525.8	6,523.8	2.0	0.0%	6,523.5	2.3	0.0%	6,522.9	2.9	0.0%	6,522.3	3.5	0.1%	6,521.8	4.1	0.1%	6,521.2	4.6	0.1%
ME 1	47 60 29	2006	Wet	December	--	20,053.2	20,050.9	2.3	0.0%	20,050.9	2.3	0.0%	20,050.9	2.3	0.0%	20,049.8	3.5	0.0%	20,049.8	3.5	0.0%	20,048.6	4.6	0.0%
ME 1	47 60 29	2006	Wet	January	--	16,928.2	16,925.9	2.3	0.0%	16,925.9	2.3	0.0%	16,925.9	2.3	0.0%	16,925.9	2.3	0.0%	16,924.8	3.5	0.0%	16,924.8	3.5	0.0%
ME 1	47 60 29	2006	Wet	February	--	9,336.6	9,335.3	1.3	0.0%	9,335.2	1.4	0.0%	9,334.8	1.7	0.0%	9,334.5	2.1	0.0%	9,334.1	2.4	0.0%	9,333.8	2.8	0.0%
ME 1	47 60 29	2006	Wet	March	--	23,255.8	23,254.6	1.2	0.0%	23,254.6	1.2	0.0%	23,254.6	1.2	0.0%	23,254.6	1.2	0.0%	23,253.5	2.3	0.0%	23,253.5	2.3	0.0%
ME 1	47 60 29	2006	Wet	April	--	11,500.5	11,499.5	0.9	0.0%	11,499.4	1.0	0.0%	11,499.2	1.3	0.0%	11,498.8	1.6	0.0%	11,498.6	1.9	0.0%	11,498.4	2.1	0.0%
ME 1	47 60 29	2006	Wet	May	--	4,648.7	4,647.1	1.6	0.0%	4,646.9	1.9	0.0%	4,646.4	2.3	0.0%	4,645.8	2.9	0.1%	4,645.4	3.4	0.1%	4,644.9	3.8	0.1%
ME 1	47 60 29	2006	Wet	June	--	562.7	557.4	5.4	1.0%	556.6	6.1	1.1%	555.2	7.6	1.3%	553.7	9.0	1.6%	552.3	10.5	1.9%	550.8	11.9	2.1%
ME 1	47 60 29	2006	Wet	July	--	75.4	72.1	3.2	4.3%	71.7	3.7	4.9%	70.8	4.6	6.1%	69.9	5.5	7.3%	69.0	6.3	8.4%	68.2	7.2	9.6%
ME 1	47 60 29	2006	Wet	August	--	61.6	58.5	3.1	5.0%	58.0	3.5	5.7%	57.2	4.4	7.1%	56.3	5.2	8.5%	55.5	6.1	9.9%	54.6	7.0	11.3%
ME 1	47 60 29	2006	Wet	September	Used in Summary Table Analysis	54.2	51.6	2.7	4.9%	51.2	3.0	5.6%	50.5	3.8	6.9%	49.7	4.5	8.3%	49.0	5.2	9.7%	48.2	6.0	11.0%
ME 1	47 60 29	2007	Above Normal	October	Used in Summary Table Analysis	44.9	42.2	2.7	5.9%	41.9	3.0	6.7%	41.1	3.8	8.4%	40.3	4.6	10.2%	39.6	5.3	11.9%	38.8	6.1	13.7%
ME 1	47 60 29	2007	Above Normal	November	Used in Summary Table Analysis	5,908.3	5,906.1	2.2	0.0%	5,905.9	2.4	0.0%	5,905.2	3.1	0.1%	5,904.5	3.8	0.1%	5,903.9	4.4	0.1%	5,903.2	5.1	0.1%
ME 1	47 60 29	2007	Above Normal	December	--	10,912.5	10,910.6	1.9	0.0%	10,910.3	2.2	0.0%	10,909.7	2.8	0.0%	10,909.1	3.4	0.0%	10,908.4	4.1	0.0%	10,907.9	4.6	0.0%
ME 1	47 60 29	2007	Above Normal	January	--	2,475.0	2,473.5	1.5	0.1%	2,473.3	1.7	0.1%	2,472.9	2.1	0.1%	2,472.5	2.5	0.1%	2,472.0	3.0	0.1%	2,471.5	3.5	0.1%
ME 1	47 60 29	2007	Above Normal	February	--	17,673.6	17,672.5	1.2	0.0%	17,672.5	1.2	0.0%	17,672.5	1.2	0.0%	17,671.3	2.3	0.0%	17,671.3	2.3	0.0%	17,670.1	3.5	0.0%
ME 1	47 60 29	2007	Above Normal	March	--	5,064.0	5,062.8	1.2	0.0%	5,062.7	1.3	0.0%	5,062.4	1.6	0.0%	5,062.0	2.0	0.0%	5,061.7	2.3	0.0%	5,061.5	2.5	0.1%
ME 1	47 60 29	2007	Above Normal	April	--	6,507.9	6,503.1	4.7	0.1%	6,502.4	5.4	0.1%	6,501.0	6.8	0.1%	6,499.8	8.1	0.1%	6,498.4	9.5	0.1%	6,497.0	10.9	0.2%
ME 1	47 60 29	2007	Above Normal	May	--	1,273.0	1,269.2	3.8	0.3%	1,268.8	4.3	0.3%	1,267.6	5.4	0.4%	1,266.6	6.5	0.5%	1,265.4	7.6	0.6%	1,264.2	8.8	0.7%
ME 1	47 60 29	2007	Above Normal	June	--	459.6	453.9	5.6	1.2%	453.1	6.5	1.4%	451.5	8.1	1.8%	449.9	9.7	2.1%	448.3	11.2	2.4%	446.8	12.8	2.8%
ME 1	47 60 29	2007	Above Normal	July	--	107.7	103.6	4.1	3.8%	103.0	4.7	4.4%	101.9	5.9	5.4%	100.7	7.0	6.5%	99.6	8.2	7.6%	98.4	9.3	8.6%
ME 1	47 60 29	2007	Above Normal	August	--	54.2	51.0	3.2	5.9%	50.6	3.6	6.7%	49.7	4.5	8.4%	48.8	5.4	10.0%	47.9	6.3	11.7%	47.0	7.2	13.3%
ME 1	47 60 29	2007	Above Normal	September	Used in Summary Table Analysis	49.5	46.6	2.9	5.8%	46.2	3.3	6.6%	45.3	4.1	8.3%	44.5	4.9	10.0%	43.7	5.8	11.6%	42.9	6.6	13.3%
ME 1	47 60 29	2008	Dry	October	Used in Summary Table Analysis	2,928.9	2,925.9	3.0	0.1%	2,925.5	3.5	0.1%	2,924.7	4.3	0.1%	2,923.7	5.2	0.2%	2,922.9	6.0	0.2%	2,922.0	6.9	0.2%
ME 1	47 60 29	2008	Dry	November	Used in Summary Table Analysis	2,163.1	2,160.8	2.3	0.1%	2,160.4	2.7	0.1%	2,159.8	3.2	0.1%	2,159.1	3.9	0.2%	2,158.4	4.6	0.2%	2,157.9	5.2	0.2%
ME 1	47 60 29	2008	Dry	December	--	14,252.3	14,250.0	2.3	0.0%	14,250.0	2.3	0.0%	14,250.0	2.3	0.0%	14,248.8	3.5	0.0%	14,247.7	4.6	0.0%	14,247.7	4.6	0.0%
ME 1	47 60 29	2008	Dry	January	--	15,944.4	15,942.1	2.3	0.0%	15,942.1	2.3	0.0%	15,941.0	3.5	0.0%	15,941.0	3.5	0.0%	15,941.0	3.5	0.0%	15,939.8	4.6	0.0%
ME 1	47 60 29	2008	Dry	February	--	6,515.0	6,513.7	1.4	0.0%	6,513.5	1.5	0.0%	6,513.1	2.0	0.0%	6,512.7	2.3	0.0%	6,512.4	2.7	0.0%	6,511.9	3.1	0.0%
ME 1	47 60 29	2008	Dry	March	--	3,178.0	3,176.9	1.2	0.0%	3,176.7	1.3	0.0%	3,176.4	1.6	0.1%	3,176.0	2.0	0.1%	3,175.8	2.2	0.1%	3,175.5	2.5	0.1%
ME 1	47 60 29	2008	Dry	April	--	4,335.1	4,329.5	5.6	0.1%	4,328.7	6.4	0.1%	4,327.2	7.9	0.2%	4,325.6	9.5	0.2%	4,324.1	11.0	0.3%	4,322.5	12.6	0.3%
ME 1	47 60 29	2008	Dry	May	--	74.7	71.9	2.8	3.7%	71.5	3.2	4.3%	70.7	4.0	5.3%	70.0	4.7	6.3%	69.4	5.3	7.0%	68.8	5.8	7.8%
ME 1	47 60 29	2008	Dry	June	--	76.1	70.3	5.8	7.6%	69.4	6.6	8.7%	67.8	8.2	10.8%	66.2	9.9	13.0%	64.6	11.5	15.1%	62.9	13.1	17.3%
ME 1	47 60 29	2008	Dry	July	--	48.6	44.5	4.1	8.5%	43.9	4.7	9.7%	42.8	5.9	12.0%	41.6	7.0	14.4%	40.4	8.2	16.8%	39.3	9.3	19.2%
ME 1	47 60 29	2008	Dry	August	--	45.4	41.3	4.0	8.8%	40.8	4.6	10.1%	39.6	5.7	12.6%	38.5	6.9	15.2%	37.3	8.0	17.7%	36.2	9.2	20.2%
ME 1	47 60 29	2008	Dry	September	Used in Summary Table Analysis	34.2	29.2	5.0	14.7%	28.5	5.7	16.8%	27.0	7.2	21.0%	25.6	8.6	25.3%	24.1	10.1	29.5%	22.7	11.5	33.7%
ME 1	47 60 29	2009	Critical	October	Used in Summary Table Analysis	654.2	650.4	3.8	0.6%	649.8	4.4	0.7%	648.7	5.5	0.8%	647.5	6.6	1.0%	646.7	7.5	1.2%	645.5	8.7	1.3%
ME 1	47 60 29	2009	Critical	November	Used in Summary Table Analysis	3,884.1	3,881.4	2.8	0.1%	3,881.0	3.1	0.1%	3,880.2	3.9	0.1%	3,879.4	4.7	0.1%	3,878.6	5.6	0.1%	3,877.8	6.4	0.2%
ME 1	47 60 29	2009	Critical	December	--	7,202.3	7,199.9	2.4	0.0%	7,199.5	2.8	0.0%	7,198.6	3.7	0.1%	7,197.9	4.4	0.1%	7,197.2	5.1	0.1%	7,196.5	5.8	0.1%
ME 1	47 60 29	2009	Critical	January	--	4,440.2	4,438.2	2.0	0.0%	4,438.0	2.2	0.0%	4,437.4	2.8	0.1%	4,436.8	3.4	0.1%	4,436.2	3.9	0.1%	4,435.6	4.5	0.1%
ME 1	47 60 29	2009	Critical	February	--	13,567.1	13,566.0	1.2	0.0%	13,566.0	1.2	0.0%	13,564.8	2.3	0.0%	13,564.8	2.3	0.0%	13,563.7	3.5	0.0%	13,563.7	3.5	0.0%
ME 1	47 60 29	2009	Critical	March	--	11,032.2	11,030.8	1.4	0.0%	11,030.6	1.6	0.0%	11,030.2	2.0	0.0%	11,029.7	2.4	0.0%	11,029.4	2.8	0.0%	11,028.9	3.2	0.0%
ME 1	47 60 29	2009	Critical	April	--	4,806.3	4,800.6	5.7	0.1%	4,799.8	6.5	0.1%	4,798.1	8.1	0.2%	4,796.5	9.7	0.2%	4,794.9	11.3	0.2%	4,793.3	13.0	0.3%
ME 1	47 60 29	2009	Critical	May	--	10,380.1	10,374.9	5.2	0.1%	10,374.2	5.9	0.1%	10,372.8	7.3	0.1%	10,371.4	8.7	0.1%	10,369.6	10.5	0.1%	10,368.1	12.0	0.1%
ME 1	47 60 29	2009	Critical	June	--	336.2	329.5	6.8	2.0%	328.5	7.7	2.3%	326.5	9.7	2.9%	324.5	11.7	3.5%	322.6	13.6	4.1%	320.6	15.6	4.6%
ME 1	47 60 29	2009	Critical	July	--	68.9	64.7	4.2	6.1%	64.2	4.8	6.9%	63.0	5.9	8.5%	61.9	7.0	10.2%	60.8	8.1	11.8%	59.7	9.2	13.4%
ME 1	47 60 29	2009	Critical	August	--	55.2	51.2	4.0	7.3%	50.7	4.6	8.3%	49.5	5.7	10.3%	48.4	6.8	12.3%	47.3	8.0	14.4%	46.1	9.1	16.5%
ME 1	47 60 29	2009	Critical	September	Used in Summary Table Analysis	49.3	45.7	3.5	7.2%	45.2	4.1	8.2%	44.2	5.1	10.3%	43.2	6.1	12.4%	42.2	7.1	14.4%	41.1	8.1	16.5%
ME 1	47 60 29	2010	Below Normal	October	Used in Summary Table Analysis	5,093.2	5,089.5	3.7	0.1%	5,089.0	4.2	0.1%	5,088.0	5.2	0.1%	5,086.9	6.3	0.1%	5,086.0	7.2	0.1%	5,084.8	8.3	0.2%
ME 1	47 60 29	2010	Below Normal	November	Used in Summary Table Analysis	6,075.7	6,072.9	2.8	0.0%	6,072.5	3.2	0.1%	6,071.6	4.1	0.1%	6,070.8	4.9	0.1%	6,070.0	5.7	0.1%	6,069.2	6.5	0.1%
ME 1	47 60 29	2010	Below Normal	December	--	6,286.1	6,283.8	2.3	0.0%	6,283.4	2.7	0.0%	6,282.8	3.4	0.1%	6,282.1	4.1	0.1%	6,281.4	4.7	0.1%	6,280.7	5.4	0.1%
ME 1	47 60 29	2010	Below Normal	January	--	18,079.9	18,077.5	2.3	0.0%	18,077.5	2.3	0.0%	18,077.5	2.3	0.0%	18,076.4	3.5	0.0%	18,075.2	4.6	0.0%	18,075.2	4.6	0.0%
ME 1	47 60 29	2010	Below Normal	February	--	11,642.4	11,641.2	1.2	0.0%	11,640.0	2.3	0.0%	11,640.0	2.3	0.0%	11,640.0	2.3	0.0%	11,638.9	3.5	0.0%	11,638.9	3.5	0.0%
ME 1	47 60 29	2010	Below Normal	March	--	15,990.7	15,989.6	1.2	0.0%	15,989.6	1.2	0.0%	15,988.4	2.3	0.0%	15,988.4	2.3	0.0%	15,988.4	2.3	0.0%	15,987.3	3.5	0.0%
ME 1	47 60 29	2010	Below Normal	April	--	22,825.2	22,824.1	1.2	0.0%	22,824.1	1.2	0.0%	22,822.9	2.3	0.0%	22,822.9	2.3	0.0%	22,822.9	2.3	0.0%	22,821.8	3.5	0.0%
ME 1	47 60 29	2010	Below Normal	May	--	6,427.2	6,422.1	5.1	0.1%	6,421.3	5.9	0.1%	6,419.8	7.4	0.1%	6,418.3	8.9	0.1%	6,416.8	10.4	0.2%	6,415.2	12.0	0.2%
ME 1	47 60 29	2010	Below Normal	June	--	3,625.6	3,619.0	6.6	0.2%	3,618.1	7.5	0.2%	3,616.3	9.3	0.3%	3,614.6	11.0	0.3%	3,612.7	12.8	0.4%	3,611.0	14.6	0.4%
ME 1	47 60 29	2010	Below Normal	July	--	87.7	83.8	3.9	4.4%	83.2	4.5	5.1%	82.1	5.6	6.4%	80.9	6.7	7.7%	79.8	7.9	9.0%	78.9	8.8	10.0%
ME 1	47 60 29	2010	Below Normal	August	--	67.1	63.9	3.2	4.8%	63.4	3.7	5.5%	62.5	4.6	6.8%	61.6	5.4	8.1%	60.7	6.4	9.5%	59.8	7.3	10.9%
ME 1	47 60 29	2010	Below Normal	September	Used in Summary Table Analysis	321.7	317.6	4.1	1.3%	317.0	4.7	1.5%	315.8	5.9	1.8%	314.7	7.0	2.2%	313.5	8.2	2.6%	312.3	9.4	2.9%
ME 1	47 60 29	2011	Wet	October	Used in Summary Table Analysis	7,149.9	7,147.1	2.8	0.0%	7,146.6	3.2	0.0%	7,145.8	4.1	0.1%	7,145.1	4.7	0.1%	7,144.3	5.6	0.1%	7,143.5	6.4	0.1%
ME 1	47 60 29	2011	Wet	November	Used in Summary Table Analysis	6,166.7	6,164.5	2.2	0.0%	6,164.2	2.4	0.0%	6,163.5	3.1	0.1%	6,163.0	3.7	0.1%	6,162.3	4.4	0.1%	6,161.7	5.0	0.1%
ME 1	47 60 29	2011	Wet	December	--	17,496.5	17,495.4	1.2	0.0%	17,494.2	2.3	0.0%	17,494.2	2.3	0.0%	17,494.2	2.3	0.0%	17,493.1	3.5	0.0%	17,493.1	3.5	0.0%
ME 1	47 60 29	2011	Wet	January	--	3,467.6	3,466.3	1.3	0.0%	3,466.1	1.5	0.0%	3,465.7	1.9	0.1%	3,465.3	2.3	0.1%	3,464.8	2.8	0.1%	3,464.5	3.1	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 60 29	2011	Wet	February	--	10,707.8	10,706.4	1.4	0.0%	10,706.3	1.5	0.0%	10,705.9	1.9	0.0%	10,705.6	2.2	0.0%	10,705.1	2.7	0.0%	10,704.7	3.0	0.0%
ME 1	47 60 29	2011	Wet	March	--	28,659.7	28,658.6	1.2	0.0%	28,658.6	1.2	0.0%	28,658.6	1.2	0.0%	28,658.6	1.2	0.0%	28,657.4	2.3	0.0%	28,657.4	2.3	0.0%
ME 1	47 60 29	2011	Wet	April	--	11,067.4	11,066.4	0.9	0.0%	11,066.2	1.2	0.0%	11,066.0	1.4	0.0%	11,065.6	1.7	0.0%	11,065.4	2.0	0.0%	11,065.0	2.3	0.0%
ME 1	47 60 29	2011	Wet	May	--	4,810.9	4,806.1	4.7	0.1%	4,805.4	5.4	0.1%	4,803.9	6.9	0.1%	4,802.5	8.3	0.2%	4,801.2	9.7	0.2%	4,799.8	11.1	0.2%
ME 1	47 60 29	2011	Wet	June	--	3,138.3	3,131.9	6.4	0.2%	3,131.1	7.2	0.2%	3,129.3	9.0	0.3%	3,127.5	10.8	0.3%	3,125.8	12.5	0.4%	3,124.1	14.2	0.5%
ME 1	47 60 29	2011	Wet	July	--	214.8	209.2	5.5	2.6%	208.5	6.3	2.9%	206.9	7.9	3.7%	205.3	9.4	4.4%	203.8	11.0	5.1%	202.2	12.6	5.8%
ME 1	47 60 29	2011	Wet	August	--	65.8	62.8	3.0	4.6%	62.3	3.5	5.3%	61.5	4.3	6.6%	60.6	5.2	7.9%	59.7	6.1	9.2%	58.9	6.9	10.5%
ME 1	47 60 29	2011	Wet	September	Used in Summary Table Analysis	55.7	53.1	2.7	4.8%	52.7	3.0	5.4%	52.0	3.8	6.8%	51.2	4.5	8.1%	50.5	5.3	9.4%	49.7	6.0	10.8%
ME 1	47 60 29	2012	Below Normal	October	Used in Summary Table Analysis	3,528.2	3,525.6	2.7	0.1%	3,525.2	3.0	0.1%	3,524.5	3.7	0.1%	3,523.7	4.5	0.1%	3,522.9	5.3	0.2%	3,522.2	6.0	0.2%
ME 1	47 60 29	2012	Below Normal	November	Used in Summary Table Analysis	4,817.9	4,815.9	2.1	0.0%	4,815.5	2.4	0.1%	4,814.9	3.0	0.1%	4,814.4	3.6	0.1%	4,813.7	4.3	0.1%	4,813.1	4.9	0.1%
ME 1	47 60 29	2012	Below Normal	December	--	1,959.7	1,958.1	1.6	0.1%	1,957.9	1.9	0.1%	1,957.3	2.4	0.1%	1,956.8	2.9	0.1%	1,956.3	3.5	0.2%	1,955.8	3.9	0.2%
ME 1	47 60 29	2012	Below Normal	January	--	11,440.7	11,439.2	1.5	0.0%	11,439.0	1.7	0.0%	11,438.7	2.1	0.0%	11,438.2	2.5	0.0%	11,437.7	3.0	0.0%	11,437.4	3.4	0.0%
ME 1	47 60 29	2012	Below Normal	February	--	6,660.1	6,658.9	1.2	0.0%	6,658.8	1.3	0.0%	6,658.4	1.6	0.0%	6,658.1	2.0	0.0%	6,657.6	2.4	0.0%	6,657.3	2.8	0.0%
ME 1	47 60 29	2012	Below Normal	March	--	25,149.3	25,148.1	1.2	0.0%	25,148.1	1.2	0.0%	25,148.1	1.2	0.0%	25,148.1	1.2	0.0%	25,147.0	2.3	0.0%	25,147.0	2.3	0.0%
ME 1	47 60 29	2012	Below Normal	April	--	12,517.4	12,516.2	1.2	0.0%	12,516.2	1.2	0.0%	12,516.2	1.2	0.0%	12,515.0	2.3	0.0%	12,515.0	2.3	0.0%	12,515.0	2.3	0.0%
ME 1	47 60 29	2012	Below Normal	May	--	2,049.2	2,044.3	4.9	0.2%	2,043.5	5.7	0.3%	2,042.1	7.1	0.3%	2,040.7	8.4	0.4%	2,039.4	9.8	0.5%	2,037.8	11.3	0.6%
ME 1	47 60 29	2012	Below Normal	June	--	3,039.6	3,033.2	6.4	0.2%	3,032.3	7.3	0.2%	3,030.6	9.0	0.3%	3,028.8	10.8	0.4%	3,027.0	12.6	0.4%	3,025.2	14.4	0.5%
ME 1	47 60 29	2012	Below Normal	July	--	1,082.5	1,076.9	5.6	0.5%	1,076.1	6.4	0.6%	1,074.5	8.0	0.7%	1,072.9	9.6	0.9%	1,071.3	11.2	1.0%	1,069.7	12.8	1.2%
ME 1	47 60 29	2012	Below Normal	August	--	72.2	69.2	3.0	4.1%	68.8	3.4	4.7%	67.9	4.2	5.9%	67.1	5.1	7.0%	66.3	5.9	8.2%	65.4	6.7	9.3%
ME 1	47 60 29	2012	Below Normal	September	Used in Summary Table Analysis	59.4	56.7	2.7	4.6%	56.3	3.1	5.2%	55.6	3.8	6.5%	54.8	4.6	7.7%	54.1	5.3	8.9%	53.3	6.1	10.2%
ME 1	47 60 29	2013	Below Normal	October	Used in Summary Table Analysis	1,483.2	1,480.3	2.9	0.2%	1,480.0	3.2	0.2%	1,479.1	4.2	0.3%	1,478.2	5.0	0.3%	1,477.4	5.8	0.4%	1,476.6	6.6	0.4%
ME 1	47 60 29	2013	Below Normal	November	Used in Summary Table Analysis	9,489.9	9,487.7	2.2	0.0%	9,487.4	2.5	0.0%	9,486.8	3.1	0.0%	9,486.1	3.8	0.0%	9,485.4	4.5	0.0%	9,484.7	5.2	0.1%
ME 1	47 60 29	2013	Below Normal	December	--	32,099.5	32,097.2	2.3	0.0%	32,096.1	3.5	0.0%	32,096.1	3.5	0.0%	32,094.9	4.6	0.0%	32,094.9	4.6	0.0%	32,093.8	5.8	0.0%
ME 1	47 60 29	2013	Below Normal	January	--	4,825.1	4,823.7	1.4	0.0%	4,823.5	1.6	0.0%	4,823.0	2.1	0.0%	4,822.6	2.5	0.1%	4,822.1	3.0	0.1%	4,821.5	3.6	0.1%
ME 1	47 60 29	2013	Below Normal	February	--	3,069.7	3,068.4	1.3	0.0%	3,068.2	1.5	0.0%	3,067.8	1.9	0.1%	3,067.5	2.2	0.1%	3,067.0	2.7	0.1%	3,066.6	3.1	0.1%
ME 1	47 60 29	2013	Below Normal	March	--	5,639.9	5,638.9	1.0	0.0%	5,638.7	1.3	0.0%	5,638.4	1.5	0.0%	5,638.1	1.9	0.0%	5,637.7	2.2	0.0%	5,637.4	2.5	0.0%
ME 1	47 60 29	2013	Below Normal	April	--	4,397.9	4,393.2	4.7	0.1%	4,392.6	5.3	0.1%	4,391.3	6.6	0.2%	4,389.9	8.0	0.2%	4,388.7	9.3	0.2%	4,387.3	10.6	0.2%
ME 1	47 60 29	2013	Below Normal	May	--	2,272.6	2,268.6	3.9	0.2%	2,268.1	4.5	0.2%	2,267.0	5.6	0.2%	2,265.9	6.7	0.3%	2,264.7	7.9	0.3%	2,263.5	9.0	0.4%
ME 1	47 60 29	2013	Below Normal	June	--	1,010.6	1,005.0	5.6	0.6%	1,004.2	6.4	0.6%	1,002.6	8.0	0.8%	1,001.0	9.6	1.0%	999.4	11.2	1.1%	997.8	12.8	1.3%
ME 1	47 60 29	2013	Below Normal	July	--	68.2	64.9	3.3	4.9%	64.4	3.8	5.5%	63.5	4.7	6.8%	62.6	5.6	8.2%	61.7	6.5	9.5%	60.8	7.3	10.8%
ME 1	47 60 29	2013	Below Normal	August	--	55.8	52.6	3.2	5.8%	52.1	3.7	6.6%	51.2	4.6	8.2%	50.3	5.5	9.8%	49.4	6.4	11.5%	48.4	7.3	13.1%
ME 1	47 60 29	2013	Below Normal	September	Used in Summary Table Analysis	3,832.8	3,828.2	4.5	0.1%	3,827.7	5.1	0.1%	3,826.4	6.4	0.2%	3,825.1	7.6	0.2%	3,823.8	8.9	0.2%	3,822.6	10.2	0.3%
ME 1	47 60 29	2014	Critical	October	Used in Summary Table Analysis	88.4	85.5	2.9	3.2%	85.1	3.3	3.7%	84.2	4.1	4.7%	83.4	5.0	5.6%	82.6	5.8	6.6%	81.7	6.7	7.5%
ME 1	47 60 29	2014	Critical	November	Used in Summary Table Analysis	1,147.7	1,145.4	2.3	0.2%	1,145.1	2.6	0.2%	1,144.4	3.3	0.3%	1,143.8	3.9	0.3%	1,143.1	4.6	0.4%	1,142.5	5.2	0.5%
ME 1	47 60 29	2014	Critical	December	--	916.9	915.2	1.8	0.2%	914.9	2.1	0.2%	914.4	2.6	0.3%	913.8	3.1	0.3%	913.3	3.7	0.4%	912.8	4.2	0.5%
ME 1	47 60 29	2014	Critical	January	--	1,815.4	1,813.9	1.5	0.1%	1,813.7	1.7	0.1%	1,813.2	2.2	0.1%	1,812.7	2.7	0.1%	1,812.4	3.0	0.2%	1,811.9	3.5	0.2%
ME 1	47 60 29	2014	Critical	February	--	9,880.3	9,878.9	1.4	0.0%	9,878.8	1.5	0.0%	9,878.4	2.0	0.0%	9,878.0	2.3	0.0%	9,877.7	2.7	0.0%	9,877.2	3.1	0.0%
ME 1	47 60 29	2014	Critical	March	--	14,849.5	14,848.4	1.2	0.0%	14,848.4	1.2	0.0%	14,848.4	1.2	0.0%	14,847.2	2.3	0.0%	14,847.2	2.3	0.0%	14,847.2	2.3	0.0%
ME 1	47 60 29	2014	Critical	April	--	3,630.9	3,625.5	5.4	0.1%	3,624.7	6.3	0.2%	3,623.3	7.6	0.2%	3,621.8	9.1	0.3%	3,620.1	10.8	0.3%	3,618.5	12.4	0.3%
ME 1	47 60 29	2014	Critical	May	--	1,853.6	1,848.8	4.7	0.3%	1,848.3	5.3	0.3%	1,846.9	6.7	0.4%	1,845.6	8.0	0.4%	1,844.2	9.4	0.5%	1,842.8	10.8	0.6%
ME 1	47 60 29	2014	Critical	June	--	121.0	114.2	6.7	5.6%	113.3	7.7	6.4%	111.4	9.6	7.9%	109.5	11.5	9.5%	107.6	13.3	11.0%	105.7	15.2	12.6%
ME 1	47 60 29	2014	Critical	July	--	57.5	53.5	4.0	6.9%	53.0	4.5	7.9%	51.9	5.7	9.9%	50.7	6.8	11.8%	49.6	7.9	13.8%	48.5	9.0	15.7%
ME 1	47 60 29	2014	Critical	August	--	50.5	46.6	4.0	7.8%	46.0	4.5	9.0%	44.9	5.7	11.2%	43.8	6.8	13.4%	42.6	7.9	15.6%	41.5	9.0	17.9%
ME 1	47 60 29	2014	Critical	September	Used in Summary Table Analysis	2,101.6	2,096.2	5.4	0.3%	2,095.5	6.1	0.3%	2,094.0	7.6	0.4%	2,092.4	9.3	0.4%	2,090.7	10.9	0.5%	2,089.2	12.4	0.6%
ME 1	47 60 29	2015	Dry	October	Used in Summary Table Analysis	8,253.8	8,249.4	4.4	0.1%	8,248.8	5.0	0.1%	8,247.8	6.0	0.1%	8,246.6	7.2	0.1%	8,245.6	8.2	0.1%	8,244.2	9.6	0.1%
ME 1	47 60 29	2015	Dry	November	Used in Summary Table Analysis	4,164.4	4,161.6	2.8	0.1%	4,161.1	3.2	0.1%	4,160.3	4.1	0.1%	4,159.5	4.9	0.1%	4,158.7	5.7	0.1%	4,157.9	6.5	0.2%
ME 1	47 60 29	2015	Dry	December	--	15,281.3	15,278.9	2.3	0.0%	15,277.8	3.5	0.0%	15,277.8	3.5	0.0%	15,276.6	4.6	0.0%	15,276.6	4.6	0.0%	15,275.5	5.8	0.0%
ME 1	47 60 29	2015	Dry	January	--	2,401.7	2,399.9	1.9	0.1%	2,399.7	2.1	0.1%	2,399.1	2.7	0.1%	2,398.6	3.1	0.1%	2,398.0	3.7	0.2%	2,397.5	4.3	0.2%
ME 1	47 60 29	2015	Dry	February	--	15,079.9	15,078.7	1.2	0.0%	15,078.7	1.2	0.0%	15,077.5	2.3	0.0%	15,077.5	2.3	0.0%	15,077.5	2.3	0.0%	15,076.4	3.5	0.0%
ME 1	47 60 29	2015	Dry	March	--	4,145.3	4,144.0	1.3	0.0%	4,143.8	1.5	0.0%	4,143.4	1.9	0.0%	4,143.1	2.2	0.1%	4,142.6	2.7	0.1%	4,142.4	2.9	0.1%
ME 1	47 60 29	2015	Dry	April	--	4,497.0	4,491.4	5.6	0.1%	4,490.6	6.4	0.1%	4,489.0	8.0	0.2%	4,487.4	9.6	0.2%	4,485.8	11.2	0.2%	4,484.1	12.8	0.3%
ME 1	47 60 29	2015	Dry	May	--	141.4	136.8	4.6	3.3%	136.1	5.3	3.8%	134.8	6.6	4.7%	133.5	7.9	5.6%	132.2	9.3	6.5%	130.8	10.6	7.5%
ME 1	47 60 29	2015	Dry	June	--	175.5	169.5	6.0	3.4%	168.7	6.8	3.9%	167.0	8.5	4.8%	165.3	10.2	5.8%	163.7	11.8	6.7%	162.0	13.4	7.7%
ME 1	47 60 29	2015	Dry	July	--	53.6	49.4	4.2	7.8%	48.8	4.8	8.9%	47.6	5.9	11.1%	46.5	7.1	13.3%	45.3	8.3	15.5%	44.1	9.4	17.6%
ME 1	47 60 29	2015	Dry	August	--	48.2	44.1	4.0	8.4%	43.5	4.6	9.6%	42.4	5.8	12.0%	41.2	6.9	14.4%	40.1	8.1	16.8%	38.9	9.2	19.2%
ME 1	47 60 29	2015	Dry	September	Used in Summary Table Analysis	46.7	43.0	3.7	7.8%	42.5	4.2	8.9%	40.9	5.7	12.3%	39.6	7.1	15.2%	38.0	8.6	18.5%	36.6	10.1	21.6%
ME 1	47 60 29	2016	Above Normal	October	Used in Summary Table Analysis	38.5	33.5	5.0	13.1%	32.7	5.8	15.1%	31.4	7.1	18.5%	30.0	8.5	22.0%	28.8	9.7	25.2%	27.7	10.8	28.0%
ME 1	47 60 29	2016	Above Normal	November	Used in Summary Table Analysis	2,988.9	2,986.1	2.8	0.1%	2,985.6	3.2	0.1%	2,984.8	4.1	0.1%	2,984.0	4.9	0.2%	2,983.2	5.7	0.2%	2,982.3	6.6	0.2%
ME 1	47 60 29	2016	Above Normal	December	--	19,850.7	19,848.4	2.3	0.0%	19,847.2	3.5	0.0%	19,847.2	3.5	0.0%	19,846.1	4.6	0.0%	19,844.9	5.8	0.0%	19,844.9	5.8	0.0%
ME 1	47 60 29	2016	Above Normal	January	--	20,939.8	20,937.5	2.3	0.0%	20,937.5	2.3	0.0%	20,936.3	3.5	0.0%	20,936.3	3.5	0.0%	20,935.2	4.6	0.0%	20,934.0	5.8	0.0%
ME 1	47 60 29	2016	Above Normal	February	--	5,507.6	5,506.1	1.5	0.0%	5,505.9	1.7	0.0%	5,505.4	2.2	0.0%	5,505.0	2.7	0.0%	5,504.5	3.1	0.1%	5,504.2	3.5	0.1%
ME 1	47 60 29	2016	Above Normal	March	--	20,275.5	20,274.3	1.2	0.0%	20,274.3	1.2	0.0%	20,273.1	2.3	0.0%	20,273.1	2.3	0.0%	20,272.0	3.5	0.0%	20,272.0	3.5	0.0%
ME 1	47 60 29	2016	Above Normal	April	--	5,690.6	5,689.5	1.2	0.0%	5,689.2	1.4	0.0%	5,689.0	1.6	0.0%	5,688.7	2.0	0.0%	5,688.3	2.3	0.0%	5,688.0	2.7	0.0%
ME 1	47 60 29	2016	Above Normal	May	--	1,249.2	1,247.5	1.7	0.1%	1,247.2	2.0	0.2%	1,246.8	2.4	0.2%	1,246.3	2.9	0.2%	1,245.7	3.5	0.3%	1,245.3	3.9	0.3%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 60 29	2016	Above Normal	June	--	80.5	76.2	4.3	5.3%	75.6	4.9	6.1%	74.5	6.0	7.5%	73.3	7.2	9.0%	72.1	8.4	10.5%	70.9	9.6	11.9%
ME 1	47 60 29	2016	Above Normal	July	--	60.7	57.4	3.3	5.4%	57.0	3.8	6.2%	56.1	4.7	7.7%	55.1	5.6	9.2%	54.2	6.5	10.8%	53.3	7.4	12.3%
ME 1	47 60 29	2016	Above Normal	August	--	52.1	49.0	3.2	6.1%	48.5	3.6	6.9%	47.6	4.5	8.6%	46.7	5.4	10.4%	45.8	6.3	12.1%	44.9	7.2	13.8%
ME 1	47 60 29	2016	Above Normal	September	Used in Summary Table Analysis	48.4	45.7	2.7	5.6%	44.7	3.7	7.7%	43.7	4.7	9.7%	42.6	5.9	12.1%	41.5	6.9	14.3%	40.4	8.1	16.6%
ME 1	47 60 29	2017	Wet	October	Used in Summary Table Analysis	12,881.9	12,878.5	3.5	0.0%	12,877.3	4.6	0.0%	12,877.3	4.6	0.0%	12,876.2	5.8	0.0%	12,873.8	8.1	0.1%	12,873.8	8.1	0.1%
ME 1	47 60 29	2017	Wet	November	Used in Summary Table Analysis	7,415.7	7,413.4	2.3	0.0%	7,413.2	2.5	0.0%	7,412.5	3.2	0.0%	7,411.8	3.9	0.1%	7,411.1	4.6	0.1%	7,410.4	5.3	0.1%
ME 1	47 60 29	2017	Wet	December	--	9,472.5	9,470.6	1.9	0.0%	9,470.4	2.1	0.0%	9,469.8	2.7	0.0%	9,469.2	3.2	0.0%	9,468.6	3.8	0.0%	9,468.2	4.3	0.0%
ME 1	47 60 29	2017	Wet	January	--	35,149.3	35,148.1	1.2	0.0%	35,148.1	1.2	0.0%	35,147.0	2.3	0.0%	35,147.0	2.3	0.0%	35,147.0	2.3	0.0%	35,145.8	3.5	0.0%
ME 1	47 60 29	2017	Wet	February	--	33,871.5	33,869.2	2.3	0.0%	33,869.2	2.3	0.0%	33,869.2	2.3	0.0%	33,868.1	3.5	0.0%	33,868.1	3.5	0.0%	33,868.1	3.5	0.0%
ME 1	47 60 29	2017	Wet	March	--	6,459.0	6,458.0	1.0	0.0%	6,457.9	1.2	0.0%	6,457.5	1.5	0.0%	6,457.2	1.9	0.0%	6,456.8	2.2	0.0%	6,456.5	2.5	0.0%
ME 1	47 60 29	2017	Wet	April	--	8,178.0	8,177.2	0.8	0.0%	8,177.0	1.0	0.0%	8,176.7	1.3	0.0%	8,176.5	1.5	0.0%	8,176.3	1.7	0.0%	8,176.0	2.0	0.0%
ME 1	47 60 29	2017	Wet	May	--	193.8	192.2	1.6	0.8%	191.9	1.9	1.0%	191.5	2.3	1.2%	191.0	2.8	1.4%	190.5	3.2	1.7%	190.1	3.7	1.9%
ME 1	47 60 29	2017	Wet	June	--	183.3	178.2	5.1	2.8%	177.5	5.9	3.2%	176.1	7.3	4.0%	174.6	8.8	4.8%	173.2	10.2	5.5%	171.7	11.6	6.3%
ME 1	47 60 29	2017	Wet	July	--	56.8	53.6	3.2	5.6%	53.2	3.6	6.4%	52.3	4.5	7.9%	51.4	5.4	9.5%	50.5	6.3	11.0%	49.7	7.1	12.6%
ME 1	47 60 29	2017	Wet	August	--	52.3	49.2	3.1	5.9%	48.8	3.5	6.7%	47.9	4.4	8.4%	47.0	5.3	10.1%	46.2	6.1	11.7%	45.3	7.0	13.4%
ME 1	47 60 29	2017	Wet	September	Used in Summary Table Analysis	47.6	43.8	3.8	8.0%	43.3	4.3	9.1%	42.2	5.4	11.4%	41.1	6.5	13.7%	40.0	7.6	16.0%	38.9	8.7	18.3%
ME 1	47 60 29	2018	Above Normal	October	Used in Summary Table Analysis	56.0	53.1	2.9	5.1%	52.7	3.3	5.8%	51.9	4.1	7.3%	51.0	4.9	8.8%	50.2	5.8	10.3%	49.4	6.6	11.8%
ME 1	47 60 29	2018	Above Normal	November	Used in Summary Table Analysis	7,167.2	7,165.2	2.1	0.0%	7,164.8	2.4	0.0%	7,164.2	3.0	0.0%	7,163.7	3.6	0.1%	7,163.0	4.3	0.1%	7,162.4	4.9	0.1%
ME 1	47 60 29	2018	Above Normal	December	--	616.5	614.9	1.6	0.3%	614.7	1.8	0.3%	614.2	2.3	0.4%	613.7	2.8	0.5%	613.2	3.3	0.5%	612.7	3.8	0.6%
ME 1	47 60 29	2018	Above Normal	January	--	9,083.1	9,081.7	1.4	0.0%	9,081.5	1.6	0.0%	9,081.0	2.1	0.0%	9,080.6	2.5	0.0%	9,080.2	2.9	0.0%	9,079.7	3.4	0.0%
ME 1	47 60 29	2018	Above Normal	February	--	730.9	729.9	1.1	0.1%	729.7	1.2	0.2%	729.4	1.6	0.2%	729.0	1.9	0.3%	728.7	2.2	0.3%	728.3	2.6	0.4%
ME 1	47 60 29	2018	Above Normal	March	--	9,610.9	9,610.0	0.9	0.0%	9,609.7	1.2	0.0%	9,609.5	1.4	0.0%	9,609.1	1.7	0.0%	9,608.9	2.0	0.0%	9,608.6	2.3	0.0%
ME 1	47 60 29	2018	Above Normal	April	--	17,443.3	17,442.1	1.2	0.0%	17,442.1	1.2	0.0%	17,442.1	1.2	0.0%	17,442.1	1.2	0.0%	17,441.0	2.3	0.0%	17,441.0	2.3	0.0%
ME 1	47 60 29	2018	Above Normal	May	--	726.7	721.9	4.8	0.7%	721.1	5.5	0.8%	719.9	6.8	0.9%	718.5	8.1	1.1%	717.3	9.4	1.3%	716.2	10.5	1.4%
ME 1	47 60 29	2018	Above Normal	June	--	64.6	61.8	2.8	4.3%	61.4	3.2	4.9%	60.7	3.9	6.1%	60.0	4.7	7.2%	59.2	5.4	8.4%	58.4	6.2	9.5%
ME 1	47 60 29	2018	Above Normal	July	--	54.4	51.1	3.3	6.1%	50.6	3.8	6.9%	49.7	4.7	8.6%	48.8	5.6	10.3%	47.9	6.5	12.0%	47.0	7.4	13.7%
ME 1	47 60 29	2018	Above Normal	August	--	50.4	47.3	3.1	6.1%	46.9	3.5	7.0%	46.0	4.4	8.7%	45.2	5.3	10.4%	44.3	6.1	12.2%	43.4	7.0	13.9%
ME 1	47 60 29	2018	Above Normal	September	Used in Summary Table Analysis	44.1	40.2	3.8	8.7%	39.7	4.4	9.9%	38.6	5.5	12.4%	37.5	6.6	14.9%	36.4	7.7	17.5%	35.2	8.8	20.0%
ME 1	47 60 29	2019	Below Normal	October	Used in Summary Table Analysis	59.0	55.9	3.1	5.3%	55.5	3.5	6.0%	54.6	4.4	7.5%	53.6	5.4	9.2%	52.8	6.2	10.5%	51.9	7.1	12.1%
ME 1	47 60 29	2019	Below Normal	November	Used in Summary Table Analysis	4,586.3	4,584.1	2.2	0.0%	4,583.8	2.5	0.1%	4,583.1	3.2	0.1%	4,582.4	3.9	0.1%	4,581.8	4.5	0.1%	4,581.1	5.2	0.1%
ME 1	47 60 29	2019	Below Normal	December	--	7,123.7	7,121.9	1.9	0.0%	7,121.6	2.1	0.0%	7,121.1	2.7	0.0%	7,120.5	3.2	0.0%	7,120.0	3.7	0.1%	7,119.4	4.3	0.1%
ME 1	47 60 29	2019	Below Normal	January	--	16,265.0	16,262.7	2.3	0.0%	16,262.7	2.3	0.0%	16,262.7	2.3	0.0%	16,261.6	3.5	0.0%	16,261.6	3.5	0.0%	16,260.4	4.6	0.0%
ME 1	47 60 29	2019	Below Normal	February	--	44,833.3	44,832.2	1.2	0.0%	44,832.2	1.2	0.0%	44,832.2	1.2	0.0%	44,831.0	2.3	0.0%	44,831.0	2.3	0.0%	44,831.0	2.3	0.0%
ME 1	47 60 29	2019	Below Normal	March	--	10,433.1	10,431.9	1.2	0.0%	10,431.8	1.3	0.0%	10,431.5	1.6	0.0%	10,431.1	2.0	0.0%	10,430.8	2.3	0.0%	10,430.4	2.7	0.0%
ME 1	47 60 29	2019	Below Normal	April	--	3,511.5	3,510.4	1.0	0.0%	3,510.3	1.2	0.0%	3,510.1	1.4	0.0%	3,509.8	1.6	0.0%	3,509.5	2.0	0.1%	3,509.3	2.2	0.1%
ME 1	47 60 29	2019	Below Normal	May	--	6,669.3	6,664.5	4.9	0.1%	6,663.7	5.7	0.1%	6,662.3	7.1	0.1%	6,660.9	8.4	0.1%	6,659.5	9.8	0.1%	6,658.1	11.2	0.2%
ME 1	47 60 29	2019	Below Normal	June	--	80.3	76.6	3.8	4.7%	76.0	4.3	5.4%	75.1	5.3	6.5%	74.3	6.0	7.5%	73.6	6.7	8.4%	72.9	7.5	9.3%
ME 1	47 60 29	2019	Below Normal	July	--	64.8	61.5	3.3	5.1%	61.0	3.8	5.9%	60.1	4.7	7.3%	59.1	5.6	8.7%	58.2	6.6	10.1%	57.3	7.5	11.6%
ME 1	47 60 29	2019	Below Normal	August	--	54.9	51.9	3.1	5.6%	51.4	3.5	6.4%	50.6	4.4	8.0%	49.7	5.2	9.5%	48.8	6.1	11.1%	48.0	7.0	12.7%
ME 1	47 60 29	2019	Below Normal	September	Used in Summary Table Analysis	127.1	123.3	3.8	3.0%	122.8	4.4	3.5%	121.6	5.5	4.3%	120.5	6.6	5.2%	119.5	7.7	6.0%	118.3	8.8	6.9%
ME 1	47 60 29	2020	Dry	October	Used in Summary Table Analysis	159.5	156.8	2.7	1.7%	156.4	3.1	1.9%	155.6	3.8	2.4%	154.9	4.6	2.9%	154.1	5.4	3.4%	153.3	6.2	3.9%
ME 1	47 60 29	2020	Dry	November	Used in Summary Table Analysis	86.3	84.7	1.6	1.8%	84.5	1.8	2.1%	84.0	2.3	2.7%	83.5	2.8	3.2%	83.0	3.3	3.8%	82.5	3.8	4.4%
ME 1	47 60 29	2020	Dry	December	--	7,889.2	7,887.5	1.7	0.0%	7,887.3	2.0	0.0%	7,886.8	2.4	0.0%	7,886.2	3.0	0.0%	7,885.8	3.5	0.0%	7,885.3	3.9	0.0%
ME 1	47 60 29	2020	Dry	January	--	9,018.1	9,016.6	1.5	0.0%	9,016.3	1.7	0.0%	9,015.9	2.2	0.0%	9,015.4	2.7	0.0%	9,014.9	3.1	0.0%	9,014.5	3.6	0.0%
ME 1	47 60 29	2020	Dry	February	--	255.2	254.0	1.1	0.4%	253.9	1.3	0.5%	253.5	1.7	0.7%	253.1	2.0	0.8%	252.8	2.4	0.9%	252.5	2.7	1.1%
ME 1	47 60 29	2020	Dry	March	--	2,675.6	2,674.5	1.0	0.0%	2,674.4	1.2	0.0%	2,674.1	1.5	0.1%	2,673.7	1.9	0.1%	2,673.4	2.2	0.1%	2,673.1	2.4	0.1%
ME 1	47 60 29	2020	Dry	April	--	2,164.0	2,158.7	5.3	0.2%	2,157.9	6.1	0.3%	2,156.4	7.6	0.4%	2,154.9	9.1	0.4%	2,153.2	10.8	0.5%	2,151.7	12.3	0.6%
ME 1	47 60 29	2020	Dry	May	--	3,785.1	3,780.4	4.6	0.1%	3,779.7	5.3	0.1%	3,778.5	6.6	0.2%	3,777.1	8.0	0.2%	3,775.8	9.3	0.2%	3,774.5	10.5	0.3%
ME 1	47 60 29	2020	Dry	June	--	90.4	84.0	6.4	7.1%	83.1	7.3	8.0%	81.6	8.7	9.7%	80.2	10.2	11.3%	78.6	11.7	13.0%	77.1	13.3	14.7%
ME 1	47 60 29	2020	Dry	July	--	54.2	50.3	3.9	7.2%	49.7	4.5	8.3%	48.6	5.6	10.3%	47.5	6.7	12.4%	46.3	7.9	14.5%	45.2	9.0	16.6%
ME 1	47 60 29	2020	Dry	August	--	47.7	43.8	3.9	8.2%	43.2	4.5	9.4%	42.1	5.6	11.8%	41.0	6.7	14.1%	39.8	7.9	16.5%	38.7	9.0	18.8%
ME 1	47 60 29	2020	Dry	September	Used in Summary Table Analysis	45.6	42.0	3.6	7.8%	41.5	4.1	8.9%	39.7	5.9	13.0%	38.3	7.3	15.9%	36.8	8.8	19.3%	35.3	10.3	22.5%
ME 1	48 59 42	2000	Above Normal	October	Used in Summary Table Analysis	413.2	409.6	3.6	0.9%	409.1	4.1	1.0%	408.1	5.1	1.2%	407.0	6.2	1.5%	406.0	7.2	1.7%	405.0	8.2	2.0%
ME 1	48 59 42	2000	Above Normal	November	Used in Summary Table Analysis	3,551.2	3,548.5	2.7	0.1%	3,548.1	3.0	0.1%	3,547.3	3.8	0.1%	3,546.6	4.5	0.1%	3,545.8	5.3	0.1%	3,545.1	6.0	0.2%
ME 1	48 59 42	2000	Above Normal	December	--	5,814.5	5,812.2	2.3	0.0%	5,811.8	2.7	0.0%	5,811.2	3.2	0.1%	5,810.5	3.9	0.1%	5,809.8	4.6	0.1%	5,809.3	5.2	0.1%
ME 1	48 59 42	2000	Above Normal	January	--	12,915.5	12,913.2	2.3	0.0%	12,913.2	2.3	0.0%	12,912.0	3.5	0.0%	12,912.0	3.5	0.0%	12,910.9	4.6	0.0%	12,910.9	4.6	0.0%
ME 1	48 59 42	2000	Above Normal	February	--	20,267.4	20,265.0	2.3	0.0%	20,265.0	2.3	0.0%	20,263.9	3.5	0.0%	20,263.9	3.5	0.0%	20,262.7	4.6	0.0%	20,262.7	4.6	0.0%
ME 1	48 59 42	2000	Above Normal	March	--	12,425.9	12,423.6	2.3	0.0%	12,423.6	2.3	0.0%	12,423.6	2.3	0.0%	12,422.5	3.5	0.0%	12,422.5	3.5	0.0%	12,421.3	4.6	0.0%
ME 1	48 59 42	2000	Above Normal	April	--	6,819.9	6,817.7	2.2	0.0%	6,817.5	2.4	0.0%	6,816.8	3.1	0.0%	6,816.2	3.7	0.1%	6,815.6	4.3	0.1%	6,814.9	5.0	0.1%
ME 1	48 59 42	2000	Above Normal	May	--	4,235.3	4,231.3	4.1	0.1%	4,230.7	4.6	0.1%	4,229.4	5.9	0.1%	4,228.2	7.1	0.2%	4,227.1	8.2	0.2%	4,225.9	9.4	0.2%
ME 1	48 59 42	2000	Above Normal	June	--	1,972.7	1,965.0	7.6	0.4%	1,964.0	8.7	0.4%	1,961.8	10.9	0.6%	1,959.6	13.1	0.7%	1,957.5	15.2	0.8%	1,955.3	17.4	0.9%
ME 1	48 59 42	2000	Above Normal	July	--	909.7	902.4	7.3	0.8%	901.3	8.3	0.9%	899.3	10.4	1.1%	897.2	12.5	1.4%	895.1	14.5	1.6%	893.0	16.6	1.8%
ME 1	48 59 42	2000	Above Normal	August	--	451.8	445.8	6.0	1.3%	444.9	6.9	1.5%	443.2	8.6	1.9%	441.5	10.3	2.3%	439.8	12.0	2.7%	438.0	13.8	3.0%
ME 1	48 59 42	2000	Above Normal	September	Used in Summary Table Analysis	233.5	228.6	4.9	2.1%	227.9	5.6	2.4%	226.5	7.0	3.0%	225.1	8.5	3.6%	223.7	9.9	4.2%	222.3	11.3	4.8%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 59 42	2001	Dry	October	Used in Summary Table Analysis	947.8	944.4	3.3	0.4%	944.0	3.8	0.4%	943.0	4.8	0.5%	942.1	5.7	0.6%	941.1	6.7	0.7%	940.2	7.6	0.8%
ME 1	48 59 42	2001	Dry	November	Used in Summary Table Analysis	2,655.2	2,652.7	2.5	0.1%	2,652.3	2.9	0.1%	2,651.5	3.7	0.1%	2,650.8	4.4	0.2%	2,650.1	5.1	0.2%	2,649.3	5.9	0.2%
ME 1	48 59 42	2001	Dry	December	--	3,750.0	3,747.7	2.3	0.1%	3,747.5	2.5	0.1%	3,746.8	3.2	0.1%	3,746.1	3.9	0.1%	3,745.5	4.5	0.1%	3,744.8	5.2	0.1%
ME 1	48 59 42	2001	Dry	January	--	5,975.1	5,972.9	2.2	0.0%	5,972.7	2.4	0.0%	5,972.0	3.1	0.1%	5,971.4	3.7	0.1%	5,970.8	4.3	0.1%	5,970.3	4.9	0.1%
ME 1	48 59 42	2001	Dry	February	--	8,662.7	8,660.8	2.0	0.0%	8,660.4	2.3	0.0%	8,659.8	2.9	0.0%	8,659.3	3.5	0.0%	8,658.7	4.1	0.0%	8,658.1	4.6	0.1%
ME 1	48 59 42	2001	Dry	March	--	7,035.8	7,033.7	2.1	0.0%	7,033.4	2.3	0.0%	7,032.9	2.9	0.0%	7,032.3	3.5	0.0%	7,031.7	4.1	0.1%	7,031.1	4.6	0.1%
ME 1	48 59 42	2001	Dry	April	--	5,758.9	5,755.2	3.7	0.1%	5,754.6	4.3	0.1%	5,753.6	5.3	0.1%	5,752.4	6.5	0.1%	5,751.4	7.5	0.1%	5,750.3	8.6	0.1%
ME 1	48 59 42	2001	Dry	May	--	2,029.2	2,023.6	5.6	0.3%	2,022.9	6.3	0.3%	2,021.3	7.9	0.4%	2,019.7	9.5	0.5%	2,018.1	11.1	0.5%	2,016.4	12.7	0.6%
ME 1	48 59 42	2001	Dry	June	--	1,247.6	1,239.1	8.4	0.7%	1,238.0	9.6	0.8%	1,235.6	11.9	1.0%	1,233.2	14.4	1.2%	1,230.9	16.7	1.3%	1,228.6	19.0	1.5%
ME 1	48 59 42	2001	Dry	July	--	647.4	639.1	8.2	1.3%	638.0	9.4	1.5%	635.6	11.8	1.8%	633.2	14.1	2.2%	630.9	16.5	2.5%	628.5	18.9	2.9%
ME 1	48 59 42	2001	Dry	August	--	109.5	102.6	6.9	6.3%	101.6	7.9	7.2%	99.6	9.9	9.0%	97.6	11.9	10.9%	95.6	13.9	12.7%	93.7	15.9	14.5%
ME 1	48 59 42	2001	Dry	September	Used in Summary Table Analysis	36.8	31.2	5.6	15.3%	30.4	6.4	17.5%	28.8	8.0	21.9%	27.1	9.6	26.2%	25.5	11.3	30.6%	23.9	12.9	35.0%
ME 1	48 59 42	2002	Below Normal	October	Used in Summary Table Analysis	116.0	112.0	4.0	3.5%	111.5	4.6	3.9%	110.3	5.7	4.9%	109.2	6.9	5.9%	108.0	8.0	6.9%	106.9	9.2	7.9%
ME 1	48 59 42	2002	Below Normal	November	Used in Summary Table Analysis	4,539.1	4,536.2	2.9	0.1%	4,535.9	3.2	0.1%	4,535.1	4.1	0.1%	4,534.3	4.9	0.1%	4,533.4	5.7	0.1%	4,532.5	6.6	0.1%
ME 1	48 59 42	2002	Below Normal	December	--	21,186.3	21,184.0	2.3	0.0%	21,182.9	3.5	0.0%	21,182.9	3.5	0.0%	21,181.7	4.6	0.0%	21,180.6	5.8	0.0%	21,180.6	5.8	0.0%
ME 1	48 59 42	2002	Below Normal	January	--	20,819.4	20,817.1	2.3	0.0%	20,817.1	2.3	0.0%	20,817.1	2.3	0.0%	20,816.0	3.5	0.0%	20,814.8	4.6	0.0%	20,814.8	4.6	0.0%
ME 1	48 59 42	2002	Below Normal	February	--	16,041.7	16,039.4	2.3	0.0%	16,038.2	3.5	0.0%	16,038.2	3.5	0.0%	16,037.0	4.6	0.0%	16,037.0	4.6	0.0%	16,035.9	5.8	0.0%
ME 1	48 59 42	2002	Below Normal	March	--	10,325.0	10,322.6	2.4	0.0%	10,322.2	2.8	0.0%	10,321.5	3.5	0.0%	10,320.8	4.2	0.0%	10,320.1	4.9	0.0%	10,319.4	5.6	0.1%
ME 1	48 59 42	2002	Below Normal	April	--	5,556.9	5,552.9	4.1	0.1%	5,552.3	4.6	0.1%	5,551.2	5.8	0.1%	5,550.0	6.9	0.1%	5,548.8	8.1	0.1%	5,547.7	9.3	0.2%
ME 1	48 59 42	2002	Below Normal	May	--	2,148.6	2,142.8	5.8	0.3%	2,142.0	6.6	0.3%	2,140.3	8.3	0.4%	2,138.7	10.0	0.5%	2,136.9	11.7	0.5%	2,135.3	13.3	0.6%
ME 1	48 59 42	2002	Below Normal	June	--	651.1	643.9	7.1	1.1%	642.9	8.1	1.3%	640.9	10.2	1.6%	638.9	12.2	1.9%	636.9	14.2	2.2%	634.9	16.2	2.5%
ME 1	48 59 42	2002	Below Normal	July	--	295.6	288.2	7.4	2.5%	287.1	8.5	2.9%	285.0	10.6	3.6%	282.9	12.7	4.3%	280.8	14.8	5.0%	278.7	17.0	5.7%
ME 1	48 59 42	2002	Below Normal	August	--	163.7	157.7	6.0	3.7%	156.8	6.9	4.2%	155.1	8.6	5.3%	153.4	10.3	6.3%	151.6	12.1	7.4%	149.9	13.8	8.4%
ME 1	48 59 42	2002	Below Normal	September	Used in Summary Table Analysis	105.1	99.6	5.5	5.2%	98.8	6.3	6.0%	97.2	7.9	7.5%	95.7	9.4	9.0%	94.1	11.0	10.5%	92.5	12.6	12.0%
ME 1	48 59 42	2003	Wet	October	Used in Summary Table Analysis	81.9	78.2	3.7	4.5%	77.7	4.2	5.1%	76.7	5.3	6.4%	75.6	6.3	7.7%	74.6	7.4	9.0%	73.5	8.4	10.3%
ME 1	48 59 42	2003	Wet	November	Used in Summary Table Analysis	258.7	256.0	2.7	1.1%	255.6	3.1	1.2%	254.8	3.9	1.5%	254.1	4.7	1.8%	253.3	5.5	2.1%	252.5	6.2	2.4%
ME 1	48 59 42	2003	Wet	December	--	25,631.9	25,628.5	3.5	0.0%	25,628.5	3.5	0.0%	25,628.5	3.5	0.0%	25,627.3	4.6	0.0%	25,626.2	5.8	0.0%	25,626.2	5.8	0.0%
ME 1	48 59 42	2003	Wet	January	--	23,622.7	23,620.4	2.3	0.0%	23,619.2	3.5	0.0%	23,619.2	3.5	0.0%	23,618.1	4.6	0.0%	23,618.1	4.6	0.0%	23,616.9	5.8	0.0%
ME 1	48 59 42	2003	Wet	February	--	14,653.9	14,651.6	2.3	0.0%	14,651.6	2.3	0.0%	14,650.5	3.5	0.0%	14,650.5	3.5	0.0%	14,649.3	4.6	0.0%	14,649.3	4.6	0.0%
ME 1	48 59 42	2003	Wet	March	--	12,693.3	12,691.0	2.3	0.0%	12,691.0	2.3	0.0%	12,689.8	3.5	0.0%	12,689.8	3.5	0.0%	12,688.7	4.6	0.0%	12,687.5	5.8	0.0%
ME 1	48 59 42	2003	Wet	April	--	20,488.4	20,486.1	2.3	0.0%	20,486.1	2.3	0.0%	20,485.0	3.5	0.0%	20,485.0	3.5	0.0%	20,483.8	4.6	0.0%	20,483.8	4.6	0.0%
ME 1	48 59 42	2003	Wet	May	--	10,054.3	10,050.1	4.2	0.0%	10,049.5	4.7	0.0%	10,048.4	5.9	0.1%	10,047.1	7.2	0.1%	10,045.9	8.3	0.1%	10,044.8	9.5	0.1%
ME 1	48 59 42	2003	Wet	June	--	3,072.5	3,064.6	7.9	0.3%	3,063.4	9.0	0.3%	3,061.2	11.2	0.4%	3,059.0	13.4	0.4%	3,056.8	15.6	0.5%	3,054.6	17.8	0.6%
ME 1	48 59 42	2003	Wet	July	--	1,393.8	1,386.3	7.4	0.5%	1,385.3	8.4	0.6%	1,383.2	10.5	0.8%	1,381.1	12.6	0.9%	1,378.9	14.8	1.1%	1,376.9	16.9	1.2%
ME 1	48 59 42	2003	Wet	August	--	679.4	673.3	6.1	0.9%	672.4	7.0	1.0%	670.6	8.7	1.3%	668.9	10.5	1.5%	667.2	12.2	1.8%	665.5	13.9	2.0%
ME 1	48 59 42	2003	Wet	September	Used in Summary Table Analysis	394.0	389.0	5.0	1.3%	388.3	5.7	1.5%	386.9	7.1	1.8%	385.5	8.6	2.2%	384.0	10.0	2.5%	382.6	11.4	2.9%
ME 1	48 59 42	2004	Wet	October	Used in Summary Table Analysis	274.1	270.5	3.6	1.3%	270.0	4.1	1.5%	269.0	5.1	1.9%	268.0	6.1	2.2%	267.0	7.1	2.6%	265.9	8.1	3.0%
ME 1	48 59 42	2004	Wet	November	Used in Summary Table Analysis	1,518.6	1,516.0	2.7	0.2%	1,515.5	3.1	0.2%	1,514.8	3.8	0.3%	1,514.0	4.6	0.3%	1,513.3	5.3	0.4%	1,512.5	6.1	0.4%
ME 1	48 59 42	2004	Wet	December	--	17,524.3	17,522.0	2.3	0.0%	17,522.0	2.3	0.0%	17,520.8	3.5	0.0%	17,520.8	3.5	0.0%	17,519.7	4.6	0.0%	17,519.7	4.6	0.0%
ME 1	48 59 42	2004	Wet	January	--	20,762.7	20,760.4	2.3	0.0%	20,760.4	2.3	0.0%	20,759.3	3.5	0.0%	20,759.3	3.5	0.0%	20,758.1	4.6	0.0%	20,758.1	4.6	0.0%
ME 1	48 59 42	2004	Wet	February	--	20,275.5	20,274.3	1.2	0.0%	20,273.1	2.3	0.0%	20,273.1	2.3	0.0%	20,272.0	3.5	0.0%	20,272.0	3.5	0.0%	20,270.8	4.6	0.0%
ME 1	48 59 42	2004	Wet	March	--	12,274.3	12,272.0	2.3	0.0%	12,272.0	2.3	0.0%	12,272.0	2.3	0.0%	12,270.8	3.5	0.0%	12,270.8	3.5	0.0%	12,269.7	4.6	0.0%
ME 1	48 59 42	2004	Wet	April	--	5,833.9	5,831.7	2.2	0.0%	5,831.4	2.5	0.0%	5,830.8	3.1	0.1%	5,830.1	3.8	0.1%	5,829.5	4.4	0.1%	5,828.8	5.1	0.1%
ME 1	48 59 42	2004	Wet	May	--	2,310.4	2,306.4	4.1	0.2%	2,305.8	4.6	0.2%	2,304.5	5.9	0.3%	2,303.4	7.1	0.3%	2,302.2	8.2	0.4%	2,301.0	9.4	0.4%
ME 1	48 59 42	2004	Wet	June	--	614.6	607.0	7.6	1.2%	605.9	8.7	1.4%	603.8	10.9	1.8%	601.6	13.0	2.1%	599.5	15.2	2.5%	597.3	17.3	2.8%
ME 1	48 59 42	2004	Wet	July	--	287.2	280.0	7.3	2.5%	278.9	8.3	2.9%	276.9	10.4	3.6%	274.8	12.5	4.3%	272.7	14.5	5.1%	270.6	16.6	5.8%
ME 1	48 59 42	2004	Wet	August	--	163.5	157.5	6.0	3.7%	156.6	6.9	4.2%	154.9	8.6	5.3%	153.1	10.3	6.3%	151.4	12.0	7.4%	149.7	13.8	8.4%
ME 1	48 59 42	2004	Wet	September	Used in Summary Table Analysis	107.6	102.7	4.9	4.6%	102.0	5.6	5.2%	100.6	7.1	6.6%	99.1	8.5	7.9%	97.7	9.9	9.2%	96.3	11.3	10.5%
ME 1	48 59 42	2005	Above Normal	October	Used in Summary Table Analysis	1,664.0	1,660.5	3.5	0.2%	1,660.0	4.1	0.2%	1,658.9	5.1	0.3%	1,658.0	6.0	0.4%	1,656.9	7.1	0.4%	1,655.9	8.1	0.5%
ME 1	48 59 42	2005	Above Normal	November	Used in Summary Table Analysis	1,265.3	1,262.7	2.5	0.2%	1,262.3	3.0	0.2%	1,261.6	3.7	0.3%	1,260.8	4.5	0.4%	1,260.1	5.2	0.4%	1,259.3	6.0	0.5%
ME 1	48 59 42	2005	Above Normal	December	--	8,586.8	8,584.5	2.3	0.0%	8,584.1	2.7	0.0%	8,583.4	3.4	0.0%	8,582.9	3.9	0.0%	8,582.2	4.6	0.1%	8,581.5	5.3	0.1%
ME 1	48 59 42	2005	Above Normal	January	--	13,535.9	13,533.6	2.3	0.0%	13,533.6	2.3	0.0%	13,533.6	2.3	0.0%	13,532.4	3.5	0.0%	13,532.4	3.5	0.0%	13,531.3	4.6	0.0%
ME 1	48 59 42	2005	Above Normal	February	--	9,280.3	9,278.2	2.1	0.0%	9,277.9	2.4	0.0%	9,277.3	3.0	0.0%	9,276.7	3.6	0.0%	9,276.2	4.2	0.0%	9,275.5	4.9	0.1%
ME 1	48 59 42	2005	Above Normal	March	--	13,944.4	13,942.1	2.3	0.0%	13,942.1	2.3	0.0%	13,941.0	3.5	0.0%	13,941.0	3.5	0.0%	13,939.8	4.6	0.0%	13,939.8	4.6	0.0%
ME 1	48 59 42	2005	Above Normal	April	--	11,990.7	11,989.6	1.2	0.0%	11,988.4	2.3	0.0%	11,988.4	2.3	0.0%	11,987.3	3.5	0.0%	11,987.3	3.5	0.0%	11,986.1	4.6	0.0%
ME 1	48 59 42	2005	Above Normal	May	--	10,761.3	10,757.2	4.2	0.0%	10,756.6	4.7	0.0%	10,755.4	5.9	0.1%	10,754.3	7.1	0.1%	10,753.0	8.3	0.1%	10,751.9	9.5	0.1%
ME 1	48 59 42	2005	Above Normal	June	--	9,164.4	9,156.6	7.8	0.1%	9,155.4	8.9	0.1%	9,153.2	11.1	0.1%	9,151.0	13.3	0.1%	9,148.8	15.5	0.2%	9,146.6	17.7	0.2%
ME 1	48 59 42	2005	Above Normal	July	--	2,770.5	2,763.2	7.3	0.3%	2,762.2	8.3	0.3%	2,760.0	10.5	0.4%	2,758.0	12.5	0.5%	2,755.8	14.7	0.5%	2,753.7	16.8	0.6%
ME 1	48 59 42	2005	Above Normal	August	--	901.6	895.5	6.0	0.7%	894.6	6.9	0.8%	892.9	8.6	1.0%	891.2	10.3	1.1%	889.5	12.1	1.3%	887.8	13.8	1.5%
ME 1	48 59 42	2005	Above Normal	September	Used in Summary Table Analysis	453.2	448.2	5.0	1.1%	447.5	5.7	1.2%	446.1	7.1	1.6%	444.7	8.5	1.9%	443.3	9.9	2.2%	441.9	11.3	2.5%
ME 1	48 59 42	2006	Wet	October	Used in Summary Table Analysis	365.9	362.5	3.4	0.9%	362.1	3.9	1.1%	361.1	4.8	1.3%	360.1	5.8	1.6%	359.2	6.7	1.8%	358.2	7.7	2.1%
ME 1	48 59 42	2006	Wet	November	Used in Summary Table Analysis	2,520.1	2,517.6	2.5	0.1%	2,517.2	2.9	0.1%	2,516.4	3.7	0.1%	2,515.7	4.4	0.2%	2,515.0	5.1	0.2%	2,514.4	5.8	0.2%
ME 1	48 59 42	2006	Wet	December	--	22,588.0	22,585.6	2.3	0.0%	22,585.6	2.3	0.0%	22,584.5	3.5	0.0%	22,583.3	4.6	0.0%	22,583.3	4.6	0.0%	22,582.2	5.8	0.0%
ME 1	48 59 42	2006	Wet	January	--	28,590.3	28,588.0	2.3	0.0%	28,588.0	2.3	0.0%	28,586.8	3.5	0.0%	28,585.6	4.6	0.0%	28,585.6	4.6	0.0%	28,584.5	5.8	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 59 42	2006	Wet	February	--	16,953.7	16,951.4	2.3	0.0%	16,951.4	2.3	0.0%	16,950.2	3.5	0.0%	16,950.2	3.5	0.0%	16,949.1	4.6	0.0%	16,949.1	4.6	0.0%
ME 1	48 59 42	2006	Wet	March	--	23,273.1	23,270.8	2.3	0.0%	23,270.8	2.3	0.0%	23,269.7	3.5	0.0%	23,269.7	3.5	0.0%	23,268.5	4.6	0.0%	23,268.5	4.6	0.0%
ME 1	48 59 42	2006	Wet	April	--	18,674.8	18,672.5	2.3	0.0%	18,672.5	2.3	0.0%	18,672.5	2.3	0.0%	18,671.3	3.5	0.0%	18,671.3	3.5	0.0%	18,670.1	4.6	0.0%
ME 1	48 59 42	2006	Wet	May	--	9,409.4	9,406.5	2.9	0.0%	9,406.0	3.4	0.0%	9,405.2	4.2	0.0%	9,404.4	5.0	0.1%	9,403.5	5.9	0.1%	9,402.7	6.7	0.1%
ME 1	48 59 42	2006	Wet	June	--	2,969.8	2,963.3	6.5	0.2%	2,962.4	7.4	0.2%	2,960.5	9.3	0.3%	2,958.7	11.1	0.4%	2,956.8	13.0	0.4%	2,955.0	14.8	0.5%
ME 1	48 59 42	2006	Wet	July	--	1,184.7	1,177.3	7.4	0.6%	1,176.3	8.4	0.7%	1,174.2	10.5	0.9%	1,172.1	12.6	1.1%	1,169.9	14.8	1.3%	1,167.8	16.9	1.4%
ME 1	48 59 42	2006	Wet	August	--	585.1	578.7	6.4	1.1%	577.8	7.3	1.2%	576.0	9.1	1.6%	574.2	10.9	1.9%	572.4	12.7	2.2%	570.6	14.5	2.5%
ME 1	48 59 42	2006	Wet	September	Used in Summary Table Analysis	355.3	350.2	5.1	1.4%	349.5	5.8	1.6%	348.0	7.3	2.1%	346.5	8.8	2.5%	345.1	10.2	2.9%	343.6	11.7	3.3%
ME 1	48 59 42	2007	Above Normal	October	Used in Summary Table Analysis	216.0	212.4	3.6	1.6%	211.9	4.1	1.9%	210.9	5.1	2.4%	209.9	6.1	2.8%	208.8	7.1	3.3%	207.8	8.1	3.8%
ME 1	48 59 42	2007	Above Normal	November	Used in Summary Table Analysis	2,527.9	2,525.2	2.7	0.1%	2,524.9	3.0	0.1%	2,524.2	3.7	0.1%	2,523.4	4.5	0.2%	2,522.7	5.2	0.2%	2,521.9	6.0	0.2%
ME 1	48 59 42	2007	Above Normal	December	--	9,032.8	9,030.3	2.4	0.0%	9,030.0	2.8	0.0%	9,029.3	3.5	0.0%	9,028.7	4.1	0.0%	9,028.0	4.7	0.1%	9,027.3	5.4	0.1%
ME 1	48 59 42	2007	Above Normal	January	--	7,656.0	7,653.8	2.2	0.0%	7,653.5	2.5	0.0%	7,652.8	3.2	0.0%	7,652.2	3.8	0.0%	7,651.5	4.5	0.1%	7,650.9	5.1	0.1%
ME 1	48 59 42	2007	Above Normal	February	--	12,370.4	12,368.1	2.3	0.0%	12,368.1	2.3	0.0%	12,368.1	2.3	0.0%	12,366.9	3.5	0.0%	12,365.7	4.6	0.0%	12,365.7	4.6	0.0%
ME 1	48 59 42	2007	Above Normal	March	--	7,943.5	7,941.2	2.3	0.0%	7,940.9	2.7	0.0%	7,940.2	3.4	0.0%	7,939.6	3.9	0.0%	7,938.9	4.6	0.1%	7,938.2	5.3	0.1%
ME 1	48 59 42	2007	Above Normal	April	--	4,932.3	4,928.2	4.1	0.1%	4,927.8	4.5	0.1%	4,926.6	5.7	0.1%	4,925.5	6.8	0.1%	4,924.3	8.0	0.2%	4,923.1	9.1	0.2%
ME 1	48 59 42	2007	Above Normal	May	--	2,825.6	2,819.8	5.8	0.2%	2,819.0	6.6	0.2%	2,817.2	8.3	0.3%	2,815.6	10.0	0.4%	2,814.0	11.6	0.4%	2,812.4	13.2	0.5%
ME 1	48 59 42	2007	Above Normal	June	--	1,014.2	1,007.1	7.1	0.7%	1,006.1	8.1	0.8%	1,004.1	10.1	1.0%	1,002.1	12.1	1.2%	1,000.1	14.1	1.4%	998.1	16.1	1.6%
ME 1	48 59 42	2007	Above Normal	July	--	379.3	371.9	7.4	1.9%	370.8	8.4	2.2%	368.7	10.5	2.8%	366.6	12.7	3.3%	364.5	14.8	3.9%	362.4	16.9	4.5%
ME 1	48 59 42	2007	Above Normal	August	--	156.8	150.8	6.0	3.8%	150.0	6.9	4.4%	148.3	8.6	5.5%	146.5	10.3	6.6%	144.8	12.0	7.6%	143.1	13.7	8.7%
ME 1	48 59 42	2007	Above Normal	September	Used in Summary Table Analysis	89.2	83.7	5.5	6.2%	83.0	6.3	7.0%	81.4	7.8	8.8%	79.8	9.4	10.5%	78.3	11.0	12.3%	76.7	12.5	14.0%
ME 1	48 59 42	2008	Dry	October	Used in Summary Table Analysis	427.2	423.6	3.6	0.8%	423.1	4.1	1.0%	422.0	5.2	1.2%	421.0	6.2	1.4%	420.0	7.2	1.7%	418.9	8.2	1.9%
ME 1	48 59 42	2008	Dry	November	Used in Summary Table Analysis	1,034.7	1,032.0	2.6	0.3%	1,031.7	3.0	0.3%	1,030.9	3.8	0.4%	1,030.2	4.5	0.4%	1,029.4	5.3	0.5%	1,028.7	6.0	0.6%
ME 1	48 59 42	2008	Dry	December	--	8,263.9	8,261.7	2.2	0.0%	8,261.3	2.5	0.0%	8,260.6	3.2	0.0%	8,260.1	3.8	0.0%	8,259.4	4.5	0.1%	8,258.8	5.1	0.1%
ME 1	48 59 42	2008	Dry	January	--	21,000.0	20,997.7	2.3	0.0%	20,997.7	2.3	0.0%	20,996.5	3.5	0.0%	20,995.4	4.6	0.0%	20,995.4	4.6	0.0%	20,994.2	5.8	0.0%
ME 1	48 59 42	2008	Dry	February	--	19,610.0	19,607.6	2.3	0.0%	19,607.6	2.3	0.0%	19,606.5	3.5	0.0%	19,606.5	3.5	0.0%	19,605.3	4.6	0.0%	19,605.3	4.6	0.0%
ME 1	48 59 42	2008	Dry	March	--	8,549.5	8,547.5	2.1	0.0%	8,547.2	2.3	0.0%	8,546.5	3.0	0.0%	8,545.9	3.6	0.0%	8,545.4	4.2	0.0%	8,544.8	4.7	0.1%
ME 1	48 59 42	2008	Dry	April	--	4,623.7	4,620.0	3.7	0.1%	4,619.6	4.2	0.1%	4,618.4	5.3	0.1%	4,617.4	6.4	0.1%	4,616.3	7.4	0.2%	4,615.3	8.4	0.2%
ME 1	48 59 42	2008	Dry	May	--	1,289.7	1,284.1	5.6	0.4%	1,283.3	6.4	0.5%	1,281.8	7.9	0.6%	1,280.2	9.5	0.7%	1,278.6	11.1	0.9%	1,277.0	12.7	1.0%
ME 1	48 59 42	2008	Dry	June	--	351.6	343.5	8.1	2.3%	342.3	9.3	2.6%	340.0	11.6	3.3%	337.7	13.9	3.9%	335.4	16.2	4.6%	333.2	18.4	5.2%
ME 1	48 59 42	2008	Dry	July	--	198.2	190.2	8.0	4.0%	189.1	9.1	4.6%	186.8	11.4	5.8%	184.5	13.7	6.9%	182.2	16.0	8.1%	179.9	18.3	9.2%
ME 1	48 59 42	2008	Dry	August	--	124.1	117.3	6.8	5.5%	116.4	7.8	6.2%	114.4	9.7	7.8%	112.5	11.6	9.4%	110.6	13.6	10.9%	108.6	15.5	12.5%
ME 1	48 59 42	2008	Dry	September	Used in Summary Table Analysis	97.1	91.5	5.6	5.7%	90.7	6.3	6.5%	89.1	7.9	8.2%	87.6	9.5	9.8%	86.0	11.1	11.4%	84.4	12.7	13.1%
ME 1	48 59 42	2009	Critical	October	Used in Summary Table Analysis	254.0	250.0	3.9	1.5%	249.5	4.5	1.8%	248.4	5.6	2.2%	247.2	6.7	2.7%	246.1	7.9	3.1%	245.0	9.0	3.5%
ME 1	48 59 42	2009	Critical	November	Used in Summary Table Analysis	1,477.0	1,474.2	2.8	0.2%	1,473.7	3.2	0.2%	1,472.9	4.1	0.3%	1,472.2	4.7	0.3%	1,471.4	5.6	0.4%	1,470.6	6.4	0.4%
ME 1	48 59 42	2009	Critical	December	--	4,650.5	4,648.0	2.4	0.1%	4,647.7	2.8	0.1%	4,647.0	3.5	0.1%	4,646.3	4.2	0.1%	4,645.6	4.9	0.1%	4,645.0	5.4	0.1%
ME 1	48 59 42	2009	Critical	January	--	4,262.2	4,259.7	2.4	0.1%	4,259.4	2.8	0.1%	4,258.7	3.5	0.1%	4,258.0	4.2	0.1%	4,257.3	4.9	0.1%	4,256.6	5.6	0.1%
ME 1	48 59 42	2009	Critical	February	--	8,764.1	8,762.0	2.1	0.0%	8,761.7	2.4	0.0%	8,761.1	3.0	0.0%	8,760.5	3.6	0.0%	8,759.8	4.3	0.0%	8,759.3	4.9	0.1%
ME 1	48 59 42	2009	Critical	March	--	9,882.4	9,880.3	2.1	0.0%	9,880.0	2.4	0.0%	9,879.4	3.0	0.0%	9,878.8	3.6	0.0%	9,878.2	4.2	0.0%	9,877.7	4.7	0.0%
ME 1	48 59 42	2009	Critical	April	--	5,261.8	5,258.1	3.7	0.1%	5,257.5	4.3	0.1%	5,256.5	5.3	0.1%	5,255.4	6.4	0.1%	5,254.3	7.5	0.1%	5,253.2	8.6	0.2%
ME 1	48 59 42	2009	Critical	May	--	5,086.0	5,080.3	5.7	0.1%	5,079.5	6.5	0.1%	5,077.9	8.1	0.2%	5,076.3	9.7	0.2%	5,074.7	11.3	0.2%	5,073.0	13.0	0.3%
ME 1	48 59 42	2009	Critical	June	--	2,809.6	2,801.3	8.3	0.3%	2,800.1	9.5	0.3%	2,797.8	11.8	0.4%	2,795.5	14.1	0.5%	2,793.2	16.4	0.6%	2,790.9	18.8	0.7%
ME 1	48 59 42	2009	Critical	July	--	1,181.8	1,173.7	8.1	0.7%	1,172.6	9.3	0.8%	1,170.3	11.6	1.0%	1,167.9	13.9	1.2%	1,165.6	16.2	1.4%	1,163.4	18.4	1.6%
ME 1	48 59 42	2009	Critical	August	--	600.9	594.1	6.8	1.1%	593.1	7.8	1.3%	591.1	9.7	1.6%	589.2	11.7	1.9%	587.3	13.6	2.3%	585.3	15.6	2.6%
ME 1	48 59 42	2009	Critical	September	Used in Summary Table Analysis	329.5	323.9	5.6	1.7%	323.1	6.4	1.9%	321.5	8.0	2.4%	319.9	9.5	2.9%	318.3	11.1	3.4%	316.8	12.7	3.9%
ME 1	48 59 42	2010	Below Normal	October	Used in Summary Table Analysis	973.2	969.2	4.0	0.4%	968.6	4.6	0.5%	967.5	5.7	0.6%	966.3	6.9	0.7%	965.2	8.0	0.8%	964.0	9.2	0.9%
ME 1	48 59 42	2010	Below Normal	November	Used in Summary Table Analysis	2,112.2	2,109.3	2.9	0.1%	2,108.8	3.4	0.2%	2,108.0	4.2	0.2%	2,107.2	5.0	0.2%	2,106.4	5.8	0.3%	2,105.6	6.6	0.3%
ME 1	48 59 42	2010	Below Normal	December	--	5,849.7	5,847.2	2.4	0.0%	5,846.9	2.8	0.0%	5,846.2	3.5	0.1%	5,845.5	4.2	0.1%	5,844.8	4.9	0.1%	5,844.1	5.6	0.1%
ME 1	48 59 42	2010	Below Normal	January	--	17,463.0	17,460.6	2.3	0.0%	17,459.5	3.5	0.0%	17,459.5	3.5	0.0%	17,458.3	4.6	0.0%	17,458.3	4.6	0.0%	17,457.2	5.8	0.0%
ME 1	48 59 42	2010	Below Normal	February	--	15,397.0	15,394.7	2.3	0.0%	15,394.7	2.3	0.0%	15,393.5	3.5	0.0%	15,392.4	4.6	0.0%	15,392.4	4.6	0.0%	15,391.2	5.8	0.0%
ME 1	48 59 42	2010	Below Normal	March	--	12,664.4	12,662.0	2.3	0.0%	12,660.9	3.5	0.0%	12,660.9	3.5	0.0%	12,659.7	4.6	0.0%	12,659.7	4.6	0.0%	12,658.6	5.8	0.0%
ME 1	48 59 42	2010	Below Normal	April	--	16,857.6	16,855.3	2.3	0.0%	16,855.3	2.3	0.0%	16,854.2	3.5	0.0%	16,854.2	3.5	0.0%	16,853.0	4.6	0.0%	16,851.9	5.8	0.0%
ME 1	48 59 42	2010	Below Normal	May	--	13,597.2	13,592.6	4.6	0.0%	13,592.6	4.6	0.0%	13,591.4	5.8	0.0%	13,590.3	6.9	0.1%	13,589.1	8.1	0.1%	13,588.0	9.3	0.1%
ME 1	48 59 42	2010	Below Normal	June	--	5,529.2	5,521.3	7.9	0.1%	5,520.3	8.9	0.2%	5,517.9	11.2	0.2%	5,515.7	13.4	0.2%	5,513.5	15.6	0.3%	5,511.3	17.8	0.3%
ME 1	48 59 42	2010	Below Normal	July	--	1,355.6	1,348.1	7.4	0.5%	1,347.1	8.4	0.6%	1,345.0	10.5	0.8%	1,342.9	12.6	0.9%	1,340.9	14.7	1.1%	1,338.8	16.8	1.2%
ME 1	48 59 42	2010	Below Normal	August	--	485.5	479.4	6.1	1.3%	478.5	7.0	1.4%	476.7	8.8	1.8%	475.0	10.5	2.2%	473.3	12.2	2.5%	471.5	13.9	2.9%
ME 1	48 59 42	2010	Below Normal	September	Used in Summary Table Analysis	312.0	307.0	5.0	1.6%	306.3	5.7	1.8%	304.9	7.2	2.3%	303.4	8.6	2.8%	302.0	10.0	3.2%	300.6	11.4	3.7%
ME 1	48 59 42	2011	Wet	October	Used in Summary Table Analysis	2,333.4	2,329.9	3.6	0.2%	2,329.4	4.1	0.2%	2,328.4	5.1	0.2%	2,327.4	6.0	0.3%	2,326.4	7.1	0.3%	2,325.5	8.0	0.3%
ME 1	48 59 42	2011	Wet	November	Used in Summary Table Analysis	7,879.3	7,876.6	2.7	0.0%	7,876.3	3.0	0.0%	7,875.6	3.7	0.0%	7,874.8	4.5	0.1%	7,874.1	5.2	0.1%	7,873.3	6.0	0.1%
ME 1	48 59 42	2011	Wet	December	--	15,506.9	15,504.6	2.3	0.0%	15,504.6	2.3	0.0%	15,503.5	3.5	0.0%	15,503.5	3.5	0.0%	15,502.3	4.6	0.0%	15,502.3	4.6	0.0%
ME 1	48 59 42	2011	Wet	January	--	10,557.5	10,555.3	2.2	0.0%	10,555.0	2.5	0.0%	10,554.4	3.1	0.0%	10,553.7	3.8	0.0%	10,553.1	4.4	0.0%	10,552.4	5.1	0.0%
ME 1	48 59 42	2011	Wet	February	--	9,919.1	9,916.9	2.2	0.0%	9,916.7	2.4	0.0%	9,916.0	3.1	0.0%	9,915.4	3.7	0.0%	9,914.7	4.4	0.0%	9,914.1	5.0	0.1%
ME 1	48 59 42	2011	Wet	March	--	22,855.3	22,853.0	2.3	0.0%	22,853.0	2.3	0.0%	22,851.9	3.5	0.0%	22,851.9	3.5	0.0%	22,850.7	4.6	0.0%	22,850.7	4.6	0.0%
ME 1	48 59 42	2011	Wet	April	--	13,566.0	13,563.7	2.3	0.0%	13,563.7	2.3	0.0%	13,563.7	2.3	0.0%	13,562.5	3.5	0.0%	13,561.3	4.6	0.0%	13,561.3	4.6	0.0%
ME 1	48 59 42	2011	Wet	May	--	6,486.5	6,482.2	4.3	0.1%	6,481.6	4.9	0.1%	6,480.3	6.1	0.1%	6,479.2	7.3	0.1%	6,477.9	8.6	0.1%	6,476.7	9.7	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 59 42	2011	Wet	June	--	3,838.4	3,830.6	7.9	0.2%	3,829.5	8.9	0.2%	3,827.3	11.1	0.3%	3,825.1	13.3	0.3%	3,822.9	15.5	0.4%	3,820.7	17.7	0.5%
ME 1	48 59 42	2011	Wet	July	--	1,607.1	1,599.7	7.4	0.5%	1,598.6	8.4	0.5%	1,596.5	10.5	0.7%	1,594.3	12.7	0.8%	1,592.2	14.8	0.9%	1,590.2	16.9	1.1%
ME 1	48 59 42	2011	Wet	August	--	697.9	691.7	6.2	0.9%	690.8	7.1	1.0%	689.0	8.9	1.3%	687.3	10.6	1.5%	685.5	12.4	1.8%	683.7	14.1	2.0%
ME 1	48 59 42	2011	Wet	September	Used in Summary Table Analysis	364.6	359.3	5.3	1.5%	358.6	6.0	1.7%	357.0	7.6	2.1%	355.5	9.1	2.5%	354.0	10.6	2.9%	352.5	12.1	3.3%
ME 1	48 59 42	2012	Below Normal	October	Used in Summary Table Analysis	937.1	933.4	3.7	0.4%	932.9	4.2	0.5%	931.8	5.3	0.6%	930.7	6.4	0.7%	929.7	7.5	0.8%	928.6	8.5	0.9%
ME 1	48 59 42	2012	Below Normal	November	Used in Summary Table Analysis	3,262.0	3,259.3	2.8	0.1%	3,258.9	3.1	0.1%	3,258.1	3.9	0.1%	3,257.3	4.7	0.1%	3,256.5	5.6	0.2%	3,255.7	6.4	0.2%
ME 1	48 59 42	2012	Below Normal	December	--	3,152.4	3,149.9	2.5	0.1%	3,149.5	2.9	0.1%	3,148.8	3.6	0.1%	3,148.1	4.3	0.1%	3,147.5	5.0	0.2%	3,146.8	5.7	0.2%
ME 1	48 59 42	2012	Below Normal	January	--	8,226.9	8,224.4	2.4	0.0%	8,224.2	2.7	0.0%	8,223.5	3.4	0.0%	8,222.8	4.1	0.0%	8,222.1	4.7	0.1%	8,221.4	5.4	0.1%
ME 1	48 59 42	2012	Below Normal	February	--	11,417.8	11,415.5	2.3	0.0%	11,415.2	2.7	0.0%	11,414.6	3.2	0.0%	11,413.9	3.9	0.0%	11,413.3	4.5	0.0%	11,412.6	5.2	0.0%
ME 1	48 59 42	2012	Below Normal	March	--	19,726.9	19,724.5	2.3	0.0%	19,724.5	2.3	0.0%	19,723.4	3.5	0.0%	19,723.4	3.5	0.0%	19,722.2	4.6	0.0%	19,721.1	5.8	0.0%
ME 1	48 59 42	2012	Below Normal	April	--	14,141.2	14,138.9	2.3	0.0%	14,137.7	3.5	0.0%	14,137.7	3.5	0.0%	14,136.6	4.6	0.0%	14,136.6	4.6	0.0%	14,135.4	5.8	0.0%
ME 1	48 59 42	2012	Below Normal	May	--	5,384.5	5,380.3	4.2	0.1%	5,379.7	4.7	0.1%	5,378.5	6.0	0.1%	5,377.3	7.2	0.1%	5,376.0	8.4	0.2%	5,374.9	9.6	0.2%
ME 1	48 59 42	2012	Below Normal	June	--	2,398.5	2,390.4	8.1	0.3%	2,389.4	9.1	0.4%	2,387.0	11.5	0.5%	2,384.7	13.8	0.6%	2,382.5	16.0	0.7%	2,380.2	18.3	0.8%
ME 1	48 59 42	2012	Below Normal	July	--	1,095.7	1,088.7	7.0	0.6%	1,087.7	8.0	0.7%	1,085.7	10.0	0.9%	1,083.7	12.0	1.1%	1,081.7	14.0	1.3%	1,079.7	16.0	1.5%
ME 1	48 59 42	2012	Below Normal	August	--	307.0	301.5	5.6	1.8%	300.7	6.3	2.1%	299.1	7.9	2.6%	297.5	9.5	3.1%	295.9	11.1	3.6%	294.4	12.7	4.1%
ME 1	48 59 42	2012	Below Normal	September	Used in Summary Table Analysis	177.2	172.6	4.6	2.6%	172.0	5.3	3.0%	170.7	6.6	3.7%	169.4	7.9	4.4%	168.0	9.2	5.2%	166.7	10.5	5.9%
ME 1	48 59 42	2013	Below Normal	October	Used in Summary Table Analysis	383.0	379.5	3.5	0.9%	379.0	4.0	1.0%	378.0	5.0	1.3%	377.0	6.0	1.6%	375.9	7.0	1.8%	374.9	8.0	2.1%
ME 1	48 59 42	2013	Below Normal	November	Used in Summary Table Analysis	4,894.1	4,891.6	2.5	0.1%	4,891.2	2.9	0.1%	4,890.4	3.7	0.1%	4,889.7	4.4	0.1%	4,888.9	5.2	0.1%	4,888.2	5.9	0.1%
ME 1	48 59 42	2013	Below Normal	December	--	27,238.4	27,236.1	2.3	0.0%	27,236.1	2.3	0.0%	27,235.0	3.5	0.0%	27,233.8	4.6	0.0%	27,233.8	4.6	0.0%	27,232.6	5.8	0.0%
ME 1	48 59 42	2013	Below Normal	January	--	17,191.0	17,188.7	2.3	0.0%	17,188.7	2.3	0.0%	17,187.5	3.5	0.0%	17,187.5	3.5	0.0%	17,186.3	4.6	0.0%	17,185.2	5.8	0.0%
ME 1	48 59 42	2013	Below Normal	February	--	5,690.4	5,688.1	2.3	0.0%	5,687.7	2.7	0.0%	5,687.0	3.4	0.1%	5,686.5	3.9	0.1%	5,685.8	4.6	0.1%	5,685.1	5.3	0.1%
ME 1	48 59 42	2013	Below Normal	March	--	4,554.6	4,552.3	2.3	0.1%	4,552.0	2.7	0.1%	4,551.3	3.4	0.1%	4,550.6	4.1	0.1%	4,549.9	4.7	0.1%	4,549.2	5.4	0.1%
ME 1	48 59 42	2013	Below Normal	April	--	3,843.3	3,839.4	3.9	0.1%	3,838.8	4.5	0.1%	3,837.6	5.7	0.1%	3,836.5	6.8	0.2%	3,835.4	7.9	0.2%	3,834.3	9.0	0.2%
ME 1	48 59 42	2013	Below Normal	May	--	2,103.9	2,098.1	5.8	0.3%	2,097.3	6.6	0.3%	2,095.7	8.2	0.4%	2,094.1	9.8	0.5%	2,092.4	11.6	0.6%	2,090.7	13.2	0.6%
ME 1	48 59 42	2013	Below Normal	June	--	1,083.1	1,076.0	7.1	0.7%	1,075.0	8.1	0.7%	1,073.0	10.1	0.9%	1,071.0	12.1	1.1%	1,069.0	14.1	1.3%	1,067.0	16.1	1.5%
ME 1	48 59 42	2013	Below Normal	July	--	643.4	636.0	7.4	1.1%	634.9	8.4	1.3%	632.8	10.5	1.6%	630.7	12.7	2.0%	628.6	14.8	2.3%	626.5	16.9	2.6%
ME 1	48 59 42	2013	Below Normal	August	--	274.0	268.0	6.0	2.2%	267.1	6.9	2.5%	265.4	8.6	3.1%	263.7	10.3	3.8%	262.0	12.0	4.4%	260.3	13.7	5.0%
ME 1	48 59 42	2013	Below Normal	September	Used in Summary Table Analysis	874.8	869.3	5.5	0.6%	868.5	6.3	0.7%	867.0	7.8	0.9%	865.4	9.4	1.1%	863.8	11.0	1.3%	862.2	12.6	1.4%
ME 1	48 59 42	2014	Critical	October	Used in Summary Table Analysis	191.3	187.8	3.5	1.8%	187.3	4.0	2.1%	186.3	5.0	2.6%	185.2	6.0	3.2%	184.2	7.0	3.7%	183.2	8.1	4.2%
ME 1	48 59 42	2014	Critical	November	Used in Summary Table Analysis	353.9	351.2	2.7	0.8%	350.8	3.1	0.9%	350.1	3.8	1.1%	349.3	4.6	1.3%	348.5	5.4	1.5%	347.8	6.1	1.7%
ME 1	48 59 42	2014	Critical	December	--	649.6	647.2	2.4	0.4%	646.9	2.8	0.4%	646.1	3.5	0.5%	645.5	4.2	0.6%	644.8	4.9	0.7%	644.1	5.6	0.9%
ME 1	48 59 42	2014	Critical	January	--	963.2	960.9	2.2	0.2%	960.6	2.6	0.3%	960.0	3.2	0.3%	959.3	3.9	0.4%	958.7	4.5	0.5%	958.0	5.2	0.5%
ME 1	48 59 42	2014	Critical	February	--	5,726.6	5,724.5	2.1	0.0%	5,724.2	2.4	0.0%	5,723.6	3.0	0.1%	5,723.0	3.6	0.1%	5,722.5	4.2	0.1%	5,721.8	4.9	0.1%
ME 1	48 59 42	2014	Critical	March	--	16,438.7	16,436.3	2.3	0.0%	16,436.3	2.3	0.0%	16,436.3	2.3	0.0%	16,435.2	3.5	0.0%	16,434.0	4.6	0.0%	16,434.0	4.6	0.0%
ME 1	48 59 42	2014	Critical	April	--	9,298.5	9,294.7	3.8	0.0%	9,294.1	4.4	0.0%	9,293.1	5.4	0.1%	9,292.0	6.5	0.1%	9,290.9	7.6	0.1%	9,289.8	8.7	0.1%
ME 1	48 59 42	2014	Critical	May	--	3,299.0	3,293.3	5.7	0.2%	3,292.5	6.5	0.2%	3,290.9	8.1	0.2%	3,289.2	9.7	0.3%	3,287.6	11.3	0.3%	3,286.0	13.0	0.4%
ME 1	48 59 42	2014	Critical	June	--	1,064.5	1,055.9	8.6	0.8%	1,054.7	9.8	0.9%	1,052.2	12.3	1.2%	1,049.8	14.7	1.4%	1,047.4	17.1	1.6%	1,045.0	19.5	1.8%
ME 1	48 59 42	2014	Critical	July	--	480.9	472.7	8.1	1.7%	471.6	9.3	1.9%	469.2	11.6	2.4%	466.9	13.9	2.9%	464.6	16.3	3.4%	462.3	18.6	3.9%
ME 1	48 59 42	2014	Critical	August	--	286.9	280.2	6.7	2.3%	279.2	7.7	2.7%	277.3	9.6	3.4%	275.4	11.6	4.0%	273.4	13.5	4.7%	271.5	15.4	5.4%
ME 1	48 59 42	2014	Critical	September	Used in Summary Table Analysis	437.7	432.3	5.5	1.3%	431.5	6.3	1.4%	429.9	7.8	1.8%	428.3	9.4	2.1%	426.8	11.0	2.5%	425.2	12.6	2.9%
ME 1	48 59 42	2015	Dry	October	Used in Summary Table Analysis	2,948.5	2,944.6	3.9	0.1%	2,944.1	4.4	0.1%	2,942.9	5.6	0.2%	2,941.8	6.7	0.2%	2,940.6	7.9	0.3%	2,939.6	8.9	0.3%
ME 1	48 59 42	2015	Dry	November	Used in Summary Table Analysis	4,721.2	4,718.4	2.8	0.1%	4,718.1	3.1	0.1%	4,717.2	3.9	0.1%	4,716.4	4.7	0.1%	4,715.6	5.6	0.1%	4,714.8	6.4	0.1%
ME 1	48 59 42	2015	Dry	December	--	16,760.4	16,758.1	2.3	0.0%	16,758.1	2.3	0.0%	16,756.9	3.5	0.0%	16,756.9	3.5	0.0%	16,755.8	4.6	0.0%	16,755.8	4.6	0.0%
ME 1	48 59 42	2015	Dry	January	--	12,089.1	12,086.8	2.3	0.0%	12,085.6	3.5	0.0%	12,085.6	3.5	0.0%	12,084.5	4.6	0.0%	12,084.5	4.6	0.0%	12,083.3	5.8	0.0%
ME 1	48 59 42	2015	Dry	February	--	11,914.4	11,913.2	1.2	0.0%	11,912.0	2.3	0.0%	11,912.0	2.3	0.0%	11,910.9	3.5	0.0%	11,910.9	3.5	0.0%	11,909.7	4.6	0.0%
ME 1	48 59 42	2015	Dry	March	--	7,366.3	7,364.2	2.1	0.0%	7,363.9	2.4	0.0%	7,363.3	3.0	0.0%	7,362.7	3.6	0.0%	7,362.2	4.2	0.1%	7,361.6	4.7	0.1%
ME 1	48 59 42	2015	Dry	April	--	3,743.2	3,739.5	3.7	0.1%	3,738.9	4.3	0.1%	3,737.8	5.3	0.1%	3,736.8	6.4	0.2%	3,735.8	7.4	0.2%	3,734.7	8.4	0.2%
ME 1	48 59 42	2015	Dry	May	--	1,363.3	1,357.6	5.7	0.4%	1,356.9	6.4	0.5%	1,355.3	8.0	0.6%	1,353.7	9.6	0.7%	1,352.1	11.2	0.8%	1,350.6	12.7	0.9%
ME 1	48 59 42	2015	Dry	June	--	470.7	462.5	8.2	1.7%	461.4	9.4	2.0%	459.1	11.7	2.5%	456.8	13.9	3.0%	454.5	16.2	3.4%	452.2	18.5	3.9%
ME 1	48 59 42	2015	Dry	July	--	208.0	200.0	8.0	3.9%	198.9	9.2	4.4%	196.6	11.4	5.5%	194.3	13.7	6.6%	192.0	16.0	7.7%	189.7	18.3	8.8%
ME 1	48 59 42	2015	Dry	August	--	108.6	101.9	6.8	6.2%	100.9	7.8	7.1%	99.0	9.7	8.9%	97.0	11.6	10.7%	95.1	13.6	12.5%	93.1	15.5	14.3%
ME 1	48 59 42	2015	Dry	September	Used in Summary Table Analysis	66.3	60.7	5.6	8.4%	59.9	6.4	9.6%	58.3	7.9	12.0%	56.7	9.5	14.4%	55.1	11.1	16.8%	53.5	12.7	19.2%
ME 1	48 59 42	2016	Above Normal	October	Used in Summary Table Analysis	40.4	36.5	3.9	9.6%	36.0	4.4	10.9%	34.9	5.5	13.7%	33.7	6.6	16.4%	32.6	7.7	19.2%	31.5	8.9	22.0%
ME 1	48 59 42	2016	Above Normal	November	Used in Summary Table Analysis	750.2	747.4	2.9	0.4%	747.0	3.3	0.4%	746.1	4.1	0.5%	745.3	4.9	0.7%	744.5	5.8	0.8%	743.6	6.6	0.9%
ME 1	48 59 42	2016	Above Normal	December	--	16,076.4	16,074.1	2.3	0.0%	16,074.1	2.3	0.0%	16,072.9	3.5	0.0%	16,072.9	3.5	0.0%	16,071.8	4.6	0.0%	16,070.6	5.8	0.0%
ME 1	48 59 42	2016	Above Normal	January	--	35,657.4	35,655.1	2.3	0.0%	35,655.1	2.3	0.0%	35,653.9	3.5	0.0%	35,652.8	4.6	0.0%	35,652.8	4.6	0.0%	35,651.6	5.8	0.0%
ME 1	48 59 42	2016	Above Normal	February	--	18,644.7	18,642.4	2.3	0.0%	18,641.2	3.5	0.0%	18,641.2	3.5	0.0%	18,640.0	4.6	0.0%	18,640.0	4.6	0.0%	18,638.9	5.8	0.0%
ME 1	48 59 42	2016	Above Normal	March	--	21,141.2	21,138.9	2.3	0.0%	21,138.9	2.3	0.0%	21,137.7	3.5	0.0%	21,137.7	3.5	0.0%	21,136.6	4.6	0.0%	21,136.6	4.6	0.0%
ME 1	48 59 42	2016	Above Normal	April	--	12,746.5	12,745.4	1.2	0.0%	12,744.2	2.3	0.0%	12,744.2	2.3	0.0%	12,743.1	3.5	0.0%	12,743.1	3.5	0.0%	12,741.9	4.6	0.0%
ME 1	48 59 42	2016	Above Normal	May	--	3,929.9	3,927.0	2.9	0.1%	3,926.5	3.4	0.1%	3,925.7	4.2	0.1%	3,924.9	5.0	0.1%	3,924.1	5.8	0.1%	3,923.3	6.6	0.2%
ME 1	48 59 42	2016	Above Normal	June	--	1,416.8	1,410.2	6.6	0.5%	1,409.3	7.5	0.5%	1,407.4	9.4	0.7%	1,405.6	11.2	0.8%	1,403.7	13.1	0.9%	1,402.0	14.8	1.0%
ME 1	48 59 42	2016	Above Normal	July	--	748.9	741.7	7.3	1.0%	740.6	8.3	1.1%	738.6	10.4	1.4%	736.5	12.4	1.7%	734.4	14.5	1.9%	732.4	16.5	2.2%
ME 1	48 59 42	2016	Above Normal	August	--	425.6	419.2	6.3	1.5%	418.3	7.2	1.7%	416.5	9.1	2.1%	414.7	10.9	2.6%	412.9	12.7	3.0%	411.1	14.5	3.4%
ME 1	48 59 42	2016	Above Normal	September	Used in Summary Table Analysis	266.6	261.4	5.2	2.0%	260.6	5.9	2.2%	259.1	7.4	2.8%	257.7	8.9	3.3%	256.2	10.4	3.9%	254.7	11.9	4.5%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 59 42	2017	Wet	October	Used in Summary Table Analysis	5,119.6	5,116.2	3.4	0.1%	5,115.7	3.8	0.1%	5,114.7	4.9	0.1%	5,113.8	5.8	0.1%	5,112.8	6.7	0.1%	5,111.8	7.8	0.2%
ME 1	48 59 42	2017	Wet	November	Used in Summary Table Analysis	11,107.6	11,105.1	2.5	0.0%	11,104.7	2.9	0.0%	11,104.1	3.6	0.0%	11,103.4	4.3	0.0%	11,102.7	5.0	0.0%	11,101.9	5.8	0.1%
ME 1	48 59 42	2017	Wet	December	--	14,188.7	14,186.3	2.3	0.0%	14,186.3	2.3	0.0%	14,185.2	3.5	0.0%	14,185.2	3.5	0.0%	14,184.0	4.6	0.0%	14,184.0	4.6	0.0%
ME 1	48 59 42	2017	Wet	January	--	70,483.8	70,481.5	2.3	0.0%	70,481.5	2.3	0.0%	70,480.3	3.5	0.0%	70,480.3	3.5	0.0%	70,479.2	4.6	0.0%	70,478.0	5.8	0.0%
ME 1	48 59 42	2017	Wet	February	--	47,223.4	47,221.1	2.3	0.0%	47,219.9	3.5	0.0%	47,219.9	3.5	0.0%	47,218.8	4.6	0.0%	47,218.8	4.6	0.0%	47,217.6	5.8	0.0%
ME 1	48 59 42	2017	Wet	March	--	20,575.2	20,572.9	2.3	0.0%	20,572.9	2.3	0.0%	20,572.9	2.3	0.0%	20,571.8	3.5	0.0%	20,570.6	4.6	0.0%	20,570.6	4.6	0.0%
ME 1	48 59 42	2017	Wet	April	--	14,496.5	14,494.2	2.3	0.0%	14,493.1	3.5	0.0%	14,493.1	3.5	0.0%	14,491.9	4.6	0.0%	14,491.9	4.6	0.0%	14,490.7	5.8	0.0%
ME 1	48 59 42	2017	Wet	May	--	6,069.6	6,066.4	3.1	0.1%	6,066.0	3.6	0.1%	6,065.0	4.5	0.1%	6,064.1	5.4	0.1%	6,063.2	6.4	0.1%	6,062.3	7.3	0.1%
ME 1	48 59 42	2017	Wet	June	--	1,903.5	1,897.0	6.5	0.3%	1,896.1	7.4	0.4%	1,894.3	9.1	0.5%	1,892.5	11.0	0.6%	1,890.6	12.8	0.7%	1,888.9	14.6	0.8%
ME 1	48 59 42	2017	Wet	July	--	859.1	851.7	7.5	0.9%	850.6	8.6	1.0%	848.4	10.7	1.2%	846.3	12.8	1.5%	844.2	14.9	1.7%	842.1	17.1	2.0%
ME 1	48 59 42	2017	Wet	August	--	436.1	429.7	6.4	1.5%	428.8	7.3	1.7%	427.0	9.1	2.1%	425.2	11.0	2.5%	423.3	12.8	2.9%	421.5	14.6	3.3%
ME 1	48 59 42	2017	Wet	September	Used in Summary Table Analysis	260.1	255.1	5.0	1.9%	254.4	5.7	2.2%	253.0	7.2	2.8%	251.5	8.6	3.3%	250.1	10.0	3.9%	248.7	11.4	4.4%
ME 1	48 59 42	2018	Above Normal	October	Used in Summary Table Analysis	204.5	200.8	3.7	1.8%	200.3	4.2	2.1%	199.2	5.2	2.6%	198.2	6.3	3.1%	197.1	7.3	3.6%	196.1	8.4	4.1%
ME 1	48 59 42	2018	Above Normal	November	Used in Summary Table Analysis	3,327.1	3,324.4	2.7	0.1%	3,324.1	3.0	0.1%	3,323.3	3.8	0.1%	3,322.6	4.5	0.1%	3,321.8	5.3	0.2%	3,321.1	6.0	0.2%
ME 1	48 59 42	2018	Above Normal	December	--	4,802.0	4,799.7	2.3	0.0%	4,799.4	2.5	0.1%	4,798.7	3.2	0.1%	4,798.0	3.9	0.1%	4,797.5	4.5	0.1%	4,796.8	5.2	0.1%
ME 1	48 59 42	2018	Above Normal	January	--	8,196.1	8,194.0	2.1	0.0%	8,193.6	2.4	0.0%	8,193.1	3.0	0.0%	8,192.4	3.7	0.0%	8,191.8	4.3	0.1%	8,191.2	4.9	0.1%
ME 1	48 59 42	2018	Above Normal	February	--	6,842.5	6,840.4	2.1	0.0%	6,840.2	2.3	0.0%	6,839.6	2.9	0.0%	6,839.0	3.5	0.1%	6,838.3	4.2	0.1%	6,837.7	4.7	0.1%
ME 1	48 59 42	2018	Above Normal	March	--	10,756.9	10,755.0	2.0	0.0%	10,754.6	2.3	0.0%	10,754.1	2.9	0.0%	10,753.5	3.5	0.0%	10,752.9	4.1	0.0%	10,752.3	4.6	0.0%
ME 1	48 59 42	2018	Above Normal	April	--	14,372.7	14,370.4	2.3	0.0%	14,370.4	2.3	0.0%	14,369.2	3.5	0.0%	14,369.2	3.5	0.0%	14,368.1	4.6	0.0%	14,368.1	4.6	0.0%
ME 1	48 59 42	2018	Above Normal	May	--	6,248.8	6,245.0	3.8	0.1%	6,244.4	4.4	0.1%	6,243.3	5.6	0.1%	6,242.1	6.7	0.1%	6,241.1	7.8	0.1%	6,239.9	8.9	0.1%
ME 1	48 59 42	2018	Above Normal	June	--	1,836.6	1,829.1	7.5	0.4%	1,828.0	8.6	0.5%	1,825.8	10.8	0.6%	1,823.7	12.8	0.7%	1,821.5	15.0	0.8%	1,819.4	17.1	0.9%
ME 1	48 59 42	2018	Above Normal	July	--	712.4	705.0	7.3	1.0%	704.0	8.4	1.2%	701.9	10.5	1.5%	699.8	12.6	1.8%	697.7	14.7	2.1%	695.6	16.8	2.4%
ME 1	48 59 42	2018	Above Normal	August	--	377.6	371.6	6.0	1.6%	370.8	6.8	1.8%	369.0	8.5	2.3%	367.3	10.2	2.7%	365.6	11.9	3.2%	363.9	13.7	3.6%
ME 1	48 59 42	2018	Above Normal	September	Used in Summary Table Analysis	242.6	237.5	5.0	2.1%	236.8	5.7	2.4%	235.4	7.2	3.0%	234.0	8.6	3.5%	232.5	10.0	4.1%	231.1	11.5	4.7%
ME 1	48 59 42	2019	Below Normal	October	Used in Summary Table Analysis	138.6	135.3	3.4	2.4%	134.8	3.8	2.8%	133.8	4.8	3.4%	132.9	5.7	4.1%	131.9	6.7	4.8%	131.0	7.7	5.5%
ME 1	48 59 42	2019	Below Normal	November	Used in Summary Table Analysis	1,844.0	1,841.4	2.5	0.1%	1,841.0	3.0	0.2%	1,840.3	3.7	0.2%	1,839.6	4.4	0.2%	1,838.8	5.2	0.3%	1,838.1	5.9	0.3%
ME 1	48 59 42	2019	Below Normal	December	--	7,209.6	7,207.4	2.2	0.0%	7,207.1	2.5	0.0%	7,206.5	3.1	0.0%	7,205.8	3.8	0.1%	7,205.2	4.4	0.1%	7,204.5	5.1	0.1%
ME 1	48 59 42	2019	Below Normal	January	--	18,292.8	18,291.7	1.2	0.0%	18,290.5	2.3	0.0%	18,290.5	2.3	0.0%	18,289.4	3.5	0.0%	18,289.4	3.5	0.0%	18,288.2	4.6	0.0%
ME 1	48 59 42	2019	Below Normal	February	--	96,401.6	96,399.3	2.3	0.0%	96,399.3	2.3	0.0%	96,399.3	2.3	0.0%	96,398.1	3.5	0.0%	96,398.1	3.5	0.0%	96,397.0	4.6	0.0%
ME 1	48 59 42	2019	Below Normal	March	--	31,516.2	31,515.0	1.2	0.0%	31,513.9	2.3	0.0%	31,513.9	2.3	0.0%	31,512.7	3.5	0.0%	31,512.7	3.5	0.0%	31,511.6	4.6	0.0%
ME 1	48 59 42	2019	Below Normal	April	--	11,655.1	11,652.8	2.3	0.0%	11,652.8	2.3	0.0%	11,651.6	3.5	0.0%	11,651.6	3.5	0.0%	11,650.5	4.6	0.0%	11,650.5	4.6	0.0%
ME 1	48 59 42	2019	Below Normal	May	--	9,765.9	9,761.6	4.3	0.0%	9,760.9	5.0	0.1%	9,759.7	6.1	0.1%	9,758.4	7.4	0.1%	9,757.3	8.6	0.1%	9,756.0	9.8	0.1%
ME 1	48 59 42	2019	Below Normal	June	--	4,163.0	4,155.2	7.8	0.2%	4,154.1	8.9	0.2%	4,151.9	11.1	0.3%	4,149.7	13.3	0.3%	4,147.5	15.5	0.4%	4,145.3	17.7	0.4%
ME 1	48 59 42	2019	Below Normal	July	--	1,277.9	1,270.5	7.4	0.6%	1,269.4	8.4	0.7%	1,267.4	10.5	0.8%	1,265.3	12.6	1.0%	1,263.2	14.7	1.2%	1,261.1	16.8	1.3%
ME 1	48 59 42	2019	Below Normal	August	--	524.3	518.1	6.2	1.2%	517.2	7.1	1.4%	515.5	8.9	1.7%	513.7	10.6	2.0%	511.9	12.4	2.4%	510.2	14.2	2.7%
ME 1	48 59 42	2019	Below Normal	September	Used in Summary Table Analysis	320.9	315.9	4.9	1.5%	315.3	5.6	1.7%	313.9	7.0	2.2%	312.5	8.4	2.6%	311.1	9.8	3.1%	309.7	11.2	3.5%
ME 1	48 59 42	2020	Dry	October	Used in Summary Table Analysis	185.8	182.6	3.3	1.8%	182.1	3.7	2.0%	181.1	4.7	2.5%	180.2	5.6	3.0%	179.3	6.5	3.5%	178.4	7.5	4.0%
ME 1	48 59 42	2020	Dry	November	Used in Summary Table Analysis	211.2	208.6	2.6	1.2%	208.3	2.9	1.4%	207.5	3.7	1.7%	206.8	4.4	2.1%	206.1	5.1	2.4%	205.3	5.9	2.8%
ME 1	48 59 42	2020	Dry	December	--	4,921.1	4,919.0	2.1	0.0%	4,918.6	2.4	0.0%	4,917.9	3.1	0.1%	4,917.4	3.7	0.1%	4,916.8	4.3	0.1%	4,916.1	5.0	0.1%
ME 1	48 59 42	2020	Dry	January	--	12,928.2	12,927.1	1.2	0.0%	12,925.9	2.3	0.0%	12,925.9	2.3	0.0%	12,924.8	3.5	0.0%	12,924.8	3.5	0.0%	12,923.6	4.6	0.0%
ME 1	48 59 42	2020	Dry	February	--	7,144.3	7,142.4	2.0	0.0%	7,142.0	2.3	0.0%	7,141.4	2.9	0.0%	7,140.9	3.5	0.0%	7,140.3	4.1	0.1%	7,139.7	4.6	0.1%
ME 1	48 59 42	2020	Dry	March	--	4,494.1	4,492.2	1.9	0.0%	4,491.9	2.2	0.0%	4,491.3	2.8	0.1%	4,490.7	3.4	0.1%	4,490.2	3.9	0.1%	4,489.6	4.5	0.1%
ME 1	48 59 42	2020	Dry	April	--	3,241.8	3,238.1	3.7	0.1%	3,237.6	4.2	0.1%	3,236.5	5.3	0.2%	3,235.4	6.4	0.2%	3,234.4	7.4	0.2%	3,233.3	8.4	0.3%
ME 1	48 59 42	2020	Dry	May	--	3,483.7	3,478.2	5.4	0.2%	3,477.4	6.3	0.2%	3,475.8	7.9	0.2%	3,474.3	9.4	0.3%	3,472.7	11.0	0.3%	3,471.1	12.6	0.4%
ME 1	48 59 42	2020	Dry	June	--	2,012.3	2,004.2	8.1	0.4%	2,003.0	9.3	0.5%	2,000.7	11.6	0.6%	1,998.4	13.9	0.7%	1,996.1	16.2	0.8%	1,993.9	18.4	0.9%
ME 1	48 59 42	2020	Dry	July	--	731.9	723.6	8.3	1.1%	722.4	9.5	1.3%	720.0	11.9	1.6%	717.7	14.3	2.0%	715.3	16.7	2.3%	712.9	19.1	2.6%
ME 1	48 59 42	2020	Dry	August	--	340.2	333.0	7.2	2.1%	332.0	8.2	2.4%	329.9	10.2	3.0%	327.9	12.3	3.6%	325.8	14.4	4.2%	323.8	16.4	4.8%
ME 1	48 59 42	2020	Dry	September	Used in Summary Table Analysis	192.0	186.1	5.8	3.0%	185.3	6.7	3.5%	183.6	8.3	4.3%	182.0	10.0	5.2%	180.3	11.7	6.1%	178.6	13.3	6.9%
ME 1	47 59 1	2000	Above Normal	October	Used in Summary Table Analysis	793.6	787.0	6.7	0.8%	786.0	7.6	1.0%	784.2	9.5	1.2%	782.2	11.4	1.4%	780.3	13.4	1.7%	778.4	15.3	1.9%
ME 1	47 59 1	2000	Above Normal	November	Used in Summary Table Analysis	11,782.4	11,776.6	5.8	0.0%	11,775.5	6.9	0.1%	11,774.3	8.1	0.1%	11,773.1	9.3	0.1%	11,772.0	10.4	0.1%	11,769.7	12.7	0.1%
ME 1	47 59 1	2000	Above Normal	December	--	10,629.5	10,625.3	4.2	0.0%	10,624.8	4.7	0.0%	10,623.5	6.0	0.1%	10,622.2	7.3	0.1%	10,621.1	8.4	0.1%	10,619.8	9.7	0.1%
ME 1	47 59 1	2000	Above Normal	January	--	28,012.7	28,009.3	3.5	0.0%	28,008.1	4.6	0.0%	28,008.1	4.6	0.0%	28,006.9	5.8	0.0%	28,005.8	6.9	0.0%	28,004.6	8.1	0.0%
ME 1	47 59 1	2000	Above Normal	February	--	36,671.3	36,667.8	3.5	0.0%	36,667.8	3.5	0.0%	36,666.7	4.6	0.0%	36,665.5	5.8	0.0%	36,664.4	6.9	0.0%	36,663.2	8.1	0.0%
ME 1	47 59 1	2000	Above Normal	March	--	18,199.1	18,195.6	3.5	0.0%	18,194.4	4.6	0.0%	18,194.4	4.6	0.0%	18,193.3	5.8	0.0%	18,192.1	6.9	0.0%	18,191.0	8.1	0.0%
ME 1	47 59 1	2000	Above Normal	April	--	12,224.5	12,221.1	3.5	0.0%	12,221.1	3.5	0.0%	12,219.9	4.6	0.0%	12,218.8	5.8	0.0%	12,217.6	6.9	0.1%	12,216.4	8.1	0.1%
ME 1	47 59 1	2000	Above Normal	May	--	7,019.1	7,010.1	9.0	0.1%	7,008.8	10.3	0.1%	7,006.3	12.8	0.2%	7,003.6	15.5	0.2%	7,001.0	18.1	0.3%	6,998.4	20.7	0.3%
ME 1	47 59 1	2000	Above Normal	June	--	2,579.7	2,565.6	14.1	0.5%	2,563.7	16.1	0.6%	2,559.6	20.1	0.8%	2,555.7	24.1	0.9%	2,551.6	28.1	1.1%	2,547.7	32.1	1.2%
ME 1	47 59 1	2000	Above Normal	July	--	975.2	964.1	11.1	1.1%	962.5	12.7	1.3%	959.4	15.8	1.6%	956.3	18.9	1.9%	953.2	22.0	2.3%	950.1	25.1	2.6%
ME 1	47 59 1	2000	Above Normal	August	--	504.5	494.9	9.6	1.9%	493.5	11.0	2.2%	490.8	13.7	2.7%	488.0	16.4	3.3%	485.3	19.1	3.8%	482.6	21.9	4.3%
ME 1	47 59 1	2000	Above Normal	September	Used in Summary Table Analysis	279.8	271.7	8.1	2.9%	270.5	9.3	3.3%	268.2	11.6	4.1%	265.9	13.9	5.0%	263.6	16.2	5.8%	261.3	18.5	6.6%
ME 1	47 59 1	2001	Dry	October	Used in Summary Table Analysis	3,734.6	3,728.0	6.6	0.2%	3,727.1	7.5	0.2%	3,725.2	9.4	0.3%	3,723.4	11.2	0.3%	3,721.4	13.2	0.4%	3,719.6	15.0	0.4%
ME 1	47 59 1	2001	Dry	November	Used in Summary Table Analysis	5,995.5	5,990.5	5.0	0.1%	5,989.8	5.7	0.1%	5,988.3	7.2	0.1%	5,986.9	8.6	0.1%	5,985.5	10.0	0.2%	5,984.0	11.5	0.2%
ME 1	47 59 1	2001	Dry	December	--	8,709.3	8,705.1	4.2	0.0%	8,704.5	4.7	0.1%	8,703.2	6.0	0.1%	8,702.1	7.2	0.1%	8,700.8	8.4	0.1%	8,699.5	9.7	0.1%
ME 1	47 59 1	2001	Dry	January	--	12,547.5	12,544.0	3.5	0.0%	12,542.8	4.6	0.0%	12,541.7	5.8	0.0%	12,541.7	5.8	0.0%	12,540.5	6.9	0.1%	12,539.4	8.1	0.1%

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Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 59 1	2001	Dry	February	--	17,317.1	17,313.7	3.5	0.0%	17,312.5	4.6	0.0%	17,311.3	5.8	0.0%	17,311.3	5.8	0.0%	17,310.2	6.9	0.0%	17,309.0	8.1	0.0%
ME 1	47 59 1	2001	Dry	March	--	12,215.3	12,211.8	3.5	0.0%	12,211.8	3.5	0.0%	12,210.6	4.6	0.0%	12,209.5	5.8	0.0%	12,208.3	6.9	0.1%	12,208.3	6.9	0.1%
ME 1	47 59 1	2001	Dry	April	--	10,886.3	10,876.9	9.5	0.1%	10,875.6	10.8	0.1%	10,872.8	13.5	0.1%	10,870.1	16.2	0.1%	10,867.4	19.0	0.2%	10,864.7	21.6	0.2%
ME 1	47 59 1	2001	Dry	May	--	2,631.4	2,620.9	10.4	0.4%	2,619.4	11.9	0.5%	2,616.4	14.9	0.6%	2,613.4	17.9	0.7%	2,610.4	20.9	0.8%	2,607.4	24.0	0.9%
ME 1	47 59 1	2001	Dry	June	--	2,592.8	2,577.1	15.7	0.6%	2,574.9	17.9	0.7%	2,570.5	22.3	0.9%	2,566.1	26.7	1.0%	2,561.7	31.1	1.2%	2,557.3	35.5	1.4%
ME 1	47 59 1	2001	Dry	July	--	709.8	697.2	12.6	1.8%	695.4	14.4	2.0%	691.8	18.0	2.5%	688.3	21.5	3.0%	684.7	25.1	3.5%	681.1	28.7	4.0%
ME 1	47 59 1	2001	Dry	August	--	159.5	148.0	11.5	7.2%	146.3	13.1	8.2%	143.0	16.4	10.3%	139.7	19.7	12.4%	136.5	23.0	14.4%	133.2	26.3	16.5%
ME 1	47 59 1	2001	Dry	September	Used in Summary Table Analysis	81.6	71.8	9.8	12.0%	70.4	11.2	13.7%	67.6	14.0	17.1%	64.8	16.8	20.6%	62.0	19.6	24.0%	59.2	22.4	27.5%
ME 1	47 59 1	2002	Below Normal	October	Used in Summary Table Analysis	249.6	241.3	8.3	3.3%	240.2	9.4	3.8%	237.7	11.9	4.7%	235.3	14.2	5.7%	233.0	16.6	6.7%	230.6	19.0	7.6%
ME 1	47 59 1	2002	Below Normal	November	Used in Summary Table Analysis	11,855.3	11,848.4	6.9	0.1%	11,848.4	6.9	0.1%	11,846.1	9.3	0.1%	11,844.9	10.4	0.1%	11,842.6	12.7	0.1%	11,840.3	15.0	0.1%
ME 1	47 59 1	2002	Below Normal	December	--	35,173.6	35,167.8	5.8	0.0%	35,167.8	5.8	0.0%	35,165.5	8.1	0.0%	35,164.4	9.3	0.0%	35,163.2	10.4	0.0%	35,160.9	12.7	0.0%
ME 1	47 59 1	2002	Below Normal	January	--	30,553.2	30,548.6	4.6	0.0%	30,547.5	5.8	0.0%	30,546.3	6.9	0.0%	30,545.1	8.1	0.0%	30,544.0	9.3	0.0%	30,542.8	10.4	0.0%
ME 1	47 59 1	2002	Below Normal	February	--	24,481.5	24,476.9	4.6	0.0%	24,476.9	4.6	0.0%	24,474.5	6.9	0.0%	24,473.4	8.1	0.0%	24,472.2	9.3	0.0%	24,471.1	10.4	0.0%
ME 1	47 59 1	2002	Below Normal	March	--	17,626.2	17,621.5	4.6	0.0%	17,621.5	4.6	0.0%	17,620.4	5.8	0.0%	17,619.2	6.9	0.0%	17,618.1	8.1	0.0%	17,616.9	9.3	0.1%
ME 1	47 59 1	2002	Below Normal	April	--	9,863.8	9,854.5	9.3	0.1%	9,853.1	10.6	0.1%	9,850.6	13.2	0.1%	9,847.9	15.9	0.2%	9,845.4	18.4	0.2%	9,842.7	21.1	0.2%
ME 1	47 59 1	2002	Below Normal	May	--	3,295.0	3,284.8	10.2	0.3%	3,283.3	11.7	0.4%	3,280.3	14.7	0.4%	3,277.4	17.6	0.5%	3,274.5	20.5	0.6%	3,271.5	23.5	0.7%
ME 1	47 59 1	2002	Below Normal	June	--	840.9	828.5	12.5	1.5%	826.7	14.2	1.7%	823.2	17.7	2.1%	819.7	21.2	2.5%	816.2	24.8	2.9%	812.7	28.2	3.4%
ME 1	47 59 1	2002	Below Normal	July	--	349.0	337.5	11.5	3.3%	335.9	13.1	3.8%	332.6	16.4	4.7%	329.4	19.6	5.6%	326.1	22.9	6.6%	322.9	26.1	7.5%
ME 1	47 59 1	2002	Below Normal	August	--	211.5	201.5	10.0	4.7%	200.1	11.4	5.4%	197.2	14.2	6.7%	194.4	17.1	8.1%	191.5	19.9	9.4%	188.7	22.8	10.8%
ME 1	47 59 1	2002	Below Normal	September	Used in Summary Table Analysis	148.9	139.8	9.1	6.1%	138.6	10.4	7.0%	136.0	13.0	8.7%	133.4	15.5	10.4%	130.8	18.1	12.2%	128.2	20.7	13.9%
ME 1	47 59 1	2003	Wet	October	Used in Summary Table Analysis	114.2	107.0	7.2	6.3%	105.9	8.2	7.2%	103.9	10.3	9.0%	101.8	12.4	10.9%	99.7	14.5	12.7%	97.6	16.6	14.5%
ME 1	47 59 1	2003	Wet	November	Used in Summary Table Analysis	877.3	871.8	5.5	0.6%	871.0	6.3	0.7%	869.4	7.9	0.9%	867.8	9.5	1.1%	866.3	10.9	1.2%	864.8	12.5	1.4%
ME 1	47 59 1	2003	Wet	December	--	55,627.3	55,622.7	4.6	0.0%	55,622.7	4.6	0.0%	55,621.5	5.8	0.0%	55,619.2	8.1	0.0%	55,618.1	9.3	0.0%	55,616.9	10.4	0.0%
ME 1	47 59 1	2003	Wet	January	--	31,280.1	31,276.6	3.5	0.0%	31,275.5	4.6	0.0%	31,274.3	5.8	0.0%	31,273.1	6.9	0.0%	31,272.0	8.1	0.0%	31,270.8	9.3	0.0%
ME 1	47 59 1	2003	Wet	February	--	20,219.9	20,215.3	4.6	0.0%	20,215.3	4.6	0.0%	20,214.1	5.8	0.0%	20,213.0	6.9	0.0%	20,211.8	8.1	0.0%	20,210.6	9.3	0.0%
ME 1	47 59 1	2003	Wet	March	--	23,829.9	23,826.4	3.5	0.0%	23,826.4	3.5	0.0%	23,825.2	4.6	0.0%	23,824.1	5.8	0.0%	23,822.9	6.9	0.0%	23,821.8	8.1	0.0%
ME 1	47 59 1	2003	Wet	April	--	42,415.5	42,412.0	3.5	0.0%	42,412.0	3.5	0.0%	42,410.9	4.6	0.0%	42,409.7	5.8	0.0%	42,408.6	6.9	0.0%	42,408.6	6.9	0.0%
ME 1	47 59 1	2003	Wet	May	--	12,153.9	12,143.5	10.4	0.1%	12,142.4	11.6	0.1%	12,140.0	13.9	0.1%	12,137.7	16.2	0.1%	12,135.4	18.5	0.2%	12,131.9	22.0	0.2%
ME 1	47 59 1	2003	Wet	June	--	3,147.1	3,135.6	11.5	0.4%	3,134.1	13.0	0.4%	3,130.9	16.2	0.5%	3,127.8	19.3	0.6%	3,124.8	22.3	0.7%	3,121.6	25.5	0.8%
ME 1	47 59 1	2003	Wet	July	--	1,453.8	1,442.5	11.3	0.8%	1,440.9	13.0	0.9%	1,437.7	16.1	1.1%	1,434.5	19.3	1.3%	1,431.3	22.6	1.6%	1,428.0	25.8	1.8%
ME 1	47 59 1	2003	Wet	August	--	741.2	730.8	10.4	1.4%	729.2	12.0	1.6%	726.3	14.9	2.0%	723.3	17.9	2.4%	720.3	20.9	2.8%	717.2	24.0	3.2%
ME 1	47 59 1	2003	Wet	September	Used in Summary Table Analysis	440.5	432.3	8.2	1.9%	431.1	9.4	2.1%	428.8	11.7	2.7%	426.5	14.0	3.2%	424.2	16.3	3.7%	421.9	18.7	4.2%
ME 1	47 59 1	2004	Wet	October	Used in Summary Table Analysis	307.9	301.3	6.6	2.2%	300.3	7.6	2.5%	298.4	9.5	3.1%	296.5	11.4	3.7%	294.6	13.3	4.3%	292.7	15.2	4.9%
ME 1	47 59 1	2004	Wet	November	Used in Summary Table Analysis	5,665.9	5,660.8	5.1	0.1%	5,660.1	5.8	0.1%	5,658.6	7.3	0.1%	5,657.1	8.8	0.2%	5,655.7	10.2	0.2%	5,654.2	11.7	0.2%
ME 1	47 59 1	2004	Wet	December	--	35,709.5	35,706.0	3.5	0.0%	35,704.9	4.6	0.0%	35,703.7	5.8	0.0%	35,702.5	6.9	0.0%	35,701.4	8.1	0.0%	35,699.1	10.4	0.0%
ME 1	47 59 1	2004	Wet	January	--	31,063.7	31,060.2	3.5	0.0%	31,059.0	4.6	0.0%	31,057.9	5.8	0.0%	31,056.7	6.9	0.0%	31,055.6	8.1	0.0%	31,054.4	9.3	0.0%
ME 1	47 59 1	2004	Wet	February	--	37,842.6	37,838.0	4.6	0.0%	37,838.0	4.6	0.0%	37,836.8	5.8	0.0%	37,835.6	6.9	0.0%	37,834.5	8.1	0.0%	37,833.3	9.3	0.0%
ME 1	47 59 1	2004	Wet	March	--	16,450.2	16,446.8	3.5	0.0%	16,446.8	3.5	0.0%	16,445.6	4.6	0.0%	16,444.4	5.8	0.0%	16,443.3	6.9	0.0%	16,442.1	8.1	0.0%
ME 1	47 59 1	2004	Wet	April	--	9,395.1	9,392.0	3.1	0.0%	9,391.6	3.6	0.0%	9,390.6	4.5	0.0%	9,389.7	5.4	0.1%	9,388.8	6.4	0.1%	9,387.8	7.3	0.1%
ME 1	47 59 1	2004	Wet	May	--	3,375.2	3,366.1	9.1	0.3%	3,364.8	10.4	0.3%	3,362.2	13.1	0.4%	3,359.6	15.6	0.5%	3,356.9	18.3	0.5%	3,354.4	20.8	0.6%
ME 1	47 59 1	2004	Wet	June	--	679.7	669.0	10.7	1.6%	667.5	12.2	1.8%	664.4	15.2	2.2%	661.4	18.2	2.7%	658.4	21.2	3.1%	655.4	24.2	3.6%
ME 1	47 59 1	2004	Wet	July	--	340.2	329.1	11.1	3.3%	327.6	12.7	3.7%	324.4	15.8	4.7%	321.3	19.0	5.6%	318.1	22.2	6.5%	314.9	25.3	7.4%
ME 1	47 59 1	2004	Wet	August	--	210.1	200.4	9.6	4.6%	199.0	11.0	5.3%	196.3	13.8	6.6%	193.5	16.5	7.9%	190.8	19.3	9.2%	188.0	22.0	10.5%
ME 1	47 59 1	2004	Wet	September	Used in Summary Table Analysis	148.1	138.8	9.3	6.3%	137.5	10.7	7.2%	134.8	13.3	9.0%	132.2	16.0	10.8%	129.5	18.7	12.6%	126.8	21.4	14.4%
ME 1	47 59 1	2005	Above Normal	October	Used in Summary Table Analysis	7,505.3	7,498.5	6.8	0.1%	7,497.5	7.9	0.1%	7,495.5	9.8	0.1%	7,493.5	11.8	0.2%	7,491.6	13.8	0.2%	7,489.6	15.7	0.2%
ME 1	47 59 1	2005	Above Normal	November	Used in Summary Table Analysis	2,229.1	2,224.0	5.1	0.2%	2,223.3	5.8	0.3%	2,221.8	7.3	0.3%	2,220.3	8.8	0.4%	2,218.9	10.2	0.5%	2,217.4	11.7	0.5%
ME 1	47 59 1	2005	Above Normal	December	--	20,525.5	20,520.8	4.6	0.0%	20,520.8	4.6	0.0%	20,518.5	6.9	0.0%	20,517.4	8.1	0.0%	20,516.2	9.3	0.0%	20,515.0	10.4	0.1%
ME 1	47 59 1	2005	Above Normal	January	--	21,989.6	21,986.1	3.5	0.0%	21,985.0	4.6	0.0%	21,983.8	5.8	0.0%	21,982.6	6.9	0.0%	21,981.5	8.1	0.0%	21,980.3	9.3	0.0%
ME 1	47 59 1	2005	Above Normal	February	--	13,937.5	13,934.0	3.5	0.0%	13,932.9	4.6	0.0%	13,932.9	4.6	0.0%	13,931.7	5.8	0.0%	13,930.6	6.9	0.0%	13,929.4	8.1	0.1%
ME 1	47 59 1	2005	Above Normal	March	--	28,265.0	28,262.7	2.3	0.0%	28,261.6	3.5	0.0%	28,260.4	4.6	0.0%	28,259.3	5.8	0.0%	28,259.3	5.8	0.0%	28,258.1	6.9	0.0%
ME 1	47 59 1	2005	Above Normal	April	--	21,245.4	21,241.9	3.5	0.0%	21,241.9	3.5	0.0%	21,240.7	4.6	0.0%	21,239.6	5.8	0.0%	21,239.6	5.8	0.0%	21,238.4	6.9	0.0%
ME 1	47 59 1	2005	Above Normal	May	--	19,332.2	19,322.9	9.3	0.0%	19,321.8	10.4	0.1%	19,319.4	12.7	0.1%	19,316.0	16.2	0.1%	19,313.7	18.5	0.1%	19,311.3	20.8	0.1%
ME 1	47 59 1	2005	Above Normal	June	--	15,591.4	15,576.4	15.0	0.1%	15,574.1	17.4	0.1%	15,570.6	20.8	0.1%	15,566.0	25.5	0.2%	15,561.3	30.1	0.2%	15,557.9	33.6	0.2%
ME 1	47 59 1	2005	Above Normal	July	--	2,856.3	2,844.4	11.8	0.4%	2,842.7	13.5	0.5%	2,839.4	16.9	0.6%	2,836.0	20.3	0.7%	2,832.6	23.6	0.8%	2,829.3	27.0	0.9%
ME 1	47 59 1	2005	Above Normal	August	--	963.7	954.0	9.6	1.0%	952.7	11.0	1.1%	949.9	13.8	1.4%	947.2	16.5	1.7%	944.4	19.2	2.0%	941.7	22.0	2.3%
ME 1	47 59 1	2005	Above Normal	September	Used in Summary Table Analysis	505.8	497.7	8.1	1.6%	496.5	9.3	1.8%	494.2	11.6	2.3%	491.9	13.9	2.8%	489.6	16.2	3.2%	487.3	18.5	3.7%
ME 1	47 59 1	2006	Wet	October	Used in Summary Table Analysis	613.2	606.7	6.5	1.1%	605.8	7.4	1.2%	603.9	9.3	1.5%	602.0	11.2	1.8%	600.2	13.0	2.1%	598.3	14.9	2.4%
ME 1	47 59 1	2006	Wet	November	Used in Summary Table Analysis	9,074.4	9,069.6	4.9	0.1%	9,068.9	5.6	0.1%	9,067.5	6.9	0.1%	9,066.1	8.3	0.1%	9,064.7	9.7	0.1%	9,063.3	11.1	0.1%
ME 1	47 59 1	2006	Wet	December	--	42,744.2	42,740.7	3.5	0.0%	42,739.6	4.6	0.0%	42,738.4	5.8	0.0%	42,737.3	6.9	0.0%	42,736.1	8.1	0.0%	42,735.0	9.3	0.0%
ME 1	47 59 1	2006	Wet	January	--	45,614.6	45,610.0	4.6	0.0%	45,610.0	4.6	0.0%	45,608.8	5.8	0.0%	45,607.6	6.9	0.0%	45,606.5	8.1	0.0%	45,605.3	9.3	0.0%
ME 1	47 59 1	2006	Wet	February	--	26,324.1	26,320.6	3.5	0.0%	26,319.4	4.6	0.0%	26,318.3	5.8	0.0%	26,317.1	6.9	0.0%	26,317.1	6.9	0.0%	26,316.0	8.1	0.0%
ME 1	47 59 1	2006	Wet	March	--	46,618.1	46,614.6	3.5	0.0%	46,614.6	3.5	0.0%	46,613.4	4.6	0.0%	46,612.3	5.8	0.0%	46,611.1	6.9	0.0%	46,610.0	8.1	0.0%
ME 1	47 59 1	2006	Wet	April	--	30,211.8	30,208.3	3.5	0.0%	30,208.3	3.5	0.0%	30,207.2	4.6	0.0%	30,206.0	5.8	0.0%	30,206.0	5.8	0.0%	30,204.9	6.9	0.0%
ME 1	47 59 1	2006	Wet	May	--	14,079.9	14,075.2	4.6	0.0%	14,074.1	5.8	0.0%	14,072.9	6.9	0.0%	14,071.8	8.1	0.1%	14,070.6	9.3	0.1%	14,068.3	11.6	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 59 1	2006	Wet	June	--	3,529.6	3,517.4	12.3	0.3%	3,515.6	14.0	0.4%	3,512.3	17.4	0.5%	3,508.8	20.8	0.6%	3,505.4	24.2	0.7%	3,502.0	27.7	0.8%
ME 1	47 59 1	2006	Wet	July	--	1,256.9	1,245.8	11.1	0.9%	1,244.2	12.7	1.0%	1,241.1	15.9	1.3%	1,237.8	19.1	1.5%	1,234.7	22.2	1.8%	1,231.6	25.3	2.0%
ME 1	47 59 1	2006	Wet	August	--	643.6	633.5	10.0	1.6%	632.1	11.5	1.8%	629.3	14.3	2.2%	626.4	17.2	2.7%	623.6	20.0	3.1%	620.8	22.8	3.5%
ME 1	47 59 1	2006	Wet	September	Used in Summary Table Analysis	406.3	398.0	8.3	2.0%	396.9	9.5	2.3%	394.5	11.8	2.9%	392.2	14.2	3.5%	389.8	16.5	4.1%	387.5	18.9	4.6%
ME 1	47 59 1	2007	Above Normal	October	Used in Summary Table Analysis	257.4	250.8	6.6	2.6%	249.8	7.6	2.9%	247.9	9.5	3.7%	246.0	11.4	4.4%	244.1	13.3	5.2%	242.2	15.2	5.9%
ME 1	47 59 1	2007	Above Normal	November	Used in Summary Table Analysis	8,462.5	8,457.4	5.1	0.1%	8,456.6	5.9	0.1%	8,455.1	7.4	0.1%	8,453.7	8.8	0.1%	8,452.2	10.3	0.1%	8,450.7	11.8	0.1%
ME 1	47 59 1	2007	Above Normal	December	--	19,998.8	19,994.2	4.6	0.0%	19,993.1	5.8	0.0%	19,991.9	6.9	0.0%	19,990.7	8.1	0.0%	19,989.6	9.3	0.0%	19,987.3	11.6	0.1%
ME 1	47 59 1	2007	Above Normal	January	--	10,139.1	10,135.3	3.8	0.0%	10,134.7	4.4	0.0%	10,133.6	5.6	0.1%	10,132.4	6.7	0.1%	10,131.4	7.8	0.1%	10,130.1	9.0	0.1%
ME 1	47 59 1	2007	Above Normal	February	--	30,110.0	30,106.5	3.5	0.0%	30,105.3	4.6	0.0%	30,104.2	5.8	0.0%	30,103.0	6.9	0.0%	30,101.9	8.1	0.0%	30,100.7	9.3	0.0%
ME 1	47 59 1	2007	Above Normal	March	--	13,019.7	13,016.2	3.5	0.0%	13,015.0	4.6	0.0%	13,013.9	5.8	0.0%	13,012.7	6.9	0.1%	13,011.6	8.1	0.1%	13,011.6	8.1	0.1%
ME 1	47 59 1	2007	Above Normal	April	--	11,457.1	11,448.1	8.9	0.1%	11,446.9	10.2	0.1%	11,444.3	12.7	0.1%	11,441.8	15.3	0.1%	11,439.1	17.9	0.2%	11,436.6	20.5	0.2%
ME 1	47 59 1	2007	Above Normal	May	--	4,102.7	4,092.7	10.0	0.2%	4,091.3	11.3	0.3%	4,088.4	14.2	0.3%	4,085.5	17.1	0.4%	4,082.6	20.0	0.5%	4,079.9	22.8	0.6%
ME 1	47 59 1	2007	Above Normal	June	--	1,472.0	1,458.7	13.3	0.9%	1,456.8	15.2	1.0%	1,453.0	19.0	1.3%	1,449.3	22.7	1.5%	1,445.6	26.4	1.8%	1,441.9	30.1	2.0%
ME 1	47 59 1	2007	Above Normal	July	--	483.1	471.0	12.1	2.5%	469.3	13.8	2.9%	465.9	17.2	3.6%	462.5	20.7	4.3%	459.0	24.1	5.0%	455.6	27.5	5.7%
ME 1	47 59 1	2007	Above Normal	August	--	207.4	197.6	9.8	4.7%	196.3	11.2	5.4%	193.5	13.9	6.7%	190.7	16.7	8.1%	187.9	19.5	9.4%	185.2	22.3	10.7%
ME 1	47 59 1	2007	Above Normal	September	Used in Summary Table Analysis	135.1	126.2	8.9	6.6%	124.9	10.2	7.5%	122.4	12.7	9.4%	119.8	15.3	11.3%	117.3	17.8	13.2%	114.7	20.4	15.1%
ME 1	47 59 1	2008	Dry	October	Used in Summary Table Analysis	3,357.8	3,350.7	7.1	0.2%	3,349.7	8.1	0.2%	3,347.7	10.1	0.3%	3,345.6	12.2	0.4%	3,343.6	14.1	0.4%	3,341.6	16.2	0.5%
ME 1	47 59 1	2008	Dry	November	Used in Summary Table Analysis	3,202.0	3,196.8	5.2	0.2%	3,196.1	5.9	0.2%	3,194.6	7.4	0.2%	3,193.1	8.9	0.3%	3,191.6	10.4	0.3%	3,190.0	11.9	0.4%
ME 1	47 59 1	2008	Dry	December	--	22,591.4	22,586.8	4.6	0.0%	22,585.6	5.8	0.0%	22,584.5	6.9	0.0%	22,583.3	8.1	0.0%	22,582.2	9.3	0.0%	22,579.9	11.6	0.1%
ME 1	47 59 1	2008	Dry	January	--	37,017.4	37,012.7	4.6	0.0%	37,012.7	4.6	0.0%	37,011.6	5.8	0.0%	37,010.4	6.9	0.0%	37,009.3	8.1	0.0%	37,008.1	9.3	0.0%
ME 1	47 59 1	2008	Dry	February	--	26,142.4	26,138.9	3.5	0.0%	26,138.9	3.5	0.0%	26,137.7	4.6	0.0%	26,136.6	5.8	0.0%	26,135.4	6.9	0.0%	26,134.3	8.1	0.0%
ME 1	47 59 1	2008	Dry	March	--	11,732.6	11,729.2	3.5	0.0%	11,729.2	3.5	0.0%	11,728.0	4.6	0.0%	11,726.9	5.8	0.0%	11,725.7	6.9	0.1%	11,725.7	6.9	0.1%
ME 1	47 59 1	2008	Dry	April	--	8,967.2	8,957.9	9.4	0.1%	8,956.5	10.8	0.1%	8,953.8	13.4	0.1%	8,951.2	16.1	0.2%	8,948.4	18.9	0.2%	8,945.7	21.5	0.2%
ME 1	47 59 1	2008	Dry	May	--	1,359.6	1,350.8	8.8	0.6%	1,349.5	10.1	0.7%	1,347.1	12.5	0.9%	1,344.7	14.9	1.1%	1,342.4	17.2	1.3%	1,340.0	19.6	1.4%
ME 1	47 59 1	2008	Dry	June	--	424.0	409.5	14.5	3.4%	407.4	16.6	3.9%	403.3	20.7	4.9%	399.2	24.8	5.8%	395.2	28.9	6.8%	391.1	32.9	7.8%
ME 1	47 59 1	2008	Dry	July	--	243.1	230.3	12.8	5.3%	228.5	14.6	6.0%	224.8	18.3	7.5%	221.2	21.9	9.0%	217.5	25.5	10.5%	213.9	29.2	12.0%
ME 1	47 59 1	2008	Dry	August	--	165.8	154.2	11.5	6.9%	152.6	13.1	7.9%	149.3	16.4	9.9%	146.0	19.7	11.9%	142.7	23.0	13.9%	139.5	26.3	15.9%
ME 1	47 59 1	2008	Dry	September	Used in Summary Table Analysis	127.6	116.4	11.3	8.8%	114.8	12.9	10.1%	111.5	16.1	12.6%	108.3	19.3	15.1%	105.1	22.5	17.7%	101.9	25.7	20.2%
ME 1	47 59 1	2009	Critical	October	Used in Summary Table Analysis	905.3	897.0	8.3	0.9%	895.8	9.5	1.0%	893.4	11.9	1.3%	891.0	14.3	1.6%	888.9	16.4	1.8%	886.4	18.9	2.1%
ME 1	47 59 1	2009	Critical	November	Used in Summary Table Analysis	5,378.0	5,372.1	5.9	0.1%	5,371.2	6.8	0.1%	5,369.4	8.6	0.2%	5,367.8	10.2	0.2%	5,366.1	11.9	0.2%	5,364.4	13.7	0.3%
ME 1	47 59 1	2009	Critical	December	--	11,888.9	11,884.3	4.6	0.0%	11,883.1	5.8	0.0%	11,881.9	6.9	0.1%	11,879.6	9.3	0.1%	11,878.5	10.4	0.1%	11,877.3	11.6	0.1%
ME 1	47 59 1	2009	Critical	January	--	8,714.7	8,710.1	4.6	0.1%	8,709.4	5.3	0.1%	8,708.1	6.6	0.1%	8,706.7	8.0	0.1%	8,705.4	9.3	0.1%	8,704.1	10.6	0.1%
ME 1	47 59 1	2009	Critical	February	--	22,383.1	22,378.5	4.6	0.0%	22,378.5	4.6	0.0%	22,377.3	5.8	0.0%	22,376.2	6.9	0.0%	22,375.0	8.1	0.0%	22,373.8	9.3	0.0%
ME 1	47 59 1	2009	Critical	March	--	20,946.8	20,943.3	3.5	0.0%	20,942.1	4.6	0.0%	20,941.0	5.8	0.0%	20,939.8	6.9	0.0%	20,939.8	6.9	0.0%	20,938.7	8.1	0.0%
ME 1	47 59 1	2009	Critical	April	--	10,072.0	10,062.4	9.6	0.1%	10,061.0	11.0	0.1%	10,058.2	13.8	0.1%	10,055.4	16.6	0.2%	10,052.7	19.3	0.2%	10,049.9	22.1	0.2%
ME 1	47 59 1	2009	Critical	May	--	15,491.9	15,481.5	10.4	0.1%	15,479.2	12.7	0.1%	15,476.9	15.0	0.1%	15,473.4	18.5	0.1%	15,469.9	22.0	0.1%	15,466.4	25.5	0.2%
ME 1	47 59 1	2009	Critical	June	--	3,142.4	3,126.6	15.7	0.5%	3,124.4	17.9	0.6%	3,119.9	22.5	0.7%	3,115.4	27.0	0.9%	3,111.0	31.4	1.0%	3,106.5	35.9	1.1%
ME 1	47 59 1	2009	Critical	July	--	1,247.0	1,234.0	13.0	1.0%	1,232.2	14.8	1.2%	1,228.6	18.4	1.5%	1,225.0	22.0	1.8%	1,221.3	25.7	2.1%	1,217.7	29.3	2.3%
ME 1	47 59 1	2009	Critical	August	--	652.6	641.0	11.6	1.8%	639.4	13.2	2.0%	636.1	16.5	2.5%	632.9	19.7	3.0%	629.6	23.0	3.5%	626.3	26.3	4.0%
ME 1	47 59 1	2009	Critical	September	Used in Summary Table Analysis	375.1	365.3	9.8	2.6%	363.9	11.2	3.0%	361.1	14.0	3.7%	358.3	16.8	4.5%	355.5	19.6	5.2%	352.7	22.4	6.0%
ME 1	47 59 1	2010	Below Normal	October	Used in Summary Table Analysis	6,065.5	6,057.3	8.2	0.1%	6,056.1	9.4	0.2%	6,053.7	11.8	0.2%	6,051.4	14.1	0.2%	6,049.2	16.3	0.3%	6,046.8	18.8	0.3%
ME 1	47 59 1	2010	Below Normal	November	Used in Summary Table Analysis	8,198.1	8,192.0	6.1	0.1%	8,191.2	6.9	0.1%	8,189.4	8.8	0.1%	8,187.6	10.5	0.1%	8,185.9	12.3	0.1%	8,184.1	14.0	0.2%
ME 1	47 59 1	2010	Below Normal	December	--	12,172.5	12,167.8	4.6	0.0%	12,166.7	5.8	0.0%	12,165.5	6.9	0.1%	12,164.4	8.1	0.1%	12,163.2	9.3	0.1%	12,160.9	11.6	0.1%
ME 1	47 59 1	2010	Below Normal	January	--	35,635.4	35,630.8	4.6	0.0%	35,629.6	5.8	0.0%	35,628.5	6.9	0.0%	35,627.3	8.1	0.0%	35,626.2	9.3	0.0%	35,625.0	10.4	0.0%
ME 1	47 59 1	2010	Below Normal	February	--	27,071.8	27,068.3	3.5	0.0%	27,067.1	4.6	0.0%	27,066.0	5.8	0.0%	27,064.8	6.9	0.0%	27,063.7	8.1	0.0%	27,062.5	9.3	0.0%
ME 1	47 59 1	2010	Below Normal	March	--	28,687.5	28,682.9	4.6	0.0%	28,682.9	4.6	0.0%	28,681.7	5.8	0.0%	28,680.6	6.9	0.0%	28,679.4	8.1	0.0%	28,678.2	9.3	0.0%
ME 1	47 59 1	2010	Below Normal	April	--	39,739.6	39,736.1	3.5	0.0%	39,735.0	4.6	0.0%	39,733.8	5.8	0.0%	39,732.6	6.9	0.0%	39,731.5	8.1	0.0%	39,730.3	9.3	0.0%
ME 1	47 59 1	2010	Below Normal	May	--	20,054.4	20,045.1	9.3	0.0%	20,044.0	10.4	0.1%	20,040.5	13.9	0.1%	20,038.2	16.2	0.1%	20,035.9	18.5	0.1%	20,032.4	22.0	0.1%
ME 1	47 59 1	2010	Below Normal	June	--	9,180.8	9,165.9	14.9	0.2%	9,163.7	17.1	0.2%	9,159.5	21.3	0.2%	9,155.4	25.3	0.3%	9,151.3	29.5	0.3%	9,147.2	33.6	0.4%
ME 1	47 59 1	2010	Below Normal	July	--	1,439.2	1,427.3	11.9	0.8%	1,425.6	13.7	0.9%	1,422.2	17.0	1.2%	1,418.9	20.4	1.4%	1,415.4	23.8	1.7%	1,412.3	27.0	1.9%
ME 1	47 59 1	2010	Below Normal	August	--	549.2	539.3	9.9	1.8%	537.9	11.3	2.1%	535.1	14.1	2.6%	532.3	16.9	3.1%	529.5	19.7	3.6%	526.7	22.5	4.1%
ME 1	47 59 1	2010	Below Normal	September	Used in Summary Table Analysis	630.9	621.2	9.7	1.5%	619.8	11.0	1.8%	617.1	13.8	2.2%	614.4	16.5	2.6%	611.6	19.3	3.1%	608.8	22.0	3.5%
ME 1	47 59 1	2011	Wet	October	Used in Summary Table Analysis	9,501.4	9,494.7	6.7	0.1%	9,493.8	7.6	0.1%	9,491.8	9.6	0.1%	9,489.9	11.5	0.1%	9,488.1	13.3	0.1%	9,486.1	15.3	0.2%
ME 1	47 59 1	2011	Wet	November	Used in Summary Table Analysis	14,069.4	14,064.8	4.6	0.0%	14,063.7	5.8	0.0%	14,062.5	6.9	0.0%	14,061.3	8.1	0.1%	14,059.0	10.4	0.1%	14,057.9	11.6	0.1%
ME 1	47 59 1	2011	Wet	December	--	33,103.0	33,099.5	3.5	0.0%	33,098.4	4.6	0.0%	33,097.2	5.8	0.0%	33,096.1	6.9	0.0%	33,094.9	8.1	0.0%	33,093.8	9.3	0.0%
ME 1	47 59 1	2011	Wet	January	--	14,039.4	14,035.9	3.5	0.0%	14,034.7	4.6	0.0%	14,033.6	5.8	0.0%	14,032.4	6.9	0.0%	14,031.3	8.1	0.1%	14,030.1	9.3	0.1%
ME 1	47 59 1	2011	Wet	February	--	20,652.8	20,649.3	3.5	0.0%	20,648.1	4.6	0.0%	20,648.1	4.6	0.0%	20,647.0	5.8	0.0%	20,645.8	6.9	0.0%	20,644.7	8.1	0.0%
ME 1	47 59 1	2011	Wet	March	--	51,612.3	51,608.8	3.5	0.0%	51,607.6	4.6	0.0%	51,607.6	4.6	0.0%	51,606.5	5.8	0.0%	51,605.3	6.9	0.0%	51,604.2	8.1	0.0%
ME 1	47 59 1	2011	Wet	April	--	24,660.9	24,657.4	3.5	0.0%	24,656.3	4.6	0.0%	24,656.3	4.6	0.0%	24,655.1	5.8	0.0%	24,653.9	6.9	0.0%	24,652.8	8.1	0.0%
ME 1	47 59 1	2011	Wet	May	--	11,313.8	11,304.5	9.3	0.1%	11,303.2	10.5	0.1%	11,300.6	13.2	0.1%	11,297.8	16.0	0.1%	11,295.1	18.6	0.2%	11,292.5	21.3	0.2%
ME 1	47 59 1	2011	Wet	June	--	6,988.4	6,973.8	14.6	0.2%	6,971.8	16.7	0.2%	6,967.6	20.8	0.3%	6,963.5	24.9	0.4%	6,959.4	29.1	0.4%	6,955.3	33.1	0.5%
ME 1	47 59 1	2011	Wet	July	--	1,817.7	1,804.3	13.4	0.7%	1,802.3	15.4	0.8%	1,798.5	19.2	1.1%	1,794.7	23.0	1.3%	1,790.9	26.9	1.5%	1,787.0	30.7	1.7%
ME 1	47 59 1	2011	Wet	August	--	760.0	750.2	9.8	1.3%	748.9	11.2	1.5%	746.1	14.0	1.8%	743.3	16.7	2.2%	740.5	19.5	2.6%	737.7	22.3	2.9%
ME 1	47 59 1	2011	Wet	September	Used in Summary Table Analysis	416.8	408.4	8.4	2.0%	407.2	9.7	2.3%	404.8	12.1	2.9%	402.4	14.4	3.5%	400.0	16.8	4.0%	397.6	19.2	4.6%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 59 1	2012	Below Normal	October	Used in Summary Table Analysis	4,472.1	4,465.4	6.7	0.2%	4,464.4	7.8	0.2%	4,462.4	9.7	0.2%	4,460.5	11.6	0.3%	4,458.6	13.5	0.3%	4,456.6	15.5	0.3%
ME 1	47 59 1	2012	Below Normal	November	Used in Summary Table Analysis	8,100.0	8,094.8	5.2	0.1%	8,094.1	5.9	0.1%	8,092.6	7.4	0.1%	8,091.1	8.9	0.1%	8,089.6	10.4	0.1%	8,088.1	11.9	0.1%
ME 1	47 59 1	2012	Below Normal	December	--	5,120.1	5,115.7	4.4	0.1%	5,115.2	5.0	0.1%	5,113.9	6.3	0.1%	5,112.6	7.5	0.1%	5,111.3	8.8	0.2%	5,110.1	10.1	0.2%
ME 1	47 59 1	2012	Below Normal	January	--	19,726.9	19,723.4	3.5	0.0%	19,722.2	4.6	0.0%	19,721.1	5.8	0.0%	19,719.9	6.9	0.0%	19,718.8	8.1	0.0%	19,717.6	9.3	0.0%
ME 1	47 59 1	2012	Below Normal	February	--	18,097.2	18,093.8	3.5	0.0%	18,093.8	3.5	0.0%	18,092.6	4.6	0.0%	18,091.4	5.8	0.0%	18,090.3	6.9	0.0%	18,089.1	8.1	0.0%
ME 1	47 59 1	2012	Below Normal	March	--	44,967.6	44,964.1	3.5	0.0%	44,963.0	4.6	0.0%	44,961.8	5.8	0.0%	44,960.6	6.9	0.0%	44,959.5	8.1	0.0%	44,958.3	9.3	0.0%
ME 1	47 59 1	2012	Below Normal	April	--	26,689.8	26,686.3	3.5	0.0%	26,686.3	3.5	0.0%	26,685.2	4.6	0.0%	26,684.0	5.8	0.0%	26,682.9	6.9	0.0%	26,681.7	8.1	0.0%
ME 1	47 59 1	2012	Below Normal	May	--	7,438.3	7,429.1	9.3	0.1%	7,427.7	10.6	0.1%	7,424.9	13.4	0.2%	7,422.2	16.1	0.2%	7,419.6	18.8	0.3%	7,416.9	21.4	0.3%
ME 1	47 59 1	2012	Below Normal	June	--	5,448.8	5,433.9	14.9	0.3%	5,431.8	17.0	0.3%	5,427.7	21.2	0.4%	5,423.5	25.3	0.5%	5,419.3	29.5	0.5%	5,415.0	33.8	0.6%
ME 1	47 59 1	2012	Below Normal	July	--	2,181.0	2,167.9	13.1	0.6%	2,166.0	15.0	0.7%	2,162.3	18.8	0.9%	2,158.6	22.5	1.0%	2,154.7	26.3	1.2%	2,151.0	30.0	1.4%
ME 1	47 59 1	2012	Below Normal	August	--	375.4	366.3	9.1	2.4%	365.0	10.4	2.8%	362.5	13.0	3.5%	359.9	15.5	4.1%	357.3	18.1	4.8%	354.7	20.7	5.5%
ME 1	47 59 1	2012	Below Normal	September	Used in Summary Table Analysis	233.2	225.3	7.8	3.4%	224.2	8.9	3.8%	222.0	11.1	4.8%	219.8	13.3	5.7%	217.6	15.5	6.7%	215.4	17.7	7.6%
ME 1	47 59 1	2013	Below Normal	October	Used in Summary Table Analysis	1,865.0	1,858.2	6.8	0.4%	1,857.3	7.8	0.4%	1,855.3	9.7	0.5%	1,853.4	11.7	0.6%	1,851.4	13.7	0.7%	1,849.4	15.6	0.8%
ME 1	47 59 1	2013	Below Normal	November	Used in Summary Table Analysis	14,435.2	14,430.6	4.6	0.0%	14,429.4	5.8	0.0%	14,428.2	6.9	0.0%	14,425.9	9.3	0.1%	14,424.8	10.4	0.1%	14,423.6	11.6	0.1%
ME 1	47 59 1	2013	Below Normal	December	--	59,436.3	59,431.7	4.6	0.0%	59,431.7	4.6	0.0%	59,429.4	6.9	0.0%	59,428.2	8.1	0.0%	59,427.1	9.3	0.0%	59,425.9	10.4	0.0%
ME 1	47 59 1	2013	Below Normal	January	--	22,034.7	22,031.3	3.5	0.0%	22,031.3	3.5	0.0%	22,028.9	5.8	0.0%	22,027.8	6.9	0.0%	22,026.6	8.1	0.0%	22,025.5	9.3	0.0%
ME 1	47 59 1	2013	Below Normal	February	--	8,765.3	8,761.6	3.7	0.0%	8,761.1	4.2	0.0%	8,760.0	5.3	0.1%	8,758.9	6.4	0.1%	8,757.8	7.5	0.1%	8,756.6	8.7	0.1%
ME 1	47 59 1	2013	Below Normal	March	--	10,211.0	10,207.5	3.5	0.0%	10,206.9	4.1	0.0%	10,205.9	5.1	0.0%	10,204.9	6.1	0.1%	10,203.8	7.2	0.1%	10,202.8	8.2	0.1%
ME 1	47 59 1	2013	Below Normal	April	--	8,251.7	8,243.1	8.7	0.1%	8,241.8	10.0	0.1%	8,239.4	12.4	0.2%	8,236.8	14.9	0.2%	8,234.3	17.5	0.2%	8,231.8	19.9	0.2%
ME 1	47 59 1	2013	Below Normal	May	--	4,381.4	4,371.4	10.0	0.2%	4,370.0	11.3	0.3%	4,367.1	14.2	0.3%	4,364.2	17.1	0.4%	4,361.3	20.0	0.5%	4,358.4	22.9	0.5%
ME 1	47 59 1	2013	Below Normal	June	--	2,091.2	2,078.0	13.2	0.6%	2,076.2	15.0	0.7%	2,072.3	18.9	0.9%	2,068.6	22.6	1.1%	2,064.9	26.3	1.3%	2,061.2	30.0	1.4%
ME 1	47 59 1	2013	Below Normal	July	--	707.4	696.2	11.3	1.6%	694.6	12.8	1.8%	691.4	16.0	2.3%	688.2	19.2	2.7%	685.1	22.4	3.2%	681.9	25.5	3.6%
ME 1	47 59 1	2013	Below Normal	August	--	326.0	316.3	9.8	3.0%	314.9	11.2	3.4%	312.1	14.0	4.3%	309.3	16.8	5.1%	306.5	19.6	6.0%	303.7	22.4	6.9%
ME 1	47 59 1	2013	Below Normal	September	Used in Summary Table Analysis	4,714.8	4,704.3	10.5	0.2%	4,702.8	12.0	0.3%	4,699.8	15.0	0.3%	4,696.8	18.1	0.4%	4,693.8	21.1	0.4%	4,690.7	24.1	0.5%
ME 1	47 59 1	2014	Critical	October	Used in Summary Table Analysis	275.3	268.5	6.8	2.5%	267.5	7.8	2.8%	265.5	9.7	3.5%	263.5	11.7	4.3%	261.6	13.7	5.0%	259.6	15.7	5.7%
ME 1	47 59 1	2014	Critical	November	Used in Summary Table Analysis	1,498.4	1,493.2	5.2	0.3%	1,492.4	6.0	0.4%	1,490.9	7.5	0.5%	1,489.4	9.0	0.6%	1,487.8	10.5	0.7%	1,486.3	12.0	0.8%
ME 1	47 59 1	2014	Critical	December	--	1,564.7	1,560.3	4.4	0.3%	1,559.6	5.1	0.3%	1,558.3	6.4	0.4%	1,557.1	7.6	0.5%	1,555.7	9.0	0.6%	1,554.4	10.3	0.7%
ME 1	47 59 1	2014	Critical	January	--	2,780.2	2,776.3	3.9	0.1%	2,775.8	4.4	0.2%	2,774.7	5.6	0.2%	2,773.5	6.7	0.2%	2,772.3	7.9	0.3%	2,771.2	9.0	0.3%
ME 1	47 59 1	2014	Critical	February	--	15,637.7	15,634.3	3.5	0.0%	15,634.3	3.5	0.0%	15,633.1	4.6	0.0%	15,631.9	5.8	0.0%	15,630.8	6.9	0.0%	15,629.6	8.1	0.1%
ME 1	47 59 1	2014	Critical	March	--	31,338.0	31,334.5	3.5	0.0%	31,333.3	4.6	0.0%	31,332.2	5.8	0.0%	31,332.2	5.8	0.0%	31,331.0	6.9	0.0%	31,329.9	8.1	0.0%
ME 1	47 59 1	2014	Critical	April	--	12,936.3	12,925.9	10.4	0.1%	12,924.8	11.6	0.1%	12,922.5	13.9	0.1%	12,920.1	16.2	0.1%	12,916.7	19.7	0.2%	12,914.4	22.0	0.2%
ME 1	47 59 1	2014	Critical	May	--	5,153.1	5,142.5	10.6	0.2%	5,140.9	12.3	0.2%	5,137.8	15.3	0.3%	5,134.7	18.4	0.4%	5,131.7	21.4	0.4%	5,128.7	24.4	0.5%
ME 1	47 59 1	2014	Critical	June	--	1,181.7	1,165.7	16.0	1.4%	1,163.4	18.3	1.5%	1,158.9	22.8	1.9%	1,154.5	27.2	2.3%	1,150.0	31.7	2.7%	1,145.6	36.1	3.1%
ME 1	47 59 1	2014	Critical	July	--	534.5	521.7	12.8	2.4%	519.9	14.6	2.7%	516.2	18.3	3.4%	512.6	21.9	4.1%	508.9	25.5	4.8%	505.3	29.2	5.5%
ME 1	47 59 1	2014	Critical	August	--	333.8	322.4	11.4	3.4%	320.8	13.0	3.9%	317.6	16.3	4.9%	314.3	19.5	5.9%	311.0	22.8	6.8%	307.8	26.1	7.8%
ME 1	47 59 1	2014	Critical	September	Used in Summary Table Analysis	2,537.0	2,525.5	11.6	0.5%	2,523.8	13.2	0.5%	2,520.6	16.4	0.6%	2,517.2	19.8	0.8%	2,513.9	23.1	0.9%	2,510.5	26.5	1.0%
ME 1	47 59 1	2015	Dry	October	Used in Summary Table Analysis	11,234.4	11,225.6	8.8	0.1%	11,224.3	10.1	0.1%	11,222.1	12.3	0.1%	11,219.6	14.8	0.1%	11,217.2	17.1	0.2%	11,214.7	19.7	0.2%
ME 1	47 59 1	2015	Dry	November	Used in Summary Table Analysis	8,906.5	8,900.5	6.0	0.1%	8,899.7	6.8	0.1%	8,897.9	8.6	0.1%	8,896.2	10.3	0.1%	8,894.4	12.0	0.1%	8,892.7	13.8	0.2%
ME 1	47 59 1	2015	Dry	December	--	32,133.1	32,128.5	4.6	0.0%	32,127.3	5.8	0.0%	32,126.2	6.9	0.0%	32,125.0	8.1	0.0%	32,122.7	10.4	0.0%	32,121.5	11.6	0.0%
ME 1	47 59 1	2015	Dry	January	--	14,500.0	14,495.4	4.6	0.0%	14,494.2	5.8	0.0%	14,493.1	6.9	0.0%	14,491.9	8.1	0.1%	14,490.7	9.3	0.1%	14,489.6	10.4	0.1%
ME 1	47 59 1	2015	Dry	February	--	27,040.5	27,035.9	4.6	0.0%	27,035.9	4.6	0.0%	27,034.7	5.8	0.0%	27,033.6	6.9	0.0%	27,032.4	8.1	0.0%	27,031.3	9.3	0.0%
ME 1	47 59 1	2015	Dry	March	--	11,520.9	11,517.5	3.5	0.0%	11,516.9	4.1	0.0%	11,516.0	5.0	0.0%	11,514.9	6.0	0.1%	11,513.9	7.1	0.1%	11,513.0	8.0	0.1%
ME 1	47 59 1	2015	Dry	April	--	8,258.6	8,249.1	9.5	0.1%	8,247.7	10.9	0.1%	8,244.9	13.7	0.2%	8,242.1	16.4	0.2%	8,239.5	19.1	0.2%	8,236.7	21.9	0.3%
ME 1	47 59 1	2015	Dry	May	--	1,501.9	1,491.1	10.8	0.7%	1,489.6	12.3	0.8%	1,486.6	15.3	1.0%	1,483.6	18.3	1.2%	1,480.6	21.3	1.4%	1,477.4	24.4	1.6%
ME 1	47 59 1	2015	Dry	June	--	642.3	627.5	14.8	2.3%	625.4	16.9	2.6%	621.3	21.0	3.3%	617.2	25.1	3.9%	613.1	29.2	4.6%	609.0	33.3	5.2%
ME 1	47 59 1	2015	Dry	July	--	257.8	244.9	12.9	5.0%	243.1	14.7	5.7%	239.4	18.4	7.1%	235.8	22.0	8.5%	232.1	25.7	10.0%	228.5	29.3	11.4%
ME 1	47 59 1	2015	Dry	August	--	153.1	141.5	11.6	7.5%	139.9	13.2	8.6%	136.6	16.5	10.8%	133.3	19.8	12.9%	130.0	23.1	15.1%	126.7	26.4	17.2%
ME 1	47 59 1	2015	Dry	September	Used in Summary Table Analysis	109.1	99.2	9.9	9.1%	97.8	11.3	10.4%	94.4	14.6	13.4%	91.3	17.8	16.3%	88.0	21.1	19.3%	84.7	24.3	22.3%
ME 1	47 59 1	2016	Above Normal	October	Used in Summary Table Analysis	75.0	65.6	9.4	12.6%	64.2	10.8	14.4%	61.7	13.4	17.8%	59.1	16.0	21.3%	56.6	18.5	24.6%	54.2	20.8	27.7%
ME 1	47 59 1	2016	Above Normal	November	Used in Summary Table Analysis	3,750.6	3,744.4	6.1	0.2%	3,743.6	6.9	0.2%	3,741.9	8.7	0.2%	3,740.0	10.5	0.3%	3,738.3	12.3	0.3%	3,736.5	14.1	0.4%
ME 1	47 59 1	2016	Above Normal	December	--	36,049.8	36,045.1	4.6	0.0%	36,044.0	5.8	0.0%	36,042.8	6.9	0.0%	36,040.5	9.3	0.0%	36,039.4	10.4	0.0%	36,038.2	11.6	0.0%
ME 1	47 59 1	2016	Above Normal	January	--	56,723.4	56,717.6	5.8	0.0%	56,717.6	5.8	0.0%	56,716.4	6.9	0.0%	56,714.1	9.3	0.0%	56,713.0	10.4	0.0%	56,711.8	11.6	0.0%
ME 1	47 59 1	2016	Above Normal	February	--	24,166.7	24,163.2	3.5	0.0%	24,162.0	4.6	0.0%	24,160.9	5.8	0.0%	24,159.7	6.9	0.0%	24,158.6	8.1	0.0%	24,157.4	9.3	0.0%
ME 1	47 59 1	2016	Above Normal	March	--	41,497.7	41,493.1	4.6	0.0%	41,493.1	4.6	0.0%	41,491.9	5.8	0.0%	41,490.7	6.9	0.0%	41,489.6	8.1	0.0%	41,488.4	9.3	0.0%
ME 1	47 59 1	2016	Above Normal	April	--	18,454.9	18,451.4	3.5	0.0%	18,451.4	3.5	0.0%	18,450.2	4.6	0.0%	18,449.1	5.8	0.0%	18,447.9	6.9	0.0%	18,446.8	8.1	0.0%
ME 1	47 59 1	2016	Above Normal	May	--	5,183.2	5,178.4	4.9	0.1%	5,177.7	5.6	0.1%	5,176.4	6.8	0.1%	5,175.0	8.2	0.2%	5,173.6	9.6	0.2%	5,172.2	11.0	0.2%
ME 1	47 59 1	2016	Above Normal	June	--	1,493.6	1,482.4	11.2	0.8%	1,480.8	12.8	0.9%	1,477.7	16.0	1.1%	1,474.5	19.1	1.3%	1,471.4	22.2	1.5%	1,468.3	25.3	1.7%
ME 1	47 59 1	2016	Above Normal	July	--	806.3	795.1	11.1	1.4%	793.5	12.7	1.6%	790.4	15.9	2.0%	787.2	19.0	2.4%	784.1	22.2	2.7%	781.0	25.3	3.1%
ME 1	47 59 1	2016	Above Normal	August	--	474.4	464.3	10.1	2.1%	462.8	11.6	2.4%	460.0	14.4	3.0%	457.1	17.3	3.6%	454.2	20.2	4.2%	451.4	23.0	4.9%
ME 1	47 59 1	2016	Above Normal	September	Used in Summary Table Analysis	311.6	303.2	8.4	2.7%	301.3	10.3	3.3%	298.7	12.9	4.1%	295.9	15.7	5.0%	293.2	18.4	5.9%	290.5	21.2	6.8%
ME 1	47 59 1	2017	Wet	October	Used in Summary Table Analysis	18,057.9	18,050.9	6.9	0.0%	18,049.8	8.1	0.0%	18,047.5	10.4	0.1%	18,046.3	11.6	0.1%	18,042.8	15.0	0.1%	18,041.7	16.2	0.1%
ME 1	47 59 1	2017	Wet	November	Used in Summary Table Analysis	18,574.1	18,568.3	5.8	0.0%	18,568.3	5.8	0.0%	18,566.0	8.1	0.0%	18,564.8	9.3	0.0%	18,563.7	10.4	0.1%	18,562.5	11.6	0.1%
ME 1	47 59 1	2017	Wet	December	--	23,725.7	23,721.1	4.6	0.0%	23,719.9	5.8	0.0%	23,718.8	6.9	0.0%	23,717.6	8.1	0.0%	23,716.4	9.3	0.0%	23,715.3	10.4	0.0%
ME 1	47 59 1	2017	Wet	January	--	105,772.0	105,767.4	4.6	0.0%	105,767.4	4.6	0.0%	105,766.2	5.8	0.0%	105,765.0	6.9	0.0%	105,763.9	8.1	0.0%	105,762.7	9.3	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 59 1	2017	Wet	February	--	81,173.6	81,170.1	3.5	0.0%	81,169.0	4.6	0.0%	81,167.8	5.8	0.0%	81,167.8	5.8	0.0%	81,166.7	6.9	0.0%	81,165.5	8.1	0.0%
ME 1	47 59 1	2017	Wet	March	--	27,061.3	27,057.9	3.5	0.0%	27,057.9	3.5	0.0%	27,056.7	4.6	0.0%	27,055.6	5.8	0.0%	27,054.4	6.9	0.0%	27,053.2	8.1	0.0%
ME 1	47 59 1	2017	Wet	April	--	22,710.6	22,707.2	3.5	0.0%	22,707.2	3.5	0.0%	22,706.0	4.6	0.0%	22,704.9	5.8	0.0%	22,704.9	5.8	0.0%	22,703.7	6.9	0.0%
ME 1	47 59 1	2017	Wet	May	--	6,260.2	6,255.2	5.0	0.1%	6,254.5	5.7	0.1%	6,253.1	7.1	0.1%	6,251.7	8.4	0.1%	6,250.2	10.0	0.2%	6,248.8	11.3	0.2%
ME 1	47 59 1	2017	Wet	June	--	2,083.7	2,071.8	11.9	0.6%	2,070.0	13.7	0.7%	2,066.7	17.0	0.8%	2,063.3	20.4	1.0%	2,060.0	23.7	1.1%	2,056.6	27.1	1.3%
ME 1	47 59 1	2017	Wet	July	--	912.9	901.6	11.2	1.2%	900.1	12.8	1.4%	896.9	16.0	1.8%	893.7	19.2	2.1%	890.6	22.3	2.4%	887.4	25.5	2.8%
ME 1	47 59 1	2017	Wet	August	--	485.4	475.3	10.1	2.1%	473.9	11.5	2.4%	471.0	14.4	3.0%	468.1	17.2	3.6%	465.3	20.1	4.1%	462.4	22.9	4.7%
ME 1	47 59 1	2017	Wet	September	Used in Summary Table Analysis	304.5	295.1	9.3	3.1%	293.8	10.7	3.5%	291.1	13.3	4.4%	288.4	16.0	5.3%	285.8	18.7	6.1%	283.1	21.3	7.0%
ME 1	47 59 1	2018	Above Normal	October	Used in Summary Table Analysis	257.4	250.4	6.9	2.7%	249.4	7.9	3.1%	247.5	9.9	3.8%	245.5	11.9	4.6%	243.5	13.9	5.4%	241.5	15.9	6.2%
ME 1	47 59 1	2018	Above Normal	November	Used in Summary Table Analysis	10,529.1	10,524.1	5.0	0.0%	10,523.4	5.7	0.1%	10,522.0	7.1	0.1%	10,520.5	8.6	0.1%	10,519.0	10.1	0.1%	10,517.6	11.5	0.1%
ME 1	47 59 1	2018	Above Normal	December	--	5,417.0	5,412.8	4.2	0.1%	5,412.4	4.6	0.1%	5,411.1	5.9	0.1%	5,410.0	7.1	0.1%	5,408.7	8.3	0.2%	5,407.4	9.6	0.2%
ME 1	47 59 1	2018	Above Normal	January	--	17,332.2	17,328.7	3.5	0.0%	17,328.7	3.5	0.0%	17,327.5	4.6	0.0%	17,326.4	5.8	0.0%	17,325.2	6.9	0.0%	17,324.1	8.1	0.0%
ME 1	47 59 1	2018	Above Normal	February	--	7,571.5	7,568.3	3.2	0.0%	7,567.8	3.7	0.0%	7,566.8	4.7	0.1%	7,565.9	5.7	0.1%	7,564.9	6.6	0.1%	7,563.9	7.6	0.1%
ME 1	47 59 1	2018	Above Normal	March	--	20,409.7	20,406.3	3.5	0.0%	20,406.3	3.5	0.0%	20,405.1	4.6	0.0%	20,403.9	5.8	0.0%	20,403.9	5.8	0.0%	20,402.8	6.9	0.0%
ME 1	47 59 1	2018	Above Normal	April	--	31,861.1	31,857.6	3.5	0.0%	31,857.6	3.5	0.0%	31,856.5	4.6	0.0%	31,855.3	5.8	0.0%	31,854.2	6.9	0.0%	31,854.2	6.9	0.0%
ME 1	47 59 1	2018	Above Normal	May	--	6,972.1	6,963.2	8.9	0.1%	6,961.9	10.2	0.1%	6,959.5	12.6	0.2%	6,956.8	15.3	0.2%	6,954.4	17.7	0.3%	6,952.2	19.9	0.3%
ME 1	47 59 1	2018	Above Normal	June	--	1,897.3	1,886.5	10.9	0.6%	1,885.0	12.4	0.7%	1,881.9	15.4	0.8%	1,878.9	18.4	1.0%	1,875.8	21.5	1.1%	1,872.8	24.5	1.3%
ME 1	47 59 1	2018	Above Normal	July	--	763.4	752.2	11.2	1.5%	750.6	12.8	1.7%	747.4	16.0	2.1%	744.2	19.2	2.5%	741.0	22.3	2.9%	737.8	25.5	3.3%
ME 1	47 59 1	2018	Above Normal	August	--	424.6	415.0	9.6	2.3%	413.7	11.0	2.6%	410.9	13.7	3.2%	408.2	16.4	3.9%	405.4	19.2	4.5%	402.7	21.9	5.2%
ME 1	47 59 1	2018	Above Normal	September	Used in Summary Table Analysis	283.2	273.9	9.4	3.3%	272.5	10.7	3.8%	269.8	13.4	4.7%	267.2	16.0	5.7%	264.5	18.7	6.6%	261.8	21.4	7.6%
ME 1	47 59 1	2019	Below Normal	October	Used in Summary Table Analysis	194.0	187.1	6.9	3.5%	186.2	7.8	4.0%	184.2	9.8	5.0%	182.1	11.9	6.1%	180.3	13.7	7.1%	178.3	15.7	8.1%
ME 1	47 59 1	2019	Below Normal	November	Used in Summary Table Analysis	6,449.5	6,444.4	5.1	0.1%	6,443.8	5.8	0.1%	6,442.2	7.3	0.1%	6,440.7	8.8	0.1%	6,439.2	10.3	0.2%	6,437.7	11.8	0.2%
ME 1	47 59 1	2019	Below Normal	December	--	14,372.7	14,368.1	4.6	0.0%	14,368.1	4.6	0.0%	14,366.9	5.8	0.0%	14,365.7	6.9	0.0%	14,364.6	8.1	0.1%	14,363.4	9.3	0.1%
ME 1	47 59 1	2019	Below Normal	January	--	34,631.9	34,627.3	4.6	0.0%	34,627.3	4.6	0.0%	34,626.2	5.8	0.0%	34,625.0	6.9	0.0%	34,623.8	8.1	0.0%	34,622.7	9.3	0.0%
ME 1	47 59 1	2019	Below Normal	February	--	141,296.3	141,284.7	11.6	0.0%	141,284.7	11.6	0.0%	141,284.7	11.6	0.0%	141,284.7	11.6	0.0%	141,284.7	11.6	0.0%	141,284.7	11.6	0.0%
ME 1	47 59 1	2019	Below Normal	March	--	41,994.2	41,990.7	3.5	0.0%	41,990.7	3.5	0.0%	41,989.6	4.6	0.0%	41,988.4	5.8	0.0%	41,987.3	6.9	0.0%	41,986.1	8.1	0.0%
ME 1	47 59 1	2019	Below Normal	April	--	15,179.4	15,175.9	3.5	0.0%	15,175.9	3.5	0.0%	15,174.8	4.6	0.0%	15,173.6	5.8	0.0%	15,172.5	6.9	0.0%	15,171.3	8.1	0.1%
ME 1	47 59 1	2019	Below Normal	May	--	16,493.1	16,482.6	10.4	0.1%	16,481.5	11.6	0.1%	16,479.2	13.9	0.1%	16,476.9	16.2	0.1%	16,473.4	19.7	0.1%	16,471.1	22.0	0.1%
ME 1	47 59 1	2019	Below Normal	June	--	4,238.2	4,226.0	12.2	0.3%	4,224.3	13.9	0.3%	4,221.1	17.1	0.4%	4,217.9	20.3	0.5%	4,214.9	23.3	0.5%	4,211.8	26.4	0.6%
ME 1	47 59 1	2019	Below Normal	July	--	1,339.5	1,328.2	11.2	0.8%	1,326.6	12.8	1.0%	1,323.5	16.0	1.2%	1,320.4	19.1	1.4%	1,317.1	22.3	1.7%	1,313.9	25.6	1.9%
ME 1	47 59 1	2019	Below Normal	August	--	576.2	566.3	9.8	1.7%	564.9	11.3	2.0%	562.1	14.1	2.4%	559.3	16.8	2.9%	556.5	19.6	3.4%	553.7	22.4	3.9%
ME 1	47 59 1	2019	Below Normal	September	Used in Summary Table Analysis	445.1	435.9	9.2	2.1%	434.5	10.6	2.4%	431.9	13.2	3.0%	429.2	15.9	3.6%	426.6	18.5	4.2%	424.0	21.2	4.8%
ME 1	47 59 1	2020	Dry	October	Used in Summary Table Analysis	342.0	335.7	6.3	1.9%	334.7	7.2	2.1%	332.9	9.1	2.7%	331.1	10.9	3.2%	329.2	12.7	3.7%	327.4	14.6	4.3%
ME 1	47 59 1	2020	Dry	November	Used in Summary Table Analysis	294.1	289.7	4.4	1.5%	289.0	5.1	1.7%	287.7	6.4	2.2%	286.4	7.7	2.6%	285.1	9.0	3.0%	283.8	10.3	3.5%
ME 1	47 59 1	2020	Dry	December	--	12,858.8	12,855.3	3.5	0.0%	12,854.2	4.6	0.0%	12,853.0	5.8	0.0%	12,851.9	6.9	0.1%	12,850.7	8.1	0.1%	12,849.5	9.3	0.1%
ME 1	47 59 1	2020	Dry	January	--	21,993.1	21,989.6	3.5	0.0%	21,988.4	4.6	0.0%	21,987.3	5.8	0.0%	21,987.3	5.8	0.0%	21,986.1	6.9	0.0%	21,985.0	8.1	0.0%
ME 1	47 59 1	2020	Dry	February	--	7,395.5	7,392.2	3.2	0.0%	7,391.8	3.7	0.1%	7,390.9	4.6	0.1%	7,389.8	5.7	0.1%	7,388.9	6.6	0.1%	7,388.0	7.5	0.1%
ME 1	47 59 1	2020	Dry	March	--	7,179.4	7,176.3	3.1	0.0%	7,175.8	3.6	0.0%	7,174.9	4.5	0.1%	7,174.0	5.4	0.1%	7,173.0	6.4	0.1%	7,172.1	7.3	0.1%
ME 1	47 59 1	2020	Dry	April	--	5,411.9	5,402.7	9.3	0.2%	5,401.4	10.5	0.2%	5,398.7	13.2	0.2%	5,396.1	15.9	0.3%	5,393.4	18.5	0.3%	5,390.7	21.2	0.4%
ME 1	47 59 1	2020	Dry	May	--	7,286.8	7,276.3	10.5	0.1%	7,274.8	12.0	0.2%	7,271.8	15.0	0.2%	7,268.8	18.1	0.2%	7,265.7	21.1	0.3%	7,262.7	24.1	0.3%
ME 1	47 59 1	2020	Dry	June	--	2,097.8	2,082.5	15.3	0.7%	2,080.4	17.4	0.8%	2,076.5	21.3	1.0%	2,072.6	25.2	1.2%	2,068.6	29.2	1.4%	2,064.7	33.1	1.6%
ME 1	47 59 1	2020	Dry	July	--	782.2	769.3	12.9	1.7%	767.4	14.8	1.9%	763.7	18.5	2.4%	760.0	22.2	2.8%	756.3	25.9	3.3%	752.6	29.6	3.8%
ME 1	47 59 1	2020	Dry	August	--	384.2	372.4	11.8	3.1%	370.7	13.5	3.5%	367.3	16.9	4.4%	363.9	20.2	5.3%	360.6	23.6	6.1%	357.2	27.0	7.0%
ME 1	47 59 1	2020	Dry	September	Used in Summary Table Analysis	234.0	223.9	10.1	4.3%	222.5	11.5	4.9%	218.8	15.2	6.5%	215.6	18.4	7.9%	212.2	21.8	9.3%	208.8	25.1	10.7%
ME 2	44 58 4	2000	Above Normal	October	Used in Summary Table Analysis	803.0	795.1	7.9	1.0%	794.0	9.1	1.1%	791.8	11.3	1.4%	789.4	13.6	1.7%	787.1	15.9	2.0%	784.9	18.2	2.3%
ME 2	44 58 4	2000	Above Normal	November	Used in Summary Table Analysis	11,866.9	11,861.1	5.8	0.0%	11,860.0	6.9	0.1%	11,857.6	9.3	0.1%	11,856.5	10.4	0.1%	11,854.2	12.7	0.1%	11,853.0	13.9	0.1%
ME 2	44 58 4	2000	Above Normal	December	--	10,676.9	10,671.9	5.0	0.0%	10,671.2	5.7	0.1%	10,669.7	7.2	0.1%	10,668.2	8.7	0.1%	10,666.8	10.1	0.1%	10,665.3	11.6	0.1%
ME 2	44 58 4	2000	Above Normal	January	--	28,152.8	28,148.1	4.6	0.0%	28,147.0	5.8	0.0%	28,145.8	6.9	0.0%	28,144.7	8.1	0.0%	28,143.5	9.3	0.0%	28,142.4	10.4	0.0%
ME 2	44 58 4	2000	Above Normal	February	--	36,763.9	36,760.4	3.5	0.0%	36,759.3	4.6	0.0%	36,758.1	5.8	0.0%	36,756.9	6.9	0.0%	36,755.8	8.1	0.0%	36,754.6	9.3	0.0%
ME 2	44 58 4	2000	Above Normal	March	--	18,230.3	18,226.9	3.5	0.0%	18,226.9	3.5	0.0%	18,225.7	4.6	0.0%	18,224.5	5.8	0.0%	18,223.4	6.9	0.0%	18,222.2	8.1	0.0%
ME 2	44 58 4	2000	Above Normal	April	--	12,250.0	12,246.5	3.5	0.0%	12,245.4	4.6	0.0%	12,245.4	4.6	0.0%	12,244.2	5.8	0.0%	12,243.1	6.9	0.1%	12,241.9	8.1	0.1%
ME 2	44 58 4	2000	Above Normal	May	--	7,041.3	7,031.3	10.1	0.1%	7,029.9	11.5	0.2%	7,027.0	14.4	0.2%	7,024.1	17.2	0.2%	7,021.2	20.1	0.3%	7,018.3	23.0	0.3%
ME 2	44 58 4	2000	Above Normal	June	--	2,591.3	2,575.6	15.7	0.6%	2,573.3	18.1	0.7%	2,568.8	22.6	0.9%	2,564.4	27.0	1.0%	2,559.8	31.5	1.2%	2,555.3	36.0	1.4%
ME 2	44 58 4	2000	Above Normal	July	--	983.1	970.3	12.8	1.3%	968.4	14.7	1.5%	964.8	18.3	1.9%	961.2	21.9	2.2%	957.6	25.5	2.6%	954.0	29.1	3.0%
ME 2	44 58 4	2000	Above Normal	August	--	512.6	501.2	11.4	2.2%	499.6	13.0	2.5%	496.3	16.3	3.2%	493.1	19.5	3.8%	489.9	22.7	4.4%	486.7	26.0	5.1%
ME 2	44 58 4	2000	Above Normal	September	Used in Summary Table Analysis	287.4	277.7	9.7	3.4%	276.3	11.1	3.9%	273.5	13.9	4.8%	270.7	16.7	5.8%	268.0	19.4	6.8%	265.2	22.2	7.7%
ME 2	44 58 4	2001	Dry	October	Used in Summary Table Analysis	3,758.0	3,750.1	7.9	0.2%	3,749.0	9.0	0.2%	3,746.8	11.2	0.3%	3,744.6	13.4	0.4%	3,742.4	15.6	0.4%	3,740.0	17.9	0.5%
ME 2	44 58 4	2001	Dry	November	Used in Summary Table Analysis	6,030.4	6,024.4	6.0	0.1%	6,023.6	6.8	0.1%	6,021.9	8.6	0.1%	6,020.1	10.3	0.2%	6,018.5	11.9	0.2%	6,016.8	13.7	0.2%
ME 2	44 58 4	2001	Dry	December	--	8,744.2	8,739.2	5.0	0.1%	8,738.5	5.7	0.1%	8,737.0	7.2	0.1%	8,735.6	8.6	0.1%	8,734.3	10.0	0.1%	8,732.8	11.5	0.1%
ME 2	44 58 4	2001	Dry	January	--	12,610.0	12,605.3	4.6	0.0%	12,605.3	4.6	0.0%	12,604.2	5.8	0.0%	12,601.9	8.1	0.1%	12,600.7	9.3	0.1%	12,599.5	10.4	0.1%
ME 2	44 58 4	2001	Dry	February	--	17,357.6	17,354.2	3.5	0.0%	17,353.0	4.6	0.0%	17,351.9	5.8	0.0%	17,350.7	6.9	0.0%	17,349.5	8.1	0.0%	17,348.4	9.3	0.1%
ME 2	44 58 4	2001	Dry	March	--	12,238.4	12,235.0	3.5	0.0%	12,235.0	3.5	0.0%	12,233.8	4.6	0.0%	12,232.6	5.8	0.0%	12,231.5	6.9	0.1%	12,230.3	8.1	0.1%
ME 2	44 58 4	2001	Dry	April	--	10,910.9	10,900.3	10.5	0.1%	10,898.8	12.0	0.1%	10,895.8	15.0	0.1%	10,892.8	18.1	0.2%	10,889.8	21.1	0.2%	10,886.8	24.1	0.2%
ME 2	44 58 4	2001	Dry	May	--	2,636.5	2,624.4	12.0	0.5%	2,622.7	13.8	0.5%	2,619.2	17.2	0.7%	2,615.7	20.7	0.8%	2,612.3	24.2	0.9%	2,608.8	27.7	1.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	44 58 4	2001	Dry	June	--	2,610.1	2,592.5	17.6	0.7%	2,590.0	20.0	0.8%	2,585.1	25.0	1.0%	2,580.1	30.0	1.1%	2,575.1	35.0	1.3%	2,570.3	39.8	1.5%
ME 2	44 58 4	2001	Dry	July	--	715.8	701.0	14.7	2.1%	699.0	16.8	2.3%	694.8	21.0	2.9%	690.6	25.2	3.5%	686.5	29.3	4.1%	682.2	33.5	4.7%
ME 2	44 58 4	2001	Dry	August	--	166.5	152.7	13.8	8.3%	150.7	15.8	9.5%	146.8	19.7	11.8%	142.8	23.6	14.2%	138.9	27.5	16.5%	135.0	31.5	18.9%
ME 2	44 58 4	2001	Dry	September	Used in Summary Table Analysis	88.8	76.8	11.9	13.4%	75.1	13.6	15.3%	71.8	17.0	19.2%	68.4	20.4	23.0%	65.0	23.8	26.8%	61.6	27.2	30.6%
ME 2	44 58 4	2002	Below Normal	October	Used in Summary Table Analysis	257.2	247.3	9.9	3.9%	245.9	11.3	4.4%	243.0	14.2	5.5%	240.2	17.0	6.6%	237.3	19.9	7.7%	234.5	22.7	8.8%
ME 2	44 58 4	2002	Below Normal	November	Used in Summary Table Analysis	11,900.5	11,892.4	8.1	0.1%	11,892.4	8.1	0.1%	11,890.0	10.4	0.1%	11,887.7	12.7	0.1%	11,885.4	15.0	0.1%	11,883.1	17.4	0.1%
ME 2	44 58 4	2002	Below Normal	December	--	35,300.9	35,294.0	6.9	0.0%	35,292.8	8.1	0.0%	35,291.7	9.3	0.0%	35,289.4	11.6	0.0%	35,287.0	13.9	0.0%	35,285.9	15.0	0.0%
ME 2	44 58 4	2002	Below Normal	January	--	30,635.4	30,629.6	5.8	0.0%	30,628.5	6.9	0.0%	30,627.3	8.1	0.0%	30,625.0	10.4	0.0%	30,623.8	11.6	0.0%	30,622.7	12.7	0.0%
ME 2	44 58 4	2002	Below Normal	February	--	24,532.4	24,526.6	5.8	0.0%	24,526.6	5.8	0.0%	24,525.5	6.9	0.0%	24,523.1	9.3	0.0%	24,522.0	10.4	0.0%	24,520.8	11.6	0.0%
ME 2	44 58 4	2002	Below Normal	March	--	17,666.7	17,662.0	4.6	0.0%	17,660.9	5.8	0.0%	17,659.7	6.9	0.0%	17,658.6	8.1	0.0%	17,657.4	9.3	0.1%	17,656.3	10.4	0.1%
ME 2	44 58 4	2002	Below Normal	April	--	9,882.3	9,872.1	10.2	0.1%	9,870.6	11.7	0.1%	9,867.7	14.6	0.1%	9,864.8	17.5	0.2%	9,861.9	20.4	0.2%	9,858.9	23.4	0.2%
ME 2	44 58 4	2002	Below Normal	May	--	3,304.7	3,293.1	11.7	0.4%	3,291.3	13.4	0.4%	3,288.0	16.8	0.5%	3,284.6	20.1	0.6%	3,281.3	23.5	0.7%	3,277.9	26.9	0.8%
ME 2	44 58 4	2002	Below Normal	June	--	848.0	833.9	14.1	1.7%	831.9	16.1	1.9%	827.9	20.1	2.4%	823.9	24.1	2.8%	819.9	28.1	3.3%	815.9	32.1	3.8%
ME 2	44 58 4	2002	Below Normal	July	--	356.2	342.9	13.3	3.7%	341.0	15.2	4.3%	337.2	19.0	5.3%	333.4	22.8	6.4%	329.6	26.6	7.5%	325.9	30.3	8.5%
ME 2	44 58 4	2002	Below Normal	August	--	219.2	207.2	12.0	5.5%	205.5	13.7	6.2%	202.1	17.1	7.8%	198.7	20.5	9.3%	195.3	23.9	10.9%	191.9	27.3	12.4%
ME 2	44 58 4	2002	Below Normal	September	Used in Summary Table Analysis	156.5	145.6	10.9	7.0%	144.0	12.4	8.0%	140.9	15.6	9.9%	137.8	18.7	11.9%	134.7	21.8	13.9%	131.6	24.9	15.9%
ME 2	44 58 4	2003	Wet	October	Used in Summary Table Analysis	121.7	113.0	8.6	7.1%	111.8	9.8	8.1%	109.3	12.3	10.1%	106.9	14.8	12.2%	104.4	17.3	14.2%	101.9	19.8	16.3%
ME 2	44 58 4	2003	Wet	November	Used in Summary Table Analysis	885.8	879.2	6.5	0.7%	878.3	7.5	0.8%	876.4	9.4	1.1%	874.5	11.3	1.3%	872.7	13.1	1.5%	870.8	15.0	1.7%
ME 2	44 58 4	2003	Wet	December	--	55,917.8	55,913.2	4.6	0.0%	55,912.0	5.8	0.0%	55,910.9	6.9	0.0%	55,908.6	9.3	0.0%	55,907.4	10.4	0.0%	55,905.1	12.7	0.0%
ME 2	44 58 4	2003	Wet	January	--	31,344.9	31,339.1	5.8	0.0%	31,339.1	5.8	0.0%	31,336.8	8.1	0.0%	31,335.6	9.3	0.0%	31,334.5	10.4	0.0%	31,333.3	11.6	0.0%
ME 2	44 58 4	2003	Wet	February	--	20,255.8	20,251.2	4.6	0.0%	20,250.0	5.8	0.0%	20,248.8	6.9	0.0%	20,247.7	8.1	0.0%	20,246.5	9.3	0.0%	20,245.4	10.4	0.1%
ME 2	44 58 4	2003	Wet	March	--	23,883.1	23,879.6	3.5	0.0%	23,878.5	4.6	0.0%	23,877.3	5.8	0.0%	23,876.2	6.9	0.0%	23,875.0	8.1	0.0%	23,873.8	9.3	0.0%
ME 2	44 58 4	2003	Wet	April	--	42,539.4	42,535.9	3.5	0.0%	42,534.7	4.6	0.0%	42,533.6	5.8	0.0%	42,532.4	6.9	0.0%	42,531.3	8.1	0.0%	42,530.1	9.3	0.0%
ME 2	44 58 4	2003	Wet	May	--	12,173.6	12,163.2	10.4	0.1%	12,162.0	11.6	0.1%	12,159.7	13.9	0.1%	12,156.3	17.4	0.1%	12,152.8	20.8	0.2%	12,150.5	23.1	0.2%
ME 2	44 58 4	2003	Wet	June	--	3,155.8	3,142.6	13.2	0.4%	3,140.7	15.0	0.5%	3,137.2	18.6	0.6%	3,133.6	22.2	0.7%	3,130.0	25.8	0.8%	3,126.4	29.4	0.9%
ME 2	44 58 4	2003	Wet	July	--	1,462.8	1,449.7	13.2	0.9%	1,447.8	15.0	1.0%	1,444.1	18.8	1.3%	1,440.4	22.5	1.5%	1,436.6	26.3	1.8%	1,432.9	30.0	2.0%
ME 2	44 58 4	2003	Wet	August	--	749.9	737.6	12.3	1.6%	735.8	14.1	1.9%	732.3	17.5	2.3%	728.8	21.1	2.8%	725.3	24.6	3.3%	721.7	28.2	3.8%
ME 2	44 58 4	2003	Wet	September	Used in Summary Table Analysis	448.8	438.9	9.9	2.2%	437.5	11.3	2.5%	434.7	14.1	3.1%	431.9	16.9	3.8%	429.1	19.7	4.4%	426.3	22.5	5.0%
ME 2	44 58 4	2004	Wet	October	Used in Summary Table Analysis	316.0	308.1	7.9	2.5%	306.9	9.1	2.9%	304.7	11.3	3.6%	302.4	13.6	4.3%	300.1	15.9	5.0%	297.8	18.2	5.8%
ME 2	44 58 4	2004	Wet	November	Used in Summary Table Analysis	5,703.2	5,697.1	6.1	0.1%	5,696.3	6.9	0.1%	5,694.6	8.7	0.2%	5,692.7	10.5	0.2%	5,691.0	12.3	0.2%	5,689.2	14.0	0.2%
ME 2	44 58 4	2004	Wet	December	--	35,861.1	35,855.3	5.8	0.0%	35,854.2	6.9	0.0%	35,853.0	8.1	0.0%	35,851.9	9.3	0.0%	35,849.5	11.6	0.0%	35,848.4	12.7	0.0%
ME 2	44 58 4	2004	Wet	January	--	31,166.7	31,162.0	4.6	0.0%	31,162.0	4.6	0.0%	31,160.9	5.8	0.0%	31,158.6	8.1	0.0%	31,157.4	9.3	0.0%	31,156.3	10.4	0.0%
ME 2	44 58 4	2004	Wet	February	--	37,942.1	37,937.5	4.6	0.0%	37,937.5	4.6	0.0%	37,936.3	5.8	0.0%	37,934.0	8.1	0.0%	37,932.9	9.3	0.0%	37,931.7	10.4	0.0%
ME 2	44 58 4	2004	Wet	March	--	16,472.2	16,467.6	4.6	0.0%	16,467.6	4.6	0.0%	16,466.4	5.8	0.0%	16,465.3	6.9	0.0%	16,464.1	8.1	0.0%	16,463.0	9.3	0.1%
ME 2	44 58 4	2004	Wet	April	--	9,412.6	9,409.1	3.5	0.0%	9,408.6	4.1	0.0%	9,407.5	5.1	0.1%	9,406.5	6.1	0.1%	9,405.4	7.2	0.1%	9,404.4	8.2	0.1%
ME 2	44 58 4	2004	Wet	May	--	3,390.0	3,379.9	10.2	0.3%	3,378.5	11.6	0.3%	3,375.6	14.5	0.4%	3,372.7	17.4	0.5%	3,369.8	20.3	0.6%	3,366.9	23.1	0.7%
ME 2	44 58 4	2004	Wet	June	--	686.6	674.2	12.4	1.8%	672.5	14.1	2.1%	668.9	17.7	2.6%	665.5	21.1	3.1%	662.0	24.6	3.6%	658.5	28.1	4.1%
ME 2	44 58 4	2004	Wet	July	--	348.1	335.2	12.9	3.7%	333.4	14.7	4.2%	329.7	18.4	5.3%	326.1	22.0	6.3%	322.4	25.7	7.4%	318.7	29.4	8.4%
ME 2	44 58 4	2004	Wet	August	--	217.7	206.3	11.5	5.3%	204.6	13.1	6.0%	201.3	16.4	7.5%	198.1	19.6	9.0%	194.8	22.9	10.5%	191.6	26.2	12.0%
ME 2	44 58 4	2004	Wet	September	Used in Summary Table Analysis	155.5	144.5	11.0	7.1%	143.0	12.5	8.1%	139.8	15.7	10.1%	136.7	18.8	12.1%	133.5	22.0	14.1%	130.4	25.1	16.2%
ME 2	44 58 4	2005	Above Normal	October	Used in Summary Table Analysis	7,552.3	7,544.1	8.2	0.1%	7,542.9	9.4	0.1%	7,540.6	11.7	0.2%	7,538.3	14.0	0.2%	7,536.0	16.3	0.2%	7,533.6	18.8	0.2%
ME 2	44 58 4	2005	Above Normal	November	Used in Summary Table Analysis	2,239.5	2,233.3	6.1	0.3%	2,232.5	6.9	0.3%	2,230.8	8.7	0.4%	2,229.1	10.4	0.5%	2,227.2	12.3	0.5%	2,225.5	14.0	0.6%
ME 2	44 58 4	2005	Above Normal	December	--	20,651.6	20,645.8	5.8	0.0%	20,645.8	5.8	0.0%	20,644.7	6.9	0.0%	20,642.4	9.3	0.0%	20,641.2	10.4	0.1%	20,640.0	11.6	0.1%
ME 2	44 58 4	2005	Above Normal	January	--	22,089.1	22,085.6	3.5	0.0%	22,084.5	4.6	0.0%	22,083.3	5.8	0.0%	22,082.2	6.9	0.0%	22,079.9	9.3	0.0%	22,078.7	10.4	0.0%
ME 2	44 58 4	2005	Above Normal	February	--	13,959.5	13,954.9	4.6	0.0%	13,954.9	4.6	0.0%	13,953.7	5.8	0.0%	13,952.5	6.9	0.0%	13,951.4	8.1	0.1%	13,950.2	9.3	0.1%
ME 2	44 58 4	2005	Above Normal	March	--	28,343.8	28,339.1	4.6	0.0%	28,339.1	4.6	0.0%	28,338.0	5.8	0.0%	28,336.8	6.9	0.0%	28,335.6	8.1	0.0%	28,334.5	9.3	0.0%
ME 2	44 58 4	2005	Above Normal	April	--	21,297.5	21,294.0	3.5	0.0%	21,294.0	3.5	0.0%	21,292.8	4.6	0.0%	21,291.7	5.8	0.0%	21,290.5	6.9	0.0%	21,289.4	8.1	0.0%
ME 2	44 58 4	2005	Above Normal	May	--	19,394.7	19,384.3	10.4	0.1%	19,381.9	12.7	0.1%	19,379.6	15.0	0.1%	19,376.2	18.5	0.1%	19,373.8	20.8	0.1%	19,370.4	24.3	0.1%
ME 2	44 58 4	2005	Above Normal	June	--	15,663.2	15,647.0	16.2	0.1%	15,644.7	18.5	0.1%	15,640.0	23.1	0.1%	15,635.4	27.8	0.2%	15,630.8	32.4	0.2%	15,626.2	37.0	0.2%
ME 2	44 58 4	2005	Above Normal	July	--	2,862.0	2,848.4	13.7	0.5%	2,846.4	15.6	0.5%	2,842.6	19.4	0.7%	2,838.7	23.4	0.8%	2,834.8	27.2	1.0%	2,830.9	31.1	1.1%
ME 2	44 58 4	2005	Above Normal	August	--	972.3	960.9	11.5	1.2%	959.2	13.1	1.3%	956.0	16.4	1.7%	952.7	19.6	2.0%	949.5	22.9	2.4%	946.2	26.1	2.7%
ME 2	44 58 4	2005	Above Normal	September	Used in Summary Table Analysis	514.3	504.6	9.8	1.9%	503.2	11.2	2.2%	500.4	13.9	2.7%	497.6	16.7	3.2%	494.8	19.5	3.8%	492.1	22.3	4.3%
ME 2	44 58 4	2006	Wet	October	Used in Summary Table Analysis	622.3	614.5	7.8	1.2%	613.4	8.9	1.4%	611.2	11.1	1.8%	609.0	13.3	2.1%	606.8	15.5	2.5%	604.5	17.8	2.9%
ME 2	44 58 4	2006	Wet	November	Used in Summary Table Analysis	9,134.8	9,129.1	5.8	0.1%	9,128.2	6.6	0.1%	9,126.5	8.3	0.1%	9,124.9	10.0	0.1%	9,123.1	11.7	0.1%	9,121.5	13.3	0.1%
ME 2	44 58 4	2006	Wet	December	--	42,932.9	42,928.2	4.6	0.0%	42,927.1	5.8	0.0%	42,925.9	6.9	0.0%	42,923.6	9.3	0.0%	42,922.5	10.4	0.0%	42,921.3	11.6	0.0%
ME 2	44 58 4	2006	Wet	January	--	45,784.7	45,780.1	4.6	0.0%	45,780.1	4.6	0.0%	45,777.8	6.9	0.0%	45,776.6	8.1	0.0%	45,775.5	9.3	0.0%	45,774.3	10.4	0.0%
ME 2	44 58 4	2006	Wet	February	--	26,399.3	26,394.7	4.6	0.0%	26,394.7	4.6	0.0%	26,393.5	5.8	0.0%	26,392.4	6.9	0.0%	26,391.2	8.1	0.0%	26,390.0	9.3	0.0%
ME 2	44 58 4	2006	Wet	March	--	46,754.6	46,750.0	4.6	0.0%	46,750.0	4.6	0.0%	46,748.8	5.8	0.0%	46,747.7	6.9	0.0%	46,746.5	8.1	0.0%	46,745.4	9.3	0.0%
ME 2	44 58 4	2006	Wet	April	--	30,268.5	30,265.0	3.5	0.0%	30,265.0	3.5	0.0%	30,263.9	4.6	0.0%	30,262.7	5.8	0.0%	30,261.6	6.9	0.0%	30,260.4	8.1	0.0%
ME 2	44 58 4	2006	Wet	May	--	14,114.6	14,110.0	4.6	0.0%	14,108.8	5.8	0.0%	14,107.6	6.9	0.0%	14,105.3	9.3	0.1%	14,104.2	10.4	0.1%	14,103.0	11.6	0.1%
ME 2	44 58 4	2006	Wet	June	--	3,538.1	3,524.7	13.4	0.4%	3,522.7	15.4	0.4%	3,518.9	19.2	0.5%	3,515.2	22.9	0.6%	3,511.3	26.7	0.8%	3,507.6	30.4	0.9%
ME 2	44 58 4	2006	Wet	July	--	1,266.4	1,253.6	12.8	1.0%	1,251.7	14.7	1.2%	1,248.0	18.4	1.5%	1,244.3	22.1	1.7%	1,240.7	25.7	2.0%	1,237.2	29.3	2.3%
ME 2	44 58 4	2006	Wet	August	--	653.0	641.0	11.9	1.8%	639.4	13.6	2.1%	636.0	17.0	2.6%	632.6	20.3	3.1%	629.2	23.7	3.6%	625.9	27.1	4.1%
ME 2	44 58 4	2006	Wet	September	Used in Summary Table Analysis	415.2	405.3	10.0	2.4%	403.9	11.4	2.7%	401.0	14.2	3.4%	398.2	17.0	4.1%	395.4	19.8	4.8%	392.6	22.6	5.4%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	44 58 4	2007	Above Normal	October	Used in Summary Table Analysis	265.5	257.7	7.9	3.0%	256.5	9.0	3.4%	254.3	11.3	4.2%	252.0	13.5	5.1%	249.7	15.8	5.9%	247.5	18.1	6.8%
ME 2	44 58 4	2007	Above Normal	November	Used in Summary Table Analysis	8,516.3	8,510.2	6.1	0.1%	8,509.3	7.1	0.1%	8,507.5	8.8	0.1%	8,505.8	10.5	0.1%	8,504.1	12.3	0.1%	8,502.2	14.1	0.2%
ME 2	44 58 4	2007	Above Normal	December	--	20,103.0	20,097.2	5.8	0.0%	20,097.2	5.8	0.0%	20,094.9	8.1	0.0%	20,093.8	9.3	0.0%	20,091.4	11.6	0.1%	20,090.3	12.7	0.1%
ME 2	44 58 4	2007	Above Normal	January	--	10,170.1	10,165.6	4.5	0.0%	10,164.9	5.2	0.1%	10,163.7	6.5	0.1%	10,162.4	7.8	0.1%	10,161.0	9.1	0.1%	10,159.7	10.4	0.1%
ME 2	44 58 4	2007	Above Normal	February	--	30,226.9	30,222.2	4.6	0.0%	30,221.1	5.8	0.0%	30,219.9	6.9	0.0%	30,218.8	8.1	0.0%	30,217.6	9.3	0.0%	30,216.4	10.4	0.0%
ME 2	44 58 4	2007	Above Normal	March	--	13,042.8	13,039.4	3.5	0.0%	13,038.2	4.6	0.0%	13,037.0	5.8	0.0%	13,035.9	6.9	0.1%	13,034.7	8.1	0.1%	13,033.6	9.3	0.1%
ME 2	44 58 4	2007	Above Normal	April	--	11,479.9	11,469.9	10.0	0.1%	11,468.5	11.3	0.1%	11,465.7	14.1	0.1%	11,463.0	16.9	0.1%	11,460.1	19.8	0.2%	11,457.3	22.6	0.2%
ME 2	44 58 4	2007	Above Normal	May	--	4,115.5	4,104.2	11.3	0.3%	4,102.5	13.0	0.3%	4,099.3	16.2	0.4%	4,096.1	19.4	0.5%	4,092.8	22.7	0.6%	4,089.5	26.0	0.6%
ME 2	44 58 4	2007	Above Normal	June	--	1,482.4	1,467.5	14.9	1.0%	1,465.4	17.0	1.1%	1,461.1	21.3	1.4%	1,456.9	25.5	1.7%	1,452.8	29.6	2.0%	1,448.6	33.8	2.3%
ME 2	44 58 4	2007	Above Normal	July	--	490.2	476.3	13.9	2.8%	474.3	15.9	3.2%	470.4	19.8	4.0%	466.5	23.7	4.8%	462.5	27.7	5.6%	458.6	31.6	6.4%
ME 2	44 58 4	2007	Above Normal	August	--	215.1	203.4	11.7	5.4%	201.8	13.4	6.2%	198.4	16.7	7.8%	195.1	20.0	9.3%	191.8	23.3	10.9%	188.5	26.7	12.4%
ME 2	44 58 4	2007	Above Normal	September	Used in Summary Table Analysis	142.8	132.1	10.7	7.5%	130.6	12.2	8.6%	127.6	15.3	10.7%	124.5	18.3	12.8%	121.5	21.4	15.0%	118.4	24.4	17.1%
ME 2	44 58 4	2008	Dry	October	Used in Summary Table Analysis	3,380.1	3,371.6	8.4	0.2%	3,370.5	9.6	0.3%	3,368.1	12.0	0.4%	3,365.6	14.5	0.4%	3,363.2	16.9	0.5%	3,360.8	19.3	0.6%
ME 2	44 58 4	2008	Dry	November	Used in Summary Table Analysis	3,223.5	3,217.2	6.3	0.2%	3,216.3	7.2	0.2%	3,214.6	8.9	0.3%	3,212.7	10.8	0.3%	3,211.0	12.5	0.4%	3,209.1	14.4	0.4%
ME 2	44 58 4	2008	Dry	December	--	22,725.7	22,719.9	5.8	0.0%	22,718.8	6.9	0.0%	22,717.6	8.1	0.0%	22,716.4	9.3	0.0%	22,714.1	11.6	0.1%	22,713.0	12.7	0.1%
ME 2	44 58 4	2008	Dry	January	--	37,147.0	37,141.2	5.8	0.0%	37,141.2	5.8	0.0%	37,140.0	6.9	0.0%	37,137.7	9.3	0.0%	37,136.6	10.4	0.0%	37,135.4	11.6	0.0%
ME 2	44 58 4	2008	Dry	February	--	26,178.2	26,173.6	4.6	0.0%	26,172.5	5.8	0.0%	26,171.3	6.9	0.0%	26,170.1	8.1	0.0%	26,169.0	9.3	0.0%	26,167.8	10.4	0.0%
ME 2	44 58 4	2008	Dry	March	--	11,752.3	11,747.7	4.6	0.0%	11,747.7	4.6	0.0%	11,746.5	5.8	0.0%	11,745.4	6.9	0.1%	11,744.2	8.1	0.1%	11,743.1	9.3	0.1%
ME 2	44 58 4	2008	Dry	April	--	8,983.3	8,972.9	10.4	0.1%	8,971.4	11.9	0.1%	8,968.4	14.9	0.2%	8,965.5	17.8	0.2%	8,962.4	20.9	0.2%	8,959.5	23.8	0.3%
ME 2	44 58 4	2008	Dry	May	--	1,363.4	1,353.1	10.3	0.8%	1,351.6	11.8	0.9%	1,348.6	14.8	1.1%	1,345.7	17.7	1.3%	1,342.9	20.5	1.5%	1,340.3	23.1	1.7%
ME 2	44 58 4	2008	Dry	June	--	431.4	415.0	16.4	3.8%	412.6	18.8	4.3%	408.0	23.4	5.4%	403.4	28.0	6.5%	398.8	32.6	7.6%	394.2	37.2	8.6%
ME 2	44 58 4	2008	Dry	July	--	250.2	235.3	14.9	6.0%	233.2	17.0	6.8%	228.9	21.3	8.5%	224.7	25.5	10.2%	220.4	29.8	11.9%	216.2	34.0	13.6%
ME 2	44 58 4	2008	Dry	August	--	173.1	159.2	13.8	8.0%	157.3	15.8	9.1%	153.3	19.7	11.4%	149.4	23.6	13.7%	145.5	27.6	15.9%	141.6	31.5	18.2%
ME 2	44 58 4	2008	Dry	September	Used in Summary Table Analysis	134.8	121.5	13.4	9.9%	119.5	15.3	11.3%	115.7	19.1	14.2%	111.9	22.9	17.0%	108.1	26.8	19.8%	104.3	30.6	22.7%
ME 2	44 58 4	2009	Critical	October	Used in Summary Table Analysis	913.8	903.9	9.9	1.1%	902.4	11.4	1.2%	899.6	14.2	1.6%	896.7	17.1	1.9%	894.1	19.7	2.2%	891.2	22.6	2.5%
ME 2	44 58 4	2009	Critical	November	Used in Summary Table Analysis	5,414.5	5,407.3	7.2	0.1%	5,406.3	8.2	0.2%	5,404.2	10.3	0.2%	5,402.1	12.4	0.2%	5,400.0	14.5	0.3%	5,397.9	16.6	0.3%
ME 2	44 58 4	2009	Critical	December	--	11,960.6	11,954.9	5.8	0.0%	11,953.7	6.9	0.1%	11,951.4	9.3	0.1%	11,950.2	10.4	0.1%	11,947.9	12.7	0.1%	11,946.8	13.9	0.1%
ME 2	44 58 4	2009	Critical	January	--	8,738.3	8,732.9	5.4	0.1%	8,732.1	6.3	0.1%	8,730.6	7.8	0.1%	8,728.9	9.4	0.1%	8,727.3	11.0	0.1%	8,725.8	12.5	0.1%
ME 2	44 58 4	2009	Critical	February	--	22,443.3	22,438.7	4.6	0.0%	22,437.5	5.8	0.0%	22,436.3	6.9	0.0%	22,435.2	8.1	0.0%	22,434.0	9.3	0.0%	22,432.9	10.4	0.0%
ME 2	44 58 4	2009	Critical	March	--	20,993.1	20,988.4	4.6	0.0%	20,988.4	4.6	0.0%	20,987.3	5.8	0.0%	20,986.1	6.9	0.0%	20,985.0	8.1	0.0%	20,983.8	9.3	0.0%
ME 2	44 58 4	2009	Critical	April	--	10,081.7	10,070.9	10.8	0.1%	10,069.4	12.3	0.1%	10,066.3	15.4	0.2%	10,063.2	18.5	0.2%	10,060.2	21.5	0.2%	10,057.1	24.7	0.2%
ME 2	44 58 4	2009	Critical	May	--	15,518.5	15,505.8	12.7	0.1%	15,503.5	15.0	0.1%	15,500.0	18.5	0.1%	15,496.5	22.0	0.1%	15,491.9	26.6	0.2%	15,488.4	30.1	0.2%
ME 2	44 58 4	2009	Critical	June	--	3,150.5	3,132.9	17.6	0.6%	3,130.3	20.1	0.6%	3,125.2	25.2	0.8%	3,120.3	30.2	1.0%	3,115.3	35.2	1.1%	3,110.2	40.3	1.3%
ME 2	44 58 4	2009	Critical	July	--	1,254.9	1,239.7	15.2	1.2%	1,237.6	17.2	1.4%	1,233.3	21.5	1.7%	1,229.1	25.8	2.1%	1,224.9	30.0	2.4%	1,220.6	34.3	2.7%
ME 2	44 58 4	2009	Critical	August	--	660.6	646.7	13.9	2.1%	644.7	15.9	2.4%	640.7	19.8	3.0%	636.8	23.7	3.6%	632.9	27.7	4.2%	628.9	31.6	4.8%
ME 2	44 58 4	2009	Critical	September	Used in Summary Table Analysis	382.7	370.8	12.0	3.1%	369.1	13.7	3.6%	365.6	17.1	4.5%	362.3	20.5	5.4%	358.8	23.9	6.2%	355.4	27.3	7.1%
ME 2	44 58 4	2010	Below Normal	October	Used in Summary Table Analysis	6,075.0	6,065.2	9.8	0.2%	6,063.8	11.2	0.2%	6,060.9	14.1	0.2%	6,058.1	16.9	0.3%	6,055.4	19.6	0.3%	6,052.5	22.5	0.4%
ME 2	44 58 4	2010	Below Normal	November	Used in Summary Table Analysis	8,224.4	8,217.0	7.4	0.1%	8,216.0	8.4	0.1%	8,213.9	10.5	0.1%	8,211.7	12.7	0.2%	8,209.6	14.8	0.2%	8,207.4	17.0	0.2%
ME 2	44 58 4	2010	Below Normal	December	--	12,222.2	12,215.3	6.9	0.1%	12,215.3	6.9	0.1%	12,213.0	9.3	0.1%	12,211.8	10.4	0.1%	12,209.5	12.7	0.1%	12,207.2	15.0	0.1%
ME 2	44 58 4	2010	Below Normal	January	--	35,787.0	35,782.4	4.6	0.0%	35,781.3	5.8	0.0%	35,780.1	6.9	0.0%	35,777.8	9.3	0.0%	35,776.6	10.4	0.0%	35,775.5	11.6	0.0%
ME 2	44 58 4	2010	Below Normal	February	--	27,118.1	27,113.4	4.6	0.0%	27,113.4	4.6	0.0%	27,112.3	5.8	0.0%	27,111.1	6.9	0.0%	27,108.8	9.3	0.0%	27,107.6	10.4	0.0%
ME 2	44 58 4	2010	Below Normal	March	--	28,728.0	28,723.4	4.6	0.0%	28,723.4	4.6	0.0%	28,722.2	5.8	0.0%	28,721.1	6.9	0.0%	28,718.8	9.3	0.0%	28,717.6	10.4	0.0%
ME 2	44 58 4	2010	Below Normal	April	--	39,811.3	39,806.7	4.6	0.0%	39,806.7	4.6	0.0%	39,805.6	5.8	0.0%	39,804.4	6.9	0.0%	39,803.2	8.1	0.0%	39,802.1	9.3	0.0%
ME 2	44 58 4	2010	Below Normal	May	--	20,112.3	20,100.7	11.6	0.1%	20,099.5	12.7	0.1%	20,096.1	16.2	0.1%	20,093.8	18.5	0.1%	20,090.3	22.0	0.1%	20,086.8	25.5	0.1%
ME 2	44 58 4	2010	Below Normal	June	--	9,227.0	9,210.2	16.8	0.2%	9,207.8	19.2	0.2%	9,203.1	23.8	0.3%	9,198.5	28.5	0.3%	9,193.9	33.1	0.4%	9,189.2	37.7	0.4%
ME 2	44 58 4	2010	Below Normal	July	--	1,447.0	1,433.2	13.8	1.0%	1,431.3	15.7	1.1%	1,427.3	19.7	1.4%	1,423.4	23.6	1.6%	1,419.3	27.7	1.9%	1,415.7	31.3	2.2%
ME 2	44 58 4	2010	Below Normal	August	--	558.2	546.4	11.8	2.1%	544.7	13.5	2.4%	541.3	16.8	3.0%	538.0	20.1	3.6%	534.7	23.5	4.2%	531.3	26.8	4.8%
ME 2	44 58 4	2010	Below Normal	September	Used in Summary Table Analysis	639.9	628.5	11.4	1.8%	626.9	13.0	2.0%	623.6	16.3	2.5%	620.5	19.4	3.0%	617.2	22.7	3.5%	614.0	25.9	4.0%
ME 2	44 58 4	2011	Wet	October	Used in Summary Table Analysis	9,538.7	9,530.7	8.0	0.1%	9,529.5	9.1	0.1%	9,527.2	11.5	0.1%	9,525.0	13.7	0.1%	9,522.7	16.0	0.2%	9,520.4	18.3	0.2%
ME 2	44 58 4	2011	Wet	November	Used in Summary Table Analysis	14,111.1	14,105.3	5.8	0.0%	14,104.2	6.9	0.0%	14,103.0	8.1	0.1%	14,100.7	10.4	0.1%	14,099.5	11.6	0.1%	14,097.2	13.9	0.1%
ME 2	44 58 4	2011	Wet	December	--	33,258.1	33,252.3	5.8	0.0%	33,252.3	5.8	0.0%	33,250.0	8.1	0.0%	33,248.8	9.3	0.0%	33,247.7	10.4	0.0%	33,245.4	12.7	0.0%
ME 2	44 58 4	2011	Wet	January	--	14,071.8	14,068.3	3.5	0.0%	14,067.1	4.6	0.0%	14,066.0	5.8	0.0%	14,064.8	6.9	0.0%	14,063.7	8.1	0.1%	14,062.5	9.3	0.1%
ME 2	44 58 4	2011	Wet	February	--	20,686.3	20,681.7	4.6	0.0%	20,680.6	5.8	0.0%	20,679.4	6.9	0.0%	20,678.2	8.1	0.0%	20,677.1	9.3	0.0%	20,675.9	10.4	0.1%
ME 2	44 58 4	2011	Wet	March	--	51,715.3	51,711.8	3.5	0.0%	51,710.6	4.6	0.0%	51,709.5	5.8	0.0%	51,708.3	6.9	0.0%	51,707.2	8.1	0.0%	51,706.0	9.3	0.0%
ME 2	44 58 4	2011	Wet	April	--	24,699.1	24,695.6	3.5	0.0%	24,695.6	3.5	0.0%	24,694.4	4.6	0.0%	24,693.3	5.8	0.0%	24,692.1	6.9	0.0%	24,691.0	8.1	0.0%
ME 2	44 58 4	2011	Wet	May	--	11,335.2	11,325.0	10.2	0.1%	11,323.5	11.7	0.1%	11,320.5	14.7	0.1%	11,317.5	17.7	0.2%	11,314.5	20.7	0.2%	11,311.6	23.6	0.2%
ME 2	44 58 4	2011	Wet	June	--	7,009.7	6,993.4	16.3	0.2%	6,991.1	18.6	0.3%	6,986.5	23.3	0.3%	6,981.9	27.8	0.4%	6,977.3	32.4	0.5%	6,972.7	37.0	0.5%
ME 2	44 58 4	2011	Wet	July	--	1,824.5	1,809.3	15.3	0.8%	1,807.1	17.5	1.0%	1,802.8	21.8	1.2%	1,798.4	26.2	1.4%	1,794.1	30.4	1.7%	1,789.7	34.8	1.9%
ME 2	44 58 4	2011	Wet	August	--	768.3	756.6	11.6	1.5%	755.0	13.3	1.7%	751.7	16.6	2.2%	748.4	19.8	2.6%	745.1	23.2	3.0%	741.8	26.4	3.4%
ME 2	44 58 4	2011	Wet	September	Used in Summary Table Analysis	425.0	414.9	10.1	2.4%	413.4	11.5	2.7%	410.6	14.4	3.4%	407.7	17.2	4.1%	404.9	20.1	4.7%	402.0	23.0	5.4%
ME 2	44 58 4	2012	Below Normal	October	Used in Summary Table Analysis	4,493.5	4,485.5	8.0	0.2%	4,484.4	9.1	0.2%	4,482.1	11.5	0.3%	4,479.9	13.7	0.3%	4,477.5	16.0	0.4%	4,475.2	18.3	0.4%
ME 2	44 58 4	2012	Below Normal	November	Used in Summary Table Analysis	8,138.7	8,132.5	6.1	0.1%	8,131.6	7.1	0.1%	8,129.9	8.8	0.1%	8,128.1	10.5	0.1%	8,126.3	12.4	0.2%	8,124.5	14.1	0.2%
ME 2	44 58 4	2012	Below Normal	December	--	5,139.9	5,134.7	5.2	0.1%	5,134.0	5.9	0.1%	5,132.5	7.4	0.1%	5,131.0	8.9	0.2%	5,129.5	10.4	0.2%	5,128.0	11.9	0.2%
ME 2	44 58 4	2012	Below Normal	January	--	19,828.7	19,824.1	4.6	0.0%	19,824.1	4.6	0.0%	19,821.8	6.9	0.0%	19,820.6	8.1	0.0%	19,819.4	9.3	0.0%	19,818.3	10.4	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	44 58 4	2012	Below Normal	February	--	18,130.8	18,126.2	4.6	0.0%	18,126.2	4.6	0.0%	18,125.0	5.8	0.0%	18,123.8	6.9	0.0%	18,122.7	8.1	0.0%	18,121.5	9.3	0.1%
ME 2	44 58 4	2012	Below Normal	March	--	45,086.8	45,082.2	4.6	0.0%	45,082.2	4.6	0.0%	45,081.0	5.8	0.0%	45,079.9	6.9	0.0%	45,078.7	8.1	0.0%	45,077.5	9.3	0.0%
ME 2	44 58 4	2012	Below Normal	April	--	26,736.1	26,732.6	3.5	0.0%	26,732.6	3.5	0.0%	26,731.5	4.6	0.0%	26,730.3	5.8	0.0%	26,729.2	6.9	0.0%	26,728.0	8.1	0.0%
ME 2	44 58 4	2012	Below Normal	May	--	7,453.4	7,443.1	10.3	0.1%	7,441.7	11.7	0.2%	7,438.5	14.8	0.2%	7,435.6	17.7	0.2%	7,432.6	20.7	0.3%	7,429.6	23.7	0.3%
ME 2	44 58 4	2012	Below Normal	June	--	5,469.8	5,453.1	16.7	0.3%	5,450.8	19.0	0.3%	5,446.2	23.6	0.4%	5,441.4	28.4	0.5%	5,436.8	33.0	0.6%	5,432.1	37.7	0.7%
ME 2	44 58 4	2012	Below Normal	July	--	2,195.8	2,180.8	15.0	0.7%	2,178.7	17.1	0.8%	2,174.4	21.4	1.0%	2,170.3	25.6	1.2%	2,166.0	29.9	1.4%	2,161.7	34.1	1.6%
ME 2	44 58 4	2012	Below Normal	August	--	382.6	371.7	10.9	2.8%	370.1	12.4	3.2%	367.0	15.5	4.1%	363.9	18.6	4.9%	360.9	21.7	5.7%	357.8	24.8	6.5%
ME 2	44 58 4	2012	Below Normal	September	Used in Summary Table Analysis	241.1	231.6	9.4	3.9%	230.3	10.8	4.5%	227.6	13.4	5.6%	225.0	16.1	6.7%	222.3	18.8	7.8%	219.6	21.4	8.9%
ME 2	44 58 4	2013	Below Normal	October	Used in Summary Table Analysis	1,880.8	1,872.8	8.0	0.4%	1,871.6	9.1	0.5%	1,869.3	11.5	0.6%	1,867.0	13.8	0.7%	1,864.7	16.1	0.9%	1,862.4	18.4	1.0%
ME 2	44 58 4	2013	Below Normal	November	Used in Summary Table Analysis	14,502.3	14,496.5	5.8	0.0%	14,495.4	6.9	0.0%	14,493.1	9.3	0.1%	14,491.9	10.4	0.1%	14,489.6	12.7	0.1%	14,488.4	13.9	0.1%
ME 2	44 58 4	2013	Below Normal	December	--	59,579.9	59,575.2	4.6	0.0%	59,574.1	5.8	0.0%	59,571.8	8.1	0.0%	59,570.6	9.3	0.0%	59,569.4	10.4	0.0%	59,567.1	12.7	0.0%
ME 2	44 58 4	2013	Below Normal	January	--	22,079.9	22,076.4	3.5	0.0%	22,075.2	4.6	0.0%	22,074.1	5.8	0.0%	22,072.9	6.9	0.0%	22,071.8	8.1	0.0%	22,069.4	10.4	0.0%
ME 2	44 58 4	2013	Below Normal	February	--	8,789.5	8,785.2	4.3	0.0%	8,784.6	4.9	0.1%	8,783.3	6.1	0.1%	8,782.1	7.4	0.1%	8,780.8	8.7	0.1%	8,779.5	10.0	0.1%
ME 2	44 58 4	2013	Below Normal	March	--	10,245.0	10,241.1	3.9	0.0%	10,240.5	4.5	0.0%	10,239.2	5.8	0.1%	10,238.1	6.9	0.1%	10,236.9	8.1	0.1%	10,235.8	9.3	0.1%
ME 2	44 58 4	2013	Below Normal	April	--	8,265.6	8,256.0	9.6	0.1%	8,254.6	11.0	0.1%	8,251.9	13.8	0.2%	8,249.1	16.6	0.2%	8,246.4	19.2	0.2%	8,243.6	22.0	0.3%
ME 2	44 58 4	2013	Below Normal	May	--	4,397.8	4,386.3	11.5	0.3%	4,384.7	13.1	0.3%	4,381.5	16.3	0.4%	4,378.2	19.6	0.4%	4,375.0	22.8	0.5%	4,371.6	26.2	0.6%
ME 2	44 58 4	2013	Below Normal	June	--	2,100.0	2,085.2	14.8	0.7%	2,083.1	16.9	0.8%	2,078.8	21.2	1.0%	2,074.7	25.3	1.2%	2,070.5	29.5	1.4%	2,066.3	33.7	1.6%
ME 2	44 58 4	2013	Below Normal	July	--	714.1	701.0	13.0	1.8%	699.2	14.9	2.1%	695.5	18.6	2.6%	691.8	22.2	3.1%	688.2	25.9	3.6%	684.5	29.6	4.1%
ME 2	44 58 4	2013	Below Normal	August	--	333.5	321.8	11.7	3.5%	320.1	13.4	4.0%	316.8	16.7	5.0%	313.5	20.0	6.0%	310.1	23.4	7.0%	306.8	26.7	8.0%
ME 2	44 58 4	2013	Below Normal	September	Used in Summary Table Analysis	4,736.7	4,724.4	12.3	0.3%	4,722.7	14.0	0.3%	4,719.1	17.6	0.4%	4,715.6	21.1	0.4%	4,712.2	24.5	0.5%	4,708.6	28.1	0.6%
ME 2	44 58 4	2014	Critical	October	Used in Summary Table Analysis	280.3	272.1	8.2	2.9%	270.9	9.3	3.3%	268.6	11.7	4.2%	266.2	14.0	5.0%	263.9	16.4	5.9%	261.5	18.8	6.7%
ME 2	44 58 4	2014	Critical	November	Used in Summary Table Analysis	1,512.3	1,505.9	6.4	0.4%	1,505.0	7.3	0.5%	1,503.2	9.0	0.6%	1,501.4	10.9	0.7%	1,499.5	12.7	0.8%	1,497.8	14.5	1.0%
ME 2	44 58 4	2014	Critical	December	--	1,574.9	1,569.6	5.3	0.3%	1,568.9	6.0	0.4%	1,567.2	7.6	0.5%	1,565.7	9.1	0.6%	1,564.2	10.6	0.7%	1,562.6	12.3	0.8%
ME 2	44 58 4	2014	Critical	January	--	2,794.4	2,789.8	4.6	0.2%	2,789.2	5.2	0.2%	2,787.8	6.6	0.2%	2,786.6	7.9	0.3%	2,785.2	9.3	0.3%	2,783.8	10.6	0.4%
ME 2	44 58 4	2014	Critical	February	--	15,671.3	15,666.7	4.6	0.0%	15,666.7	4.6	0.0%	15,665.5	5.8	0.0%	15,664.4	6.9	0.0%	15,662.0	9.3	0.1%	15,660.9	10.4	0.1%
ME 2	44 58 4	2014	Critical	March	--	31,378.5	31,375.0	3.5	0.0%	31,375.0	3.5	0.0%	31,373.8	4.6	0.0%	31,372.7	5.8	0.0%	31,371.5	6.9	0.0%	31,370.4	8.1	0.0%
ME 2	44 58 4	2014	Critical	April	--	12,953.7	12,942.1	11.6	0.1%	12,941.0	12.7	0.1%	12,938.7	15.0	0.1%	12,935.2	18.5	0.1%	12,932.9	20.8	0.2%	12,929.4	24.3	0.2%
ME 2	44 58 4	2014	Critical	May	--	5,165.7	5,153.4	12.4	0.2%	5,151.6	14.1	0.3%	5,148.0	17.7	0.3%	5,144.6	21.2	0.4%	5,141.0	24.8	0.5%	5,137.5	28.2	0.5%
ME 2	44 58 4	2014	Critical	June	--	1,189.6	1,171.8	17.8	1.5%	1,169.2	20.4	1.7%	1,164.2	25.3	2.1%	1,159.1	30.4	2.6%	1,154.2	35.4	3.0%	1,149.2	40.4	3.4%
ME 2	44 58 4	2014	Critical	July	--	541.3	526.4	14.9	2.8%	524.2	17.0	3.1%	520.0	21.3	3.9%	515.8	25.5	4.7%	511.5	29.8	5.5%	507.3	34.0	6.3%
ME 2	44 58 4	2014	Critical	August	--	341.3	327.6	13.7	4.0%	325.7	15.7	4.6%	321.8	19.6	5.7%	317.9	23.5	6.9%	314.0	27.4	8.0%	310.1	31.3	9.2%
ME 2	44 58 4	2014	Critical	September	Used in Summary Table Analysis	2,550.2	2,536.5	13.8	0.5%	2,534.5	15.7	0.6%	2,530.7	19.6	0.8%	2,526.7	23.5	0.9%	2,522.8	27.4	1.1%	2,518.9	31.4	1.2%
ME 2	44 58 4	2015	Dry	October	Used in Summary Table Analysis	11,270.4	11,259.8	10.5	0.1%	11,258.4	11.9	0.1%	11,255.7	14.7	0.1%	11,252.8	17.6	0.2%	11,250.0	20.4	0.2%	11,246.9	23.5	0.2%
ME 2	44 58 4	2015	Dry	November	Used in Summary Table Analysis	8,943.8	8,936.6	7.2	0.1%	8,935.5	8.2	0.1%	8,933.4	10.3	0.1%	8,931.4	12.4	0.1%	8,929.3	14.5	0.2%	8,927.2	16.6	0.2%
ME 2	44 58 4	2015	Dry	December	--	32,260.4	32,254.6	5.8	0.0%	32,253.5	6.9	0.0%	32,251.2	9.3	0.0%	32,250.0	10.4	0.0%	32,247.7	12.7	0.0%	32,246.5	13.9	0.0%
ME 2	44 58 4	2015	Dry	January	--	14,523.1	14,517.4	5.8	0.0%	14,517.4	5.8	0.0%	14,515.0	8.1	0.1%	14,513.9	9.3	0.1%	14,512.7	10.4	0.1%	14,510.4	12.7	0.1%
ME 2	44 58 4	2015	Dry	February	--	27,093.8	27,089.1	4.6	0.0%	27,088.0	5.8	0.0%	27,086.8	6.9	0.0%	27,085.6	8.1	0.0%	27,084.5	9.3	0.0%	27,083.3	10.4	0.0%
ME 2	44 58 4	2015	Dry	March	--	11,537.5	11,533.4	4.1	0.0%	11,532.9	4.6	0.0%	11,531.7	5.8	0.1%	11,530.4	7.1	0.1%	11,529.3	8.2	0.1%	11,528.1	9.4	0.1%
ME 2	44 58 4	2015	Dry	April	--	8,295.0	8,284.4	10.6	0.1%	8,282.9	12.2	0.1%	8,279.7	15.3	0.2%	8,276.6	18.4	0.2%	8,273.6	21.4	0.3%	8,270.6	24.4	0.3%
ME 2	44 58 4	2015	Dry	May	--	1,507.6	1,495.3	12.4	0.8%	1,493.5	14.1	0.9%	1,490.0	17.6	1.2%	1,486.5	21.2	1.4%	1,483.0	24.7	1.6%	1,479.4	28.2	1.9%
ME 2	44 58 4	2015	Dry	June	--	649.0	632.2	16.7	2.6%	629.9	19.1	2.9%	625.2	23.8	3.7%	620.5	28.4	4.4%	615.9	33.1	5.1%	611.3	37.7	5.8%
ME 2	44 58 4	2015	Dry	July	--	264.6	249.5	15.0	5.7%	247.4	17.2	6.5%	243.1	21.4	8.1%	238.9	25.7	9.7%	234.6	30.0	11.3%	230.3	34.2	12.9%
ME 2	44 58 4	2015	Dry	August	--	160.4	146.6	13.9	8.7%	144.6	15.8	9.9%	140.6	19.8	12.3%	136.7	23.8	14.8%	132.7	27.7	17.3%	128.8	31.7	19.7%
ME 2	44 58 4	2015	Dry	September	Used in Summary Table Analysis	116.0	103.9	12.0	10.4%	102.2	13.8	11.9%	98.3	17.7	15.3%	94.5	21.5	18.5%	90.6	25.4	21.9%	86.8	29.2	25.2%
ME 2	44 58 4	2016	Above Normal	October	Used in Summary Table Analysis	81.7	70.7	11.1	13.5%	69.1	12.7	15.5%	66.0	15.7	19.2%	62.9	18.8	23.0%	60.0	21.8	26.6%	57.2	24.5	30.0%
ME 2	44 58 4	2016	Above Normal	November	Used in Summary Table Analysis	3,783.7	3,776.4	7.3	0.2%	3,775.2	8.4	0.2%	3,773.1	10.5	0.3%	3,770.9	12.7	0.3%	3,768.9	14.8	0.4%	3,766.7	17.0	0.4%
ME 2	44 58 4	2016	Above Normal	December	--	36,199.1	36,192.1	6.9	0.0%	36,192.1	6.9	0.0%	36,189.8	9.3	0.0%	36,187.5	11.6	0.0%	36,186.3	12.7	0.0%	36,184.0	15.0	0.0%
ME 2	44 58 4	2016	Above Normal	January	--	56,877.3	56,871.5	5.8	0.0%	56,870.4	6.9	0.0%	56,869.2	8.1	0.0%	56,868.1	9.3	0.0%	56,865.7	11.6	0.0%	56,864.6	12.7	0.0%
ME 2	44 58 4	2016	Above Normal	February	--	24,196.8	24,192.1	4.6	0.0%	24,191.0	5.8	0.0%	24,189.8	6.9	0.0%	24,188.7	8.1	0.0%	24,187.5	9.3	0.0%	24,186.3	10.4	0.0%
ME 2	44 58 4	2016	Above Normal	March	--	41,572.9	41,568.3	4.6	0.0%	41,568.3	4.6	0.0%	41,567.1	5.8	0.0%	41,564.8	8.1	0.0%	41,563.7	9.3	0.0%	41,562.5	10.4	0.0%
ME 2	44 58 4	2016	Above Normal	April	--	18,480.3	18,475.7	4.6	0.0%	18,475.7	4.6	0.0%	18,474.5	5.8	0.0%	18,473.4	6.9	0.0%	18,472.2	8.1	0.0%	18,471.1	9.3	0.1%
ME 2	44 58 4	2016	Above Normal	May	--	5,195.6	5,190.2	5.4	0.1%	5,189.4	6.3	0.1%	5,187.8	7.8	0.1%	5,186.2	9.4	0.2%	5,184.6	11.0	0.2%	5,183.0	12.6	0.2%
ME 2	44 58 4	2016	Above Normal	June	--	1,501.9	1,489.4	12.5	0.8%	1,487.5	14.4	1.0%	1,484.0	17.8	1.2%	1,480.4	21.4	1.4%	1,477.0	24.9	1.7%	1,473.5	28.4	1.9%
ME 2	44 58 4	2016	Above Normal	July	--	814.7	801.7	13.0	1.6%	799.8	14.8	1.8%	796.2	18.5	2.3%	792.5	22.2	2.7%	788.8	25.8	3.2%	785.2	29.5	3.6%
ME 2	44 58 4	2016	Above Normal	August	--	482.8	470.8	12.0	2.5%	469.1	13.7	2.8%	465.7	17.1	3.6%	462.3	20.6	4.3%	458.9	24.0	5.0%	455.4	27.4	5.7%
ME 2	44 58 4	2016	Above Normal	September	Used in Summary Table Analysis	319.8	309.6	10.2	3.2%	307.6	12.2	3.8%	304.5	15.3	4.8%	301.2	18.6	5.8%	298.0	21.8	6.8%	294.7	25.0	7.8%
ME 2	44 58 4	2017	Wet	October	Used in Summary Table Analysis	18,119.2	18,111.1	8.1	0.0%	18,110.0	9.3	0.1%	18,107.6	11.6	0.1%	18,105.3	13.9	0.1%	18,101.9	17.4	0.1%	18,099.5	19.7	0.1%
ME 2	44 58 4	2017	Wet	November	Used in Summary Table Analysis	18,641.2	18,634.3	6.9	0.0%	18,634.3	6.9	0.0%	18,631.9	9.3	0.0%	18,630.8	10.4	0.1%	18,628.5	12.7	0.1%	18,626.2	15.0	0.1%
ME 2	44 58 4	2017	Wet	December	--	23,827.5	23,821.8	5.8	0.0%	23,821.8	5.8	0.0%	23,819.4	8.1	0.0%	23,818.3	9.3	0.0%	23,817.1	10.4	0.0%	23,814.8	12.7	0.1%
ME 2	44 58 4	2017	Wet	January	--	106,061.3	106,056.7	4.6	0.0%	106,055.6	5.8	0.0%	106,054.4	6.9	0.0%	106,053.2	8.1	0.0%	106,052.1	9.3	0.0%	106,050.9	10.4	0.0%
ME 2	44 58 4	2017	Wet	February	--	81,344.9	81,340.3	4.6	0.0%	81,340.3	4.6	0.0%	81,339.1	5.8	0.0%	81,338.0	6.9	0.0%	81,335.6	9.3	0.0%	81,334.5	10.4	0.0%
ME 2	44 58 4	2017	Wet	March	--	27,119.2	27,115.7	3.5	0.0%	27,114.6	4.6	0.0%	27,113.4	5.8	0.0%	27,112.3	6.9	0.0%	27,111.1	8.1	0.0%	27,110.0	9.3	0.0%
ME 2	44 58 4	2017	Wet	April	--	22,772.0	22,768.5	3.5	0.0%	22,768.5	3.5	0.0%	22,767.4	4.6	0.0%	22,766.2	5.8	0.0%	22,765.0	6.9	0.0%	22,763.9	8.1	0.0%
ME 2	44 58 4	2017	Wet	May	--	6,267.7	6,262.3	5.4	0.1%	6,261.5	6.3	0.1%	6,259.8	7.9	0.1%	6,258.3	9.4	0.1%	6,256.7	11.0	0.2%	6,255.1	12.6	0.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	44 58 4	2017	Wet	June	--	2,096.2	2,083.0	13.2	0.6%	2,081.1	15.0	0.7%	2,077.4	18.8	0.9%	2,073.7	22.5	1.1%	2,070.0	26.2	1.2%	2,066.3	29.9	1.4%
ME 2	44 58 4	2017	Wet	July	--	922.5	909.4	13.0	1.4%	907.6	14.9	1.6%	903.9	18.6	2.0%	900.2	22.2	2.4%	896.6	25.9	2.8%	892.9	29.6	3.2%
ME 2	44 58 4	2017	Wet	August	--	494.8	482.8	12.0	2.4%	481.1	13.7	2.8%	477.7	17.1	3.4%	474.4	20.5	4.1%	471.0	23.8	4.8%	467.6	27.2	5.5%
ME 2	44 58 4	2017	Wet	September	Used in Summary Table Analysis	313.1	302.1	11.0	3.5%	300.5	12.6	4.0%	297.3	15.7	5.0%	294.2	18.9	6.0%	291.1	22.0	7.0%	287.9	25.1	8.0%
ME 2	44 58 4	2018	Above Normal	October	Used in Summary Table Analysis	265.9	257.7	8.2	3.1%	256.5	9.4	3.5%	254.2	11.7	4.4%	251.8	14.1	5.3%	249.5	16.4	6.2%	247.1	18.8	7.1%
ME 2	44 58 4	2018	Above Normal	November	Used in Summary Table Analysis	10,598.6	10,592.6	6.0	0.1%	10,591.8	6.8	0.1%	10,590.0	8.6	0.1%	10,588.3	10.3	0.1%	10,586.6	12.0	0.1%	10,584.8	13.8	0.1%
ME 2	44 58 4	2018	Above Normal	December	--	5,428.2	5,423.3	5.0	0.1%	5,422.6	5.7	0.1%	5,421.2	7.1	0.1%	5,419.7	8.6	0.2%	5,418.3	10.0	0.2%	5,416.8	11.5	0.2%
ME 2	44 58 4	2018	Above Normal	January	--	17,447.9	17,443.3	4.6	0.0%	17,443.3	4.6	0.0%	17,442.1	5.8	0.0%	17,441.0	6.9	0.0%	17,439.8	8.1	0.0%	17,437.5	10.4	0.1%
ME 2	44 58 4	2018	Above Normal	February	--	7,581.8	7,578.0	3.8	0.1%	7,577.5	4.3	0.1%	7,576.4	5.4	0.1%	7,575.2	6.6	0.1%	7,574.1	7.8	0.1%	7,572.9	8.9	0.1%
ME 2	44 58 4	2018	Above Normal	March	--	20,486.1	20,482.6	3.5	0.0%	20,482.6	3.5	0.0%	20,481.5	4.6	0.0%	20,480.3	5.8	0.0%	20,479.2	6.9	0.0%	20,478.0	8.1	0.0%
ME 2	44 58 4	2018	Above Normal	April	--	31,949.1	31,945.6	3.5	0.0%	31,945.6	3.5	0.0%	31,944.4	4.6	0.0%	31,943.3	5.8	0.0%	31,942.1	6.9	0.0%	31,941.0	8.1	0.0%
ME 2	44 58 4	2018	Above Normal	May	--	6,980.0	6,970.0	10.0	0.1%	6,968.6	11.3	0.2%	6,965.9	14.1	0.2%	6,963.0	17.0	0.2%	6,960.2	19.8	0.3%	6,957.6	22.3	0.3%
ME 2	44 58 4	2018	Above Normal	June	--	1,905.4	1,892.9	12.5	0.7%	1,891.1	14.4	0.8%	1,887.6	17.8	0.9%	1,884.1	21.3	1.1%	1,880.6	24.9	1.3%	1,877.1	28.4	1.5%
ME 2	44 58 4	2018	Above Normal	July	--	771.9	758.9	13.0	1.7%	757.0	14.8	1.9%	753.4	18.5	2.4%	749.7	22.2	2.9%	745.9	25.9	3.4%	742.3	29.6	3.8%
ME 2	44 58 4	2018	Above Normal	August	--	433.1	421.7	11.4	2.6%	420.1	13.0	3.0%	416.8	16.3	3.8%	413.6	19.5	4.5%	410.3	22.8	5.3%	407.1	26.0	6.0%
ME 2	44 58 4	2018	Above Normal	September	Used in Summary Table Analysis	291.4	280.4	11.0	3.8%	278.8	12.6	4.3%	275.7	15.7	5.4%	272.5	18.9	6.5%	269.4	22.0	7.6%	266.2	25.2	8.6%
ME 2	44 58 4	2019	Below Normal	October	Used in Summary Table Analysis	201.4	193.3	8.1	4.0%	192.2	9.2	4.6%	189.8	11.6	5.8%	187.4	14.0	7.0%	185.2	16.2	8.1%	182.9	18.6	9.2%
ME 2	44 58 4	2019	Below Normal	November	Used in Summary Table Analysis	6,497.0	6,490.9	6.1	0.1%	6,489.9	7.1	0.1%	6,488.2	8.8	0.1%	6,486.5	10.5	0.2%	6,484.7	12.3	0.2%	6,482.9	14.1	0.2%
ME 2	44 58 4	2019	Below Normal	December	--	14,450.2	14,444.4	5.8	0.0%	14,444.4	5.8	0.0%	14,442.1	8.1	0.1%	14,441.0	9.3	0.1%	14,439.8	10.4	0.1%	14,437.5	12.7	0.1%
ME 2	44 58 4	2019	Below Normal	January	--	34,782.4	34,777.8	4.6	0.0%	34,776.6	5.8	0.0%	34,775.5	6.9	0.0%	34,774.3	8.1	0.0%	34,773.1	9.3	0.0%	34,772.0	10.4	0.0%
ME 2	44 58 4	2019	Below Normal	February	--	141,458.3	141,446.8	11.6	0.0%	141,446.8	11.6	0.0%	141,446.8	11.6	0.0%	141,446.8	11.6	0.0%	141,446.8	11.6	0.0%	141,446.8	11.6	0.0%
ME 2	44 58 4	2019	Below Normal	March	--	42,078.7	42,075.2	3.5	0.0%	42,074.1	4.6	0.0%	42,072.9	5.8	0.0%	42,071.8	6.9	0.0%	42,070.6	8.1	0.0%	42,069.4	9.3	0.0%
ME 2	44 58 4	2019	Below Normal	April	--	15,206.0	15,202.5	3.5	0.0%	15,202.5	3.5	0.0%	15,201.4	4.6	0.0%	15,200.2	5.8	0.0%	15,199.1	6.9	0.0%	15,197.9	8.1	0.1%
ME 2	44 58 4	2019	Below Normal	May	--	16,608.8	16,598.4	10.4	0.1%	16,596.1	12.7	0.1%	16,593.8	15.0	0.1%	16,590.3	18.5	0.1%	16,586.8	22.0	0.1%	16,584.5	24.3	0.1%
ME 2	44 58 4	2019	Below Normal	June	--	4,243.5	4,229.6	13.9	0.3%	4,227.7	15.9	0.4%	4,224.0	19.6	0.5%	4,220.4	23.1	0.5%	4,216.8	26.7	0.6%	4,213.2	30.3	0.7%
ME 2	44 58 4	2019	Below Normal	July	--	1,349.0	1,335.9	13.1	1.0%	1,334.0	14.9	1.1%	1,330.3	18.6	1.4%	1,326.7	22.2	1.6%	1,323.0	25.9	1.9%	1,319.3	29.6	2.2%
ME 2	44 58 4	2019	Below Normal	August	--	585.3	573.6	11.7	2.0%	571.9	13.3	2.3%	568.6	16.6	2.8%	565.3	19.9	3.4%	562.0	23.3	4.0%	558.7	26.6	4.5%
ME 2	44 58 4	2019	Below Normal	September	Used in Summary Table Analysis	453.5	442.6	10.9	2.4%	441.1	12.5	2.7%	438.0	15.6	3.4%	434.8	18.7	4.1%	431.7	21.8	4.8%	428.6	24.9	5.5%
ME 2	44 58 4	2020	Dry	October	Used in Summary Table Analysis	349.4	341.9	7.6	2.2%	340.8	8.7	2.5%	338.6	10.9	3.1%	336.4	13.1	3.7%	334.2	15.3	4.4%	332.0	17.5	5.0%
ME 2	44 58 4	2020	Dry	November	Used in Summary Table Analysis	304.4	299.0	5.4	1.8%	298.2	6.2	2.0%	296.6	7.8	2.6%	295.0	9.3	3.1%	293.5	10.9	3.6%	291.9	12.5	4.1%
ME 2	44 58 4	2020	Dry	December	--	12,968.8	12,964.1	4.6	0.0%	12,964.1	4.6	0.0%	12,961.8	6.9	0.1%	12,960.6	8.1	0.1%	12,959.5	9.3	0.1%	12,958.3	10.4	0.1%
ME 2	44 58 4	2020	Dry	January	--	22,081.0	22,076.4	4.6	0.0%	22,076.4	4.6	0.0%	22,074.1	6.9	0.0%	22,072.9	8.1	0.0%	22,071.8	9.3	0.0%	22,070.6	10.4	0.0%
ME 2	44 58 4	2020	Dry	February	--	7,403.9	7,400.2	3.7	0.1%	7,399.7	4.3	0.1%	7,398.5	5.4	0.1%	7,397.3	6.6	0.1%	7,396.2	7.8	0.1%	7,395.1	8.8	0.1%
ME 2	44 58 4	2020	Dry	March	--	7,199.5	7,195.9	3.6	0.0%	7,195.4	4.2	0.1%	7,194.3	5.2	0.1%	7,193.3	6.3	0.1%	7,192.2	7.3	0.1%	7,191.1	8.4	0.1%
ME 2	44 58 4	2020	Dry	April	--	5,433.6	5,423.3	10.3	0.2%	5,421.8	11.8	0.2%	5,418.9	14.7	0.3%	5,415.9	17.7	0.3%	5,412.8	20.7	0.4%	5,410.0	23.6	0.4%
ME 2	44 58 4	2020	Dry	May	--	7,313.2	7,301.0	12.2	0.2%	7,299.3	13.9	0.2%	7,295.8	17.4	0.2%	7,292.2	20.9	0.3%	7,288.8	24.4	0.3%	7,285.3	27.9	0.4%
ME 2	44 58 4	2020	Dry	June	--	2,103.4	2,086.2	17.1	0.8%	2,083.9	19.4	0.9%	2,079.4	24.0	1.1%	2,074.9	28.5	1.4%	2,070.4	33.0	1.6%	2,065.9	37.5	1.8%
ME 2	44 58 4	2020	Dry	July	--	789.6	774.6	15.1	1.9%	772.4	17.2	2.2%	768.1	21.5	2.7%	763.8	25.8	3.3%	759.5	30.2	3.8%	755.2	34.5	4.4%
ME 2	44 58 4	2020	Dry	August	--	391.8	377.7	14.1	3.6%	375.7	16.1	4.1%	371.7	20.1	5.1%	367.7	24.2	6.2%	363.6	28.2	7.2%	359.6	32.2	8.2%
ME 2	44 58 4	2020	Dry	September	Used in Summary Table Analysis	241.5	229.3	12.2	5.0%	227.6	13.9	5.8%	223.3	18.3	7.6%	219.5	22.0	9.1%	215.5	26.0	10.8%	211.6	30.0	12.4%
ME 2	43 58 5	2000	Above Normal	October	Used in Summary Table Analysis	805.3	797.0	8.4	1.0%	795.8	9.6	1.2%	793.4	11.9	1.5%	791.0	14.3	1.8%	788.6	16.8	2.1%	786.2	19.2	2.4%
ME 2	43 58 5	2000	Above Normal	November	Used in Summary Table Analysis	11,893.5	11,886.6	6.9	0.1%	11,885.4	8.1	0.1%	11,884.3	9.3	0.1%	11,881.9	11.6	0.1%	11,879.6	13.9	0.1%	11,878.5	15.0	0.1%
ME 2	43 58 5	2000	Above Normal	December	--	10,691.1	10,685.9	5.2	0.0%	10,685.2	5.9	0.1%	10,683.7	7.4	0.1%	10,682.1	9.0	0.1%	10,680.6	10.5	0.1%	10,678.9	12.2	0.1%
ME 2	43 58 5	2000	Above Normal	January	--	28,195.6	28,191.0	4.6	0.0%	28,189.8	5.8	0.0%	28,188.7	6.9	0.0%	28,187.5	8.1	0.0%	28,186.3	9.3	0.0%	28,185.2	10.4	0.0%
ME 2	43 58 5	2000	Above Normal	February	--	36,792.8	36,788.2	4.6	0.0%	36,788.2	4.6	0.0%	36,787.0	5.8	0.0%	36,785.9	6.9	0.0%	36,784.7	8.1	0.0%	36,782.4	10.4	0.0%
ME 2	43 58 5	2000	Above Normal	March	--	18,239.6	18,236.1	3.5	0.0%	18,236.1	3.5	0.0%	18,235.0	4.6	0.0%	18,233.8	5.8	0.0%	18,232.6	6.9	0.0%	18,231.5	8.1	0.0%
ME 2	43 58 5	2000	Above Normal	April	--	12,256.9	12,253.5	3.5	0.0%	12,253.5	3.5	0.0%	12,252.3	4.6	0.0%	12,251.2	5.8	0.0%	12,250.0	6.9	0.1%	12,248.8	8.1	0.1%
ME 2	43 58 5	2000	Above Normal	May	--	7,047.6	7,037.2	10.4	0.1%	7,035.6	11.9	0.2%	7,032.6	14.9	0.2%	7,029.7	17.8	0.3%	7,026.7	20.8	0.3%	7,023.7	23.8	0.3%
ME 2	43 58 5	2000	Above Normal	June	--	2,594.3	2,577.9	16.4	0.6%	2,575.6	18.8	0.7%	2,570.9	23.4	0.9%	2,566.3	28.0	1.1%	2,561.7	32.6	1.3%	2,557.1	37.3	1.4%
ME 2	43 58 5	2000	Above Normal	July	--	984.9	971.5	13.4	1.4%	969.6	15.3	1.6%	965.8	19.2	1.9%	962.0	22.9	2.3%	958.2	26.7	2.7%	954.5	30.5	3.1%
ME 2	43 58 5	2000	Above Normal	August	--	514.5	502.5	12.0	2.3%	500.8	13.7	2.7%	497.3	17.1	3.3%	494.0	20.5	4.0%	490.6	23.9	4.6%	487.2	27.3	5.3%
ME 2	43 58 5	2000	Above Normal	September	Used in Summary Table Analysis	289.1	278.8	10.3	3.6%	277.4	11.7	4.1%	274.4	14.7	5.1%	271.5	17.6	6.1%	268.6	20.5	7.1%	265.7	23.4	8.1%
ME 2	43 58 5	2001	Dry	October	Used in Summary Table Analysis	3,764.7	3,756.5	8.2	0.2%	3,755.3	9.4	0.2%	3,752.9	11.8	0.3%	3,750.6	14.1	0.4%	3,748.3	16.4	0.4%	3,745.8	18.9	0.5%
ME 2	43 58 5	2001	Dry	November	Used in Summary Table Analysis	6,040.9	6,034.5	6.4	0.1%	6,033.7	7.2	0.1%	6,031.8	9.0	0.1%	6,030.0	10.9	0.2%	6,028.2	12.6	0.2%	6,026.4	14.5	0.2%
ME 2	43 58 5	2001	Dry	December	--	8,754.7	8,749.4	5.3	0.1%	8,748.7	6.0	0.1%	8,747.2	7.5	0.1%	8,745.7	9.0	0.1%	8,744.1	10.6	0.1%	8,742.6	12.2	0.1%
ME 2	43 58 5	2001	Dry	January	--	12,629.6	12,625.0	4.6	0.0%	12,623.8	5.8	0.0%	12,622.7	6.9	0.1%	12,621.5	8.1	0.1%	12,619.2	10.4	0.1%	12,618.1	11.6	0.1%
ME 2	43 58 5	2001	Dry	February	--	17,370.4	17,365.7	4.6	0.0%	17,365.7	4.6	0.0%	17,364.6	5.8	0.0%	17,363.4	6.9	0.0%	17,362.3	8.1	0.0%	17,361.1	9.3	0.1%
ME 2	43 58 5	2001	Dry	March	--	12,245.4	12,241.9	3.5	0.0%	12,240.7	4.6	0.0%	12,239.6	5.8	0.0%	12,238.4	6.9	0.1%	12,237.3	8.1	0.1%	12,236.1	9.3	0.1%
ME 2	43 58 5	2001	Dry	April	--	10,917.9	10,907.1	10.9	0.1%	10,905.6	12.4	0.1%	10,902.4	15.5	0.1%	10,899.3	18.6	0.2%	10,896.2	21.8	0.2%	10,893.1	24.9	0.2%
ME 2	43 58 5	2001	Dry	May	--	2,637.4	2,624.8	12.6	0.5%	2,623.0	14.4	0.5%	2,619.3	18.1	0.7%	2,615.7	21.6	0.8%	2,612.2	25.2	1.0%	2,608.6	28.8	1.1%
ME 2	43 58 5	2001	Dry	June	--	2,614.8	2,596.6	18.2	0.7%	2,594.1	20.7	0.8%	2,588.9	25.9	1.0%	2,583.8	31.0	1.2%	2,578.7	36.1	1.4%	2,573.6	41.2	1.6%
ME 2	43 58 5	2001	Dry	July	--	717.0	701.5	15.4	2.2%	699.3	17.6	2.5%	695.0	22.0	3.1%	690.6	26.3	3.7%	686.3	30.7	4.3%	681.9	35.1	4.9%
ME 2	43 58 5	2001	Dry	August	--	168.0	153.4	14.5	8.7%	151.4	16.6	9.9%	147.2	20.8	12.4%	143.1	24.9	14.8%	138.9	29.0	17.3%	134.8	33.2	19.7%
ME 2	43 58 5	2001	Dry	September	Used in Summary Table Analysis	90.3	77.7	12.6	14.0%	75.9	14.4	16.0%	72.3	18.0	19.9%	68.7	21.6	23.9%	65.1	25.2	27.9%	61.5	28.8	31.9%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	43 58 5	2002	Below Normal	October	Used in Summary Table Analysis	258.9	248.5	10.5	4.0%	247.0	11.9	4.6%	244.0	15.0	5.8%	240.9	18.0	7.0%	238.0	21.0	8.1%	234.9	24.0	9.3%
ME 2	43 58 5	2002	Below Normal	November	Used in Summary Table Analysis	11,914.4	11,906.3	8.1	0.1%	11,905.1	9.3	0.1%	11,902.8	11.6	0.1%	11,900.5	13.9	0.1%	11,898.1	16.2	0.1%	11,895.8	18.5	0.2%
ME 2	43 58 5	2002	Below Normal	December	--	35,339.1	35,333.3	5.8	0.0%	35,332.2	6.9	0.0%	35,329.9	9.3	0.0%	35,327.5	11.6	0.0%	35,326.4	12.7	0.0%	35,324.1	15.0	0.0%
ME 2	43 58 5	2002	Below Normal	January	--	30,659.7	30,653.9	5.8	0.0%	30,652.8	6.9	0.0%	30,651.6	8.1	0.0%	30,650.5	9.3	0.0%	30,648.1	11.6	0.0%	30,647.0	12.7	0.0%
ME 2	43 58 5	2002	Below Normal	February	--	24,547.5	24,542.8	4.6	0.0%	24,541.7	5.8	0.0%	24,540.5	6.9	0.0%	24,538.2	9.3	0.0%	24,537.0	10.4	0.0%	24,535.9	11.6	0.0%
ME 2	43 58 5	2002	Below Normal	March	--	17,678.2	17,673.6	4.6	0.0%	17,673.6	4.6	0.0%	17,671.3	6.9	0.0%	17,670.1	8.1	0.0%	17,669.0	9.3	0.1%	17,667.8	10.4	0.1%
ME 2	43 58 5	2002	Below Normal	April	--	9,887.5	9,876.9	10.6	0.1%	9,875.3	12.2	0.1%	9,872.3	15.2	0.2%	9,869.3	18.2	0.2%	9,866.3	21.2	0.2%	9,863.3	24.2	0.2%
ME 2	43 58 5	2002	Below Normal	May	--	3,307.2	3,294.9	12.3	0.4%	3,293.2	14.0	0.4%	3,289.6	17.6	0.5%	3,286.1	21.1	0.6%	3,282.6	24.5	0.7%	3,279.1	28.1	0.9%
ME 2	43 58 5	2002	Below Normal	June	--	849.5	834.8	14.7	1.7%	832.7	16.8	2.0%	828.6	20.9	2.5%	824.5	25.0	2.9%	820.3	29.2	3.4%	816.2	33.3	3.9%
ME 2	43 58 5	2002	Below Normal	July	--	357.8	343.9	13.9	3.9%	341.9	15.9	4.4%	337.9	19.9	5.6%	334.0	23.8	6.7%	330.0	27.8	7.8%	326.0	31.7	8.9%
ME 2	43 58 5	2002	Below Normal	August	--	220.9	208.3	12.6	5.7%	206.5	14.4	6.5%	202.9	18.0	8.2%	199.3	21.6	9.8%	195.8	25.2	11.4%	192.2	28.8	13.0%
ME 2	43 58 5	2002	Below Normal	September	Used in Summary Table Analysis	158.2	146.7	11.5	7.3%	145.0	13.1	8.3%	141.7	16.4	10.4%	138.5	19.7	12.5%	135.2	23.0	14.5%	131.9	26.3	16.6%
ME 2	43 58 5	2003	Wet	October	Used in Summary Table Analysis	123.3	114.2	9.1	7.4%	112.9	10.4	8.4%	110.3	13.0	10.6%	107.7	15.6	12.7%	105.1	18.3	14.8%	102.4	20.9	16.9%
ME 2	43 58 5	2003	Wet	November	Used in Summary Table Analysis	887.8	880.9	6.9	0.8%	879.9	7.9	0.9%	877.9	9.9	1.1%	875.9	12.0	1.3%	874.0	13.8	1.6%	872.0	15.8	1.8%
ME 2	43 58 5	2003	Wet	December	--	56,009.3	56,003.5	5.8	0.0%	56,002.3	6.9	0.0%	56,000.0	9.3	0.0%	55,998.8	10.4	0.0%	55,996.5	12.7	0.0%	55,995.4	13.9	0.0%
ME 2	43 58 5	2003	Wet	January	--	31,363.4	31,358.8	4.6	0.0%	31,357.6	5.8	0.0%	31,356.5	6.9	0.0%	31,355.3	8.1	0.0%	31,353.0	10.4	0.0%	31,351.9	11.6	0.0%
ME 2	43 58 5	2003	Wet	February	--	20,266.2	20,261.6	4.6	0.0%	20,260.4	5.8	0.0%	20,259.3	6.9	0.0%	20,258.1	8.1	0.0%	20,256.9	9.3	0.0%	20,255.8	10.4	0.1%
ME 2	43 58 5	2003	Wet	March	--	23,899.3	23,894.7	4.6	0.0%	23,894.7	4.6	0.0%	23,893.5	5.8	0.0%	23,892.4	6.9	0.0%	23,890.0	9.3	0.0%	23,888.9	10.4	0.0%
ME 2	43 58 5	2003	Wet	April	--	42,577.5	42,574.1	3.5	0.0%	42,572.9	4.6	0.0%	42,571.8	5.8	0.0%	42,570.6	6.9	0.0%	42,569.4	8.1	0.0%	42,568.3	9.3	0.0%
ME 2	43 58 5	2003	Wet	May	--	12,179.4	12,169.0	10.4	0.1%	12,167.8	11.6	0.1%	12,164.4	15.0	0.1%	12,160.9	18.5	0.2%	12,158.6	20.8	0.2%	12,155.1	24.3	0.2%
ME 2	43 58 5	2003	Wet	June	--	3,157.8	3,144.0	13.8	0.4%	3,142.0	15.7	0.5%	3,138.3	19.4	0.6%	3,134.5	23.3	0.7%	3,130.7	27.1	0.9%	3,127.0	30.8	1.0%
ME 2	43 58 5	2003	Wet	July	--	1,464.9	1,451.2	13.8	0.9%	1,449.2	15.7	1.1%	1,445.4	19.6	1.3%	1,441.4	23.5	1.6%	1,437.5	27.4	1.9%	1,433.6	31.4	2.1%
ME 2	43 58 5	2003	Wet	August	--	751.9	739.0	12.9	1.7%	737.1	14.8	2.0%	733.4	18.4	2.5%	729.8	22.1	2.9%	726.1	25.8	3.4%	722.3	29.6	3.9%
ME 2	43 58 5	2003	Wet	September	Used in Summary Table Analysis	450.7	440.2	10.4	2.3%	438.8	11.9	2.6%	435.8	14.9	3.3%	432.8	17.8	4.0%	429.9	20.8	4.6%	426.9	23.8	5.3%
ME 2	43 58 5	2004	Wet	October	Used in Summary Table Analysis	317.9	309.5	8.4	2.6%	308.3	9.6	3.0%	305.9	12.0	3.8%	303.5	14.4	4.5%	301.1	16.8	5.3%	298.7	19.2	6.0%
ME 2	43 58 5	2004	Wet	November	Used in Summary Table Analysis	5,714.4	5,708.0	6.4	0.1%	5,707.1	7.3	0.1%	5,705.2	9.1	0.2%	5,703.4	11.0	0.2%	5,701.5	12.8	0.2%	5,699.5	14.8	0.3%
ME 2	43 58 5	2004	Wet	December	--	35,907.4	35,901.6	5.8	0.0%	35,901.6	5.8	0.0%	35,899.3	8.1	0.0%	35,898.1	9.3	0.0%	35,895.8	11.6	0.0%	35,894.7	12.7	0.0%
ME 2	43 58 5	2004	Wet	January	--	31,199.1	31,194.4	4.6	0.0%	31,193.3	5.8	0.0%	31,192.1	6.9	0.0%	31,191.0	8.1	0.0%	31,188.7	10.4	0.0%	31,187.5	11.6	0.0%
ME 2	43 58 5	2004	Wet	February	--	37,972.2	37,968.8	3.5	0.0%	37,967.6	4.6	0.0%	37,966.4	5.8	0.0%	37,965.3	6.9	0.0%	37,964.1	8.1	0.0%	37,961.8	10.4	0.0%
ME 2	43 58 5	2004	Wet	March	--	16,478.0	16,473.4	4.6	0.0%	16,473.4	4.6	0.0%	16,472.2	5.8	0.0%	16,471.1	6.9	0.0%	16,469.9	8.1	0.0%	16,468.8	9.3	0.1%
ME 2	43 58 5	2004	Wet	April	--	9,417.4	9,413.8	3.6	0.0%	9,413.2	4.2	0.0%	9,412.2	5.2	0.1%	9,411.0	6.4	0.1%	9,410.0	7.4	0.1%	9,408.8	8.6	0.1%
ME 2	43 58 5	2004	Wet	May	--	3,394.0	3,383.4	10.5	0.3%	3,381.9	12.0	0.4%	3,378.9	15.0	0.4%	3,375.9	18.1	0.5%	3,372.9	21.1	0.6%	3,369.9	24.1	0.7%
ME 2	43 58 5	2004	Wet	June	--	688.1	675.1	12.9	1.9%	673.3	14.8	2.1%	669.6	18.4	2.7%	666.0	22.1	3.2%	662.3	25.8	3.7%	658.6	29.4	4.3%
ME 2	43 58 5	2004	Wet	July	--	349.8	336.4	13.4	3.8%	334.5	15.4	4.4%	330.6	19.2	5.5%	326.8	23.0	6.6%	323.0	26.9	7.7%	319.1	30.7	8.8%
ME 2	43 58 5	2004	Wet	August	--	219.4	207.3	12.1	5.5%	205.6	13.8	6.3%	202.2	17.2	7.9%	198.8	20.7	9.4%	195.3	24.1	11.0%	191.9	27.5	12.5%
ME 2	43 58 5	2004	Wet	September	Used in Summary Table Analysis	157.1	145.6	11.5	7.3%	144.0	13.2	8.4%	140.7	16.5	10.5%	137.4	19.8	12.6%	134.1	23.1	14.7%	130.8	26.4	16.8%
ME 2	43 58 5	2005	Above Normal	October	Used in Summary Table Analysis	7,566.6	7,558.0	8.6	0.1%	7,556.7	9.8	0.1%	7,554.3	12.3	0.2%	7,551.9	14.7	0.2%	7,549.3	17.2	0.2%	7,546.9	19.7	0.3%
ME 2	43 58 5	2005	Above Normal	November	Used in Summary Table Analysis	2,242.1	2,235.8	6.4	0.3%	2,234.8	7.3	0.3%	2,233.0	9.1	0.4%	2,231.1	11.0	0.5%	2,229.3	12.8	0.6%	2,227.4	14.7	0.7%
ME 2	43 58 5	2005	Above Normal	December	--	20,691.0	20,685.2	5.8	0.0%	20,684.0	6.9	0.0%	20,682.9	8.1	0.0%	20,681.7	9.3	0.0%	20,679.4	11.6	0.1%	20,678.2	12.7	0.1%
ME 2	43 58 5	2005	Above Normal	January	--	22,120.4	22,115.7	4.6	0.0%	22,114.6	5.8	0.0%	22,113.4	6.9	0.0%	22,112.3	8.1	0.0%	22,111.1	9.3	0.0%	22,108.8	11.6	0.1%
ME 2	43 58 5	2005	Above Normal	February	--	13,965.3	13,961.8	3.5	0.0%	13,960.6	4.6	0.0%	13,959.5	5.8	0.0%	13,958.3	6.9	0.0%	13,957.2	8.1	0.1%	13,956.0	9.3	0.1%
ME 2	43 58 5	2005	Above Normal	March	--	28,366.9	28,363.4	3.5	0.0%	28,362.3	4.6	0.0%	28,361.1	5.8	0.0%	28,360.0	6.9	0.0%	28,358.8	8.1	0.0%	28,357.6	9.3	0.0%
ME 2	43 58 5	2005	Above Normal	April	--	21,313.7	21,310.2	3.5	0.0%	21,310.2	3.5	0.0%	21,309.0	4.6	0.0%	21,307.9	5.8	0.0%	21,306.7	6.9	0.0%	21,305.6	8.1	0.0%
ME 2	43 58 5	2005	Above Normal	May	--	19,413.2	19,402.8	10.4	0.1%	19,400.5	12.7	0.1%	19,398.1	15.0	0.1%	19,394.7	18.5	0.1%	19,391.2	22.0	0.1%	19,388.9	24.3	0.1%
ME 2	43 58 5	2005	Above Normal	June	--	15,685.2	15,669.0	16.2	0.1%	15,666.7	18.5	0.1%	15,660.9	24.3	0.2%	15,656.3	28.9	0.2%	15,651.6	33.6	0.2%	15,647.0	38.2	0.2%
ME 2	43 58 5	2005	Above Normal	July	--	2,863.1	2,848.8	14.2	0.5%	2,846.8	16.3	0.6%	2,842.7	20.4	0.7%	2,838.8	24.3	0.8%	2,834.7	28.4	1.0%	2,830.7	32.4	1.1%
ME 2	43 58 5	2005	Above Normal	August	--	974.3	962.3	12.0	1.2%	960.6	13.8	1.4%	957.1	17.2	1.8%	953.7	20.6	2.1%	950.3	24.1	2.5%	946.9	27.5	2.8%
ME 2	43 58 5	2005	Above Normal	September	Used in Summary Table Analysis	516.3	506.0	10.3	2.0%	504.5	11.8	2.3%	501.6	14.7	2.8%	498.7	17.6	3.4%	495.7	20.6	4.0%	492.8	23.5	4.6%
ME 2	43 58 5	2006	Wet	October	Used in Summary Table Analysis	624.5	616.3	8.2	1.3%	615.1	9.4	1.5%	612.8	11.7	1.9%	610.4	14.1	2.3%	608.1	16.4	2.6%	605.7	18.7	3.0%
ME 2	43 58 5	2006	Wet	November	Used in Summary Table Analysis	9,153.2	9,147.2	6.0	0.1%	9,146.3	6.9	0.1%	9,144.6	8.7	0.1%	9,142.8	10.4	0.1%	9,141.0	12.3	0.1%	9,139.2	14.0	0.2%
ME 2	43 58 5	2006	Wet	December	--	42,990.7	42,986.1	4.6	0.0%	42,985.0	5.8	0.0%	42,983.8	6.9	0.0%	42,981.5	9.3	0.0%	42,980.3	10.4	0.0%	42,979.2	11.6	0.0%
ME 2	43 58 5	2006	Wet	January	--	45,838.0	45,833.3	4.6	0.0%	45,832.2	5.8	0.0%	45,831.0	6.9	0.0%	45,829.9	8.1	0.0%	45,827.5	10.4	0.0%	45,826.4	11.6	0.0%
ME 2	43 58 5	2006	Wet	February	--	26,422.5	26,417.8	4.6	0.0%	26,417.8	4.6	0.0%	26,416.7	5.8	0.0%	26,415.5	6.9	0.0%	26,414.4	8.1	0.0%	26,412.0	10.4	0.0%
ME 2	43 58 5	2006	Wet	March	--	46,796.3	46,792.8	3.5	0.0%	46,791.7	4.6	0.0%	46,790.5	5.8	0.0%	46,789.4	6.9	0.0%	46,788.2	8.1	0.0%	46,787.0	9.3	0.0%
ME 2	43 58 5	2006	Wet	April	--	30,285.9	30,282.4	3.5	0.0%	30,281.3	4.6	0.0%	30,280.1	5.8	0.0%	30,278.9	6.9	0.0%	30,278.9	6.9	0.0%	30,277.8	8.1	0.0%
ME 2	43 58 5	2006	Wet	May	--	14,125.0	14,119.2	5.8	0.0%	14,119.2	5.8	0.0%	14,116.9	8.1	0.1%	14,115.7	9.3	0.1%	14,113.4	11.6	0.1%	14,112.3	12.7	0.1%
ME 2	43 58 5	2006	Wet	June	--	3,539.9	3,526.2	13.8	0.4%	3,524.1	15.9	0.4%	3,520.3	19.7	0.6%	3,516.3	23.6	0.7%	3,512.5	27.4	0.8%	3,508.6	31.4	0.9%
ME 2	43 58 5	2006	Wet	July	--	1,268.8	1,255.2	13.5	1.1%	1,253.2	15.5	1.2%	1,249.4	19.3	1.5%	1,245.6	23.1	1.8%	1,241.8	27.0	2.1%	1,238.0	30.8	2.4%
ME 2	43 58 5	2006	Wet	August	--	655.2	642.6	12.5	1.9%	640.9	14.3	2.2%	637.3	17.9	2.7%	633.8	21.4	3.3%	630.2	25.0	3.8%	626.7	28.5	4.3%
ME 2	43 58 5	2006	Wet	September	Used in Summary Table Analysis	417.3	406.8	10.5	2.5%	405.3	12.0	2.9%	402.3	15.0	3.6%	399.4	17.9	4.3%	396.4	20.9	5.0%	393.4	23.9	5.7%
ME 2	43 58 5	2007	Above Normal	October	Used in Summary Table Analysis	267.4	259.1	8.3	3.1%	257.9	9.5	3.5%	255.5	11.9	4.4%	253.1	14.3	5.3%	250.8	16.6	6.2%	248.4	19.0	7.1%
ME 2	43 58 5	2007	Above Normal	November	Used in Summary Table Analysis	8,532.6	8,526.2	6.5	0.1%	8,525.2	7.4	0.1%	8,523.4	9.3	0.1%	8,521.5	11.1	0.1%	8,519.7	13.0	0.2%	8,517.8	14.8	0.2%
ME 2	43 58 5	2007	Above Normal	December	--	20,135.4	20,129.6	5.8	0.0%	20,128.5	6.9	0.0%	20,127.3	8.1	0.0%	20,125.0	10.4	0.1%	20,123.8	11.6	0.1%	20,121.5	13.9	0.1%
ME 2	43 58 5	2007	Above Normal	January	--	10,179.3	10,174.4	4.9	0.0%	10,173.7	5.6	0.1%	10,172.5	6.8	0.1%	10,171.1	8.2	0.1%	10,169.7	9.6	0.1%	10,168.2	11.1	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	43 58 5	2007	Above Normal	February	--	30,262.7	30,258.1	4.6	0.0%	30,256.9	5.8	0.0%	30,255.8	6.9	0.0%	30,254.6	8.1	0.0%	30,253.5	9.3	0.0%	30,252.3	10.4	0.0%
ME 2	43 58 5	2007	Above Normal	March	--	13,049.8	13,045.1	4.6	0.0%	13,045.1	4.6	0.0%	13,044.0	5.8	0.0%	13,042.8	6.9	0.1%	13,041.7	8.1	0.1%	13,039.4	10.4	0.1%
ME 2	43 58 5	2007	Above Normal	April	--	11,486.5	11,476.3	10.2	0.1%	11,474.8	11.7	0.1%	11,471.9	14.6	0.1%	11,469.0	17.5	0.2%	11,466.0	20.5	0.2%	11,463.1	23.4	0.2%
ME 2	43 58 5	2007	Above Normal	May	--	4,118.9	4,107.1	11.8	0.3%	4,105.4	13.4	0.3%	4,102.0	16.9	0.4%	4,098.6	20.3	0.5%	4,095.3	23.6	0.6%	4,091.8	27.1	0.7%
ME 2	43 58 5	2007	Above Normal	June	--	1,485.0	1,469.6	15.4	1.0%	1,467.4	17.6	1.2%	1,463.0	22.0	1.5%	1,458.7	26.3	1.8%	1,454.3	30.7	2.1%	1,450.0	35.0	2.4%
ME 2	43 58 5	2007	Above Normal	July	--	491.7	477.3	14.5	2.9%	475.2	16.6	3.4%	471.1	20.6	4.2%	467.0	24.7	5.0%	462.9	28.8	5.9%	458.8	32.9	6.7%
ME 2	43 58 5	2007	Above Normal	August	--	216.9	204.5	12.4	5.7%	202.8	14.1	6.5%	199.3	17.6	8.1%	195.8	21.1	9.7%	192.3	24.6	11.4%	188.8	28.1	13.0%
ME 2	43 58 5	2007	Above Normal	September	Used in Summary Table Analysis	144.5	133.3	11.3	7.8%	131.7	12.9	8.9%	128.4	16.1	11.1%	125.2	19.3	13.4%	122.0	22.5	15.6%	118.8	25.8	17.8%
ME 2	43 58 5	2008	Dry	October	Used in Summary Table Analysis	3,386.6	3,377.7	8.9	0.3%	3,376.4	10.2	0.3%	3,373.8	12.7	0.4%	3,371.3	15.3	0.5%	3,368.8	17.8	0.5%	3,366.1	20.5	0.6%
ME 2	43 58 5	2008	Dry	November	Used in Summary Table Analysis	3,229.7	3,223.1	6.6	0.2%	3,222.1	7.6	0.2%	3,220.3	9.5	0.3%	3,218.4	11.3	0.4%	3,216.4	13.3	0.4%	3,214.6	15.2	0.5%
ME 2	43 58 5	2008	Dry	December	--	22,767.4	22,761.6	5.8	0.0%	22,760.4	6.9	0.0%	22,759.3	8.1	0.0%	22,756.9	10.4	0.0%	22,755.8	11.6	0.1%	22,753.5	13.9	0.1%
ME 2	43 58 5	2008	Dry	January	--	37,186.3	37,181.7	4.6	0.0%	37,180.6	5.8	0.0%	37,179.4	6.9	0.0%	37,178.2	8.1	0.0%	37,175.9	10.4	0.0%	37,174.8	11.6	0.0%
ME 2	43 58 5	2008	Dry	February	--	26,187.5	26,184.0	3.5	0.0%	26,182.9	4.6	0.0%	26,181.7	5.8	0.0%	26,180.6	6.9	0.0%	26,179.4	8.1	0.0%	26,178.2	9.3	0.0%
ME 2	43 58 5	2008	Dry	March	--	11,756.9	11,753.5	3.5	0.0%	11,752.3	4.6	0.0%	11,751.2	5.8	0.0%	11,750.0	6.9	0.1%	11,748.8	8.1	0.1%	11,747.7	9.3	0.1%
ME 2	43 58 5	2008	Dry	April	--	8,987.8	8,977.0	10.9	0.1%	8,975.5	12.4	0.1%	8,972.3	15.5	0.2%	8,969.2	18.6	0.2%	8,966.1	21.8	0.2%	8,963.0	24.9	0.3%
ME 2	43 58 5	2008	Dry	May	--	1,364.0	1,353.0	11.0	0.8%	1,351.5	12.5	0.9%	1,348.4	15.6	1.1%	1,345.4	18.6	1.4%	1,342.4	21.6	1.6%	1,339.5	24.5	1.8%
ME 2	43 58 5	2008	Dry	June	--	433.0	415.9	17.0	3.9%	413.5	19.5	4.5%	408.7	24.2	5.6%	403.9	29.0	6.7%	399.1	33.8	7.8%	394.4	38.6	8.9%
ME 2	43 58 5	2008	Dry	July	--	251.8	236.1	15.6	6.2%	233.9	17.8	7.1%	229.5	22.3	8.9%	225.0	26.7	10.6%	220.6	31.2	12.4%	216.2	35.6	14.1%
ME 2	43 58 5	2008	Dry	August	--	174.7	160.1	14.6	8.3%	158.0	16.6	9.5%	153.9	20.8	11.9%	149.7	24.9	14.3%	145.6	29.1	16.7%	141.4	33.2	19.0%
ME 2	43 58 5	2008	Dry	September	Used in Summary Table Analysis	136.4	122.3	14.1	10.3%	120.3	16.1	11.8%	116.3	20.1	14.8%	112.3	24.1	17.7%	108.3	28.2	20.6%	104.2	32.2	23.6%
ME 2	43 58 5	2009	Critical	October	Used in Summary Table Analysis	915.8	905.4	10.5	1.1%	903.8	12.0	1.3%	900.8	15.0	1.6%	897.8	18.0	2.0%	895.0	20.8	2.3%	892.0	23.9	2.6%
ME 2	43 58 5	2009	Critical	November	Used in Summary Table Analysis	5,425.5	5,417.8	7.6	0.1%	5,416.7	8.8	0.2%	5,414.5	11.0	0.2%	5,412.3	13.2	0.2%	5,410.1	15.4	0.3%	5,407.9	17.6	0.3%
ME 2	43 58 5	2009	Critical	December	--	11,982.6	11,975.7	6.9	0.1%	11,974.5	8.1	0.1%	11,973.4	9.3	0.1%	11,971.1	11.6	0.1%	11,968.8	13.9	0.1%	11,967.6	15.0	0.1%
ME 2	43 58 5	2009	Critical	January	--	8,745.3	8,739.6	5.7	0.1%	8,738.7	6.6	0.1%	8,737.0	8.2	0.1%	8,735.4	9.8	0.1%	8,733.7	11.6	0.1%	8,732.1	13.2	0.2%
ME 2	43 58 5	2009	Critical	February	--	22,461.8	22,457.2	4.6	0.0%	22,456.0	5.8	0.0%	22,454.9	6.9	0.0%	22,453.7	8.1	0.0%	22,452.5	9.3	0.0%	22,450.2	11.6	0.1%
ME 2	43 58 5	2009	Critical	March	--	21,006.9	21,002.3	4.6	0.0%	21,002.3	4.6	0.0%	21,001.2	5.8	0.0%	21,000.0	6.9	0.0%	20,998.8	8.1	0.0%	20,996.5	10.4	0.0%
ME 2	43 58 5	2009	Critical	April	--	10,084.3	10,073.0	11.2	0.1%	10,071.4	12.8	0.1%	10,068.2	16.1	0.2%	10,064.9	19.3	0.2%	10,061.8	22.5	0.2%	10,058.6	25.7	0.3%
ME 2	43 58 5	2009	Critical	May	--	15,526.6	15,512.7	13.9	0.1%	15,511.6	15.0	0.1%	15,506.9	19.7	0.1%	15,503.5	23.1	0.1%	15,498.8	27.8	0.2%	15,495.4	31.3	0.2%
ME 2	43 58 5	2009	Critical	June	--	3,152.3	3,134.0	18.3	0.6%	3,131.5	20.8	0.7%	3,126.2	26.2	0.8%	3,120.9	31.4	1.0%	3,115.7	36.6	1.2%	3,110.6	41.7	1.3%
ME 2	43 58 5	2009	Critical	July	--	1,256.6	1,240.7	15.9	1.3%	1,238.5	18.1	1.4%	1,234.0	22.6	1.8%	1,229.6	27.0	2.1%	1,225.1	31.5	2.5%	1,220.7	35.9	2.9%
ME 2	43 58 5	2009	Critical	August	--	662.4	647.7	14.7	2.2%	645.6	16.7	2.5%	641.4	20.9	3.2%	637.3	25.0	3.8%	633.1	29.2	4.4%	629.0	33.4	5.0%
ME 2	43 58 5	2009	Critical	September	Used in Summary Table Analysis	384.4	371.7	12.7	3.3%	369.9	14.5	3.8%	366.3	18.1	4.7%	362.7	21.7	5.7%	359.1	25.3	6.6%	355.5	29.0	7.5%
ME 2	43 58 5	2010	Below Normal	October	Used in Summary Table Analysis	6,077.7	6,067.1	10.5	0.2%	6,065.7	11.9	0.2%	6,062.7	14.9	0.2%	6,059.7	17.9	0.3%	6,056.8	20.8	0.3%	6,053.8	23.8	0.4%
ME 2	43 58 5	2010	Below Normal	November	Used in Summary Table Analysis	8,232.3	8,224.4	7.9	0.1%	8,223.4	8.9	0.1%	8,221.1	11.2	0.1%	8,218.9	13.4	0.2%	8,216.6	15.7	0.2%	8,214.4	17.9	0.2%
ME 2	43 58 5	2010	Below Normal	December	--	12,236.1	12,230.3	5.8	0.0%	12,229.2	6.9	0.1%	12,226.9	9.3	0.1%	12,225.7	10.4	0.1%	12,223.4	12.7	0.1%	12,222.2	13.9	0.1%
ME 2	43 58 5	2010	Below Normal	January	--	35,834.5	35,828.7	5.8	0.0%	35,828.7	5.8	0.0%	35,826.4	8.1	0.0%	35,825.2	9.3	0.0%	35,822.9	11.6	0.0%	35,821.8	12.7	0.0%
ME 2	43 58 5	2010	Below Normal	February	--	27,133.1	27,127.3	5.8	0.0%	27,127.3	5.8	0.0%	27,126.2	6.9	0.0%	27,123.8	9.3	0.0%	27,122.7	10.4	0.0%	27,121.5	11.6	0.0%
ME 2	43 58 5	2010	Below Normal	March	--	28,740.7	28,736.1	4.6	0.0%	28,735.0	5.8	0.0%	28,733.8	6.9	0.0%	28,732.6	8.1	0.0%	28,731.5	9.3	0.0%	28,730.3	10.4	0.0%
ME 2	43 58 5	2010	Below Normal	April	--	39,833.3	39,829.9	3.5	0.0%	39,828.7	4.6	0.0%	39,827.5	5.8	0.0%	39,826.4	6.9	0.0%	39,825.2	8.1	0.0%	39,824.1	9.3	0.0%
ME 2	43 58 5	2010	Below Normal	May	--	20,129.6	20,118.1	11.6	0.1%	20,115.7	13.9	0.1%	20,113.4	16.2	0.1%	20,110.0	19.7	0.1%	20,106.5	23.1	0.1%	20,103.0	26.6	0.1%
ME 2	43 58 5	2010	Below Normal	June	--	9,240.6	9,223.3	17.4	0.2%	9,220.8	19.8	0.2%	9,216.0	24.7	0.3%	9,211.2	29.4	0.3%	9,206.4	34.3	0.4%	9,201.5	39.1	0.4%
ME 2	43 58 5	2010	Below Normal	July	--	1,448.6	1,434.3	14.4	1.0%	1,432.2	16.4	1.1%	1,428.0	20.6	1.4%	1,424.0	24.7	1.7%	1,419.8	28.8	2.0%	1,416.0	32.6	2.3%
ME 2	43 58 5	2010	Below Normal	August	--	560.2	547.8	12.4	2.2%	546.0	14.2	2.5%	542.5	17.7	3.2%	539.0	21.2	3.8%	535.5	24.7	4.4%	532.0	28.3	5.0%
ME 2	43 58 5	2010	Below Normal	September	Used in Summary Table Analysis	642.0	630.1	11.9	1.9%	628.4	13.6	2.1%	625.0	17.1	2.7%	621.6	20.4	3.2%	618.2	23.8	3.7%	614.8	27.2	4.2%
ME 2	43 58 5	2011	Wet	October	Used in Summary Table Analysis	9,549.9	9,541.4	8.4	0.1%	9,540.3	9.6	0.1%	9,537.8	12.0	0.1%	9,535.4	14.5	0.2%	9,533.0	16.9	0.2%	9,530.7	19.2	0.2%
ME 2	43 58 5	2011	Wet	November	Used in Summary Table Analysis	14,123.8	14,118.1	5.8	0.0%	14,116.9	6.9	0.0%	14,114.6	9.3	0.1%	14,113.4	10.4	0.1%	14,111.1	12.7	0.1%	14,110.0	13.9	0.1%
ME 2	43 58 5	2011	Wet	December	--	33,305.6	33,299.8	5.8	0.0%	33,299.8	5.8	0.0%	33,297.5	8.1	0.0%	33,296.3	9.3	0.0%	33,295.1	10.4	0.0%	33,292.8	12.7	0.0%
ME 2	43 58 5	2011	Wet	January	--	14,082.2	14,077.5	4.6	0.0%	14,076.4	5.8	0.0%	14,075.2	6.9	0.0%	14,074.1	8.1	0.1%	14,072.9	9.3	0.1%	14,070.6	11.6	0.1%
ME 2	43 58 5	2011	Wet	February	--	20,695.6	20,691.0	4.6	0.0%	20,691.0	4.6	0.0%	20,689.8	5.8	0.0%	20,688.7	6.9	0.0%	20,687.5	8.1	0.0%	20,686.3	9.3	0.0%
ME 2	43 58 5	2011	Wet	March	--	51,747.7	51,743.1	4.6	0.0%	51,743.1	4.6	0.0%	51,741.9	5.8	0.0%	51,740.7	6.9	0.0%	51,739.6	8.1	0.0%	51,738.4	9.3	0.0%
ME 2	43 58 5	2011	Wet	April	--	24,710.6	24,707.2	3.5	0.0%	24,706.0	4.6	0.0%	24,704.9	5.8	0.0%	24,703.7	6.9	0.0%	24,702.5	8.1	0.0%	24,701.4	9.3	0.0%
ME 2	43 58 5	2011	Wet	May	--	11,341.2	11,330.7	10.5	0.1%	11,329.2	12.0	0.1%	11,326.0	15.2	0.1%	11,322.9	18.3	0.2%	11,319.8	21.4	0.2%	11,316.8	24.4	0.2%
ME 2	43 58 5	2011	Wet	June	--	7,015.7	6,998.8	16.9	0.2%	6,996.4	19.3	0.3%	6,991.7	24.1	0.3%	6,986.9	28.8	0.4%	6,982.2	33.6	0.5%	6,977.4	38.3	0.5%
ME 2	43 58 5	2011	Wet	July	--	1,825.9	1,810.1	15.9	0.9%	1,807.9	18.1	1.0%	1,803.4	22.6	1.2%	1,798.8	27.1	1.5%	1,794.3	31.6	1.7%	1,789.8	36.1	2.0%
ME 2	43 58 5	2011	Wet	August	--	770.1	757.9	12.2	1.6%	756.2	13.9	1.8%	752.7	17.4	2.3%	749.2	20.9	2.7%	745.8	24.3	3.2%	742.3	27.8	3.6%
ME 2	43 58 5	2011	Wet	September	Used in Summary Table Analysis	426.8	416.2	10.6	2.5%	414.7	12.1	2.8%	411.6	15.2	3.6%	408.6	18.2	4.3%	405.6	21.2	5.0%	402.6	24.2	5.7%
ME 2	43 58 5	2012	Below Normal	October	Used in Summary Table Analysis	4,499.8	4,491.3	8.4	0.2%	4,490.2	9.6	0.2%	4,487.7	12.0	0.3%	4,485.3	14.5	0.3%	4,482.9	16.9	0.4%	4,480.4	19.3	0.4%
ME 2	43 58 5	2012	Below Normal	November	Used in Summary Table Analysis	8,150.3	8,143.9	6.5	0.1%	8,142.9	7.4	0.1%	8,141.1	9.3	0.1%	8,139.1	11.2	0.1%	8,137.3	13.1	0.2%	8,135.4	14.9	0.2%
ME 2	43 58 5	2012	Below Normal	December	--	5,145.5	5,140.0	5.4	0.1%	5,139.2	6.3	0.1%	5,137.7	7.8	0.2%	5,136.1	9.4	0.2%	5,134.6	10.9	0.2%	5,133.0	12.5	0.2%
ME 2	43 58 5	2012	Below Normal	January	--	19,860.0	19,855.3	4.6	0.0%	19,855.3	4.6	0.0%	19,853.0	6.9	0.0%	19,851.9	8.1	0.0%	19,850.7	9.3	0.0%	19,849.5	10.4	0.1%
ME 2	43 58 5	2012	Below Normal	February	--	18,140.0	18,136.6	3.5	0.0%	18,135.4	4.6	0.0%	18,134.3	5.8	0.0%	18,133.1	6.9	0.0%	18,131.9	8.1	0.0%	18,130.8	9.3	0.1%
ME 2	43 58 5	2012	Below Normal	March	--	45,123.8	45,119.2	4.6	0.0%	45,119.2	4.6	0.0%	45,118.1	5.8	0.0%	45,116.9	6.9	0.0%	45,114.6	9.3	0.0%	45,113.4	10.4	0.0%
ME 2	43 58 5	2012	Below Normal	April	--	26,750.0	26,746.5	3.5	0.0%	26,745.4	4.6	0.0%	26,744.2	5.8	0.0%	26,743.1	6.9	0.0%	26,741.9	8.1	0.0%	26,740.7	9.3	0.0%
ME 2	43 58 5	2012	Below Normal	May	--	7,457.3	7,446.6	10.6	0.1%	7,445.1	12.2	0.2%	7,442.0	15.3	0.2%	7,439.0	18.3	0.2%	7,435.9	21.4	0.3%	7,432.9	24.4	0.3%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	43 58 5	2012	Below Normal	June	--	5,475.7	5,458.6	17.1	0.3%	5,456.1	19.6	0.4%	5,451.3	24.4	0.4%	5,446.4	29.3	0.5%	5,441.6	34.1	0.6%	5,436.7	39.0	0.7%
ME 2	43 58 5	2012	Below Normal	July	--	2,199.8	2,184.1	15.6	0.7%	2,181.9	17.8	0.8%	2,177.5	22.2	1.0%	2,173.1	26.6	1.2%	2,168.8	31.0	1.4%	2,164.2	35.5	1.6%
ME 2	43 58 5	2012	Below Normal	August	--	384.1	372.6	11.5	3.0%	371.0	13.1	3.4%	367.7	16.4	4.3%	364.5	19.6	5.1%	361.2	22.9	6.0%	358.0	26.1	6.8%
ME 2	43 58 5	2012	Below Normal	September	Used in Summary Table Analysis	242.8	232.9	10.0	4.1%	231.5	11.4	4.7%	228.6	14.2	5.9%	225.8	17.0	7.0%	223.0	19.8	8.2%	220.2	22.7	9.3%
ME 2	43 58 5	2013	Below Normal	October	Used in Summary Table Analysis	1,885.2	1,876.6	8.6	0.5%	1,875.5	9.7	0.5%	1,873.0	12.2	0.6%	1,870.6	14.6	0.8%	1,868.2	17.0	0.9%	1,865.7	19.4	1.0%
ME 2	43 58 5	2013	Below Normal	November	Used in Summary Table Analysis	14,523.1	14,516.2	6.9	0.0%	14,516.2	6.9	0.0%	14,513.9	9.3	0.1%	14,511.6	11.6	0.1%	14,510.4	12.7	0.1%	14,508.1	15.0	0.1%
ME 2	43 58 5	2013	Below Normal	December	--	59,625.0	59,619.2	5.8	0.0%	59,618.1	6.9	0.0%	59,616.9	8.1	0.0%	59,614.6	10.4	0.0%	59,613.4	11.6	0.0%	59,611.1	13.9	0.0%
ME 2	43 58 5	2013	Below Normal	January	--	22,093.8	22,089.1	4.6	0.0%	22,088.0	5.8	0.0%	22,086.8	6.9	0.0%	22,085.6	8.1	0.0%	22,084.5	9.3	0.0%	22,083.3	10.4	0.0%
ME 2	43 58 5	2013	Below Normal	February	--	8,796.3	8,791.9	4.4	0.0%	8,791.2	5.1	0.1%	8,789.9	6.4	0.1%	8,788.5	7.8	0.1%	8,787.3	9.0	0.1%	8,786.0	10.3	0.1%
ME 2	43 58 5	2013	Below Normal	March	--	10,255.1	10,250.9	4.2	0.0%	10,250.3	4.7	0.0%	10,249.2	5.9	0.1%	10,247.9	7.2	0.1%	10,246.6	8.4	0.1%	10,245.4	9.7	0.1%
ME 2	43 58 5	2013	Below Normal	April	--	8,269.4	8,259.4	10.1	0.1%	8,258.0	11.5	0.1%	8,255.2	14.2	0.2%	8,252.3	17.1	0.2%	8,249.4	20.0	0.2%	8,246.6	22.8	0.3%
ME 2	43 58 5	2013	Below Normal	May	--	4,402.3	4,390.4	11.9	0.3%	4,388.8	13.5	0.3%	4,385.3	17.0	0.4%	4,381.9	20.4	0.5%	4,378.5	23.8	0.5%	4,375.1	27.2	0.6%
ME 2	43 58 5	2013	Below Normal	June	--	2,102.1	2,086.8	15.3	0.7%	2,084.6	17.5	0.8%	2,080.2	21.9	1.0%	2,075.9	26.2	1.2%	2,071.5	30.6	1.5%	2,067.2	34.8	1.7%
ME 2	43 58 5	2013	Below Normal	July	--	715.5	701.8	13.6	1.9%	699.9	15.6	2.2%	696.1	19.4	2.7%	692.2	23.3	3.2%	688.4	27.1	3.8%	684.6	30.9	4.3%
ME 2	43 58 5	2013	Below Normal	August	--	335.2	322.8	12.3	3.7%	321.1	14.1	4.2%	317.6	17.6	5.2%	314.1	21.1	6.3%	310.5	24.6	7.3%	307.0	28.1	8.4%
ME 2	43 58 5	2013	Below Normal	September	Used in Summary Table Analysis	4,743.1	4,730.1	13.0	0.3%	4,728.4	14.7	0.3%	4,724.7	18.4	0.4%	4,720.9	22.1	0.5%	4,717.2	25.8	0.5%	4,713.5	29.5	0.6%
ME 2	43 58 5	2014	Critical	October	Used in Summary Table Analysis	281.3	272.6	8.6	3.1%	271.4	9.8	3.5%	268.9	12.3	4.4%	266.4	14.8	5.3%	263.9	17.3	6.2%	261.4	19.8	7.0%
ME 2	43 58 5	2014	Critical	November	Used in Summary Table Analysis	1,516.0	1,509.4	6.6	0.4%	1,508.3	7.6	0.5%	1,506.5	9.5	0.6%	1,504.5	11.5	0.8%	1,502.7	13.3	0.9%	1,500.7	15.3	1.0%
ME 2	43 58 5	2014	Critical	December	--	1,577.4	1,571.9	5.6	0.4%	1,571.1	6.4	0.4%	1,569.4	8.0	0.5%	1,567.8	9.6	0.6%	1,566.2	11.2	0.7%	1,564.6	12.8	0.8%
ME 2	43 58 5	2014	Critical	January	--	2,798.4	2,793.5	4.9	0.2%	2,792.8	5.6	0.2%	2,791.4	6.9	0.2%	2,790.0	8.3	0.3%	2,788.5	9.8	0.4%	2,787.2	11.2	0.4%
ME 2	43 58 5	2014	Critical	February	--	15,680.6	15,677.1	3.5	0.0%	15,675.9	4.6	0.0%	15,674.8	5.8	0.0%	15,673.6	6.9	0.0%	15,672.5	8.1	0.1%	15,671.3	9.3	0.1%
ME 2	43 58 5	2014	Critical	March	--	31,391.2	31,387.7	3.5	0.0%	31,386.6	4.6	0.0%	31,385.4	5.8	0.0%	31,384.3	6.9	0.0%	31,383.1	8.1	0.0%	31,381.9	9.3	0.0%
ME 2	43 58 5	2014	Critical	April	--	12,958.3	12,946.8	11.6	0.1%	12,945.6	12.7	0.1%	12,942.1	16.2	0.1%	12,939.8	18.5	0.1%	12,936.3	22.0	0.2%	12,932.9	25.5	0.2%
ME 2	43 58 5	2014	Critical	May	--	5,169.0	5,156.1	12.8	0.2%	5,154.3	14.7	0.3%	5,150.6	18.4	0.4%	5,146.9	22.1	0.4%	5,143.2	25.8	0.5%	5,139.6	29.4	0.6%
ME 2	43 58 5	2014	Critical	June	--	1,191.4	1,172.9	18.5	1.6%	1,170.3	21.2	1.8%	1,165.0	26.4	2.2%	1,160.0	31.5	2.6%	1,154.7	36.7	3.1%	1,149.6	41.8	3.5%
ME 2	43 58 5	2014	Critical	July	--	542.7	527.1	15.6	2.9%	524.9	17.8	3.3%	520.5	22.3	4.1%	516.0	26.7	4.9%	511.6	31.1	5.7%	507.2	35.6	6.6%
ME 2	43 58 5	2014	Critical	August	--	343.0	328.5	14.5	4.2%	326.5	16.5	4.8%	322.3	20.6	6.0%	318.2	24.8	7.2%	314.1	28.9	8.4%	310.0	33.0	9.6%
ME 2	43 58 5	2014	Critical	September	Used in Summary Table Analysis	2,553.7	2,539.2	14.5	0.6%	2,537.3	16.4	0.6%	2,533.2	20.5	0.8%	2,529.1	24.7	1.0%	2,524.9	28.8	1.1%	2,520.7	33.0	1.3%
ME 2	43 58 5	2015	Dry	October	Used in Summary Table Analysis	11,281.3	11,270.3	11.0	0.1%	11,268.8	12.5	0.1%	11,265.9	15.4	0.1%	11,262.7	18.5	0.2%	11,259.8	21.4	0.2%	11,256.6	24.7	0.2%
ME 2	43 58 5	2015	Dry	November	Used in Summary Table Analysis	8,955.0	8,947.3	7.6	0.1%	8,946.2	8.8	0.1%	8,944.0	11.0	0.1%	8,941.8	13.2	0.1%	8,939.6	15.4	0.2%	8,937.4	17.6	0.2%
ME 2	43 58 5	2015	Dry	December	--	32,299.8	32,292.8	6.9	0.0%	32,292.8	6.9	0.0%	32,290.5	9.3	0.0%	32,288.2	11.6	0.0%	32,287.0	12.7	0.0%	32,284.7	15.0	0.0%
ME 2	43 58 5	2015	Dry	January	--	14,530.1	14,524.3	5.8	0.0%	14,523.1	6.9	0.0%	14,522.0	8.1	0.1%	14,519.7	10.4	0.1%	14,518.5	11.6	0.1%	14,517.4	12.7	0.1%
ME 2	43 58 5	2015	Dry	February	--	27,110.0	27,105.3	4.6	0.0%	27,104.2	5.8	0.0%	27,103.0	6.9	0.0%	27,101.9	8.1	0.0%	27,100.7	9.3	0.0%	27,098.4	11.6	0.0%
ME 2	43 58 5	2015	Dry	March	--	11,542.0	11,537.7	4.3	0.0%	11,537.2	4.9	0.0%	11,535.9	6.1	0.1%	11,534.6	7.4	0.1%	11,533.3	8.7	0.1%	11,532.2	9.8	0.1%
ME 2	43 58 5	2015	Dry	April	--	8,305.8	8,294.7	11.1	0.1%	8,293.2	12.6	0.2%	8,289.9	15.9	0.2%	8,286.8	19.0	0.2%	8,283.6	22.2	0.3%	8,280.4	25.3	0.3%
ME 2	43 58 5	2015	Dry	May	--	1,508.7	1,495.8	12.8	0.9%	1,494.0	14.7	1.0%	1,490.3	18.4	1.2%	1,486.6	22.1	1.5%	1,483.0	25.7	1.7%	1,479.3	29.4	1.9%
ME 2	43 58 5	2015	Dry	June	--	650.3	633.0	17.4	2.7%	630.5	19.8	3.0%	625.7	24.7	3.8%	620.8	29.5	4.5%	616.0	34.3	5.3%	611.2	39.1	6.0%
ME 2	43 58 5	2015	Dry	July	--	266.0	250.3	15.7	5.9%	248.0	18.0	6.8%	243.6	22.5	8.4%	239.1	26.9	10.1%	234.6	31.4	11.8%	230.2	35.9	13.5%
ME 2	43 58 5	2015	Dry	August	--	162.0	147.4	14.6	9.0%	145.3	16.7	10.3%	141.2	20.9	12.9%	137.0	25.1	15.5%	132.8	29.2	18.0%	128.6	33.4	20.6%
ME 2	43 58 5	2015	Dry	September	Used in Summary Table Analysis	117.5	104.7	12.8	10.9%	102.9	14.6	12.4%	98.7	18.7	16.0%	94.8	22.7	19.3%	90.7	26.8	22.8%	86.6	30.8	26.3%
ME 2	43 58 5	2016	Above Normal	October	Used in Summary Table Analysis	83.2	71.6	11.6	14.0%	69.9	13.3	16.0%	66.7	16.5	19.8%	63.4	19.8	23.7%	60.3	22.9	27.5%	57.4	25.8	31.0%
ME 2	43 58 5	2016	Above Normal	November	Used in Summary Table Analysis	3,793.5	3,785.8	7.8	0.2%	3,784.6	8.9	0.2%	3,782.4	11.1	0.3%	3,780.1	13.4	0.4%	3,777.8	15.7	0.4%	3,775.5	18.1	0.5%
ME 2	43 58 5	2016	Above Normal	December	--	36,245.4	36,238.4	6.9	0.0%	36,237.3	8.1	0.0%	36,235.0	10.4	0.0%	36,233.8	11.6	0.0%	36,231.5	13.9	0.0%	36,229.2	16.2	0.0%
ME 2	43 58 5	2016	Above Normal	January	--	56,924.8	56,919.0	5.8	0.0%	56,919.0	5.8	0.0%	56,916.7	8.1	0.0%	56,914.4	10.4	0.0%	56,913.2	11.6	0.0%	56,910.9	13.9	0.0%
ME 2	43 58 5	2016	Above Normal	February	--	24,204.9	24,200.2	4.6	0.0%	24,199.1	5.8	0.0%	24,197.9	6.9	0.0%	24,196.8	8.1	0.0%	24,195.6	9.3	0.0%	24,194.4	10.4	0.0%
ME 2	43 58 5	2016	Above Normal	March	--	41,596.1	41,591.4	4.6	0.0%	41,591.4	4.6	0.0%	41,589.1	6.9	0.0%	41,588.0	8.1	0.0%	41,586.8	9.3	0.0%	41,585.6	10.4	0.0%
ME 2	43 58 5	2016	Above Normal	April	--	18,487.3	18,482.6	4.6	0.0%	18,482.6	4.6	0.0%	18,481.5	5.8	0.0%	18,480.3	6.9	0.0%	18,479.2	8.1	0.0%	18,478.0	9.3	0.1%
ME 2	43 58 5	2016	Above Normal	May	--	5,198.7	5,193.1	5.7	0.1%	5,192.2	6.5	0.1%	5,190.6	8.1	0.2%	5,188.9	9.8	0.2%	5,187.3	11.5	0.2%	5,185.5	13.2	0.3%
ME 2	43 58 5	2016	Above Normal	June	--	1,503.7	1,490.7	13.0	0.9%	1,488.8	14.9	1.0%	1,485.2	18.5	1.2%	1,481.5	22.2	1.5%	1,477.9	25.8	1.7%	1,474.3	29.4	2.0%
ME 2	43 58 5	2016	Above Normal	July	--	816.6	803.0	13.6	1.7%	801.0	15.5	1.9%	797.2	19.4	2.4%	793.4	23.2	2.8%	789.5	27.1	3.3%	785.7	30.9	3.8%
ME 2	43 58 5	2016	Above Normal	August	--	484.8	472.1	12.6	2.6%	470.3	14.5	3.0%	466.7	18.0	3.7%	463.1	21.6	4.5%	459.5	25.2	5.2%	455.9	28.8	5.9%
ME 2	43 58 5	2016	Above Normal	September	Used in Summary Table Analysis	321.6	310.9	10.7	3.3%	308.8	12.9	4.0%	305.5	16.1	5.0%	302.1	19.6	6.1%	298.7	22.9	7.1%	295.3	26.3	8.2%
ME 2	43 58 5	2017	Wet	October	Used in Summary Table Analysis	18,137.7	18,129.6	8.1	0.0%	18,128.5	9.3	0.1%	18,126.2	11.6	0.1%	18,123.8	13.9	0.1%	18,120.4	17.4	0.1%	18,118.1	19.7	0.1%
ME 2	43 58 5	2017	Wet	November	Used in Summary Table Analysis	18,660.9	18,655.1	5.8	0.0%	18,653.9	6.9	0.0%	18,651.6	9.3	0.0%	18,650.5	10.4	0.1%	18,648.1	12.7	0.1%	18,647.0	13.9	0.1%
ME 2	43 58 5	2017	Wet	December	--	23,858.8	23,853.0	5.8	0.0%	23,851.9	6.9	0.0%	23,850.7	8.1	0.0%	23,849.5	9.3	0.0%	23,847.2	11.6	0.0%	23,846.1	12.7	0.1%
ME 2	43 58 5	2017	Wet	January	--	106,151.6	106,147.0	4.6	0.0%	106,145.8	5.8	0.0%	106,144.7	6.9	0.0%	106,143.5	8.1	0.0%	106,141.2	10.4	0.0%	106,140.0	11.6	0.0%
ME 2	43 58 5	2017	Wet	February	--	81,398.1	81,393.5	4.6	0.0%	81,392.4	5.8	0.0%	81,391.2	6.9	0.0%	81,390.0	8.1	0.0%	81,388.9	9.3	0.0%	81,387.7	10.4	0.0%
ME 2	43 58 5	2017	Wet	March	--	27,136.6	27,133.1	3.5	0.0%	27,131.9	4.6	0.0%	27,130.8	5.8	0.0%	27,129.6	6.9	0.0%	27,128.5	8.1	0.0%	27,127.3	9.3	0.0%
ME 2	43 58 5	2017	Wet	April	--	22,790.5	22,787.0	3.5	0.0%	22,785.9	4.6	0.0%	22,785.9	4.6	0.0%	22,784.7	5.8	0.0%	22,783.6	6.9	0.0%	22,782.4	8.1	0.0%
ME 2	43 58 5	2017	Wet	May	--	6,269.3	6,263.5	5.8	0.1%	6,262.7	6.6	0.1%	6,261.1	8.2	0.1%	6,259.5	9.8	0.2%	6,257.8	11.6	0.2%	6,256.1	13.2	0.2%
ME 2	43 58 5	2017	Wet	June	--	2,099.4	2,085.8	13.7	0.7%	2,083.8	15.6	0.7%	2,080.0	19.4	0.9%	2,076.2	23.3	1.1%	2,072.3	27.1	1.3%	2,068.5	30.9	1.5%
ME 2	43 58 5	2017	Wet	July	--	924.7	911.1	13.6	1.5%	909.2	15.6	1.7%	905.3	19.4	2.1%	901.5	23.3	2.5%	897.7	27.1	2.9%	893.8	30.9	3.3%
ME 2	43 58 5	2017	Wet	August	--	497.0	484.5	12.6	2.5%	482.7	14.4	2.9%	479.1	18.0	3.6%	475.5	21.5	4.3%	472.0	25.1	5.0%	468.4	28.6	5.8%
ME 2	43 58 5	2017	Wet	September	Used in Summary Table Analysis	315.1	303.5	11.6	3.7%	301.9	13.2	4.2%	298.6	16.5	5.2%	295.3	19.8	6.3%	292.0	23.1	7.3%	288.7	26.4	8.4%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	43 58 5	2018	Above Normal	October	Used in Summary Table Analysis	267.9	259.3	8.6	3.2%	258.0	9.9	3.7%	255.5	12.3	4.6%	253.0	14.8	5.5%	250.6	17.3	6.5%	248.1	19.8	7.4%
ME 2	43 58 5	2018	Above Normal	November	Used in Summary Table Analysis	10,619.9	10,613.5	6.4	0.1%	10,612.7	7.2	0.1%	10,610.9	9.0	0.1%	10,609.0	10.9	0.1%	10,607.2	12.7	0.1%	10,605.3	14.6	0.1%
ME 2	43 58 5	2018	Above Normal	December	--	5,431.1	5,425.8	5.3	0.1%	5,425.1	6.0	0.1%	5,423.6	7.5	0.1%	5,422.1	9.0	0.2%	5,420.6	10.5	0.2%	5,419.1	12.0	0.2%
ME 2	43 58 5	2018	Above Normal	January	--	17,483.8	17,479.2	4.6	0.0%	17,478.0	5.8	0.0%	17,476.9	6.9	0.0%	17,475.7	8.1	0.0%	17,474.5	9.3	0.1%	17,473.4	10.4	0.1%
ME 2	43 58 5	2018	Above Normal	February	--	7,584.4	7,580.4	3.9	0.1%	7,579.9	4.5	0.1%	7,578.6	5.8	0.1%	7,577.4	6.9	0.1%	7,576.3	8.1	0.1%	7,575.0	9.4	0.1%
ME 2	43 58 5	2018	Above Normal	March	--	20,509.3	20,505.8	3.5	0.0%	20,505.8	3.5	0.0%	20,504.6	4.6	0.0%	20,503.5	5.8	0.0%	20,502.3	6.9	0.0%	20,501.2	8.1	0.0%
ME 2	43 58 5	2018	Above Normal	April	--	31,976.9	31,973.4	3.5	0.0%	31,972.2	4.6	0.0%	31,971.1	5.8	0.0%	31,969.9	6.9	0.0%	31,969.9	6.9	0.0%	31,968.8	8.1	0.0%
ME 2	43 58 5	2018	Above Normal	May	--	6,981.7	6,971.4	10.3	0.1%	6,969.9	11.8	0.2%	6,967.0	14.7	0.2%	6,964.1	17.6	0.3%	6,961.2	20.5	0.3%	6,958.6	23.1	0.3%
ME 2	43 58 5	2018	Above Normal	June	--	1,907.3	1,894.2	13.1	0.7%	1,892.2	15.0	0.8%	1,888.7	18.6	1.0%	1,885.0	22.3	1.2%	1,881.3	26.0	1.4%	1,877.5	29.7	1.6%
ME 2	43 58 5	2018	Above Normal	July	--	773.8	760.2	13.6	1.8%	758.3	15.5	2.0%	754.5	19.3	2.5%	750.6	23.2	3.0%	746.7	27.1	3.5%	742.9	30.9	4.0%
ME 2	43 58 5	2018	Above Normal	August	--	435.1	423.1	12.0	2.8%	421.4	13.7	3.2%	417.9	17.1	3.9%	414.5	20.6	4.7%	411.1	24.0	5.5%	407.7	27.4	6.3%
ME 2	43 58 5	2018	Above Normal	September	Used in Summary Table Analysis	293.3	281.7	11.6	3.9%	280.1	13.2	4.5%	276.8	16.5	5.6%	273.5	19.8	6.8%	270.1	23.1	7.9%	266.8	26.4	9.0%
ME 2	43 58 5	2019	Below Normal	October	Used in Summary Table Analysis	203.1	194.5	8.6	4.2%	193.3	9.7	4.8%	190.9	12.2	6.0%	188.3	14.8	7.3%	186.0	17.1	8.4%	183.5	19.5	9.6%
ME 2	43 58 5	2019	Below Normal	November	Used in Summary Table Analysis	6,511.2	6,504.9	6.4	0.1%	6,503.9	7.3	0.1%	6,502.1	9.1	0.1%	6,500.2	11.0	0.2%	6,498.4	12.8	0.2%	6,496.5	14.7	0.2%
ME 2	43 58 5	2019	Below Normal	December	--	14,473.4	14,467.6	5.8	0.0%	14,467.6	5.8	0.0%	14,465.3	8.1	0.1%	14,464.1	9.3	0.1%	14,463.0	10.4	0.1%	14,460.6	12.7	0.1%
ME 2	43 58 5	2019	Below Normal	January	--	34,828.7	34,824.1	4.6	0.0%	34,822.9	5.8	0.0%	34,821.8	6.9	0.0%	34,820.6	8.1	0.0%	34,819.4	9.3	0.0%	34,817.1	11.6	0.0%
ME 2	43 58 5	2019	Below Normal	February	--	141,504.6	141,504.6	0.0	0.0%	141,493.1	11.6	0.0%	141,493.1	11.6	0.0%	141,493.1	11.6	0.0%	141,493.1	11.6	0.0%	141,493.1	11.6	0.0%
ME 2	43 58 5	2019	Below Normal	March	--	42,105.3	42,100.7	4.6	0.0%	42,100.7	4.6	0.0%	42,099.5	5.8	0.0%	42,098.4	6.9	0.0%	42,097.2	8.1	0.0%	42,096.1	9.3	0.0%
ME 2	43 58 5	2019	Below Normal	April	--	15,214.1	15,210.6	3.5	0.0%	15,209.5	4.6	0.0%	15,208.3	5.8	0.0%	15,208.3	5.8	0.0%	15,207.2	6.9	0.0%	15,206.0	8.1	0.1%
ME 2	43 58 5	2019	Below Normal	May	--	16,643.5	16,633.1	10.4	0.1%	16,631.9	11.6	0.1%	16,628.5	15.0	0.1%	16,625.0	18.5	0.1%	16,622.7	20.8	0.1%	16,619.2	24.3	0.1%
ME 2	43 58 5	2019	Below Normal	June	--	4,244.3	4,230.0	14.4	0.3%	4,227.9	16.4	0.4%	4,224.0	20.4	0.5%	4,220.3	24.1	0.6%	4,216.6	27.8	0.7%	4,212.8	31.5	0.7%
ME 2	43 58 5	2019	Below Normal	July	--	1,351.2	1,337.5	13.7	1.0%	1,335.5	15.6	1.2%	1,331.7	19.4	1.4%	1,327.9	23.3	1.7%	1,324.0	27.2	2.0%	1,320.1	31.0	2.3%
ME 2	43 58 5	2019	Below Normal	August	--	587.4	575.1	12.3	2.1%	573.4	14.0	2.4%	569.9	17.5	3.0%	566.4	21.0	3.6%	563.0	24.4	4.2%	559.5	27.9	4.8%
ME 2	43 58 5	2019	Below Normal	September	Used in Summary Table Analysis	455.5	444.0	11.4	2.5%	442.4	13.1	2.9%	439.1	16.4	3.6%	435.8	19.6	4.3%	432.6	22.9	5.0%	429.3	26.2	5.7%
ME 2	43 58 5	2020	Dry	October	Used in Summary Table Analysis	351.1	343.1	8.0	2.3%	341.9	9.2	2.6%	339.6	11.5	3.3%	337.3	13.8	3.9%	335.0	16.1	4.6%	332.7	18.4	5.3%
ME 2	43 58 5	2020	Dry	November	Used in Summary Table Analysis	306.9	301.2	5.7	1.9%	300.4	6.6	2.1%	298.7	8.2	2.7%	297.0	9.9	3.2%	295.3	11.6	3.8%	293.7	13.3	4.3%
ME 2	43 58 5	2020	Dry	December	--	13,003.5	12,997.7	5.8	0.0%	12,997.7	5.8	0.0%	12,995.4	8.1	0.1%	12,994.2	9.3	0.1%	12,993.1	10.4	0.1%	12,990.7	12.7	0.1%
ME 2	43 58 5	2020	Dry	January	--	22,107.6	22,103.0	4.6	0.0%	22,103.0	4.6	0.0%	22,100.7	6.9	0.0%	22,099.5	8.1	0.0%	22,098.4	9.3	0.0%	22,097.2	10.4	0.0%
ME 2	43 58 5	2020	Dry	February	--	7,405.9	7,402.0	3.9	0.1%	7,401.3	4.6	0.1%	7,400.1	5.8	0.1%	7,399.0	6.9	0.1%	7,397.7	8.2	0.1%	7,396.5	9.4	0.1%
ME 2	43 58 5	2020	Dry	March	--	7,205.2	7,201.4	3.8	0.1%	7,200.9	4.3	0.1%	7,199.8	5.4	0.1%	7,198.6	6.6	0.1%	7,197.6	7.6	0.1%	7,196.4	8.8	0.1%
ME 2	43 58 5	2020	Dry	April	--	5,439.7	5,429.1	10.6	0.2%	5,427.5	12.2	0.2%	5,424.4	15.3	0.3%	5,421.3	18.4	0.3%	5,418.3	21.4	0.4%	5,415.2	24.5	0.5%
ME 2	43 58 5	2020	Dry	May	--	7,320.9	7,308.2	12.7	0.2%	7,306.5	14.5	0.2%	7,302.8	18.2	0.2%	7,299.1	21.9	0.3%	7,295.5	25.5	0.3%	7,291.8	29.2	0.4%
ME 2	43 58 5	2020	Dry	June	--	2,104.4	2,086.7	17.7	0.8%	2,084.3	20.1	1.0%	2,079.6	24.8	1.2%	2,074.9	29.5	1.4%	2,070.3	34.1	1.6%	2,065.5	38.9	1.8%
ME 2	43 58 5	2020	Dry	July	--	791.3	775.5	15.8	2.0%	773.3	18.0	2.3%	768.8	22.5	2.8%	764.3	27.0	3.4%	759.7	31.5	4.0%	755.2	36.0	4.6%
ME 2	43 58 5	2020	Dry	August	--	393.5	378.7	14.9	3.8%	376.5	17.0	4.3%	372.3	21.2	5.4%	368.1	25.5	6.5%	363.8	29.7	7.6%	359.6	34.0	8.6%
ME 2	43 58 5	2020	Dry	September	Used in Summary Table Analysis	243.2	230.3	12.9	5.3%	228.5	14.7	6.1%	223.9	19.3	7.9%	220.0	23.3	9.6%	215.8	27.5	11.3%	211.6	31.6	13.0%
ME 2	42 59 6	2000	Above Normal	October	Used in Summary Table Analysis	808.1	799.3	8.8	1.1%	798.1	10.0	1.2%	795.6	12.5	1.5%	793.0	15.1	1.9%	790.5	17.6	2.2%	788.0	20.1	2.5%
ME 2	42 59 6	2000	Above Normal	November	Used in Summary Table Analysis	11,921.3	11,914.4	6.9	0.1%	11,913.2	8.1	0.1%	11,912.0	9.3	0.1%	11,909.7	11.6	0.1%	11,907.4	13.9	0.1%	11,906.3	15.0	0.1%
ME 2	42 59 6	2000	Above Normal	December	--	10,706.8	10,701.3	5.6	0.1%	10,700.5	6.4	0.1%	10,699.0	7.9	0.1%	10,697.2	9.6	0.1%	10,695.6	11.2	0.1%	10,694.0	12.8	0.1%
ME 2	42 59 6	2000	Above Normal	January	--	28,241.9	28,237.3	4.6	0.0%	28,236.1	5.8	0.0%	28,235.0	6.9	0.0%	28,233.8	8.1	0.0%	28,231.5	10.4	0.0%	28,230.3	11.6	0.0%
ME 2	42 59 6	2000	Above Normal	February	--	36,822.9	36,819.4	3.5	0.0%	36,818.3	4.6	0.0%	36,817.1	5.8	0.0%	36,816.0	6.9	0.0%	36,814.8	8.1	0.0%	36,813.7	9.3	0.0%
ME 2	42 59 6	2000	Above Normal	March	--	18,250.0	18,246.5	3.5	0.0%	18,245.4	4.6	0.0%	18,244.2	5.8	0.0%	18,243.1	6.9	0.0%	18,241.9	8.1	0.0%	18,240.7	9.3	0.1%
ME 2	42 59 6	2000	Above Normal	April	--	12,265.0	12,261.6	3.5	0.0%	12,261.6	3.5	0.0%	12,260.4	4.6	0.0%	12,259.3	5.8	0.0%	12,258.1	6.9	0.1%	12,256.9	8.1	0.1%
ME 2	42 59 6	2000	Above Normal	May	--	7,054.6	7,043.8	10.9	0.2%	7,042.2	12.4	0.2%	7,039.1	15.5	0.2%	7,036.0	18.6	0.3%	7,032.9	21.8	0.3%	7,029.7	24.9	0.4%
ME 2	42 59 6	2000	Above Normal	June	--	2,597.7	2,580.7	17.0	0.7%	2,578.2	19.4	0.7%	2,573.4	24.3	0.9%	2,568.5	29.2	1.1%	2,563.8	33.9	1.3%	2,558.9	38.8	1.5%
ME 2	42 59 6	2000	Above Normal	July	--	987.2	973.1	14.1	1.4%	971.0	16.1	1.6%	967.0	20.1	2.0%	963.1	24.1	2.4%	959.1	28.0	2.8%	955.2	32.0	3.2%
ME 2	42 59 6	2000	Above Normal	August	--	516.8	504.1	12.7	2.5%	502.3	14.5	2.8%	498.7	18.1	3.5%	495.1	21.6	4.2%	491.6	25.2	4.9%	488.0	28.8	5.6%
ME 2	42 59 6	2000	Above Normal	September	Used in Summary Table Analysis	291.3	280.4	10.9	3.7%	278.9	12.4	4.3%	275.8	15.5	5.3%	272.7	18.6	6.4%	269.6	21.7	7.4%	266.5	24.8	8.5%
ME 2	42 59 6	2001	Dry	October	Used in Summary Table Analysis	3,772.2	3,763.5	8.7	0.2%	3,762.4	9.8	0.3%	3,759.8	12.4	0.3%	3,757.4	14.8	0.4%	3,754.9	17.4	0.5%	3,752.4	19.8	0.5%
ME 2	42 59 6	2001	Dry	November	Used in Summary Table Analysis	6,052.2	6,045.6	6.6	0.1%	6,044.7	7.5	0.1%	6,042.8	9.4	0.2%	6,040.9	11.3	0.2%	6,039.0	13.2	0.2%	6,037.0	15.2	0.3%
ME 2	42 59 6	2001	Dry	December	--	8,766.2	8,760.6	5.6	0.1%	8,760.0	6.3	0.1%	8,758.3	7.9	0.1%	8,756.7	9.5	0.1%	8,755.1	11.1	0.1%	8,753.5	12.7	0.1%
ME 2	42 59 6	2001	Dry	January	--	12,649.3	12,644.7	4.6	0.0%	12,644.7	4.6	0.0%	12,642.4	6.9	0.1%	12,641.2	8.1	0.1%	12,640.0	9.3	0.1%	12,638.9	10.4	0.1%
ME 2	42 59 6	2001	Dry	February	--	17,384.3	17,379.6	4.6	0.0%	17,378.5	5.8	0.0%	17,377.3	6.9	0.0%	17,376.2	8.1	0.0%	17,375.0	9.3	0.1%	17,373.8	10.4	0.1%
ME 2	42 59 6	2001	Dry	March	--	12,253.5	12,248.8	4.6	0.0%	12,248.8	4.6	0.0%	12,247.7	5.8	0.0%	12,246.5	6.9	0.1%	12,245.4	8.1	0.1%	12,244.2	9.3	0.1%
ME 2	42 59 6	2001	Dry	April	--	10,925.8	10,914.6	11.2	0.1%	10,913.0	12.8	0.1%	10,909.7	16.1	0.1%	10,906.5	19.3	0.2%	10,903.2	22.6	0.2%	10,900.0	25.8	0.2%
ME 2	42 59 6	2001	Dry	May	--	2,638.8	2,625.5	13.3	0.5%	2,623.6	15.2	0.6%	2,619.8	19.0	0.7%	2,616.0	22.8	0.9%	2,612.3	26.5	1.0%	2,608.4	30.3	1.1%
ME 2	42 59 6	2001	Dry	June	--	2,620.3	2,601.3	19.0	0.7%	2,598.6	21.6	0.8%	2,593.3	27.0	1.0%	2,588.0	32.3	1.2%	2,582.6	37.6	1.4%	2,577.4	42.8	1.6%
ME 2	42 59 6	2001	Dry	July	--	718.6	702.3	16.2	2.3%	700.1	18.5	2.6%	695.5	23.1	3.2%	690.9	27.7	3.9%	686.3	32.3	4.5%	681.7	36.9	5.1%
ME 2	42 59 6	2001	Dry	August	--	170.0	154.6	15.4	9.1%	152.4	17.6	10.4%	148.0	22.0	12.9%	143.6	26.3	15.5%	139.2	30.7	18.1%	134.9	35.1	20.6%
ME 2	42 59 6	2001	Dry	September	Used in Summary Table Analysis	92.4	79.0	13.4	14.5%	77.1	15.3	16.5%	73.3	19.1	20.6%	69.5	22.9	24.8%	65.7	26.7	28.9%	61.9	30.5	33.0%
ME 2	42 59 6	2002	Below Normal	October	Used in Summary Table Analysis	261.2	250.2	11.0	4.2%	248.6	12.5	4.8%	245.4	15.7	6.0%	242.2	18.9	7.2%	239.1	22.0	8.4%	235.9	25.2	9.7%
ME 2	42 59 6	2002	Below Normal	November	Used in Summary Table Analysis	11,929.4	11,921.3	8.1	0.1%	11,920.1	9.3	0.1%	11,917.8	11.6	0.1%	11,915.5	13.9	0.1%	11,912.0	17.4	0.1%	11,909.7	19.7	0.2%
ME 2	42 59 6	2002	Below Normal	December	--	35,381.9	35,375.0	6.9	0.0%	35,373.8	8.1	0.0%	35,371.5	10.4	0.0%	35,369.2	12.7	0.0%	35,366.9	15.0	0.0%	35,365.7	16.2	0.0%
ME 2	42 59 6	2002	Below Normal	January	--	30,687.5	30,680.6	6.9	0.0%	30,680.6	6.9	0.0%	30,678.2	9.3	0.0%	30,675.9	11.6	0.0%	30,674.8	12.7	0.0%	30,672.5	15.0	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	42 59 6	2002	Below Normal	February	--	24,563.7	24,559.0	4.6	0.0%	24,557.9	5.8	0.0%	24,556.7	6.9	0.0%	24,554.4	9.3	0.0%	24,553.2	10.4	0.0%	24,550.9	12.7	0.1%
ME 2	42 59 6	2002	Below Normal	March	--	17,692.1	17,686.3	5.8	0.0%	17,686.3	5.8	0.0%	17,684.0	8.1	0.0%	17,682.9	9.3	0.1%	17,681.7	10.4	0.1%	17,680.6	11.6	0.1%
ME 2	42 59 6	2002	Below Normal	April	--	9,893.3	9,882.3	11.0	0.1%	9,880.7	12.6	0.1%	9,877.5	15.7	0.2%	9,874.4	18.9	0.2%	9,871.3	22.0	0.2%	9,868.2	25.1	0.3%
ME 2	42 59 6	2002	Below Normal	May	--	3,310.0	3,297.1	12.8	0.4%	3,295.3	14.7	0.4%	3,291.7	18.3	0.6%	3,288.0	22.0	0.7%	3,284.3	25.7	0.8%	3,280.6	29.4	0.9%
ME 2	42 59 6	2002	Below Normal	June	--	851.4	836.1	15.3	1.8%	833.9	17.5	2.1%	829.6	21.8	2.6%	825.3	26.1	3.1%	820.9	30.5	3.6%	816.7	34.8	4.1%
ME 2	42 59 6	2002	Below Normal	July	--	359.8	345.2	14.6	4.1%	343.1	16.7	4.6%	338.9	20.9	5.8%	334.8	25.0	6.9%	330.6	29.2	8.1%	326.5	33.3	9.3%
ME 2	42 59 6	2002	Below Normal	August	--	223.1	209.8	13.4	6.0%	207.9	15.3	6.8%	204.1	19.1	8.5%	200.3	22.9	10.2%	196.5	26.7	11.9%	192.7	30.5	13.6%
ME 2	42 59 6	2002	Below Normal	September	Used in Summary Table Analysis	160.3	148.2	12.2	7.6%	146.4	13.9	8.7%	143.0	17.3	10.8%	139.5	20.8	13.0%	136.0	24.3	15.2%	132.6	27.8	17.3%
ME 2	42 59 6	2003	Wet	October	Used in Summary Table Analysis	125.5	115.9	9.6	7.6%	114.5	10.9	8.7%	111.8	13.7	10.9%	109.0	16.4	13.1%	106.3	19.2	15.3%	103.5	22.0	17.5%
ME 2	42 59 6	2003	Wet	November	Used in Summary Table Analysis	890.4	883.1	7.3	0.8%	882.0	8.3	0.9%	879.9	10.5	1.2%	877.8	12.6	1.4%	875.8	14.6	1.6%	873.7	16.7	1.9%
ME 2	42 59 6	2003	Wet	December	--	56,106.5	56,100.7	5.8	0.0%	56,099.5	6.9	0.0%	56,097.2	9.3	0.0%	56,096.1	10.4	0.0%	56,093.8	12.7	0.0%	56,092.6	13.9	0.0%
ME 2	42 59 6	2003	Wet	January	--	31,384.3	31,379.6	4.6	0.0%	31,378.5	5.8	0.0%	31,377.3	6.9	0.0%	31,375.0	9.3	0.0%	31,373.8	10.4	0.0%	31,372.7	11.6	0.0%
ME 2	42 59 6	2003	Wet	February	--	20,277.8	20,273.1	4.6	0.0%	20,272.0	5.8	0.0%	20,270.8	6.9	0.0%	20,269.7	8.1	0.0%	20,268.5	9.3	0.0%	20,266.2	11.6	0.1%
ME 2	42 59 6	2003	Wet	March	--	23,916.7	23,912.0	4.6	0.0%	23,912.0	4.6	0.0%	23,909.7	6.9	0.0%	23,908.6	8.1	0.0%	23,907.4	9.3	0.0%	23,906.3	10.4	0.0%
ME 2	42 59 6	2003	Wet	April	--	42,619.2	42,614.6	4.6	0.0%	42,613.4	5.8	0.0%	42,612.3	6.9	0.0%	42,611.1	8.1	0.0%	42,610.0	9.3	0.0%	42,608.8	10.4	0.0%
ME 2	42 59 6	2003	Wet	May	--	12,186.3	12,174.8	11.6	0.1%	12,173.6	12.7	0.1%	12,170.1	16.2	0.1%	12,166.7	19.7	0.2%	12,163.2	23.1	0.2%	12,160.9	25.5	0.2%
ME 2	42 59 6	2003	Wet	June	--	3,160.1	3,145.6	14.5	0.5%	3,143.6	16.4	0.5%	3,139.6	20.5	0.6%	3,135.6	24.4	0.8%	3,131.7	28.4	0.9%	3,127.8	32.3	1.0%
ME 2	42 59 6	2003	Wet	July	--	1,467.5	1,453.0	14.5	1.0%	1,450.9	16.6	1.1%	1,446.9	20.6	1.4%	1,442.7	24.8	1.7%	1,438.7	28.8	2.0%	1,434.5	33.0	2.2%
ME 2	42 59 6	2003	Wet	August	--	754.3	740.7	13.6	1.8%	738.7	15.6	2.1%	734.9	19.4	2.6%	731.0	23.3	3.1%	727.2	27.2	3.6%	723.1	31.2	4.1%
ME 2	42 59 6	2003	Wet	September	Used in Summary Table Analysis	453.0	442.0	11.0	2.4%	440.4	12.6	2.8%	437.3	15.7	3.5%	434.1	18.9	4.2%	431.0	22.0	4.9%	427.9	25.1	5.5%
ME 2	42 59 6	2004	Wet	October	Used in Summary Table Analysis	320.2	311.4	8.8	2.8%	310.1	10.1	3.1%	307.6	12.6	3.9%	305.1	15.1	4.7%	302.5	17.6	5.5%	300.0	20.2	6.3%
ME 2	42 59 6	2004	Wet	November	Used in Summary Table Analysis	5,726.6	5,719.8	6.8	0.1%	5,718.9	7.8	0.1%	5,716.9	9.7	0.2%	5,714.9	11.7	0.2%	5,713.0	13.7	0.2%	5,711.0	15.6	0.3%
ME 2	42 59 6	2004	Wet	December	--	35,957.2	35,951.4	5.8	0.0%	35,950.2	6.9	0.0%	35,949.1	8.1	0.0%	35,947.9	9.3	0.0%	35,945.6	11.6	0.0%	35,943.3	13.9	0.0%
ME 2	42 59 6	2004	Wet	January	--	31,232.6	31,228.0	4.6	0.0%	31,226.9	5.8	0.0%	31,225.7	6.9	0.0%	31,224.5	8.1	0.0%	31,223.4	9.3	0.0%	31,221.1	11.6	0.0%
ME 2	42 59 6	2004	Wet	February	--	38,005.8	38,001.2	4.6	0.0%	38,000.0	5.8	0.0%	37,998.8	6.9	0.0%	37,997.7	8.1	0.0%	37,996.5	9.3	0.0%	37,995.4	10.4	0.0%
ME 2	42 59 6	2004	Wet	March	--	16,485.0	16,480.3	4.6	0.0%	16,480.3	4.6	0.0%	16,479.2	5.8	0.0%	16,476.9	8.1	0.0%	16,475.7	9.3	0.1%	16,474.5	10.4	0.1%
ME 2	42 59 6	2004	Wet	April	--	9,422.8	9,419.0	3.8	0.0%	9,418.4	4.4	0.0%	9,417.2	5.6	0.1%	9,416.1	6.7	0.1%	9,414.9	7.9	0.1%	9,413.8	9.0	0.1%
ME 2	42 59 6	2004	Wet	May	--	3,398.4	3,387.5	10.9	0.3%	3,386.0	12.4	0.4%	3,382.9	15.5	0.5%	3,379.7	18.6	0.5%	3,376.6	21.8	0.6%	3,373.4	25.0	0.7%
ME 2	42 59 6	2004	Wet	June	--	689.9	676.3	13.6	2.0%	674.4	15.5	2.3%	670.5	19.4	2.8%	666.7	23.3	3.4%	662.8	27.1	3.9%	659.0	31.0	4.5%
ME 2	42 59 6	2004	Wet	July	--	352.0	337.9	14.1	4.0%	335.9	16.1	4.6%	331.9	20.2	5.7%	327.9	24.2	6.9%	323.8	28.2	8.0%	319.8	32.2	9.2%
ME 2	42 59 6	2004	Wet	August	--	221.6	208.8	12.7	5.7%	207.0	14.5	6.6%	203.4	18.2	8.2%	199.8	21.8	9.8%	196.1	25.4	11.5%	192.5	29.1	13.1%
ME 2	42 59 6	2004	Wet	September	Used in Summary Table Analysis	159.2	147.1	12.1	7.6%	145.4	13.8	8.7%	141.9	17.3	10.9%	138.5	20.8	13.0%	135.0	24.2	15.2%	131.5	27.7	17.4%
ME 2	42 59 6	2005	Above Normal	October	Used in Summary Table Analysis	7,582.1	7,573.0	9.0	0.1%	7,571.8	10.3	0.1%	7,569.2	12.8	0.2%	7,566.6	15.5	0.2%	7,564.0	18.1	0.2%	7,561.3	20.7	0.3%
ME 2	42 59 6	2005	Above Normal	November	Used in Summary Table Analysis	2,245.5	2,238.7	6.8	0.3%	2,237.7	7.8	0.3%	2,235.8	9.7	0.4%	2,233.9	11.6	0.5%	2,231.9	13.5	0.6%	2,230.0	15.5	0.7%
ME 2	42 59 6	2005	Above Normal	December	--	20,732.6	20,726.9	5.8	0.0%	20,725.7	6.9	0.0%	20,724.5	8.1	0.0%	20,722.2	10.4	0.1%	20,721.1	11.6	0.1%	20,719.9	12.7	0.1%
ME 2	42 59 6	2005	Above Normal	January	--	22,153.9	22,148.1	5.8	0.0%	22,148.1	5.8	0.0%	22,145.8	8.1	0.0%	22,144.7	9.3	0.0%	22,143.5	10.4	0.0%	22,142.4	11.6	0.1%
ME 2	42 59 6	2005	Above Normal	February	--	13,972.2	13,967.6	4.6	0.0%	13,967.6	4.6	0.0%	13,966.4	5.8	0.0%	13,965.3	6.9	0.0%	13,963.0	9.3	0.1%	13,961.8	10.4	0.1%
ME 2	42 59 6	2005	Above Normal	March	--	28,392.4	28,388.9	3.5	0.0%	28,387.7	4.6	0.0%	28,386.6	5.8	0.0%	28,385.4	6.9	0.0%	28,384.3	8.1	0.0%	28,383.1	9.3	0.0%
ME 2	42 59 6	2005	Above Normal	April	--	21,331.0	21,327.5	3.5	0.0%	21,326.4	4.6	0.0%	21,325.2	5.8	0.0%	21,324.1	6.9	0.0%	21,322.9	8.1	0.0%	21,321.8	9.3	0.0%
ME 2	42 59 6	2005	Above Normal	May	--	19,434.0	19,422.5	11.6	0.1%	19,420.1	13.9	0.1%	19,417.8	16.2	0.1%	19,414.4	19.7	0.1%	19,410.9	23.1	0.1%	19,407.4	26.6	0.1%
ME 2	42 59 6	2005	Above Normal	June	--	15,709.5	15,692.1	17.4	0.1%	15,688.7	20.8	0.1%	15,684.0	25.5	0.2%	15,679.4	30.1	0.2%	15,674.8	34.7	0.2%	15,669.0	40.5	0.3%
ME 2	42 59 6	2005	Above Normal	July	--	2,864.6	2,849.7	14.9	0.5%	2,847.6	17.0	0.6%	2,843.3	21.3	0.7%	2,839.0	25.6	0.9%	2,834.8	29.7	1.0%	2,830.7	33.9	1.2%
ME 2	42 59 6	2005	Above Normal	August	--	976.7	964.0	12.7	1.3%	962.2	14.5	1.5%	958.6	18.2	1.9%	955.0	21.8	2.2%	951.4	25.4	2.6%	947.8	29.0	3.0%
ME 2	42 59 6	2005	Above Normal	September	Used in Summary Table Analysis	518.7	507.9	10.9	2.1%	506.3	12.4	2.4%	503.2	15.5	3.0%	500.1	18.6	3.6%	497.0	21.7	4.2%	493.9	24.8	4.8%
ME 2	42 59 6	2006	Wet	October	Used in Summary Table Analysis	627.1	618.5	8.6	1.4%	617.3	9.8	1.6%	614.8	12.3	2.0%	612.4	14.8	2.4%	609.9	17.2	2.7%	607.4	19.7	3.1%
ME 2	42 59 6	2006	Wet	November	Used in Summary Table Analysis	9,173.3	9,166.8	6.5	0.1%	9,165.9	7.4	0.1%	9,164.0	9.3	0.1%	9,162.2	11.1	0.1%	9,160.3	13.0	0.1%	9,158.4	14.8	0.2%
ME 2	42 59 6	2006	Wet	December	--	43,054.4	43,048.6	5.8	0.0%	43,047.5	6.9	0.0%	43,046.3	8.1	0.0%	43,044.0	10.4	0.0%	43,042.8	11.6	0.0%	43,040.5	13.9	0.0%
ME 2	42 59 6	2006	Wet	January	--	45,894.7	45,888.9	5.8	0.0%	45,888.9	5.8	0.0%	45,886.6	8.1	0.0%	45,885.4	9.3	0.0%	45,884.3	10.4	0.0%	45,883.1	11.6	0.0%
ME 2	42 59 6	2006	Wet	February	--	26,446.8	26,442.1	4.6	0.0%	26,442.1	4.6	0.0%	26,441.0	5.8	0.0%	26,439.8	6.9	0.0%	26,438.7	8.1	0.0%	26,436.3	10.4	0.0%
ME 2	42 59 6	2006	Wet	March	--	46,841.4	46,836.8	4.6	0.0%	46,836.8	4.6	0.0%	46,835.6	5.8	0.0%	46,834.5	6.9	0.0%	46,833.3	8.1	0.0%	46,832.2	9.3	0.0%
ME 2	42 59 6	2006	Wet	April	--	30,304.4	30,300.9	3.5	0.0%	30,299.8	4.6	0.0%	30,298.6	5.8	0.0%	30,297.5	6.9	0.0%	30,296.3	8.1	0.0%	30,295.1	9.3	0.0%
ME 2	42 59 6	2006	Wet	May	--	14,136.6	14,130.8	5.8	0.0%	14,129.6	6.9	0.0%	14,128.5	8.1	0.1%	14,126.2	10.4	0.1%	14,125.0	11.6	0.1%	14,122.7	13.9	0.1%
ME 2	42 59 6	2006	Wet	June	--	3,542.2	3,527.9	14.4	0.4%	3,525.8	16.4	0.5%	3,521.8	20.5	0.6%	3,517.7	24.5	0.7%	3,513.7	28.6	0.8%	3,509.6	32.6	0.9%
ME 2	42 59 6	2006	Wet	July	--	1,271.4	1,257.2	14.2	1.1%	1,255.1	16.3	1.3%	1,251.0	20.4	1.6%	1,247.0	24.4	1.9%	1,243.1	28.4	2.2%	1,239.0	32.4	2.5%
ME 2	42 59 6	2006	Wet	August	--	657.8	644.6	13.2	2.0%	642.7	15.1	2.3%	639.0	18.9	2.9%	635.2	22.6	3.4%	631.5	26.3	4.0%	627.8	30.1	4.6%
ME 2	42 59 6	2006	Wet	September	Used in Summary Table Analysis	419.8	408.7	11.1	2.6%	407.2	12.7	3.0%	404.0	15.8	3.8%	400.9	18.9	4.5%	397.7	22.1	5.3%	394.6	25.2	6.0%
ME 2	42 59 6	2007	Above Normal	October	Used in Summary Table Analysis	269.7	261.0	8.7	3.2%	259.7	10.0	3.7%	257.2	12.5	4.6%	254.7	15.0	5.6%	252.2	17.5	6.5%	249.7	20.0	7.4%
ME 2	42 59 6	2007	Above Normal	November	Used in Summary Table Analysis	8,550.3	8,543.6	6.7	0.1%	8,542.6	7.8	0.1%	8,540.7	9.6	0.1%	8,538.8	11.6	0.1%	8,536.8	13.5	0.2%	8,534.8	15.5	0.2%
ME 2	42 59 6	2007	Above Normal	December	--	20,170.1	20,164.4	5.8	0.0%	20,163.2	6.9	0.0%	20,160.9	9.3	0.0%	20,159.7	10.4	0.1%	20,157.4	12.7	0.1%	20,156.3	13.9	0.1%
ME 2	42 59 6	2007	Above Normal	January	--	10,189.4	10,184.4	5.0	0.0%	10,183.6	5.8	0.1%	10,182.2	7.2	0.1%	10,180.7	8.7	0.1%	10,179.3	10.1	0.1%	10,177.8	11.6	0.1%
ME 2	42 59 6	2007	Above Normal	February	--	30,300.9	30,296.3	4.6	0.0%	30,296.3	4.6	0.0%	30,295.1	5.8	0.0%	30,292.8	8.1	0.0%	30,291.7	9.3	0.0%	30,290.5	10.4	0.0%
ME 2	42 59 6	2007	Above Normal	March	--	13,056.7	13,053.2	3.5	0.0%	13,052.1	4.6	0.0%	13,050.9	5.8	0.0%	13,049.8	6.9	0.1%	13,048.6	8.1	0.1%	13,047.5	9.3	0.1%
ME 2	42 59 6	2007	Above Normal	April	--	11,493.8	11,483.2	10.5	0.1%	11,481.6	12.2	0.1%	11,478.6	15.2	0.1%	11,475.6	18.2	0.2%	11,472.6	21.2	0.2%	11,469.6	24.2	0.2%
ME 2	42 59 6	2007	Above Normal	May	--	4,122.8	4,110.4	12.4	0.3%	4,108.7	14.1	0.3%	4,105.1	17.7	0.4%	4,101.6	21.2	0.5%	4,098.0	24.8	0.6%	4,094.4	28.4	0.7%

Table A.1

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Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	42 59 6	2007	Above Normal	June	--	1,488.0	1,472.0	16.0	1.1%	1,469.7	18.3	1.2%	1,465.2	22.8	1.5%	1,460.6	27.3	1.8%	1,456.1	31.8	2.1%	1,451.6	36.3	2.4%
ME 2	42 59 6	2007	Above Normal	July	--	493.7	478.6	15.2	3.1%	476.4	17.3	3.5%	472.1	21.6	4.4%	467.8	25.9	5.2%	463.6	30.2	6.1%	459.3	34.4	7.0%
ME 2	42 59 6	2007	Above Normal	August	--	219.1	206.0	13.1	6.0%	204.2	14.9	6.8%	200.5	18.6	8.5%	196.7	22.3	10.2%	193.0	26.1	11.9%	189.3	29.7	13.6%
ME 2	42 59 6	2007	Above Normal	September	Used in Summary Table Analysis	146.8	134.8	11.9	8.1%	133.2	13.6	9.3%	129.8	17.0	11.6%	126.4	20.4	13.9%	123.0	23.8	16.2%	119.6	27.2	18.5%
ME 2	42 59 6	2008	Dry	October	Used in Summary Table Analysis	3,393.9	3,384.5	9.4	0.3%	3,383.1	10.8	0.3%	3,380.4	13.4	0.4%	3,377.8	16.1	0.5%	3,375.0	18.9	0.6%	3,372.3	21.5	0.6%
ME 2	42 59 6	2008	Dry	November	Used in Summary Table Analysis	3,236.7	3,229.7	6.9	0.2%	3,228.7	8.0	0.2%	3,226.7	10.0	0.3%	3,224.8	11.9	0.4%	3,222.8	13.9	0.4%	3,220.7	16.0	0.5%
ME 2	42 59 6	2008	Dry	December	--	22,812.5	22,805.6	6.9	0.0%	22,805.6	6.9	0.0%	22,803.2	9.3	0.0%	22,802.1	10.4	0.0%	22,799.8	12.7	0.1%	22,798.6	13.9	0.1%
ME 2	42 59 6	2008	Dry	January	--	37,230.3	37,224.5	5.8	0.0%	37,223.4	6.9	0.0%	37,222.2	8.1	0.0%	37,219.9	10.4	0.0%	37,218.8	11.6	0.0%	37,217.6	12.7	0.0%
ME 2	42 59 6	2008	Dry	February	--	26,199.1	26,194.4	4.6	0.0%	26,194.4	4.6	0.0%	26,192.1	6.9	0.0%	26,191.0	8.1	0.0%	26,189.8	9.3	0.0%	26,188.7	10.4	0.0%
ME 2	42 59 6	2008	Dry	March	--	11,762.7	11,759.3	3.5	0.0%	11,758.1	4.6	0.0%	11,756.9	5.8	0.0%	11,755.8	6.9	0.1%	11,754.6	8.1	0.1%	11,753.5	9.3	0.1%
ME 2	42 59 6	2008	Dry	April	--	8,992.8	8,981.6	11.2	0.1%	8,980.0	12.8	0.1%	8,976.7	16.1	0.2%	8,973.5	19.3	0.2%	8,970.3	22.6	0.3%	8,967.0	25.8	0.3%
ME 2	42 59 6	2008	Dry	May	--	1,364.8	1,353.2	11.6	0.8%	1,351.6	13.2	1.0%	1,348.4	16.4	1.2%	1,345.1	19.7	1.4%	1,342.0	22.8	1.7%	1,338.9	25.9	1.9%
ME 2	42 59 6	2008	Dry	June	--	435.0	417.3	17.7	4.1%	414.7	20.3	4.7%	409.7	25.3	5.8%	404.8	30.2	6.9%	399.8	35.2	8.1%	394.8	40.2	9.2%
ME 2	42 59 6	2008	Dry	July	--	253.8	237.3	16.4	6.5%	235.0	18.7	7.4%	230.3	23.4	9.2%	225.7	28.1	11.1%	221.0	32.8	12.9%	216.4	37.4	14.7%
ME 2	42 59 6	2008	Dry	August	--	176.7	161.3	15.4	8.7%	159.1	17.6	10.0%	154.7	22.0	12.5%	150.3	26.4	14.9%	145.9	30.8	17.4%	141.6	35.2	19.9%
ME 2	42 59 6	2008	Dry	September	Used in Summary Table Analysis	138.5	123.6	14.8	10.7%	121.5	17.0	12.2%	117.3	21.2	15.3%	113.1	25.4	18.4%	108.8	29.7	21.4%	104.6	33.9	24.5%
ME 2	42 59 6	2009	Critical	October	Used in Summary Table Analysis	918.4	907.4	11.0	1.2%	905.8	12.6	1.4%	902.6	15.8	1.7%	899.4	19.0	2.1%	896.5	21.9	2.4%	893.3	25.1	2.7%
ME 2	42 59 6	2009	Critical	November	Used in Summary Table Analysis	5,437.4	5,429.4	8.0	0.1%	5,428.2	9.1	0.2%	5,425.8	11.6	0.2%	5,423.5	13.9	0.3%	5,421.2	16.2	0.3%	5,418.9	18.5	0.3%
ME 2	42 59 6	2009	Critical	December	--	12,005.8	11,998.8	6.9	0.1%	11,998.8	6.9	0.1%	11,996.5	9.3	0.1%	11,994.2	11.6	0.1%	11,991.9	13.9	0.1%	11,990.7	15.0	0.1%
ME 2	42 59 6	2009	Critical	January	--	8,753.0	8,747.0	6.0	0.1%	8,746.2	6.8	0.1%	8,744.3	8.7	0.1%	8,742.6	10.4	0.1%	8,740.9	12.2	0.1%	8,739.1	13.9	0.2%
ME 2	42 59 6	2009	Critical	February	--	22,482.6	22,476.9	5.8	0.0%	22,475.7	6.9	0.0%	22,474.5	8.1	0.0%	22,473.4	9.3	0.0%	22,472.2	10.4	0.0%	22,469.9	12.7	0.1%
ME 2	42 59 6	2009	Critical	March	--	21,023.1	21,018.5	4.6	0.0%	21,017.4	5.8	0.0%	21,016.2	6.9	0.0%	21,015.0	8.1	0.0%	21,012.7	10.4	0.0%	21,011.6	11.6	0.1%
ME 2	42 59 6	2009	Critical	April	--	10,087.2	10,075.6	11.6	0.1%	10,073.8	13.3	0.1%	10,070.5	16.7	0.2%	10,067.1	20.0	0.2%	10,063.9	23.3	0.2%	10,060.5	26.6	0.3%
ME 2	42 59 6	2009	Critical	May	--	15,534.7	15,520.8	13.9	0.1%	15,518.5	16.2	0.1%	15,515.0	19.7	0.1%	15,510.4	24.3	0.2%	15,506.9	27.8	0.2%	15,502.3	32.4	0.2%
ME 2	42 59 6	2009	Critical	June	--	3,154.7	3,135.6	19.1	0.6%	3,133.0	21.8	0.7%	3,127.5	27.2	0.9%	3,122.1	32.6	1.0%	3,116.7	38.1	1.2%	3,111.3	43.4	1.4%
ME 2	42 59 6	2009	Critical	July	--	1,258.8	1,242.1	16.7	1.3%	1,239.8	19.0	1.5%	1,235.1	23.7	1.9%	1,230.4	28.4	2.3%	1,225.7	33.1	2.6%	1,221.1	37.7	3.0%
ME 2	42 59 6	2009	Critical	August	--	664.6	649.1	15.5	2.3%	646.9	17.7	2.7%	642.5	22.1	3.3%	638.1	26.5	4.0%	633.7	30.9	4.7%	629.3	35.3	5.3%
ME 2	42 59 6	2009	Critical	September	Used in Summary Table Analysis	386.6	373.2	13.4	3.5%	371.2	15.4	4.0%	367.4	19.2	5.0%	363.6	23.0	6.0%	359.7	26.9	6.9%	355.9	30.7	7.9%
ME 2	42 59 6	2010	Below Normal	October	Used in Summary Table Analysis	6,080.7	6,069.7	11.0	0.2%	6,068.1	12.6	0.2%	6,064.9	15.7	0.3%	6,061.8	18.9	0.3%	6,058.8	21.9	0.4%	6,055.6	25.1	0.4%
ME 2	42 59 6	2010	Below Normal	November	Used in Summary Table Analysis	8,241.0	8,232.8	8.2	0.1%	8,231.6	9.4	0.1%	8,229.2	11.8	0.1%	8,226.9	14.1	0.2%	8,224.4	16.6	0.2%	8,222.0	19.0	0.2%
ME 2	42 59 6	2010	Below Normal	December	--	12,252.3	12,245.4	6.9	0.1%	12,245.4	6.9	0.1%	12,243.1	9.3	0.1%	12,240.7	11.6	0.1%	12,238.4	13.9	0.1%	12,237.3	15.0	0.1%
ME 2	42 59 6	2010	Below Normal	January	--	35,885.4	35,879.6	5.8	0.0%	35,878.5	6.9	0.0%	35,877.3	8.1	0.0%	35,875.0	10.4	0.0%	35,872.7	12.7	0.0%	35,871.5	13.9	0.0%
ME 2	42 59 6	2010	Below Normal	February	--	27,148.1	27,142.4	5.8	0.0%	27,142.4	5.8	0.0%	27,140.0	8.1	0.0%	27,138.9	9.3	0.0%	27,137.7	10.4	0.0%	27,135.4	12.7	0.0%
ME 2	42 59 6	2010	Below Normal	March	--	28,754.6	28,748.8	5.8	0.0%	28,748.8	5.8	0.0%	28,747.7	6.9	0.0%	28,745.4	9.3	0.0%	28,744.2	10.4	0.0%	28,743.1	11.6	0.0%
ME 2	42 59 6	2010	Below Normal	April	--	39,857.6	39,853.0	4.6	0.0%	39,853.0	4.6	0.0%	39,850.7	6.9	0.0%	39,849.5	8.1	0.0%	39,848.4	9.3	0.0%	39,847.2	10.4	0.0%
ME 2	42 59 6	2010	Below Normal	May	--	20,148.1	20,136.6	11.6	0.1%	20,134.3	13.9	0.1%	20,130.8	17.4	0.1%	20,127.3	20.8	0.1%	20,123.8	24.3	0.1%	20,120.4	27.8	0.1%
ME 2	42 59 6	2010	Below Normal	June	--	9,255.6	9,237.5	18.1	0.2%	9,235.0	20.6	0.2%	9,229.9	25.7	0.3%	9,224.9	30.7	0.3%	9,219.9	35.6	0.4%	9,214.8	40.7	0.4%
ME 2	42 59 6	2010	Below Normal	July	--	1,450.7	1,435.6	15.0	1.0%	1,433.4	17.2	1.2%	1,429.2	21.5	1.5%	1,424.9	25.8	1.8%	1,420.5	30.2	2.1%	1,416.4	34.3	2.4%
ME 2	42 59 6	2010	Below Normal	August	--	562.7	549.6	13.1	2.3%	547.7	15.0	2.7%	544.0	18.7	3.3%	540.3	22.4	4.0%	536.6	26.1	4.6%	532.9	29.8	5.3%
ME 2	42 59 6	2010	Below Normal	September	Used in Summary Table Analysis	644.6	632.1	12.5	1.9%	630.3	14.3	2.2%	626.7	17.9	2.8%	623.2	21.4	3.3%	619.6	25.0	3.9%	616.0	28.6	4.4%
ME 2	42 59 6	2011	Wet	October	Used in Summary Table Analysis	9,562.2	9,553.2	8.9	0.1%	9,552.0	10.2	0.1%	9,549.4	12.7	0.1%	9,547.0	15.2	0.2%	9,544.4	17.7	0.2%	9,541.9	20.3	0.2%
ME 2	42 59 6	2011	Wet	November	Used in Summary Table Analysis	14,137.7	14,130.8	6.9	0.0%	14,129.6	8.1	0.1%	14,128.5	9.3	0.1%	14,126.2	11.6	0.1%	14,123.8	13.9	0.1%	14,122.7	15.0	0.1%
ME 2	42 59 6	2011	Wet	December	--	33,356.5	33,351.9	4.6	0.0%	33,350.7	5.8	0.0%	33,348.4	8.1	0.0%	33,347.2	9.3	0.0%	33,346.1	10.4	0.0%	33,343.8	12.7	0.0%
ME 2	42 59 6	2011	Wet	January	--	14,092.6	14,088.0	4.6	0.0%	14,086.8	5.8	0.0%	14,085.6	6.9	0.0%	14,084.5	8.1	0.1%	14,082.2	10.4	0.1%	14,081.0	11.6	0.1%
ME 2	42 59 6	2011	Wet	February	--	20,706.0	20,701.4	4.6	0.0%	20,701.4	4.6	0.0%	20,700.2	5.8	0.0%	20,699.1	6.9	0.0%	20,696.8	9.3	0.0%	20,695.6	10.4	0.1%
ME 2	42 59 6	2011	Wet	March	--	51,782.4	51,777.8	4.6	0.0%	51,776.6	5.8	0.0%	51,775.5	6.9	0.0%	51,774.3	8.1	0.0%	51,773.1	9.3	0.0%	51,772.0	10.4	0.0%
ME 2	42 59 6	2011	Wet	April	--	24,723.4	24,719.9	3.5	0.0%	24,718.8	4.6	0.0%	24,717.6	5.8	0.0%	24,716.4	6.9	0.0%	24,715.3	8.1	0.0%	24,714.1	9.3	0.0%
ME 2	42 59 6	2011	Wet	May	--	11,347.9	11,336.9	11.0	0.1%	11,335.3	12.6	0.1%	11,332.1	15.9	0.1%	11,328.8	19.1	0.2%	11,325.6	22.3	0.2%	11,322.5	25.5	0.2%
ME 2	42 59 6	2011	Wet	June	--	7,022.3	7,004.7	17.6	0.3%	7,002.3	20.0	0.3%	6,997.3	25.0	0.4%	6,992.5	29.9	0.4%	6,987.5	34.8	0.5%	6,982.5	39.8	0.6%
ME 2	42 59 6	2011	Wet	July	--	1,827.8	1,811.2	16.6	0.9%	1,808.8	19.0	1.0%	1,804.2	23.6	1.3%	1,799.4	28.4	1.6%	1,794.8	33.0	1.8%	1,790.0	37.7	2.1%
ME 2	42 59 6	2011	Wet	August	--	772.4	759.5	12.9	1.7%	757.7	14.7	1.9%	754.0	18.4	2.4%	750.4	22.0	2.9%	746.7	25.7	3.3%	743.1	29.3	3.8%
ME 2	42 59 6	2011	Wet	September	Used in Summary Table Analysis	429.1	417.9	11.2	2.6%	416.3	12.8	3.0%	413.1	16.0	3.7%	409.9	19.2	4.5%	406.7	22.3	5.2%	403.6	25.5	5.9%
ME 2	42 59 6	2012	Below Normal	October	Used in Summary Table Analysis	4,506.6	4,497.8	8.8	0.2%	4,496.5	10.1	0.2%	4,494.0	12.6	0.3%	4,491.4	15.2	0.3%	4,488.9	17.7	0.4%	4,486.3	20.3	0.4%
ME 2	42 59 6	2012	Below Normal	November	Used in Summary Table Analysis	8,163.0	8,156.3	6.7	0.1%	8,155.2	7.8	0.1%	8,153.2	9.7	0.1%	8,151.3	11.7	0.1%	8,149.3	13.7	0.2%	8,147.3	15.6	0.2%
ME 2	42 59 6	2012	Below Normal	December	--	5,151.7	5,146.1	5.7	0.1%	5,145.3	6.5	0.1%	5,143.6	8.1	0.2%	5,142.0	9.7	0.2%	5,140.3	11.5	0.2%	5,138.7	13.1	0.3%
ME 2	42 59 6	2012	Below Normal	January	--	19,894.7	19,888.9	5.8	0.0%	19,888.9	5.8	0.0%	19,886.6	8.1	0.0%	19,885.4	9.3	0.0%	19,884.3	10.4	0.1%	19,883.1	11.6	0.1%
ME 2	42 59 6	2012	Below Normal	February	--	18,151.6	18,147.0	4.6	0.0%	18,145.8	5.8	0.0%	18,144.7	6.9	0.0%	18,143.5	8.1	0.0%	18,142.4	9.3	0.1%	18,141.2	10.4	0.1%
ME 2	42 59 6	2012	Below Normal	March	--	45,163.2	45,158.6	4.6	0.0%	45,158.6	4.6	0.0%	45,157.4	5.8	0.0%	45,156.3	6.9	0.0%	45,155.1	8.1	0.0%	45,152.8	10.4	0.0%
ME 2	42 59 6	2012	Below Normal	April	--	26,765.0	26,761.6	3.5	0.0%	26,760.4	4.6	0.0%	26,759.3	5.8	0.0%	26,758.1	6.9	0.0%	26,756.9	8.1	0.0%	26,755.8	9.3	0.0%
ME 2	42 59 6	2012	Below Normal	May	--	7,461.9	7,450.8	11.1	0.1%	7,449.2	12.7	0.2%	7,445.9	16.0	0.2%	7,442.7	19.2	0.3%	7,439.6	22.3	0.3%	7,436.3	25.6	0.3%
ME 2	42 59 6	2012	Below Normal	June	--	5,482.2	5,464.4	17.8	0.3%	5,461.9	20.3	0.4%	5,456.8	25.3	0.5%	5,451.9	30.3	0.6%	5,446.8	35.4	0.6%	5,441.8	40.4	0.7%
ME 2	42 59 6	2012	Below Normal	July	--	2,204.3	2,188.1	16.2	0.7%	2,185.8	18.5	0.8%	2,181.1	23.1	1.1%	2,176.5	27.8	1.3%	2,171.9	32.4	1.5%	2,167.2	37.0	1.7%
ME 2	42 59 6	2012	Below Normal	August	--	386.1	373.9	12.2	3.1%	372.2	13.9	3.6%	368.8	17.3	4.5%	365.3	20.8	5.4%	361.9	24.2	6.3%	358.5	27.6	7.2%
ME 2	42 59 6	2012	Below Normal	September	Used in Summary Table Analysis	245.1	234.5	10.6	4.3%	233.1	12.0	4.9%	230.1	15.0	6.1%	227.1	18.0	7.3%	224.1	21.0	8.6%	221.1	23.9	9.8%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	42 59 6	2013	Below Normal	October	Used in Summary Table Analysis	1,890.0	1,881.1	8.9	0.5%	1,880.0	10.1	0.5%	1,877.4	12.6	0.7%	1,874.9	15.2	0.8%	1,872.3	17.7	0.9%	1,869.8	20.3	1.1%
ME 2	42 59 6	2013	Below Normal	November	Used in Summary Table Analysis	14,545.1	14,538.2	6.9	0.0%	14,537.0	8.1	0.1%	14,535.9	9.3	0.1%	14,533.6	11.6	0.1%	14,531.3	13.9	0.1%	14,530.1	15.0	0.1%
ME 2	42 59 6	2013	Below Normal	December	--	59,673.6	59,666.7	6.9	0.0%	59,666.7	6.9	0.0%	59,664.4	9.3	0.0%	59,663.2	10.4	0.0%	59,660.9	12.7	0.0%	59,659.7	13.9	0.0%
ME 2	42 59 6	2013	Below Normal	January	--	22,108.8	22,104.2	4.6	0.0%	22,103.0	5.8	0.0%	22,101.9	6.9	0.0%	22,099.5	9.3	0.0%	22,098.4	10.4	0.0%	22,097.2	11.6	0.1%
ME 2	42 59 6	2013	Below Normal	February	--	8,803.8	8,799.2	4.6	0.1%	8,798.5	5.3	0.1%	8,797.1	6.7	0.1%	8,795.8	8.0	0.1%	8,794.4	9.4	0.1%	8,793.1	10.8	0.1%
ME 2	42 59 6	2013	Below Normal	March	--	10,266.1	10,261.8	4.3	0.0%	10,261.1	5.0	0.0%	10,259.8	6.3	0.1%	10,258.6	7.5	0.1%	10,257.3	8.8	0.1%	10,256.0	10.1	0.1%
ME 2	42 59 6	2013	Below Normal	April	--	8,273.6	8,263.3	10.3	0.1%	8,261.8	11.8	0.1%	8,258.9	14.7	0.2%	8,256.0	17.6	0.2%	8,253.0	20.6	0.2%	8,250.0	23.6	0.3%
ME 2	42 59 6	2013	Below Normal	May	--	4,407.4	4,395.0	12.4	0.3%	4,393.2	14.2	0.3%	4,389.7	17.7	0.4%	4,386.1	21.3	0.5%	4,382.5	24.9	0.6%	4,378.9	28.5	0.6%
ME 2	42 59 6	2013	Below Normal	June	--	2,104.6	2,088.7	16.0	0.8%	2,086.5	18.2	0.9%	2,081.9	22.7	1.1%	2,077.4	27.2	1.3%	2,072.9	31.7	1.5%	2,068.4	36.2	1.7%
ME 2	42 59 6	2013	Below Normal	July	--	717.3	703.0	14.3	2.0%	701.0	16.3	2.3%	696.9	20.4	2.8%	692.9	24.4	3.4%	688.9	28.4	4.0%	684.9	32.4	4.5%
ME 2	42 59 6	2013	Below Normal	August	--	337.3	324.2	13.0	3.9%	322.4	14.9	4.4%	318.7	18.6	5.5%	314.9	22.3	6.6%	311.2	26.0	7.7%	307.5	29.7	8.8%
ME 2	42 59 6	2013	Below Normal	September	Used in Summary Table Analysis	4,750.1	4,736.6	13.5	0.3%	4,734.6	15.5	0.3%	4,730.8	19.3	0.4%	4,727.0	23.1	0.5%	4,723.1	27.0	0.6%	4,719.2	30.9	0.7%
ME 2	42 59 6	2014	Critical	October	Used in Summary Table Analysis	282.7	273.7	9.1	3.2%	272.4	10.4	3.7%	269.7	13.0	4.6%	267.1	15.6	5.5%	264.5	18.2	6.4%	261.9	20.8	7.4%
ME 2	42 59 6	2014	Critical	November	Used in Summary Table Analysis	1,520.3	1,513.3	6.9	0.5%	1,512.3	8.0	0.5%	1,510.3	10.0	0.7%	1,508.3	11.9	0.8%	1,506.3	14.0	0.9%	1,504.3	16.0	1.1%
ME 2	42 59 6	2014	Critical	December	--	1,580.6	1,574.7	5.9	0.4%	1,573.8	6.7	0.4%	1,572.2	8.3	0.5%	1,570.5	10.1	0.6%	1,568.8	11.8	0.7%	1,567.0	13.5	0.9%
ME 2	42 59 6	2014	Critical	January	--	2,802.8	2,797.8	5.0	0.2%	2,797.0	5.8	0.2%	2,795.6	7.2	0.3%	2,794.1	8.7	0.3%	2,792.6	10.2	0.4%	2,791.1	11.7	0.4%
ME 2	42 59 6	2014	Critical	February	--	15,692.1	15,687.5	4.6	0.0%	15,686.3	5.8	0.0%	15,685.2	6.9	0.0%	15,684.0	8.1	0.1%	15,682.9	9.3	0.1%	15,681.7	10.4	0.1%
ME 2	42 59 6	2014	Critical	March	--	31,405.1	31,401.6	3.5	0.0%	31,400.5	4.6	0.0%	31,399.3	5.8	0.0%	31,398.1	6.9	0.0%	31,397.0	8.1	0.0%	31,395.8	9.3	0.0%
ME 2	42 59 6	2014	Critical	April	--	12,963.0	12,952.5	10.4	0.1%	12,950.2	12.7	0.1%	12,947.9	15.0	0.1%	12,944.4	18.5	0.1%	12,941.0	22.0	0.2%	12,937.5	25.5	0.2%
ME 2	42 59 6	2014	Critical	May	--	5,172.8	5,159.4	13.4	0.3%	5,157.4	15.4	0.3%	5,153.5	19.3	0.4%	5,149.7	23.1	0.4%	5,145.8	27.0	0.5%	5,141.9	30.9	0.6%
ME 2	42 59 6	2014	Critical	June	--	1,193.6	1,174.4	19.2	1.6%	1,171.8	21.9	1.8%	1,166.3	27.3	2.3%	1,161.0	32.6	2.7%	1,155.6	38.0	3.2%	1,150.2	43.4	3.6%
ME 2	42 59 6	2014	Critical	July	--	544.6	528.2	16.4	3.0%	525.9	18.7	3.4%	521.2	23.4	4.3%	516.6	28.1	5.2%	511.9	32.7	6.0%	507.2	37.4	6.9%
ME 2	42 59 6	2014	Critical	August	--	345.1	329.8	15.3	4.4%	327.6	17.5	5.1%	323.3	21.9	6.3%	318.9	26.2	7.6%	314.6	30.6	8.9%	310.2	34.9	10.1%
ME 2	42 59 6	2014	Critical	September	Used in Summary Table Analysis	2,557.9	2,542.6	15.3	0.6%	2,540.5	17.4	0.7%	2,536.2	21.6	0.8%	2,531.8	26.0	1.0%	2,527.5	30.3	1.2%	2,523.1	34.7	1.4%
ME 2	42 59 6	2015	Dry	October	Used in Summary Table Analysis	11,293.3	11,281.7	11.6	0.1%	11,280.1	13.2	0.1%	11,277.0	16.3	0.1%	11,273.7	19.6	0.2%	11,270.7	22.6	0.2%	11,267.2	26.0	0.2%
ME 2	42 59 6	2015	Dry	November	Used in Summary Table Analysis	8,967.2	8,959.1	8.1	0.1%	8,958.0	9.3	0.1%	8,955.7	11.6	0.1%	8,953.4	13.9	0.2%	8,951.0	16.2	0.2%	8,948.7	18.5	0.2%
ME 2	42 59 6	2015	Dry	December	--	32,341.4	32,335.6	5.8	0.0%	32,334.5	6.9	0.0%	32,332.2	9.3	0.0%	32,329.9	11.6	0.0%	32,328.7	12.7	0.0%	32,326.4	15.0	0.0%
ME 2	42 59 6	2015	Dry	January	--	14,537.0	14,531.3	5.8	0.0%	14,530.1	6.9	0.0%	14,528.9	8.1	0.1%	14,526.6	10.4	0.1%	14,525.5	11.6	0.1%	14,523.1	13.9	0.1%
ME 2	42 59 6	2015	Dry	February	--	27,127.3	27,122.7	4.6	0.0%	27,121.5	5.8	0.0%	27,120.4	6.9	0.0%	27,119.2	8.1	0.0%	27,116.9	10.4	0.0%	27,115.7	11.6	0.0%
ME 2	42 59 6	2015	Dry	March	--	11,547.1	11,542.6	4.5	0.0%	11,542.0	5.1	0.0%	11,540.6	6.5	0.1%	11,539.4	7.8	0.1%	11,538.1	9.0	0.1%	11,536.8	10.3	0.1%
ME 2	42 59 6	2015	Dry	April	--	8,317.6	8,306.0	11.6	0.1%	8,304.4	13.2	0.2%	8,301.2	16.4	0.2%	8,297.8	19.8	0.2%	8,294.4	23.1	0.3%	8,291.2	26.4	0.3%
ME 2	42 59 6	2015	Dry	May	--	1,510.2	1,496.6	13.5	0.9%	1,494.7	15.5	1.0%	1,490.9	19.3	1.3%	1,487.0	23.1	1.5%	1,483.1	27.1	1.8%	1,479.3	30.9	2.0%
ME 2	42 59 6	2015	Dry	June	--	652.1	634.1	18.1	2.8%	631.5	20.6	3.2%	626.4	25.7	3.9%	621.4	30.7	4.7%	616.4	35.8	5.5%	611.4	40.8	6.2%
ME 2	42 59 6	2015	Dry	July	--	267.9	251.3	16.6	6.2%	249.0	18.9	7.1%	244.3	23.6	8.8%	239.6	28.3	10.6%	234.9	33.0	12.3%	230.2	37.7	14.1%
ME 2	42 59 6	2015	Dry	August	--	164.1	148.6	15.5	9.4%	146.4	17.7	10.8%	142.0	22.1	13.5%	137.6	26.5	16.2%	133.2	30.9	18.9%	128.8	35.4	21.5%
ME 2	42 59 6	2015	Dry	September	Used in Summary Table Analysis	119.4	105.9	13.5	11.3%	104.0	15.4	12.9%	99.6	19.8	16.6%	95.4	24.0	20.1%	91.1	28.3	23.7%	86.9	32.6	27.3%
ME 2	42 59 6	2016	Above Normal	October	Used in Summary Table Analysis	85.1	72.9	12.1	14.3%	71.2	13.9	16.4%	67.8	17.3	20.3%	64.4	20.7	24.3%	61.1	24.0	28.2%	58.0	27.0	31.8%
ME 2	42 59 6	2016	Above Normal	November	Used in Summary Table Analysis	3,804.3	3,796.2	8.1	0.2%	3,794.9	9.4	0.2%	3,792.6	11.7	0.3%	3,790.2	14.1	0.4%	3,787.7	16.6	0.4%	3,785.3	19.0	0.5%
ME 2	42 59 6	2016	Above Normal	December	--	36,294.0	36,287.0	6.9	0.0%	36,285.9	8.1	0.0%	36,284.7	9.3	0.0%	36,282.4	11.6	0.0%	36,280.1	13.9	0.0%	36,277.8	16.2	0.0%
ME 2	42 59 6	2016	Above Normal	January	--	56,976.9	56,971.1	5.8	0.0%	56,969.9	6.9	0.0%	56,967.6	9.3	0.0%	56,966.4	10.4	0.0%	56,964.1	12.7	0.0%	56,961.8	15.0	0.0%
ME 2	42 59 6	2016	Above Normal	February	--	24,214.1	24,209.5	4.6	0.0%	24,208.3	5.8	0.0%	24,207.2	6.9	0.0%	24,204.9	9.3	0.0%	24,203.7	10.4	0.0%	24,202.5	11.6	0.0%
ME 2	42 59 6	2016	Above Normal	March	--	41,621.5	41,615.7	5.8	0.0%	41,615.7	5.8	0.0%	41,614.6	6.9	0.0%	41,612.3	9.3	0.0%	41,611.1	10.4	0.0%	41,610.0	11.6	0.0%
ME 2	42 59 6	2016	Above Normal	April	--	18,495.4	18,490.7	4.6	0.0%	18,489.6	5.8	0.0%	18,488.4	6.9	0.0%	18,487.3	8.1	0.0%	18,486.1	9.3	0.1%	18,485.0	10.4	0.1%
ME 2	42 59 6	2016	Above Normal	May	--	5,202.3	5,196.3	6.0	0.1%	5,195.5	6.8	0.1%	5,193.8	8.6	0.2%	5,192.0	10.3	0.2%	5,190.3	12.0	0.2%	5,188.5	13.8	0.3%
ME 2	42 59 6	2016	Above Normal	June	--	1,505.9	1,492.4	13.5	0.9%	1,490.4	15.5	1.0%	1,486.6	19.3	1.3%	1,482.8	23.1	1.5%	1,478.9	27.0	1.8%	1,475.2	30.7	2.0%
ME 2	42 59 6	2016	Above Normal	July	--	818.9	804.6	14.3	1.7%	802.5	16.4	2.0%	798.5	20.4	2.5%	794.4	24.5	3.0%	790.4	28.5	3.5%	786.3	32.5	4.0%
ME 2	42 59 6	2016	Above Normal	August	--	487.2	473.8	13.3	2.7%	471.9	15.3	3.1%	468.1	19.1	3.9%	464.3	22.9	4.7%	460.5	26.7	5.5%	456.7	30.5	6.3%
ME 2	42 59 6	2016	Above Normal	September	Used in Summary Table Analysis	324.0	312.7	11.3	3.5%	310.4	13.6	4.2%	307.0	17.0	5.3%	303.4	20.6	6.4%	299.8	24.1	7.5%	296.3	27.7	8.6%
ME 2	42 59 6	2017	Wet	October	Used in Summary Table Analysis	18,158.6	18,149.3	9.3	0.1%	18,148.1	10.4	0.1%	18,145.8	12.7	0.1%	18,143.5	15.0	0.1%	18,138.9	19.7	0.1%	18,137.7	20.8	0.1%
ME 2	42 59 6	2017	Wet	November	Used in Summary Table Analysis	18,684.0	18,677.1	6.9	0.0%	18,675.9	8.1	0.0%	18,673.6	10.4	0.1%	18,671.3	12.7	0.1%	18,670.1	13.9	0.1%	18,667.8	16.2	0.1%
ME 2	42 59 6	2017	Wet	December	--	23,892.4	23,886.6	5.8	0.0%	23,885.4	6.9	0.0%	23,884.3	8.1	0.0%	23,881.9	10.4	0.0%	23,880.8	11.6	0.0%	23,878.5	13.9	0.1%
ME 2	42 59 6	2017	Wet	January	--	106,248.8	106,243.1	5.8	0.0%	106,241.9	6.9	0.0%	106,240.7	8.1	0.0%	106,239.6	9.3	0.0%	106,237.3	11.6	0.0%	106,236.1	12.7	0.0%
ME 2	42 59 6	2017	Wet	February	--	81,454.9	81,449.1	5.8	0.0%	81,449.1	5.8	0.0%	81,447.9	6.9	0.0%	81,445.6	9.3	0.0%	81,444.4	10.4	0.0%	81,443.3	11.6	0.0%
ME 2	42 59 6	2017	Wet	March	--	27,155.1	27,150.5	4.6	0.0%	27,150.5	4.6	0.0%	27,149.3	5.8	0.0%	27,148.1	6.9	0.0%	27,145.8	9.3	0.0%	27,144.7	10.4	0.0%
ME 2	42 59 6	2017	Wet	April	--	22,810.2	22,806.7	3.5	0.0%	22,805.6	4.6	0.0%	22,804.4	5.8	0.0%	22,804.4	5.8	0.0%	22,802.1	8.1	0.0%	22,802.1	8.1	0.0%
ME 2	42 59 6	2017	Wet	May	--	6,271.2	6,265.2	6.0	0.1%	6,264.4	6.8	0.1%	6,262.6	8.6	0.1%	6,260.9	10.3	0.2%	6,259.1	12.0	0.2%	6,257.4	13.8	0.2%
ME 2	42 59 6	2017	Wet	June	--	2,103.0	2,088.9	14.1	0.7%	2,086.8	16.2	0.8%	2,082.9	20.1	1.0%	2,078.8	24.2	1.2%	2,074.9	28.1	1.3%	2,070.8	32.2	1.5%
ME 2	42 59 6	2017	Wet	July	--	927.4	913.1	14.3	1.5%	911.0	16.4	1.8%	907.0	20.4	2.2%	902.9	24.5	2.6%	898.9	28.5	3.1%	894.9	32.6	3.5%
ME 2	42 59 6	2017	Wet	August	--	499.7	486.4	13.3	2.7%	484.5	15.2	3.0%	480.8	19.0	3.8%	477.0	22.7	4.5%	473.3	26.5	5.3%	469.5	30.2	6.1%
ME 2	42 59 6	2017	Wet	September	Used in Summary Table Analysis	317.6	305.4	12.2	3.8%	303.6	13.9	4.4%	300.2	17.4	5.5%	296.7	20.9	6.6%	293.3	24.3	7.7%	289.8	27.8	8.7%
ME 2	42 59 6	2018	Above Normal	October	Used in Summary Table Analysis	270.4	261.3	9.1	3.4%	260.0	10.4	3.8%	257.4	13.0	4.8%	254.8	15.6	5.8%	252.2	18.2	6.7%	249.6	20.8	7.7%
ME 2	42 59 6	2018	Above Normal	November	Used in Summary Table Analysis	10,642.9	10,636.2	6.7	0.1%	10,635.3	7.6	0.1%	10,633.4	9.5	0.1%	10,631.5	11.5	0.1%	10,629.5	13.4	0.1%	10,627.5	15.4	0.1%
ME 2	42 59 6	2018	Above Normal	December	--	5,434.5	5,429.1	5.4	0.1%	5,428.2	6.3	0.1%	5,426.7	7.8	0.1%	5,425.1	9.4	0.2%	5,423.5	11.0	0.2%	5,421.9	12.6	0.2%
ME 2	42 59 6	2018	Above Normal	January	--	17,522.0	17,517.4	4.6	0.0%	17,516.2	5.8	0.0%	17,515.0	6.9	0.0%	17,513.9	8.1	0.0%	17,512.7	9.3	0.1%	17,511.6	10.4	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	42 59 6	2018	Above Normal	February	--	7,587.5	7,583.3	4.2	0.1%	7,582.6	4.9	0.1%	7,581.4	6.1	0.1%	7,580.1	7.4	0.1%	7,578.9	8.6	0.1%	7,577.7	9.8	0.1%
ME 2	42 59 6	2018	Above Normal	March	--	20,534.7	20,531.3	3.5	0.0%	20,530.1	4.6	0.0%	20,528.9	5.8	0.0%	20,527.8	6.9	0.0%	20,526.6	8.1	0.0%	20,525.5	9.3	0.0%
ME 2	42 59 6	2018	Above Normal	April	--	32,005.8	32,002.3	3.5	0.0%	32,002.3	3.5	0.0%	32,001.2	4.6	0.0%	32,000.0	5.8	0.0%	31,998.8	6.9	0.0%	31,997.7	8.1	0.0%
ME 2	42 59 6	2018	Above Normal	May	--	6,983.9	6,973.1	10.8	0.2%	6,971.6	12.3	0.2%	6,968.6	15.3	0.2%	6,965.5	18.4	0.3%	6,962.5	21.4	0.3%	6,959.7	24.2	0.3%
ME 2	42 59 6	2018	Above Normal	June	--	1,909.5	1,895.7	13.8	0.7%	1,893.8	15.7	0.8%	1,889.9	19.6	1.0%	1,886.1	23.4	1.2%	1,882.2	27.3	1.4%	1,878.4	31.1	1.6%
ME 2	42 59 6	2018	Above Normal	July	--	776.2	762.0	14.2	1.8%	759.9	16.3	2.1%	755.9	20.3	2.6%	751.9	24.4	3.1%	747.8	28.4	3.7%	743.8	32.4	4.2%
ME 2	42 59 6	2018	Above Normal	August	--	437.5	424.8	12.7	2.9%	423.0	14.5	3.3%	419.4	18.1	4.1%	415.8	21.7	5.0%	412.2	25.3	5.8%	408.6	28.9	6.6%
ME 2	42 59 6	2018	Above Normal	September	Used in Summary Table Analysis	295.6	283.5	12.1	4.1%	281.7	13.9	4.7%	278.3	17.3	5.9%	274.8	20.8	7.0%	271.3	24.3	8.2%	267.8	27.8	9.4%
ME 2	42 59 6	2019	Below Normal	October	Used in Summary Table Analysis	205.2	196.2	9.0	4.4%	195.0	10.2	5.0%	192.4	12.8	6.2%	189.7	15.5	7.5%	187.2	17.9	8.7%	184.7	20.5	10.0%
ME 2	42 59 6	2019	Below Normal	November	Used in Summary Table Analysis	6,526.9	6,520.1	6.7	0.1%	6,519.1	7.8	0.1%	6,517.2	9.6	0.1%	6,515.3	11.6	0.2%	6,513.3	13.5	0.2%	6,511.3	15.5	0.2%
ME 2	42 59 6	2019	Below Normal	December	--	14,498.8	14,493.1	5.8	0.0%	14,491.9	6.9	0.0%	14,490.7	8.1	0.1%	14,489.6	9.3	0.1%	14,487.3	11.6	0.1%	14,486.1	12.7	0.1%
ME 2	42 59 6	2019	Below Normal	January	--	34,878.5	34,873.8	4.6	0.0%	34,872.7	5.8	0.0%	34,871.5	6.9	0.0%	34,870.4	8.1	0.0%	34,869.2	9.3	0.0%	34,866.9	11.6	0.0%
ME 2	42 59 6	2019	Below Normal	February	--	141,562.5	141,550.9	11.6	0.0%	141,550.9	11.6	0.0%	141,550.9	11.6	0.0%	141,550.9	11.6	0.0%	141,550.9	11.6	0.0%	141,550.9	11.6	0.0%
ME 2	42 59 6	2019	Below Normal	March	--	42,131.9	42,128.5	3.5	0.0%	42,127.3	4.6	0.0%	42,126.2	5.8	0.0%	42,125.0	6.9	0.0%	42,123.8	8.1	0.0%	42,122.7	9.3	0.0%
ME 2	42 59 6	2019	Below Normal	April	--	15,222.2	15,218.8	3.5	0.0%	15,218.8	3.5	0.0%	15,217.6	4.6	0.0%	15,216.4	5.8	0.0%	15,215.3	6.9	0.0%	15,214.1	8.1	0.1%
ME 2	42 59 6	2019	Below Normal	May	--	16,681.7	16,671.3	10.4	0.1%	16,669.0	12.7	0.1%	16,665.5	16.2	0.1%	16,663.2	18.5	0.1%	16,659.7	22.0	0.1%	16,656.3	25.5	0.2%
ME 2	42 59 6	2019	Below Normal	June	--	4,245.6	4,230.6	15.0	0.4%	4,228.4	17.2	0.4%	4,224.3	21.3	0.5%	4,220.4	25.2	0.6%	4,216.4	29.2	0.7%	4,212.5	33.1	0.8%
ME 2	42 59 6	2019	Below Normal	July	--	1,353.8	1,339.5	14.4	1.1%	1,337.5	16.3	1.2%	1,333.4	20.4	1.5%	1,329.4	24.4	1.8%	1,325.3	28.5	2.1%	1,321.3	32.5	2.4%
ME 2	42 59 6	2019	Below Normal	August	--	590.0	577.0	13.0	2.2%	575.2	14.8	2.5%	571.5	18.5	3.1%	567.9	22.1	3.7%	564.2	25.8	4.4%	560.5	29.5	5.0%
ME 2	42 59 6	2019	Below Normal	September	Used in Summary Table Analysis	457.9	445.8	12.0	2.6%	444.1	13.8	3.0%	440.7	17.2	3.8%	437.2	20.6	4.5%	433.8	24.1	5.3%	430.4	27.5	6.0%
ME 2	42 59 6	2020	Dry	October	Used in Summary Table Analysis	353.2	344.8	8.4	2.4%	343.6	9.7	2.7%	341.1	12.1	3.4%	338.7	14.5	4.1%	336.3	17.0	4.8%	333.8	19.4	5.5%
ME 2	42 59 6	2020	Dry	November	Used in Summary Table Analysis	310.0	303.9	6.1	2.0%	303.0	6.9	2.2%	301.3	8.7	2.8%	299.5	10.5	3.4%	297.8	12.2	3.9%	296.0	14.0	4.5%
ME 2	42 59 6	2020	Dry	December	--	13,039.4	13,034.7	4.6	0.0%	13,033.6	5.8	0.0%	13,032.4	6.9	0.1%	13,030.1	9.3	0.1%	13,028.9	10.4	0.1%	13,026.6	12.7	0.1%
ME 2	42 59 6	2020	Dry	January	--	22,136.6	22,131.9	4.6	0.0%	22,131.9	4.6	0.0%	22,129.6	6.9	0.0%	22,128.5	8.1	0.0%	22,127.3	9.3	0.0%	22,126.2	10.4	0.0%
ME 2	42 59 6	2020	Dry	February	--	7,408.3	7,404.2	4.2	0.1%	7,403.6	4.7	0.1%	7,402.3	6.0	0.1%	7,401.0	7.3	0.1%	7,399.8	8.6	0.1%	7,398.5	9.8	0.1%
ME 2	42 59 6	2020	Dry	March	--	7,211.5	7,207.6	3.8	0.1%	7,207.1	4.4	0.1%	7,205.9	5.6	0.1%	7,204.6	6.8	0.1%	7,203.5	8.0	0.1%	7,202.3	9.1	0.1%
ME 2	42 59 6	2020	Dry	April	--	5,446.5	5,435.4	11.1	0.2%	5,433.9	12.6	0.2%	5,430.7	15.9	0.3%	5,427.5	19.0	0.3%	5,424.3	22.2	0.4%	5,421.1	25.5	0.5%
ME 2	42 59 6	2020	Dry	May	--	7,329.5	7,316.1	13.4	0.2%	7,314.2	15.3	0.2%	7,310.4	19.1	0.3%	7,306.5	23.0	0.3%	7,302.7	26.9	0.4%	7,298.8	30.7	0.4%
ME 2	42 59 6	2020	Dry	June	--	2,105.9	2,087.5	18.4	0.9%	2,085.0	20.9	1.0%	2,080.1	25.8	1.2%	2,075.2	30.7	1.5%	2,070.3	35.6	1.7%	2,065.4	40.5	1.9%
ME 2	42 59 6	2020	Dry	July	--	793.4	776.8	16.6	2.1%	774.5	18.9	2.4%	769.7	23.7	3.0%	765.0	28.4	3.6%	760.3	33.1	4.2%	755.5	37.9	4.8%
ME 2	42 59 6	2020	Dry	August	--	395.7	380.0	15.7	4.0%	377.8	18.0	4.5%	373.3	22.5	5.7%	368.8	27.0	6.8%	364.3	31.4	7.9%	359.8	35.9	9.1%
ME 2	42 59 6	2020	Dry	September	Used in Summary Table Analysis	245.4	231.7	13.7	5.6%	229.8	15.6	6.4%	225.0	20.3	8.3%	220.8	24.5	10.0%	216.4	29.0	11.8%	212.1	33.3	13.6%
ME 2	41 58 8	2000	Above Normal	October	Used in Summary Table Analysis	801.8	792.1	9.7	1.2%	790.7	11.1	1.4%	788.0	13.8	1.7%	785.1	16.7	2.1%	782.3	19.5	2.4%	779.5	22.3	2.8%
ME 2	41 58 8	2000	Above Normal	November	Used in Summary Table Analysis	11,943.3	11,935.2	8.1	0.1%	11,935.2	8.1	0.1%	11,932.9	10.4	0.1%	11,930.6	12.7	0.1%	11,928.2	15.0	0.1%	11,925.9	17.4	0.1%
ME 2	41 58 8	2000	Above Normal	December	--	10,715.0	10,708.8	6.3	0.1%	10,707.9	7.2	0.1%	10,706.1	8.9	0.1%	10,704.3	10.8	0.1%	10,702.4	12.6	0.1%	10,700.6	14.5	0.1%
ME 2	41 58 8	2000	Above Normal	January	--	28,284.7	28,278.9	5.8	0.0%	28,278.9	5.8	0.0%	28,276.6	8.1	0.0%	28,275.5	9.3	0.0%	28,273.1	11.6	0.0%	28,272.0	12.7	0.0%
ME 2	41 58 8	2000	Above Normal	February	--	36,849.5	36,843.8	5.8	0.0%	36,843.8	5.8	0.0%	36,842.6	6.9	0.0%	36,840.3	9.3	0.0%	36,839.1	10.4	0.0%	36,838.0	11.6	0.0%
ME 2	41 58 8	2000	Above Normal	March	--	18,253.5	18,248.8	4.6	0.0%	18,248.8	4.6	0.0%	18,247.7	5.8	0.0%	18,245.4	8.1	0.0%	18,244.2	9.3	0.1%	18,243.1	10.4	0.1%
ME 2	41 58 8	2000	Above Normal	April	--	12,266.2	12,261.6	4.6	0.0%	12,260.4	5.8	0.0%	12,259.3	6.9	0.1%	12,258.1	8.1	0.1%	12,256.9	9.3	0.1%	12,255.8	10.4	0.1%
ME 2	41 58 8	2000	Above Normal	May	--	7,053.6	7,041.7	11.9	0.2%	7,039.9	13.7	0.2%	7,036.5	17.1	0.2%	7,033.0	20.6	0.3%	7,029.5	24.1	0.3%	7,026.2	27.4	0.4%
ME 2	41 58 8	2000	Above Normal	June	--	2,592.6	2,574.3	18.3	0.7%	2,571.6	20.9	0.8%	2,566.4	26.2	1.0%	2,561.2	31.4	1.2%	2,556.0	36.6	1.4%	2,550.8	41.8	1.6%
ME 2	41 58 8	2000	Above Normal	July	--	980.6	965.2	15.4	1.6%	963.0	17.6	1.8%	958.6	21.9	2.2%	954.3	26.3	2.7%	950.0	30.6	3.1%	945.7	34.9	3.6%
ME 2	41 58 8	2000	Above Normal	August	--	510.2	496.2	13.9	2.7%	494.3	15.9	3.1%	490.3	19.9	3.9%	486.3	23.8	4.7%	482.4	27.8	5.4%	478.4	31.7	6.2%
ME 2	41 58 8	2000	Above Normal	September	Used in Summary Table Analysis	284.5	272.5	12.0	4.2%	270.8	13.7	4.8%	267.3	17.2	6.0%	263.9	20.6	7.2%	260.5	24.0	8.4%	257.1	27.4	9.6%
ME 2	41 58 8	2001	Dry	October	Used in Summary Table Analysis	3,771.1	3,761.5	9.6	0.3%	3,760.1	11.0	0.3%	3,757.3	13.8	0.4%	3,754.6	16.4	0.4%	3,751.9	19.2	0.5%	3,749.1	22.0	0.6%
ME 2	41 58 8	2001	Dry	November	Used in Summary Table Analysis	6,055.6	6,048.1	7.4	0.1%	6,047.0	8.6	0.1%	6,044.9	10.6	0.2%	6,042.8	12.7	0.2%	6,040.6	14.9	0.2%	6,038.4	17.1	0.3%
ME 2	41 58 8	2001	Dry	December	--	8,769.6	8,763.3	6.3	0.1%	8,762.4	7.2	0.1%	8,760.5	9.0	0.1%	8,758.7	10.9	0.1%	8,756.9	12.6	0.1%	8,755.0	14.6	0.2%
ME 2	41 58 8	2001	Dry	January	--	12,663.2	12,658.6	4.6	0.0%	12,657.4	5.8	0.0%	12,655.1	8.1	0.1%	12,653.9	9.3	0.1%	12,652.8	10.4	0.1%	12,650.5	12.7	0.1%
ME 2	41 58 8	2001	Dry	February	--	17,390.0	17,384.3	5.8	0.0%	17,384.3	5.8	0.0%	17,381.9	8.1	0.0%	17,380.8	9.3	0.1%	17,379.6	10.4	0.1%	17,378.5	11.6	0.1%
ME 2	41 58 8	2001	Dry	March	--	12,252.3	12,247.7	4.6	0.0%	12,246.5	5.8	0.0%	12,245.4	6.9	0.1%	12,244.2	8.1	0.1%	12,243.1	9.3	0.1%	12,241.9	10.4	0.1%
ME 2	41 58 8	2001	Dry	April	--	10,925.5	10,913.1	12.4	0.1%	10,911.2	14.2	0.1%	10,907.6	17.8	0.2%	10,904.1	21.4	0.2%	10,900.5	25.0	0.2%	10,897.0	28.5	0.3%
ME 2	41 58 8	2001	Dry	May	--	2,631.4	2,616.9	14.5	0.5%	2,614.8	16.6	0.6%	2,610.5	20.8	0.8%	2,606.4	25.0	1.0%	2,602.2	29.2	1.1%	2,598.0	33.3	1.3%
ME 2	41 58 8	2001	Dry	June	--	2,617.1	2,596.9	20.3	0.8%	2,594.0	23.1	0.9%	2,588.3	28.8	1.1%	2,582.6	34.5	1.3%	2,577.0	40.2	1.5%	2,571.3	45.8	1.8%
ME 2	41 58 8	2001	Dry	July	--	711.3	693.6	17.7	2.5%	691.1	20.2	2.8%	686.1	25.2	3.5%	681.1	30.2	4.2%	676.1	35.2	4.9%	671.1	40.2	5.7%
ME 2	41 58 8	2001	Dry	August	--	163.0	146.1	16.9	10.3%	143.7	19.3	11.8%	138.9	24.1	14.8%	134.1	28.9	17.7%	129.4	33.7	20.6%	124.5	38.5	23.6%
ME 2	41 58 8	2001	Dry	September	Used in Summary Table Analysis	85.4	70.8	14.7	17.2%	68.7	16.8	19.6%	64.5	20.9	24.5%	60.3	25.1	29.4%	56.2	29.3	34.3%	52.0	33.5	39.2%
ME 2	41 58 8	2002	Below Normal	October	Used in Summary Table Analysis	254.2	242.2	12.0	4.7%	240.5	13.7	5.4%	237.0	17.2	6.8%	233.6	20.7	8.1%	230.2	24.1	9.5%	226.7	27.6	10.8%
ME 2	41 58 8	2002	Below Normal	November	Used in Summary Table Analysis	11,935.2	11,927.1	8.1	0.1%	11,924.8	10.4	0.1%	11,922.5	12.7	0.1%	11,920.1	15.0	0.1%	11,917.8	17.4	0.1%	11,914.4	20.8	0.2%
ME 2	41 58 8	2002	Below Normal	December	--	35,419.0	35,410.9	8.1	0.0%	35,409.7	9.3	0.0%	35,408.6	10.4	0.0%	35,406.3	12.7	0.0%	35,402.8	16.2	0.0%	35,400.5	18.5	0.1%
ME 2	41 58 8	2002	Below Normal	January	--	30,708.3	30,701.4	6.9	0.0%	30,701.4	6.9	0.0%	30,699.1	9.3	0.0%	30,696.8	11.6	0.0%	30,694.4	13.9	0.0%	30,693.3	15.0	0.0%
ME 2	41 58 8	2002	Below Normal	February	--	24,574.1	24,568.3	5.8	0.0%	24,567.1	6.9	0.0%	24,566.0	8.1	0.0%	24,563.7	10.4	0.0%	24,561.3	12.7	0.1%	24,560.2	13.9	0.1%
ME 2	41 58 8	2002	Below Normal	March	--	17,697.9	17,692.1	5.8	0.0%	17,691.0	6.9	0.0%	17,689.8	8.1	0.0%	17,688.7	9.3	0.1%	17,686.3	11.6	0.1%	17,685.2	12.7	0.1%
ME 2	41 58 8	2002	Below Normal	April	--	9,891.1	9,878.8	12.3	0.1%	9,877.1	14.0	0.1%	9,873.6	17.5	0.2%	9,870.1	20.9	0.2%	9,866.7	24.4	0.2%	9,863.2	27.9	0.3%
ME 2	41 58 8	2002	Below Normal	May	--	3,304.4	3,290.2	14.2	0.4%	3,288.2	16.2	0.5%	3,284.0	20.4	0.6%	3,280.1	24.3	0.7%	3,275.9	28.5	0.9%	3,271.9	32.5	1.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	41 58 8	2002	Below Normal	June	--	844.7	828.1	16.5	2.0%	825.8	18.8	2.2%	821.1	23.5	2.8%	816.5	28.2	3.3%	811.8	32.9	3.9%	807.2	37.5	4.4%
ME 2	41 58 8	2002	Below Normal	July	--	352.9	337.0	15.9	4.5%	334.7	18.1	5.1%	330.2	22.7	6.4%	325.7	27.2	7.7%	321.2	31.7	9.0%	316.7	36.2	10.3%
ME 2	41 58 8	2002	Below Normal	August	--	216.4	201.8	14.6	6.8%	199.7	16.7	7.7%	195.5	20.9	9.6%	191.4	25.0	11.6%	187.2	29.2	13.5%	183.0	33.3	15.4%
ME 2	41 58 8	2002	Below Normal	September	Used in Summary Table Analysis	153.5	140.1	13.3	8.7%	138.2	15.3	9.9%	134.4	19.1	12.4%	130.6	22.9	14.9%	126.8	26.7	17.4%	123.0	30.5	19.9%
ME 2	41 58 8	2003	Wet	October	Used in Summary Table Analysis	118.6	108.0	10.5	8.9%	106.5	12.1	10.2%	103.5	15.1	12.7%	100.5	18.1	15.3%	97.4	21.2	17.8%	94.4	24.2	20.4%
ME 2	41 58 8	2003	Wet	November	Used in Summary Table Analysis	883.7	875.6	8.1	0.9%	874.4	9.3	1.0%	872.0	11.6	1.3%	869.7	14.0	1.6%	867.4	16.3	1.8%	865.1	18.6	2.1%
ME 2	41 58 8	2003	Wet	December	--	56,204.9	56,197.9	6.9	0.0%	56,197.9	6.9	0.0%	56,195.6	9.3	0.0%	56,193.3	11.6	0.0%	56,191.0	13.9	0.0%	56,189.8	15.0	0.0%
ME 2	41 58 8	2003	Wet	January	--	31,400.5	31,394.7	5.8	0.0%	31,393.5	6.9	0.0%	31,391.2	9.3	0.0%	31,390.0	10.4	0.0%	31,387.7	12.7	0.0%	31,386.6	13.9	0.0%
ME 2	41 58 8	2003	Wet	February	--	20,282.4	20,276.6	5.8	0.0%	20,276.6	5.8	0.0%	20,274.3	8.1	0.0%	20,273.1	9.3	0.0%	20,272.0	10.4	0.1%	20,269.7	12.7	0.1%
ME 2	41 58 8	2003	Wet	March	--	23,927.1	23,921.3	5.8	0.0%	23,921.3	5.8	0.0%	23,920.1	6.9	0.0%	23,917.8	9.3	0.0%	23,916.7	10.4	0.0%	23,915.5	11.6	0.0%
ME 2	41 58 8	2003	Wet	April	--	42,656.3	42,650.5	5.8	0.0%	42,650.5	5.8	0.0%	42,649.3	6.9	0.0%	42,647.0	9.3	0.0%	42,645.8	10.4	0.0%	42,644.7	11.6	0.0%
ME 2	41 58 8	2003	Wet	May	--	12,185.2	12,173.6	11.6	0.1%	12,171.3	13.9	0.1%	12,167.8	17.4	0.1%	12,164.4	20.8	0.2%	12,160.9	24.3	0.2%	12,157.4	27.8	0.2%
ME 2	41 58 8	2003	Wet	June	--	3,154.3	3,138.5	15.7	0.5%	3,136.3	17.9	0.6%	3,131.9	22.3	0.7%	3,127.5	26.7	0.8%	3,123.3	31.0	1.0%	3,118.9	35.4	1.1%
ME 2	41 58 8	2003	Wet	July	--	1,461.3	1,445.6	15.7	1.1%	1,443.4	17.9	1.2%	1,438.9	22.5	1.5%	1,434.4	27.0	1.8%	1,430.0	31.4	2.1%	1,425.5	35.9	2.5%
ME 2	41 58 8	2003	Wet	August	--	747.9	733.0	14.9	2.0%	730.9	17.0	2.3%	726.7	21.3	2.8%	722.4	25.5	3.4%	718.2	29.7	4.0%	713.8	34.1	4.6%
ME 2	41 58 8	2003	Wet	September	Used in Summary Table Analysis	446.4	434.2	12.2	2.7%	432.5	13.9	3.1%	429.0	17.4	3.9%	425.6	20.9	4.7%	422.1	24.3	5.4%	418.6	27.8	6.2%
ME 2	41 58 8	2004	Wet	October	Used in Summary Table Analysis	313.5	303.8	9.7	3.1%	302.4	11.1	3.6%	299.6	13.9	4.4%	296.8	16.7	5.3%	294.0	19.5	6.2%	291.2	22.3	7.1%
ME 2	41 58 8	2004	Wet	November	Used in Summary Table Analysis	5,730.7	5,723.1	7.5	0.1%	5,722.0	8.7	0.2%	5,719.8	10.9	0.2%	5,717.6	13.1	0.2%	5,715.4	15.3	0.3%	5,713.2	17.5	0.3%
ME 2	41 58 8	2004	Wet	December	--	36,003.5	35,996.5	6.9	0.0%	35,996.5	6.9	0.0%	35,994.2	9.3	0.0%	35,991.9	11.6	0.0%	35,990.7	12.7	0.0%	35,988.4	15.0	0.0%
ME 2	41 58 8	2004	Wet	January	--	31,263.9	31,258.1	5.8	0.0%	31,256.9	6.9	0.0%	31,255.8	8.1	0.0%	31,253.5	10.4	0.0%	31,252.3	11.6	0.0%	31,250.0	13.9	0.0%
ME 2	41 58 8	2004	Wet	February	--	38,033.6	38,028.9	4.6	0.0%	38,027.8	5.8	0.0%	38,026.6	6.9	0.0%	38,025.5	8.1	0.0%	38,023.1	10.4	0.0%	38,022.0	11.6	0.0%
ME 2	41 58 8	2004	Wet	March	--	16,483.8	16,479.2	4.6	0.0%	16,479.2	4.6	0.0%	16,476.9	6.9	0.0%	16,475.7	8.1	0.0%	16,474.5	9.3	0.1%	16,473.4	10.4	0.1%
ME 2	41 58 8	2004	Wet	April	--	9,420.0	9,415.5	4.5	0.0%	9,414.9	5.1	0.1%	9,413.5	6.5	0.1%	9,412.3	7.8	0.1%	9,410.9	9.1	0.1%	9,409.6	10.4	0.1%
ME 2	41 58 8	2004	Wet	May	--	3,394.7	3,382.6	12.0	0.4%	3,380.9	13.8	0.4%	3,377.5	17.1	0.5%	3,374.1	20.6	0.6%	3,370.6	24.1	0.7%	3,367.1	27.5	0.8%
ME 2	41 58 8	2004	Wet	June	--	683.1	668.1	15.0	2.2%	666.0	17.1	2.5%	661.7	21.3	3.1%	657.5	25.6	3.7%	653.3	29.8	4.4%	649.0	34.0	5.0%
ME 2	41 58 8	2004	Wet	July	--	345.4	330.0	15.4	4.5%	327.8	17.6	5.1%	323.4	22.0	6.4%	319.0	26.4	7.6%	314.6	30.8	8.9%	310.2	35.2	10.2%
ME 2	41 58 8	2004	Wet	August	--	214.7	200.7	14.0	6.5%	198.7	16.0	7.5%	194.7	20.0	9.3%	190.7	24.0	11.2%	186.7	28.0	13.0%	182.7	32.0	14.9%
ME 2	41 58 8	2004	Wet	September	Used in Summary Table Analysis	152.3	139.0	13.3	8.7%	137.1	15.2	10.0%	133.3	19.0	12.5%	129.5	22.8	14.9%	125.7	26.6	17.4%	121.9	30.4	20.0%
ME 2	41 58 8	2005	Above Normal	October	Used in Summary Table Analysis	7,589.7	7,579.7	10.0	0.1%	7,578.4	11.3	0.1%	7,575.5	14.2	0.2%	7,572.7	17.0	0.2%	7,569.8	19.9	0.3%	7,566.9	22.8	0.3%
ME 2	41 58 8	2005	Above Normal	November	Used in Summary Table Analysis	2,239.7	2,232.2	7.5	0.3%	2,231.1	8.6	0.4%	2,228.9	10.8	0.5%	2,226.7	13.0	0.6%	2,224.7	15.0	0.7%	2,222.5	17.2	0.8%
ME 2	41 58 8	2005	Above Normal	December	--	20,770.8	20,763.9	6.9	0.0%	20,762.7	8.1	0.0%	20,761.6	9.3	0.0%	20,759.3	11.6	0.1%	20,756.9	13.9	0.1%	20,755.8	15.0	0.1%
ME 2	41 58 8	2005	Above Normal	January	--	22,181.7	22,177.1	4.6	0.0%	22,175.9	5.8	0.0%	22,173.6	8.1	0.0%	22,172.5	9.3	0.0%	22,171.3	10.4	0.0%	22,169.0	12.7	0.1%
ME 2	41 58 8	2005	Above Normal	February	--	13,971.1	13,966.4	4.6	0.0%	13,965.3	5.8	0.0%	13,964.1	6.9	0.0%	13,963.0	8.1	0.1%	13,960.6	10.4	0.1%	13,959.5	11.6	0.1%
ME 2	41 58 8	2005	Above Normal	March	--	28,412.0	28,407.4	4.6	0.0%	28,406.3	5.8	0.0%	28,405.1	6.9	0.0%	28,403.9	8.1	0.0%	28,402.8	9.3	0.0%	28,401.6	10.4	0.0%
ME 2	41 58 8	2005	Above Normal	April	--	21,341.4	21,336.8	4.6	0.0%	21,336.8	4.6	0.0%	21,335.6	5.8	0.0%	21,334.5	6.9	0.0%	21,332.2	9.3	0.0%	21,331.0	10.4	0.0%
ME 2	41 58 8	2005	Above Normal	May	--	19,447.9	19,435.2	12.7	0.1%	19,434.0	13.9	0.1%	19,429.4	18.5	0.1%	19,425.9	22.0	0.1%	19,422.5	25.5	0.1%	19,419.0	28.9	0.1%
ME 2	41 58 8	2005	Above Normal	June	--	15,728.0	15,708.3	19.7	0.1%	15,706.0	22.0	0.1%	15,700.2	27.8	0.2%	15,695.6	32.4	0.2%	15,689.8	38.2	0.2%	15,684.0	44.0	0.3%
ME 2	41 58 8	2005	Above Normal	July	--	2,857.5	2,841.3	16.2	0.6%	2,839.0	18.5	0.6%	2,834.5	23.0	0.8%	2,829.9	27.7	1.0%	2,825.2	32.3	1.1%	2,820.7	36.8	1.3%
ME 2	41 58 8	2005	Above Normal	August	--	970.5	956.5	14.0	1.4%	954.5	16.0	1.6%	950.5	20.0	2.1%	946.5	24.0	2.5%	942.5	28.0	2.9%	938.6	31.9	3.3%
ME 2	41 58 8	2005	Above Normal	September	Used in Summary Table Analysis	512.3	500.3	12.0	2.3%	498.5	13.7	2.7%	495.1	17.2	3.4%	491.7	20.6	4.0%	488.3	24.0	4.7%	484.8	27.5	5.4%
ME 2	41 58 8	2006	Wet	October	Used in Summary Table Analysis	620.8	611.3	9.5	1.5%	609.9	10.9	1.8%	607.2	13.6	2.2%	604.5	16.3	2.6%	601.8	19.0	3.1%	599.0	21.8	3.5%
ME 2	41 58 8	2006	Wet	November	Used in Summary Table Analysis	9,186.0	9,178.8	7.2	0.1%	9,177.8	8.2	0.1%	9,175.7	10.3	0.1%	9,173.6	12.4	0.1%	9,171.5	14.5	0.2%	9,169.4	16.6	0.2%
ME 2	41 58 8	2006	Wet	December	--	43,114.6	43,107.6	6.9	0.0%	43,106.5	8.1	0.0%	43,105.3	9.3	0.0%	43,103.0	11.6	0.0%	43,101.9	12.7	0.0%	43,099.5	15.0	0.0%
ME 2	41 58 8	2006	Wet	January	--	45,950.2	45,944.4	5.8	0.0%	45,943.3	6.9	0.0%	45,942.1	8.1	0.0%	45,941.0	9.3	0.0%	45,938.7	11.6	0.0%	45,937.5	12.7	0.0%
ME 2	41 58 8	2006	Wet	February	--	26,467.6	26,463.0	4.6	0.0%	26,461.8	5.8	0.0%	26,460.6	6.9	0.0%	26,459.5	8.1	0.0%	26,457.2	10.4	0.0%	26,456.0	11.6	0.0%
ME 2	41 58 8	2006	Wet	March	--	46,883.1	46,878.5	4.6	0.0%	46,877.3	5.8	0.0%	46,876.2	6.9	0.0%	46,875.0	8.1	0.0%	46,873.8	9.3	0.0%	46,872.7	10.4	0.0%
ME 2	41 58 8	2006	Wet	April	--	30,317.1	30,312.5	4.6	0.0%	30,312.5	4.6	0.0%	30,310.2	6.9	0.0%	30,309.0	8.1	0.0%	30,307.9	9.3	0.0%	30,306.7	10.4	0.0%
ME 2	41 58 8	2006	Wet	May	--	14,141.2	14,134.3	6.9	0.0%	14,133.1	8.1	0.1%	14,131.9	9.3	0.1%	14,129.6	11.6	0.1%	14,127.3	13.9	0.1%	14,126.2	15.0	0.1%
ME 2	41 58 8	2006	Wet	June	--	3,536.2	3,520.8	15.4	0.4%	3,518.6	17.6	0.5%	3,514.4	21.9	0.6%	3,510.0	26.3	0.7%	3,505.7	30.6	0.9%	3,501.3	35.0	1.0%
ME 2	41 58 8	2006	Wet	July	--	1,265.5	1,250.0	15.5	1.2%	1,247.8	17.7	1.4%	1,243.4	22.1	1.7%	1,239.0	26.5	2.1%	1,234.7	30.8	2.4%	1,230.3	35.2	2.8%
ME 2	41 58 8	2006	Wet	August	--	651.7	637.2	14.5	2.2%	635.2	16.6	2.5%	631.1	20.7	3.2%	626.9	24.8	3.8%	622.8	28.9	4.4%	618.8	32.9	5.1%
ME 2	41 58 8	2006	Wet	September	Used in Summary Table Analysis	413.4	401.2	12.2	3.0%	399.5	13.9	3.4%	396.0	17.4	4.2%	392.6	20.9	5.1%	389.1	24.4	5.9%	385.6	27.8	6.7%
ME 2	41 58 8	2007	Above Normal	October	Used in Summary Table Analysis	263.0	253.4	9.6	3.7%	252.0	11.0	4.2%	249.3	13.8	5.2%	246.5	16.5	6.3%	243.7	19.3	7.3%	240.9	22.1	8.4%
ME 2	41 58 8	2007	Above Normal	November	Used in Summary Table Analysis	8,560.5	8,553.0	7.5	0.1%	8,552.0	8.6	0.1%	8,549.8	10.8	0.1%	8,547.6	13.0	0.2%	8,545.5	15.0	0.2%	8,543.2	17.4	0.2%
ME 2	41 58 8	2007	Above Normal	December	--	20,199.1	20,192.1	6.9	0.0%	20,192.1	6.9	0.0%	20,189.8	9.3	0.0%	20,187.5	11.6	0.1%	20,186.3	12.7	0.1%	20,184.0	15.0	0.1%
ME 2	41 58 8	2007	Above Normal	January	--	10,191.9	10,186.2	5.7	0.1%	10,185.4	6.5	0.1%	10,183.8	8.1	0.1%	10,182.1	9.8	0.1%	10,180.4	11.5	0.1%	10,178.8	13.1	0.1%
ME 2	41 58 8	2007	Above Normal	February	--	30,335.6	30,329.9	5.8	0.0%	30,329.9	5.8	0.0%	30,327.5	8.1	0.0%	30,326.4	9.3	0.0%	30,325.2	10.4	0.0%	30,322.9	12.7	0.0%
ME 2	41 58 8	2007	Above Normal	March	--	13,057.9	13,052.1	5.8	0.0%	13,052.1	5.8	0.0%	13,049.8	8.1	0.1%	13,048.6	9.3	0.1%	13,047.5	10.4	0.1%	13,046.3	11.6	0.1%
ME 2	41 58 8	2007	Above Normal	April	--	11,492.8	11,481.1	11.7	0.1%	11,479.4	13.4	0.1%	11,476.0	16.8	0.1%	11,472.7	20.1	0.2%	11,469.3	23.5	0.2%	11,466.0	26.9	0.2%
ME 2	41 58 8	2007	Above Normal	May	--	4,118.4	4,104.7	13.7	0.3%	4,102.8	15.6	0.4%	4,098.8	19.6	0.5%	4,094.9	23.5	0.6%	4,091.0	27.4	0.7%	4,087.0	31.4	0.8%
ME 2	41 58 8	2007	Above Normal	June	--	1,482.5	1,465.3	17.2	1.2%	1,462.8	19.7	1.3%	1,458.0	24.5	1.7%	1,453.1	29.4	2.0%	1,448.3	34.3	2.3%	1,443.4	39.1	2.6%
ME 2	41 58 8	2007	Above Normal	July	--	486.8	470.4	16.4	3.4%	468.0	18.8	3.9%	463.4	23.4	4.8%	458.8	28.0	5.8%	454.1	32.7	6.7%	449.5	37.3	7.7%
ME 2	41 58 8	2007	Above Normal	August	--	212.3	198.0	14.3	6.7%	196.0	16.3	7.7%	191.9	20.4	9.6%	187.9	24.5	11.5%	183.8	28.5	13.4%	179.8	32.6	15.3%
ME 2	41 58 8	2007	Above Normal	September	Used in Summary Table Analysis	140.0	126.9	13.1	9.4%	125.0	15.0	10.7%	121.3	18.7	13.4%	117.5	22.4	16.0%	113.8	26.2	18.7%	110.1	29.9	21.4%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	41 58 8	2008	Dry	October	Used in Summary Table Analysis	3,392.4	3,382.1	10.3	0.3%	3,380.6	11.8	0.3%	3,377.7	14.7	0.4%	3,374.7	17.7	0.5%	3,371.6	20.7	0.6%	3,368.6	23.7	0.7%
ME 2	41 58 8	2008	Dry	November	Used in Summary Table Analysis	3,235.1	3,227.3	7.8	0.2%	3,226.3	8.8	0.3%	3,224.1	11.0	0.3%	3,221.8	13.3	0.4%	3,219.6	15.5	0.5%	3,217.4	17.7	0.5%
ME 2	41 58 8	2008	Dry	December	--	22,853.0	22,846.1	6.9	0.0%	22,844.9	8.1	0.0%	22,843.8	9.3	0.0%	22,841.4	11.6	0.1%	22,839.1	13.9	0.1%	22,838.0	15.0	0.1%
ME 2	41 58 8	2008	Dry	January	--	37,268.5	37,262.7	5.8	0.0%	37,261.6	6.9	0.0%	37,260.4	8.1	0.0%	37,258.1	10.4	0.0%	37,255.8	12.7	0.0%	37,254.6	13.9	0.0%
ME 2	41 58 8	2008	Dry	February	--	26,203.7	26,199.1	4.6	0.0%	26,197.9	5.8	0.0%	26,196.8	6.9	0.0%	26,194.4	9.3	0.0%	26,193.3	10.4	0.0%	26,192.1	11.6	0.0%
ME 2	41 58 8	2008	Dry	March	--	11,761.6	11,755.8	5.8	0.0%	11,755.8	5.8	0.0%	11,754.6	6.9	0.1%	11,752.3	9.3	0.1%	11,751.2	10.4	0.1%	11,750.0	11.6	0.1%
ME 2	41 58 8	2008	Dry	April	--	8,989.4	8,977.0	12.4	0.1%	8,975.1	14.2	0.2%	8,971.6	17.7	0.2%	8,968.1	21.3	0.2%	8,964.5	24.9	0.3%	8,961.0	28.4	0.3%
ME 2	41 58 8	2008	Dry	May	--	1,357.1	1,344.3	12.7	0.9%	1,342.5	14.6	1.1%	1,338.8	18.3	1.3%	1,335.2	21.9	1.6%	1,331.7	25.3	1.9%	1,328.4	28.7	2.1%
ME 2	41 58 8	2008	Dry	June	--	428.2	409.3	18.9	4.4%	406.6	21.6	5.0%	401.3	26.9	6.3%	396.0	32.3	7.5%	390.6	37.6	8.8%	385.3	42.9	10.0%
ME 2	41 58 8	2008	Dry	July	--	246.8	229.1	17.7	7.2%	226.6	20.2	8.2%	221.5	25.3	10.2%	216.5	30.3	12.3%	211.5	35.3	14.3%	206.4	40.3	16.3%
ME 2	41 58 8	2008	Dry	August	--	169.8	153.0	16.7	9.9%	150.6	19.1	11.3%	145.9	23.9	14.1%	141.1	28.6	16.9%	136.3	33.4	19.7%	131.6	38.2	22.5%
ME 2	41 58 8	2008	Dry	September	Used in Summary Table Analysis	131.5	115.5	16.0	12.2%	113.2	18.3	13.9%	108.6	22.9	17.4%	104.0	27.4	20.9%	99.5	32.0	24.4%	94.9	36.6	27.8%
ME 2	41 58 8	2009	Critical	October	Used in Summary Table Analysis	911.7	899.7	12.0	1.3%	898.0	13.7	1.5%	894.6	17.2	1.9%	891.1	20.6	2.3%	887.9	23.8	2.6%	884.4	27.3	3.0%
ME 2	41 58 8	2009	Critical	November	Used in Summary Table Analysis	5,441.3	5,432.4	8.9	0.2%	5,431.1	10.2	0.2%	5,428.6	12.7	0.2%	5,426.0	15.3	0.3%	5,423.5	17.8	0.3%	5,420.8	20.5	0.4%
ME 2	41 58 8	2009	Critical	December	--	12,023.1	12,016.2	6.9	0.1%	12,015.0	8.1	0.1%	12,012.7	10.4	0.1%	12,010.4	12.7	0.1%	12,008.1	15.0	0.1%	12,005.8	17.4	0.1%
ME 2	41 58 8	2009	Critical	January	--	8,752.2	8,745.5	6.7	0.1%	8,744.6	7.6	0.1%	8,742.6	9.6	0.1%	8,740.6	11.6	0.1%	8,738.7	13.5	0.2%	8,736.7	15.5	0.2%
ME 2	41 58 8	2009	Critical	February	--	22,495.4	22,489.6	5.8	0.0%	22,488.4	6.9	0.0%	22,486.1	9.3	0.0%	22,485.0	10.4	0.0%	22,482.6	12.7	0.1%	22,481.5	13.9	0.1%
ME 2	41 58 8	2009	Critical	March	--	21,031.3	21,025.5	5.8	0.0%	21,024.3	6.9	0.0%	21,023.1	8.1	0.0%	21,022.0	9.3	0.0%	21,019.7	11.6	0.1%	21,018.5	12.7	0.1%
ME 2	41 58 8	2009	Critical	April	--	10,081.7	10,069.0	12.7	0.1%	10,067.1	14.6	0.1%	10,063.4	18.3	0.2%	10,059.7	22.0	0.2%	10,056.1	25.6	0.3%	10,052.4	29.3	0.3%
ME 2	41 58 8	2009	Critical	May	--	15,534.7	15,519.7	15.0	0.1%	15,517.4	17.4	0.1%	15,512.7	22.0	0.1%	15,508.1	26.6	0.2%	15,503.5	31.3	0.2%	15,500.0	34.7	0.2%
ME 2	41 58 8	2009	Critical	June	--	3,148.6	3,128.5	20.1	0.6%	3,125.6	23.0	0.7%	3,119.7	28.9	0.9%	3,113.9	34.7	1.1%	3,108.2	40.4	1.3%	3,102.4	46.2	1.5%
ME 2	41 58 8	2009	Critical	July	--	1,252.3	1,234.4	17.9	1.4%	1,231.8	20.5	1.6%	1,226.7	25.6	2.0%	1,221.6	30.7	2.4%	1,216.7	35.6	2.8%	1,211.6	40.7	3.3%
ME 2	41 58 8	2009	Critical	August	--	658.0	641.1	16.9	2.6%	638.7	19.2	2.9%	633.9	24.0	3.7%	629.2	28.8	4.4%	624.4	33.6	5.1%	619.6	38.4	5.8%
ME 2	41 58 8	2009	Critical	September	Used in Summary Table Analysis	379.8	365.2	14.6	3.9%	363.1	16.7	4.4%	358.9	20.9	5.5%	354.7	25.0	6.6%	350.6	29.2	7.7%	346.4	33.4	8.8%
ME 2	41 58 8	2010	Below Normal	October	Used in Summary Table Analysis	6,074.0	6,062.0	11.9	0.2%	6,060.3	13.7	0.2%	6,056.8	17.1	0.3%	6,053.4	20.6	0.3%	6,050.1	23.8	0.4%	6,046.6	27.3	0.4%
ME 2	41 58 8	2010	Below Normal	November	Used in Summary Table Analysis	8,241.0	8,231.9	9.0	0.1%	8,230.7	10.3	0.1%	8,228.0	13.0	0.2%	8,225.5	15.5	0.2%	8,222.8	18.2	0.2%	8,220.1	20.8	0.3%
ME 2	41 58 8	2010	Below Normal	December	--	12,261.6	12,253.5	8.1	0.1%	12,252.3	9.3	0.1%	12,250.0	11.6	0.1%	12,247.7	13.9	0.1%	12,246.5	15.0	0.1%	12,244.2	17.4	0.1%
ME 2	41 58 8	2010	Below Normal	January	--	35,932.9	35,925.9	6.9	0.0%	35,924.8	8.1	0.0%	35,923.6	9.3	0.0%	35,921.3	11.6	0.0%	35,919.0	13.9	0.0%	35,916.7	16.2	0.0%
ME 2	41 58 8	2010	Below Normal	February	--	27,156.3	27,150.5	5.8	0.0%	27,149.3	6.9	0.0%	27,148.1	8.1	0.0%	27,145.8	10.4	0.0%	27,144.7	11.6	0.0%	27,142.4	13.9	0.1%
ME 2	41 58 8	2010	Below Normal	March	--	28,760.4	28,754.6	5.8	0.0%	28,753.5	6.9	0.0%	28,752.3	8.1	0.0%	28,750.0	10.4	0.0%	28,748.8	11.6	0.0%	28,747.7	12.7	0.0%
ME 2	41 58 8	2010	Below Normal	April	--	39,875.0	39,869.2	5.8	0.0%	39,869.2	5.8	0.0%	39,866.9	8.1	0.0%	39,865.7	9.3	0.0%	39,864.6	10.4	0.0%	39,862.3	12.7	0.0%
ME 2	41 58 8	2010	Below Normal	May	--	20,160.9	20,148.1	12.7	0.1%	20,145.8	15.0	0.1%	20,142.4	18.5	0.1%	20,138.9	22.0	0.1%	20,135.4	25.5	0.1%	20,130.8	30.1	0.1%
ME 2	41 58 8	2010	Below Normal	June	--	9,264.2	9,244.8	19.4	0.2%	9,242.0	22.2	0.2%	9,236.6	27.7	0.3%	9,231.1	33.1	0.4%	9,225.8	38.4	0.4%	9,220.4	43.9	0.5%
ME 2	41 58 8	2010	Below Normal	July	--	1,444.6	1,428.1	16.4	1.1%	1,425.8	18.8	1.3%	1,421.2	23.4	1.6%	1,416.4	28.1	1.9%	1,411.7	32.9	2.3%	1,407.3	37.3	2.6%
ME 2	41 58 8	2010	Below Normal	August	--	556.5	542.1	14.4	2.6%	540.1	16.5	3.0%	536.0	20.6	3.7%	531.9	24.6	4.4%	527.8	28.7	5.2%	523.7	32.8	5.9%
ME 2	41 58 8	2010	Below Normal	September	Used in Summary Table Analysis	638.3	624.6	13.7	2.1%	622.6	15.6	2.5%	618.7	19.6	3.1%	614.8	23.4	3.7%	610.9	27.3	4.3%	607.0	31.3	4.9%
ME 2	41 58 8	2011	Wet	October	Used in Summary Table Analysis	9,565.9	9,556.0	9.8	0.1%	9,554.6	11.2	0.1%	9,551.9	14.0	0.1%	9,549.1	16.8	0.2%	9,546.3	19.6	0.2%	9,543.4	22.5	0.2%
ME 2	41 58 8	2011	Wet	November	Used in Summary Table Analysis	14,143.5	14,136.6	6.9	0.0%	14,135.4	8.1	0.1%	14,133.1	10.4	0.1%	14,130.8	12.7	0.1%	14,128.5	15.0	0.1%	14,126.2	17.4	0.1%
ME 2	41 58 8	2011	Wet	December	--	33,405.1	33,399.3	5.8	0.0%	33,398.1	6.9	0.0%	33,395.8	9.3	0.0%	33,394.7	10.4	0.0%	33,392.4	12.7	0.0%	33,391.2	13.9	0.0%
ME 2	41 58 8	2011	Wet	January	--	14,096.1	14,091.4	4.6	0.0%	14,090.3	5.8	0.0%	14,088.0	8.1	0.1%	14,086.8	9.3	0.1%	14,085.6	10.4	0.1%	14,083.3	12.7	0.1%
ME 2	41 58 8	2011	Wet	February	--	20,709.5	20,703.7	5.8	0.0%	20,702.5	6.9	0.0%	20,701.4	8.1	0.0%	20,700.2	9.3	0.0%	20,699.1	10.4	0.1%	20,696.8	12.7	0.1%
ME 2	41 58 8	2011	Wet	March	--	51,810.2	51,805.6	4.6	0.0%	51,804.4	5.8	0.0%	51,803.2	6.9	0.0%	51,802.1	8.1	0.0%	51,800.9	9.3	0.0%	51,798.6	11.6	0.0%
ME 2	41 58 8	2011	Wet	April	--	24,729.2	24,724.5	4.6	0.0%	24,724.5	4.6	0.0%	24,723.4	5.8	0.0%	24,721.1	8.1	0.0%	24,719.9	9.3	0.0%	24,718.8	10.4	0.0%
ME 2	41 58 8	2011	Wet	May	--	11,347.0	11,334.7	12.3	0.1%	11,333.0	14.0	0.1%	11,329.5	17.5	0.2%	11,325.9	21.1	0.2%	11,322.3	24.7	0.2%	11,318.9	28.1	0.2%
ME 2	41 58 8	2011	Wet	June	--	7,020.9	7,002.1	18.9	0.3%	6,999.4	21.5	0.3%	6,994.1	26.9	0.4%	6,988.8	32.2	0.5%	6,983.4	37.5	0.5%	6,978.1	42.8	0.6%
ME 2	41 58 8	2011	Wet	July	--	1,820.8	1,803.0	17.8	1.0%	1,800.5	20.4	1.1%	1,795.4	25.5	1.4%	1,790.4	30.4	1.7%	1,785.3	35.5	2.0%	1,780.2	40.6	2.2%
ME 2	41 58 8	2011	Wet	August	--	765.8	751.7	14.2	1.9%	749.6	16.2	2.1%	745.6	20.3	2.6%	741.6	24.3	3.2%	737.5	28.3	3.7%	733.5	32.3	4.2%
ME 2	41 58 8	2011	Wet	September	Used in Summary Table Analysis	422.4	410.0	12.4	2.9%	408.2	14.2	3.4%	404.7	17.8	4.2%	401.2	21.3	5.0%	397.6	24.8	5.9%	394.1	28.3	6.7%
ME 2	41 58 8	2012	Below Normal	October	Used in Summary Table Analysis	4,504.6	4,494.8	9.8	0.2%	4,493.4	11.2	0.2%	4,490.6	14.0	0.3%	4,487.7	16.9	0.4%	4,485.0	19.7	0.4%	4,482.1	22.6	0.5%
ME 2	41 58 8	2012	Below Normal	November	Used in Summary Table Analysis	8,167.6	8,160.0	7.6	0.1%	8,158.9	8.7	0.1%	8,156.6	11.0	0.1%	8,154.5	13.1	0.2%	8,152.2	15.4	0.2%	8,150.0	17.6	0.2%
ME 2	41 58 8	2012	Below Normal	December	--	5,149.5	5,143.2	6.4	0.1%	5,142.2	7.3	0.1%	5,140.4	9.1	0.2%	5,138.4	11.1	0.2%	5,136.6	13.0	0.3%	5,134.7	14.8	0.3%
ME 2	41 58 8	2012	Below Normal	January	--	19,922.5	19,916.7	5.8	0.0%	19,916.7	5.8	0.0%	19,914.4	8.1	0.0%	19,913.2	9.3	0.0%	19,910.9	11.6	0.1%	19,909.7	12.7	0.1%
ME 2	41 58 8	2012	Below Normal	February	--	18,153.9	18,149.3	4.6	0.0%	18,148.1	5.8	0.0%	18,147.0	6.9	0.0%	18,144.7	9.3	0.1%	18,143.5	10.4	0.1%	18,142.4	11.6	0.1%
ME 2	41 58 8	2012	Below Normal	March	--	45,197.9	45,193.3	4.6	0.0%	45,192.1	5.8	0.0%	45,191.0	6.9	0.0%	45,189.8	8.1	0.0%	45,187.5	10.4	0.0%	45,186.3	11.6	0.0%
ME 2	41 58 8	2012	Below Normal	April	--	26,774.3	26,769.7	4.6	0.0%	26,768.5	5.8	0.0%	26,767.4	6.9	0.0%	26,766.2	8.1	0.0%	26,765.0	9.3	0.0%	26,762.7	11.6	0.0%
ME 2	41 58 8	2012	Below Normal	May	--	7,458.9	7,446.6	12.3	0.2%	7,444.9	14.0	0.2%	7,441.3	17.6	0.2%	7,437.7	21.2	0.3%	7,434.3	24.7	0.3%	7,430.8	28.1	0.4%
ME 2	41 58 8	2012	Below Normal	June	--	5,480.7	5,461.5	19.2	0.4%	5,458.7	22.0	0.4%	5,453.4	27.3	0.5%	5,447.9	32.8	0.6%	5,442.5	38.2	0.7%	5,437.0	43.6	0.8%
ME 2	41 58 8	2012	Below Normal	July	--	2,200.3	2,182.9	17.5	0.8%	2,180.4	19.9	0.9%	2,175.5	24.9	1.1%	2,170.5	29.9	1.4%	2,165.5	34.8	1.6%	2,160.5	39.8	1.8%
ME 2	41 58 8	2012	Below Normal	August	--	379.2	366.0	13.3	3.5%	364.1	15.2	4.0%	360.3	18.9	5.0%	356.6	22.7	6.0%	352.8	26.5	7.0%	349.0	30.2	8.0%
ME 2	41 58 8	2012	Below Normal	September	Used in Summary Table Analysis	238.4	226.8	11.6	4.9%	225.2	13.2	5.5%	221.9	16.5	6.9%	218.6	19.7	8.3%	215.4	23.0	9.6%	212.1	26.3	11.0%
ME 2	41 58 8	2013	Below Normal	October	Used in Summary Table Analysis	1,886.1	1,876.4	9.7	0.5%	1,875.0	11.1	0.6%	1,872.2	13.9	0.7%	1,869.4	16.7	0.9%	1,866.7	19.4	1.0%	1,863.8	22.3	1.2%
ME 2	41 58 8	2013	Below Normal	November	Used in Summary Table Analysis	14,560.2	14,553.2	6.9	0.0%	14,552.1	8.1	0.1%	14,549.8	10.4	0.1%	14,547.5	12.7	0.1%	14,545.1	15.0	0.1%	14,542.8	17.4	0.1%
ME 2	41 58 8	2013	Below Normal	December	--	59,716.4	59,709.5	6.9	0.0%	59,708.3	8.1	0.0%	59,706.0	10.4	0.0%	59,704.9	11.6	0.0%	59,702.5	13.9	0.0%	59,700.2	16.2	0.0%
ME 2	41 58 8	2013	Below Normal	January	--	22,118.1	22,112.3	5.8	0.0%	22,111.1	6.9	0.0%	22,110.0	8.1	0.0%	22,107.6	10.4	0.0%	22,106.5	11.6	0.1%	22,104.2	13.9	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	41 58 8	2013	Below Normal	February	--	8,803.9	8,798.7	5.2	0.1%	8,798.0	5.9	0.1%	8,796.4	7.5	0.1%	8,794.9	9.0	0.1%	8,793.3	10.6	0.1%	8,791.8	12.2	0.1%
ME 2	41 58 8	2013	Below Normal	March	--	10,269.3	10,264.4	5.0	0.0%	10,263.7	5.7	0.1%	10,262.2	7.2	0.1%	10,260.6	8.7	0.1%	10,259.1	10.2	0.1%	10,257.8	11.6	0.1%
ME 2	41 58 8	2013	Below Normal	April	--	8,269.2	8,257.8	11.5	0.1%	8,256.1	13.1	0.2%	8,252.8	16.4	0.2%	8,249.5	19.7	0.2%	8,246.3	22.9	0.3%	8,242.9	26.3	0.3%
ME 2	41 58 8	2013	Below Normal	May	--	4,404.1	4,390.3	13.8	0.3%	4,388.3	15.7	0.4%	4,384.4	19.7	0.4%	4,380.4	23.6	0.5%	4,376.5	27.5	0.6%	4,372.6	31.5	0.7%
ME 2	41 58 8	2013	Below Normal	June	--	2,098.3	2,081.3	17.0	0.8%	2,078.8	19.4	0.9%	2,074.0	24.3	1.2%	2,069.1	29.2	1.4%	2,064.2	34.0	1.6%	2,059.4	38.9	1.9%
ME 2	41 58 8	2013	Below Normal	July	--	710.2	694.6	15.6	2.2%	692.4	17.8	2.5%	688.0	22.2	3.1%	683.6	26.6	3.7%	679.2	31.0	4.4%	674.8	35.3	5.0%
ME 2	41 58 8	2013	Below Normal	August	--	330.4	316.1	14.3	4.3%	314.1	16.3	4.9%	310.0	20.4	6.2%	305.9	24.4	7.4%	301.9	28.5	8.6%	297.8	32.6	9.9%
ME 2	41 58 8	2013	Below Normal	September	Used in Summary Table Analysis	4,748.3	4,733.6	14.7	0.3%	4,731.5	16.8	0.4%	4,727.3	20.9	0.4%	4,723.0	25.2	0.5%	4,718.9	29.4	0.6%	4,714.7	33.6	0.7%
ME 2	41 58 8	2014	Critical	October	Used in Summary Table Analysis	275.2	265.1	10.0	3.6%	263.7	11.5	4.2%	260.8	14.4	5.2%	257.9	17.3	6.3%	255.0	20.2	7.3%	252.1	23.1	8.4%
ME 2	41 58 8	2014	Critical	November	Used in Summary Table Analysis	1,515.7	1,507.9	7.9	0.5%	1,506.8	8.9	0.6%	1,504.5	11.2	0.7%	1,502.3	13.4	0.9%	1,500.0	15.7	1.0%	1,497.8	17.9	1.2%
ME 2	41 58 8	2014	Critical	December	--	1,574.5	1,567.9	6.6	0.4%	1,567.0	7.5	0.5%	1,565.0	9.5	0.6%	1,563.2	11.3	0.7%	1,561.2	13.3	0.8%	1,559.3	15.3	1.0%
ME 2	41 58 8	2014	Critical	January	--	2,798.3	2,792.5	5.8	0.2%	2,791.7	6.6	0.2%	2,789.9	8.3	0.3%	2,788.3	10.0	0.4%	2,786.6	11.7	0.4%	2,784.8	13.4	0.5%
ME 2	41 58 8	2014	Critical	February	--	15,693.3	15,688.7	4.6	0.0%	15,687.5	5.8	0.0%	15,686.3	6.9	0.0%	15,684.0	9.3	0.1%	15,682.9	10.4	0.1%	15,681.7	11.6	0.1%
ME 2	41 58 8	2014	Critical	March	--	31,409.7	31,405.1	4.6	0.0%	31,405.1	4.6	0.0%	31,402.8	6.9	0.0%	31,401.6	8.1	0.0%	31,400.5	9.3	0.0%	31,399.3	10.4	0.0%
ME 2	41 58 8	2014	Critical	April	--	12,960.6	12,947.9	12.7	0.1%	12,946.8	13.9	0.1%	12,943.3	17.4	0.1%	12,939.8	20.8	0.2%	12,936.3	24.3	0.2%	12,931.7	28.9	0.2%
ME 2	41 58 8	2014	Critical	May	--	5,168.2	5,153.4	14.8	0.3%	5,151.3	16.9	0.3%	5,147.0	21.2	0.4%	5,142.7	25.5	0.5%	5,138.4	29.7	0.6%	5,134.3	33.9	0.7%
ME 2	41 58 8	2014	Critical	June	--	1,187.2	1,166.7	20.5	1.7%	1,163.8	23.4	2.0%	1,157.9	29.3	2.5%	1,152.1	35.0	2.9%	1,146.4	40.8	3.4%	1,140.6	46.5	3.9%
ME 2	41 58 8	2014	Critical	July	--	537.5	519.7	17.8	3.3%	517.2	20.4	3.8%	512.1	25.5	4.7%	507.0	30.5	5.7%	501.9	35.6	6.6%	496.9	40.7	7.6%
ME 2	41 58 8	2014	Critical	August	--	338.2	321.5	16.7	4.9%	319.1	19.1	5.7%	314.3	23.9	7.1%	309.6	28.6	8.5%	304.8	33.4	9.9%	300.1	38.2	11.3%
ME 2	41 58 8	2014	Critical	September	Used in Summary Table Analysis	2,552.8	2,536.3	16.4	0.6%	2,534.0	18.8	0.7%	2,529.4	23.4	0.9%	2,524.7	28.1	1.1%	2,519.9	32.9	1.3%	2,515.3	37.5	1.5%
ME 2	41 58 8	2015	Dry	October	Used in Summary Table Analysis	11,296.5	11,284.0	12.5	0.1%	11,282.3	14.2	0.1%	11,278.9	17.6	0.2%	11,275.3	21.2	0.2%	11,272.0	24.5	0.2%	11,268.3	28.2	0.2%
ME 2	41 58 8	2015	Dry	November	Used in Summary Table Analysis	8,971.6	8,962.7	8.9	0.1%	8,961.5	10.2	0.1%	8,958.9	12.7	0.1%	8,956.4	15.3	0.2%	8,953.8	17.8	0.2%	8,951.3	20.4	0.2%
ME 2	41 58 8	2015	Dry	December	--	32,379.6	32,371.5	8.1	0.0%	32,370.4	9.3	0.0%	32,369.2	10.4	0.0%	32,366.9	12.7	0.0%	32,364.6	15.0	0.0%	32,362.3	17.4	0.1%
ME 2	41 58 8	2015	Dry	January	--	14,537.0	14,530.1	6.9	0.0%	14,530.1	6.9	0.0%	14,527.8	9.3	0.1%	14,525.5	11.6	0.1%	14,524.3	12.7	0.1%	14,522.0	15.0	0.1%
ME 2	41 58 8	2015	Dry	February	--	27,137.7	27,131.9	5.8	0.0%	27,130.8	6.9	0.0%	27,129.6	8.1	0.0%	27,127.3	10.4	0.0%	27,126.2	11.6	0.0%	27,123.8	13.9	0.1%
ME 2	41 58 8	2015	Dry	March	--	11,544.2	11,539.1	5.1	0.0%	11,538.3	5.9	0.1%	11,536.9	7.3	0.1%	11,535.4	8.8	0.1%	11,533.9	10.3	0.1%	11,532.4	11.8	0.1%
ME 2	41 58 8	2015	Dry	April	--	8,322.0	8,309.3	12.7	0.2%	8,307.5	14.5	0.2%	8,303.8	18.2	0.2%	8,300.2	21.8	0.3%	8,296.5	25.5	0.3%	8,292.9	29.1	0.3%
ME 2	41 58 8	2015	Dry	May	--	1,503.0	1,488.2	14.8	1.0%	1,486.1	16.9	1.1%	1,481.8	21.2	1.4%	1,477.7	25.3	1.7%	1,473.4	29.6	2.0%	1,469.1	33.9	2.3%
ME 2	41 58 8	2015	Dry	June	--	645.0	625.7	19.3	3.0%	623.0	22.0	3.4%	617.6	27.4	4.2%	612.2	32.8	5.1%	606.9	38.1	5.9%	601.5	43.5	6.7%
ME 2	41 58 8	2015	Dry	July	--	260.7	242.9	17.8	6.8%	240.3	20.4	7.8%	235.2	25.5	9.8%	230.2	30.5	11.7%	225.1	35.6	13.7%	220.0	40.6	15.6%
ME 2	41 58 8	2015	Dry	August	--	157.1	140.3	16.8	10.7%	137.9	19.2	12.2%	133.1	24.0	15.3%	128.3	28.8	18.3%	123.5	33.6	21.4%	118.8	38.4	24.4%
ME 2	41 58 8	2015	Dry	September	Used in Summary Table Analysis	112.2	97.5	14.7	13.1%	95.4	16.8	15.0%	90.7	21.5	19.2%	86.2	26.0	23.2%	81.5	30.7	27.3%	77.0	35.3	31.4%
ME 2	41 58 8	2016	Above Normal	October	Used in Summary Table Analysis	77.8	64.7	13.1	16.8%	62.8	15.0	19.3%	59.2	18.6	23.9%	55.5	22.3	28.7%	52.0	25.9	33.2%	48.6	29.2	37.6%
ME 2	41 58 8	2016	Above Normal	November	Used in Summary Table Analysis	3,806.8	3,797.9	8.9	0.2%	3,796.5	10.3	0.3%	3,793.9	13.0	0.3%	3,791.3	15.5	0.4%	3,788.5	18.3	0.5%	3,785.9	20.9	0.6%
ME 2	41 58 8	2016	Above Normal	December	--	36,339.1	36,332.2	6.9	0.0%	36,331.0	8.1	0.0%	36,328.7	10.4	0.0%	36,326.4	12.7	0.0%	36,324.1	15.0	0.0%	36,321.8	17.4	0.0%
ME 2	41 58 8	2016	Above Normal	January	--	57,025.5	57,018.5	6.9	0.0%	57,017.4	8.1	0.0%	57,015.0	10.4	0.0%	57,012.7	12.7	0.0%	57,011.6	13.9	0.0%	57,009.3	16.2	0.0%
ME 2	41 58 8	2016	Above Normal	February	--	24,217.6	24,211.8	5.8	0.0%	24,210.6	6.9	0.0%	24,209.5	8.1	0.0%	24,207.2	10.4	0.0%	24,206.0	11.6	0.0%	24,203.7	13.9	0.1%
ME 2	41 58 8	2016	Above Normal	March	--	41,638.9	41,633.1	5.8	0.0%	41,633.1	5.8	0.0%	41,630.8	8.1	0.0%	41,629.6	9.3	0.0%	41,627.3	11.6	0.0%	41,626.2	12.7	0.0%
ME 2	41 58 8	2016	Above Normal	April	--	18,495.4	18,490.7	4.6	0.0%	18,489.6	5.8	0.0%	18,488.4	6.9	0.0%	18,487.3	8.1	0.0%	18,485.0	10.4	0.1%	18,483.8	11.6	0.1%
ME 2	41 58 8	2016	Above Normal	May	--	5,197.8	5,191.1	6.7	0.1%	5,190.0	7.8	0.1%	5,188.2	9.6	0.2%	5,186.2	11.6	0.2%	5,184.3	13.5	0.3%	5,182.3	15.5	0.3%
ME 2	41 58 8	2016	Above Normal	June	--	1,499.4	1,484.8	14.6	1.0%	1,482.8	16.7	1.1%	1,478.6	20.8	1.4%	1,474.5	24.9	1.7%	1,470.4	29.1	1.9%	1,466.3	33.1	2.2%
ME 2	41 58 8	2016	Above Normal	July	--	812.3	796.8	15.5	1.9%	794.5	17.8	2.2%	790.1	22.2	2.7%	785.7	26.6	3.3%	781.3	31.0	3.8%	776.9	35.4	4.4%
ME 2	41 58 8	2016	Above Normal	August	--	480.5	465.9	14.6	3.0%	463.8	16.7	3.5%	459.7	20.8	4.3%	455.5	25.0	5.2%	451.3	29.2	6.1%	447.2	33.3	6.9%
ME 2	41 58 8	2016	Above Normal	September	Used in Summary Table Analysis	317.2	304.8	12.5	3.9%	302.3	14.9	4.7%	298.6	18.7	5.9%	294.6	22.6	7.1%	290.8	26.5	8.3%	286.9	30.4	9.6%
ME 2	41 58 8	2017	Wet	October	Used in Summary Table Analysis	18,171.3	18,160.9	10.4	0.1%	18,159.7	11.6	0.1%	18,156.3	15.0	0.1%	18,153.9	17.4	0.1%	18,149.3	22.0	0.1%	18,147.0	24.3	0.1%
ME 2	41 58 8	2017	Wet	November	Used in Summary Table Analysis	18,699.1	18,692.1	6.9	0.0%	18,691.0	8.1	0.0%	18,688.7	10.4	0.1%	18,686.3	12.7	0.1%	18,684.0	15.0	0.1%	18,681.7	17.4	0.1%
ME 2	41 58 8	2017	Wet	December	--	23,921.3	23,914.4	6.9	0.0%	23,913.2	8.1	0.0%	23,912.0	9.3	0.0%	23,909.7	11.6	0.0%	23,907.4	13.9	0.1%	23,906.3	15.0	0.1%
ME 2	41 58 8	2017	Wet	January	--	106,346.1	106,340.3	5.8	0.0%	106,340.3	5.8	0.0%	106,338.0	8.1	0.0%	106,336.8	9.3	0.0%	106,334.5	11.6	0.0%	106,333.3	12.7	0.0%
ME 2	41 58 8	2017	Wet	February	--	81,511.6	81,506.9	4.6	0.0%	81,505.8	5.8	0.0%	81,504.6	6.9	0.0%	81,502.3	9.3	0.0%	81,501.2	10.4	0.0%	81,500.0	11.6	0.0%
ME 2	41 58 8	2017	Wet	March	--	27,169.0	27,164.4	4.6	0.0%	27,163.2	5.8	0.0%	27,162.0	6.9	0.0%	27,160.9	8.1	0.0%	27,159.7	9.3	0.0%	27,157.4	11.6	0.0%
ME 2	41 58 8	2017	Wet	April	--	22,824.1	22,819.4	4.6	0.0%	22,819.4	4.6	0.0%	22,818.3	5.8	0.0%	22,817.1	6.9	0.0%	22,814.8	9.3	0.0%	22,813.7	10.4	0.0%
ME 2	41 58 8	2017	Wet	May	--	6,264.9	6,258.2	6.7	0.1%	6,257.2	7.8	0.1%	6,255.3	9.6	0.2%	6,253.4	11.6	0.2%	6,251.4	13.5	0.2%	6,249.4	15.5	0.2%
ME 2	41 58 8	2017	Wet	June	--	2,098.3	2,083.1	15.2	0.7%	2,080.9	17.4	0.8%	2,076.6	21.6	1.0%	2,072.3	25.9	1.2%	2,068.1	30.2	1.4%	2,063.8	34.5	1.6%
ME 2	41 58 8	2017	Wet	July	--	921.3	905.7	15.6	1.7%	903.5	17.8	1.9%	899.1	22.2	2.4%	894.7	26.6	2.9%	890.3	31.1	3.4%	885.9	35.5	3.8%
ME 2	41 58 8	2017	Wet	August	--	493.5	478.9	14.6	3.0%	476.8	16.6	3.4%	472.7	20.8	4.2%	468.6	24.9	5.0%	464.4	29.0	5.9%	460.3	33.2	6.7%
ME 2	41 58 8	2017	Wet	September	Used in Summary Table Analysis	311.0	297.7	13.3	4.3%	295.8	15.2	4.9%	292.0	19.0	6.1%	288.2	22.8	7.3%	284.4	26.6	8.5%	280.6	30.4	9.8%
ME 2	41 58 8	2018	Above Normal	October	Used in Summary Table Analysis	263.7	253.7	10.0	3.8%	252.3	11.4	4.3%	249.4	14.3	5.4%	246.5	17.2	6.5%	243.6	20.1	7.6%	240.8	22.9	8.7%
ME 2	41 58 8	2018	Above Normal	November	Used in Summary Table Analysis	10,658.9	10,651.4	7.5	0.1%	10,650.3	8.6	0.1%	10,648.1	10.8	0.1%	10,646.1	12.8	0.1%	10,643.9	15.0	0.1%	10,641.7	17.2	0.2%
ME 2	41 58 8	2018	Above Normal	December	--	5,428.9	5,422.7	6.3	0.1%	5,421.9	7.1	0.1%	5,420.0	8.9	0.2%	5,418.3	10.6	0.2%	5,416.4	12.5	0.2%	5,414.6	14.4	0.3%
ME 2	41 58 8	2018	Above Normal	January	--	17,556.7	17,550.9	5.8	0.0%	17,549.8	6.9	0.0%	17,548.6	8.1	0.0%	17,546.3	10.4	0.1%	17,545.1	11.6	0.1%	17,542.8	13.9	0.1%
ME 2	41 58 8	2018	Above Normal	February	--	7,581.9	7,577.2	4.7	0.1%	7,576.5	5.4	0.1%	7,575.0	6.9	0.1%	7,573.6	8.3	0.1%	7,572.2	9.7	0.1%	7,570.7	11.2	0.1%
ME 2	41 58 8	2018	Above Normal	March	--	20,553.2	20,548.6	4.6	0.0%	20,548.6	4.6	0.0%	20,547.5	5.8	0.0%	20,545.1	8.1	0.0%	20,544.0	9.3	0.0%	20,542.8	10.4	0.1%
ME 2	41 58 8	2018	Above Normal	April	--	32,030.1	32,025.5	4.6	0.0%	32,025.5	4.6	0.0%	32,023.1	6.9	0.0%	32,022.0	8.1	0.0%	32,020.8	9.3	0.0%	32,019.7	10.4	0.0%
ME 2	41 58 8	2018	Above Normal	May	--	6,978.1	6,966.2	11.9	0.2%	6,964.6	13.5	0.2%	6,961.2	16.9	0.2%	6,957.9	20.3	0.3%	6,954.5	23.6	0.3%	6,951.4	26.7	0.4%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	41 58 8	2018	Above Normal	June	--	1,903.2	1,888.2	15.0	0.8%	1,886.0	17.2	0.9%	1,881.8	21.4	1.1%	1,877.5	25.7	1.4%	1,873.3	30.0	1.6%	1,869.1	34.1	1.8%
ME 2	41 58 8	2018	Above Normal	July	--	769.8	754.3	15.5	2.0%	752.1	17.7	2.3%	747.7	22.1	2.9%	743.2	26.5	3.4%	738.8	30.9	4.0%	734.4	35.3	4.6%
ME 2	41 58 8	2018	Above Normal	August	--	430.9	417.0	13.9	3.2%	415.0	15.9	3.7%	411.1	19.9	4.6%	407.1	23.9	5.5%	403.1	27.8	6.5%	399.1	31.8	7.4%
ME 2	41 58 8	2018	Above Normal	September	Used in Summary Table Analysis	288.9	275.6	13.3	4.6%	273.7	15.2	5.3%	269.9	19.0	6.6%	266.1	22.8	7.9%	262.3	26.6	9.2%	258.5	30.4	10.5%
ME 2	41 58 8	2019	Below Normal	October	Used in Summary Table Analysis	198.2	188.3	9.9	5.0%	186.9	11.3	5.7%	184.1	14.1	7.1%	181.1	17.0	8.6%	178.4	19.8	10.0%	175.6	22.6	11.4%
ME 2	41 58 8	2019	Below Normal	November	Used in Summary Table Analysis	6,534.6	6,527.1	7.5	0.1%	6,526.0	8.6	0.1%	6,523.8	10.8	0.2%	6,521.6	13.0	0.2%	6,519.4	15.2	0.2%	6,517.2	17.4	0.3%
ME 2	41 58 8	2019	Below Normal	December	--	14,517.4	14,511.6	5.8	0.0%	14,510.4	6.9	0.0%	14,509.3	8.1	0.1%	14,506.9	10.4	0.1%	14,504.6	12.7	0.1%	14,503.5	13.9	0.1%
ME 2	41 58 8	2019	Below Normal	January	--	34,925.9	34,920.1	5.8	0.0%	34,919.0	6.9	0.0%	34,917.8	8.1	0.0%	34,915.5	10.4	0.0%	34,914.4	11.6	0.0%	34,913.2	12.7	0.0%
ME 2	41 58 8	2019	Below Normal	February	--	141,608.8	141,597.2	11.6	0.0%	141,597.2	11.6	0.0%	141,597.2	11.6	0.0%	141,597.2	11.6	0.0%	141,597.2	11.6	0.0%	141,597.2	11.6	0.0%
ME 2	41 58 8	2019	Below Normal	March	--	42,157.4	42,152.8	4.6	0.0%	42,152.8	4.6	0.0%	42,150.5	6.9	0.0%	42,149.3	8.1	0.0%	42,148.1	9.3	0.0%	42,147.0	10.4	0.0%
ME 2	41 58 8	2019	Below Normal	April	--	15,224.5	15,219.9	4.6	0.0%	15,219.9	4.6	0.0%	15,218.8	5.8	0.0%	15,216.4	8.1	0.1%	15,215.3	9.3	0.1%	15,214.1	10.4	0.1%
ME 2	41 58 8	2019	Below Normal	May	--	16,716.4	16,704.9	11.6	0.1%	16,702.5	13.9	0.1%	16,699.1	17.4	0.1%	16,695.6	20.8	0.1%	16,692.1	24.3	0.1%	16,688.7	27.8	0.2%
ME 2	41 58 8	2019	Below Normal	June	--	4,238.4	4,222.1	16.3	0.4%	4,219.7	18.8	0.4%	4,215.2	23.3	0.5%	4,210.9	27.5	0.6%	4,206.6	31.8	0.8%	4,202.3	36.1	0.9%
ME 2	41 58 8	2019	Below Normal	July	--	1,347.9	1,332.3	15.6	1.2%	1,330.1	17.8	1.3%	1,325.7	22.2	1.6%	1,321.3	26.6	2.0%	1,316.9	31.0	2.3%	1,312.5	35.4	2.6%
ME 2	41 58 8	2019	Below Normal	August	--	583.7	569.5	14.3	2.4%	567.4	16.3	2.8%	563.4	20.3	3.5%	559.4	24.4	4.2%	555.3	28.4	4.9%	551.3	32.5	5.6%
ME 2	41 58 8	2019	Below Normal	September	Used in Summary Table Analysis	451.3	438.1	13.2	2.9%	436.2	15.1	3.3%	432.4	18.9	4.2%	428.6	22.6	5.0%	424.8	26.4	5.9%	421.1	30.2	6.7%
ME 2	41 58 8	2020	Dry	October	Used in Summary Table Analysis	346.2	336.9	9.4	2.7%	335.5	10.7	3.1%	332.8	13.4	3.9%	330.1	16.1	4.7%	327.4	18.8	5.4%	324.7	21.5	6.2%
ME 2	41 58 8	2020	Dry	November	Used in Summary Table Analysis	304.0	297.1	6.9	2.3%	296.1	7.9	2.6%	294.1	9.9	3.2%	292.1	11.9	3.9%	290.1	13.8	4.6%	288.1	15.9	5.2%
ME 2	41 58 8	2020	Dry	December	--	13,071.8	13,064.8	6.9	0.1%	13,063.7	8.1	0.1%	13,062.5	9.3	0.1%	13,060.2	11.6	0.1%	13,059.0	12.7	0.1%	13,056.7	15.0	0.1%
ME 2	41 58 8	2020	Dry	January	--	22,159.7	22,155.1	4.6	0.0%	22,153.9	5.8	0.0%	22,152.8	6.9	0.0%	22,150.5	9.3	0.0%	22,149.3	10.4	0.0%	22,147.0	12.7	0.1%
ME 2	41 58 8	2020	Dry	February	--	7,402.5	7,397.7	4.9	0.1%	7,397.0	5.6	0.1%	7,395.5	7.1	0.1%	7,394.1	8.4	0.1%	7,392.6	10.0	0.1%	7,391.2	11.3	0.2%
ME 2	41 58 8	2020	Dry	March	--	7,209.4	7,204.9	4.5	0.1%	7,204.2	5.2	0.1%	7,202.8	6.6	0.1%	7,201.4	8.0	0.1%	7,200.1	9.3	0.1%	7,198.7	10.6	0.1%
ME 2	41 58 8	2020	Dry	April	--	5,445.0	5,432.8	12.3	0.2%	5,430.9	14.1	0.3%	5,427.4	17.6	0.3%	5,423.8	21.2	0.4%	5,420.4	24.7	0.5%	5,416.8	28.2	0.5%
ME 2	41 58 8	2020	Dry	May	--	7,329.4	7,314.7	14.7	0.2%	7,312.6	16.8	0.2%	7,308.4	20.9	0.3%	7,304.2	25.2	0.3%	7,299.9	29.5	0.4%	7,295.7	33.7	0.5%
ME 2	41 58 8	2020	Dry	June	--	2,098.5	2,078.7	19.8	0.9%	2,076.0	22.5	1.1%	2,070.8	27.7	1.3%	2,065.5	33.0	1.6%	2,060.3	38.2	1.8%	2,055.0	43.5	2.1%
ME 2	41 58 8	2020	Dry	July	--	786.6	768.5	18.0	2.3%	765.9	20.6	2.6%	760.8	25.8	3.3%	755.7	30.9	3.9%	750.5	36.1	4.6%	745.3	41.2	5.2%
ME 2	41 58 8	2020	Dry	August	--	388.9	371.6	17.3	4.4%	369.1	19.7	5.1%	364.2	24.7	6.3%	359.3	29.6	7.6%	354.4	34.5	8.9%	349.4	39.4	10.1%
ME 2	41 58 8	2020	Dry	September	Used in Summary Table Analysis	238.4	223.4	15.0	6.3%	221.3	17.2	7.2%	216.1	22.3	9.4%	211.5	26.9	11.3%	206.7	31.7	13.3%	202.0	36.4	15.3%
ME 3	39 58 10	2000	Above Normal	October	Used in Summary Table Analysis	806.9	796.1	10.8	1.3%	794.5	12.4	1.5%	791.4	15.4	1.9%	788.3	18.6	2.3%	785.2	21.7	2.7%	782.1	24.8	3.1%
ME 3	39 58 10	2000	Above Normal	November	Used in Summary Table Analysis	11,991.9	11,982.6	9.3	0.1%	11,981.5	10.4	0.1%	11,979.2	12.7	0.1%	11,976.9	15.0	0.1%	11,974.5	17.4	0.1%	11,972.2	19.7	0.2%
ME 3	39 58 10	2000	Above Normal	December	--	10,741.8	10,734.7	7.1	0.1%	10,733.8	8.0	0.1%	10,731.7	10.1	0.1%	10,729.6	12.2	0.1%	10,727.5	14.2	0.1%	10,725.5	16.3	0.2%
ME 3	39 58 10	2000	Above Normal	January	--	28,364.6	28,357.6	6.9	0.0%	28,356.5	8.1	0.0%	28,355.3	9.3	0.0%	28,353.0	11.6	0.0%	28,350.7	13.9	0.0%	28,349.5	15.0	0.1%
ME 3	39 58 10	2000	Above Normal	February	--	36,901.6	36,895.8	5.8	0.0%	36,894.7	6.9	0.0%	36,893.5	8.1	0.0%	36,891.2	10.4	0.0%	36,890.0	11.6	0.0%	36,887.7	13.9	0.0%
ME 3	39 58 10	2000	Above Normal	March	--	18,270.8	18,265.0	5.8	0.0%	18,265.0	5.8	0.0%	18,262.7	8.1	0.0%	18,261.6	9.3	0.1%	18,260.4	10.4	0.1%	18,258.1	12.7	0.1%
ME 3	39 58 10	2000	Above Normal	April	--	12,280.1	12,274.3	5.8	0.0%	12,273.1	6.9	0.1%	12,272.0	8.1	0.1%	12,270.8	9.3	0.1%	12,269.7	10.4	0.1%	12,267.4	12.7	0.1%
ME 3	39 58 10	2000	Above Normal	May	--	7,065.4	7,052.4	13.0	0.2%	7,050.6	14.8	0.2%	7,046.9	18.5	0.3%	7,043.1	22.3	0.3%	7,039.4	26.0	0.4%	7,035.6	29.7	0.4%
ME 3	39 58 10	2000	Above Normal	June	--	2,598.5	2,578.8	19.7	0.8%	2,576.0	22.5	0.9%	2,570.4	28.1	1.1%	2,564.8	33.7	1.3%	2,559.3	39.2	1.5%	2,553.6	44.9	1.7%
ME 3	39 58 10	2000	Above Normal	July	--	984.5	967.7	16.8	1.7%	965.3	19.2	2.0%	960.5	24.0	2.4%	955.8	28.8	2.9%	951.0	33.5	3.4%	946.3	38.3	3.9%
ME 3	39 58 10	2000	Above Normal	August	--	514.4	498.9	15.4	3.0%	496.8	17.6	3.4%	492.4	22.0	4.3%	488.0	26.4	5.1%	483.6	30.8	6.0%	479.2	35.1	6.8%
ME 3	39 58 10	2000	Above Normal	September	Used in Summary Table Analysis	288.5	275.2	13.3	4.6%	273.3	15.3	5.3%	269.4	19.1	6.6%	265.6	22.9	7.9%	261.9	26.7	9.2%	258.0	30.5	10.6%
ME 3	39 58 10	2001	Dry	October	Used in Summary Table Analysis	3,784.3	3,773.6	10.6	0.3%	3,772.0	12.3	0.3%	3,769.0	15.3	0.4%	3,765.9	18.4	0.5%	3,762.8	21.4	0.6%	3,759.7	24.5	0.6%
ME 3	39 58 10	2001	Dry	November	Used in Summary Table Analysis	6,075.2	6,066.9	8.3	0.1%	6,065.7	9.5	0.2%	6,063.3	11.9	0.2%	6,060.9	14.4	0.2%	6,058.6	16.7	0.3%	6,056.0	19.2	0.3%
ME 3	39 58 10	2001	Dry	December	--	8,789.4	8,782.3	7.1	0.1%	8,781.3	8.1	0.1%	8,779.2	10.2	0.1%	8,777.1	12.3	0.1%	8,775.0	14.4	0.2%	8,772.9	16.4	0.2%
ME 3	39 58 10	2001	Dry	January	--	12,699.1	12,692.1	6.9	0.1%	12,692.1	6.9	0.1%	12,689.8	9.3	0.1%	12,687.5	11.6	0.1%	12,686.3	12.7	0.1%	12,684.0	15.0	0.1%
ME 3	39 58 10	2001	Dry	February	--	17,413.2	17,407.4	5.8	0.0%	17,406.3	6.9	0.0%	17,405.1	8.1	0.0%	17,402.8	10.4	0.1%	17,401.6	11.6	0.1%	17,399.3	13.9	0.1%
ME 3	39 58 10	2001	Dry	March	--	12,265.0	12,260.4	4.6	0.0%	12,259.3	5.8	0.0%	12,256.9	8.1	0.1%	12,255.8	9.3	0.1%	12,254.6	10.4	0.1%	12,252.3	12.7	0.1%
ME 3	39 58 10	2001	Dry	April	--	10,938.9	10,925.5	13.4	0.1%	10,923.6	15.3	0.1%	10,919.8	19.1	0.2%	10,915.9	23.0	0.2%	10,912.0	26.9	0.2%	10,908.2	30.7	0.3%
ME 3	39 58 10	2001	Dry	May	--	2,633.8	2,618.1	15.7	0.6%	2,615.7	18.1	0.7%	2,611.2	22.6	0.9%	2,606.7	27.1	1.0%	2,602.2	31.6	1.2%	2,597.7	36.1	1.4%
ME 3	39 58 10	2001	Dry	June	--	2,626.5	2,604.9	21.6	0.8%	2,601.7	24.8	0.9%	2,595.6	30.9	1.2%	2,589.5	37.0	1.4%	2,583.3	43.2	1.6%	2,577.3	49.2	1.9%
ME 3	39 58 10	2001	Dry	July	--	714.3	695.0	19.4	2.7%	692.2	22.1	3.1%	686.8	27.6	3.9%	681.3	33.1	4.6%	675.8	38.5	5.4%	670.3	44.0	6.2%
ME 3	39 58 10	2001	Dry	August	--	166.7	148.1	18.6	11.1%	145.5	21.2	12.7%	140.2	26.5	15.9%	134.9	31.8	19.1%	129.7	37.1	22.2%	124.4	42.4	25.4%
ME 3	39 58 10	2001	Dry	September	Used in Summary Table Analysis	89.4	73.2	16.2	18.1%	70.8	18.5	20.7%	66.2	23.1	25.9%	61.6	27.8	31.1%	57.0	32.4	36.2%	52.4	37.0	41.4%
ME 3	39 58 10	2002	Below Normal	October	Used in Summary Table Analysis	258.5	245.2	13.3	5.1%	243.4	15.1	5.8%	239.5	18.9	7.3%	235.7	22.8	8.8%	231.9	26.5	10.3%	228.1	30.4	11.7%
ME 3	39 58 10	2002	Below Normal	November	Used in Summary Table Analysis	11,961.8	11,951.4	10.4	0.1%	11,950.2	11.6	0.1%	11,946.8	15.0	0.1%	11,944.4	17.4	0.1%	11,941.0	20.8	0.2%	11,938.7	23.1	0.2%
ME 3	39 58 10	2002	Below Normal	December	--	35,490.7	35,482.6	8.1	0.0%	35,481.5	9.3	0.0%	35,479.2	11.6	0.0%	35,475.7	15.0	0.0%	35,473.4	17.4	0.0%	35,471.1	19.7	0.1%
ME 3	39 58 10	2002	Below Normal	January	--	30,754.6	30,746.5	8.1	0.0%	30,745.4	9.3	0.0%	30,743.1	11.6	0.0%	30,740.7	13.9	0.0%	30,739.6	15.0	0.0%	30,737.3	17.4	0.1%
ME 3	39 58 10	2002	Below Normal	February	--	24,603.0	24,594.9	8.1	0.0%	24,594.9	8.1	0.0%	24,592.6	10.4	0.0%	24,590.3	12.7	0.1%	24,588.0	15.0	0.1%	24,586.8	16.2	0.1%
ME 3	39 58 10	2002	Below Normal	March	--	17,719.9	17,714.1	5.8	0.0%	17,713.0	6.9	0.0%	17,710.6	9.3	0.1%	17,709.5	10.4	0.1%	17,707.2	12.7	0.1%	17,704.9	15.0	0.1%
ME 3	39 58 10	2002	Below Normal	April	--	9,900.8	9,887.6	13.2	0.1%	9,885.6	15.2	0.2%	9,881.9	18.9	0.2%	9,878.2	22.6	0.2%	9,874.4	26.4	0.3%	9,870.7	30.1	0.3%
ME 3	39 58 10	2002	Below Normal	May	--	3,309.1	3,293.8	15.4	0.5%	3,291.4	17.7	0.5%	3,287.0	22.1	0.7%	3,282.6	26.5	0.8%	3,278.1	31.0	0.9%	3,273.7	35.4	1.1%
ME 3	39 58 10	2002	Below Normal	June	--	848.1	830.3	17.8	2.1%	827.8	20.3	2.4%	822.7	25.4	3.0%	817.7	30.4	3.6%	812.6	35.5	4.2%	807.6	40.5	4.8%
ME 3	39 58 10	2002	Below Normal	July	--	356.5	339.2	17.4	4.9%	336.7	19.8	5.6%	331.7	24.8	7.0%	326.8	29.7	8.3%	321.9	34.7	9.7%	316.9	39.6	11.1%
ME 3	39 58 10	2002	Below Normal	August	--	220.5	204.4	16.1	7.3%	202.1	18.4	8.3%	197.5	22.9	10.4%	192.9	27.5	12.5%	188.4	32.1	14.6%	183.8	36.7	16.6%
ME 3	39 58 10	2002	Below Normal	September	Used in Summary Table Analysis	157.5	142.8	14.8	9.4%	140.7	16.9	10.7%	136.4	21.1	13.4%	132.2	25.3	16.1%	128.0	29.5	18.8%	123.8	33.8	21.4%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 58 10	2003	Wet	October	Used in Summary Table Analysis	122.7	111.0	11.7	9.5%	109.3	13.4	10.9%	105.9	16.7	13.7%	102.5	20.1	16.4%	99.2	23.5	19.2%	95.8	26.9	21.9%
ME 3	39 58 10	2003	Wet	November	Used in Summary Table Analysis	888.5	879.4	9.1	1.0%	878.1	10.4	1.2%	875.4	13.0	1.5%	872.8	15.7	1.8%	870.2	18.2	2.1%	867.6	20.9	2.3%
ME 3	39 58 10	2003	Wet	December	--	56,371.5	56,363.4	8.1	0.0%	56,362.3	9.3	0.0%	56,360.0	11.6	0.0%	56,357.6	13.9	0.0%	56,355.3	16.2	0.0%	56,353.0	18.5	0.0%
ME 3	39 58 10	2003	Wet	January	--	31,435.2	31,428.2	6.9	0.0%	31,428.2	6.9	0.0%	31,425.9	9.3	0.0%	31,423.6	11.6	0.0%	31,421.3	13.9	0.0%	31,419.0	16.2	0.1%
ME 3	39 58 10	2003	Wet	February	--	20,302.1	20,295.1	6.9	0.0%	20,295.1	6.9	0.0%	20,292.8	9.3	0.0%	20,290.5	11.6	0.1%	20,289.4	12.7	0.1%	20,287.0	15.0	0.1%
ME 3	39 58 10	2003	Wet	March	--	23,956.0	23,950.2	5.8	0.0%	23,949.1	6.9	0.0%	23,947.9	8.1	0.0%	23,946.8	9.3	0.0%	23,944.4	11.6	0.0%	23,943.3	12.7	0.1%
ME 3	39 58 10	2003	Wet	April	--	42,725.7	42,719.9	5.8	0.0%	42,718.8	6.9	0.0%	42,717.6	8.1	0.0%	42,715.3	10.4	0.0%	42,714.1	11.6	0.0%	42,713.0	12.7	0.0%
ME 3	39 58 10	2003	Wet	May	--	12,195.6	12,182.9	12.7	0.1%	12,180.6	15.0	0.1%	12,177.1	18.5	0.2%	12,173.6	22.0	0.2%	12,169.0	26.6	0.2%	12,165.5	30.1	0.2%
ME 3	39 58 10	2003	Wet	June	--	3,158.1	3,141.0	17.1	0.5%	3,138.5	19.6	0.6%	3,133.8	24.3	0.8%	3,129.1	29.1	0.9%	3,124.3	33.8	1.1%	3,119.6	38.5	1.2%
ME 3	39 58 10	2003	Wet	July	--	1,465.6	1,448.4	17.2	1.2%	1,445.9	19.7	1.3%	1,441.1	24.5	1.7%	1,436.1	29.5	2.0%	1,431.3	34.4	2.3%	1,426.3	39.4	2.7%
ME 3	39 58 10	2003	Wet	August	--	752.2	735.8	16.4	2.2%	733.4	18.8	2.5%	728.8	23.4	3.1%	724.1	28.1	3.7%	719.5	32.8	4.4%	714.7	37.6	5.0%
ME 3	39 58 10	2003	Wet	September	Used in Summary Table Analysis	450.6	437.1	13.5	3.0%	435.2	15.5	3.4%	431.3	19.3	4.3%	427.5	23.2	5.1%	423.6	27.0	6.0%	419.8	30.9	6.9%
ME 3	39 58 10	2004	Wet	October	Used in Summary Table Analysis	317.8	306.9	10.9	3.4%	305.3	12.4	3.9%	302.2	15.5	4.9%	299.1	18.7	5.9%	296.0	21.8	6.9%	292.9	24.9	7.8%
ME 3	39 58 10	2004	Wet	November	Used in Summary Table Analysis	5,751.9	5,743.3	8.6	0.1%	5,742.0	9.8	0.2%	5,739.6	12.3	0.2%	5,737.2	14.7	0.3%	5,734.6	17.2	0.3%	5,732.2	19.7	0.3%
ME 3	39 58 10	2004	Wet	December	--	36,089.1	36,082.2	6.9	0.0%	36,081.0	8.1	0.0%	36,078.7	10.4	0.0%	36,076.4	12.7	0.0%	36,074.1	15.0	0.0%	36,071.8	17.4	0.0%
ME 3	39 58 10	2004	Wet	January	--	31,321.8	31,314.8	6.9	0.0%	31,314.8	6.9	0.0%	31,312.5	9.3	0.0%	31,310.2	11.6	0.0%	31,309.0	12.7	0.0%	31,306.7	15.0	0.0%
ME 3	39 58 10	2004	Wet	February	--	38,090.3	38,084.5	5.8	0.0%	38,083.3	6.9	0.0%	38,081.0	9.3	0.0%	38,079.9	10.4	0.0%	38,077.5	12.7	0.0%	38,076.4	13.9	0.0%
ME 3	39 58 10	2004	Wet	March	--	16,495.4	16,489.6	5.8	0.0%	16,488.4	6.9	0.0%	16,487.3	8.1	0.0%	16,486.1	9.3	0.1%	16,483.8	11.6	0.1%	16,482.6	12.7	0.1%
ME 3	39 58 10	2004	Wet	April	--	9,428.9	9,423.7	5.2	0.1%	9,422.9	6.0	0.1%	9,421.4	7.5	0.1%	9,419.9	9.0	0.1%	9,418.3	10.6	0.1%	9,416.8	12.2	0.1%
ME 3	39 58 10	2004	Wet	May	--	3,402.3	3,389.4	13.0	0.4%	3,387.4	14.9	0.4%	3,383.7	18.6	0.5%	3,380.0	22.3	0.7%	3,376.3	26.0	0.8%	3,372.5	29.9	0.9%
ME 3	39 58 10	2004	Wet	June	--	686.4	670.1	16.3	2.4%	667.8	18.6	2.7%	663.1	23.2	3.4%	658.5	27.8	4.1%	653.9	32.4	4.7%	649.3	37.0	5.4%
ME 3	39 58 10	2004	Wet	July	--	349.3	332.5	16.9	4.8%	330.1	19.3	5.5%	325.2	24.1	6.9%	320.4	28.9	8.3%	315.6	33.7	9.7%	310.8	38.5	11.0%
ME 3	39 58 10	2004	Wet	August	--	218.7	203.2	15.5	7.1%	201.0	17.7	8.1%	196.6	22.2	10.1%	192.2	26.6	12.1%	187.7	31.0	14.2%	183.3	35.4	16.2%
ME 3	39 58 10	2004	Wet	September	Used in Summary Table Analysis	156.2	141.6	14.6	9.4%	139.5	16.7	10.7%	135.3	20.9	13.4%	131.1	25.1	16.1%	126.9	29.3	18.7%	122.7	33.5	21.4%
ME 3	39 58 10	2005	Above Normal	October	Used in Summary Table Analysis	7,616.6	7,605.4	11.1	0.1%	7,603.8	12.7	0.2%	7,600.7	15.9	0.2%	7,597.5	19.1	0.3%	7,594.3	22.2	0.3%	7,591.1	25.5	0.3%
ME 3	39 58 10	2005	Above Normal	November	Used in Summary Table Analysis	2,245.6	2,237.2	8.4	0.4%	2,236.0	9.6	0.4%	2,233.6	12.0	0.5%	2,231.0	14.6	0.6%	2,228.6	17.0	0.8%	2,226.2	19.4	0.9%
ME 3	39 58 10	2005	Above Normal	December	--	20,842.6	20,834.5	8.1	0.0%	20,833.3	9.3	0.0%	20,832.2	10.4	0.0%	20,829.9	12.7	0.1%	20,827.5	15.0	0.1%	20,825.2	17.4	0.1%
ME 3	39 58 10	2005	Above Normal	January	--	22,238.4	22,232.6	5.8	0.0%	22,231.5	6.9	0.0%	22,229.2	9.3	0.0%	22,228.0	10.4	0.0%	22,225.7	12.7	0.1%	22,223.4	15.0	0.1%
ME 3	39 58 10	2005	Above Normal	February	--	13,982.6	13,976.9	5.8	0.0%	13,976.9	5.8	0.0%	13,974.5	8.1	0.1%	13,973.4	9.3	0.1%	13,971.1	11.6	0.1%	13,969.9	12.7	0.1%
ME 3	39 58 10	2005	Above Normal	March	--	28,456.0	28,450.2	5.8	0.0%	28,449.1	6.9	0.0%	28,447.9	8.1	0.0%	28,446.8	9.3	0.0%	28,444.4	11.6	0.0%	28,443.3	12.7	0.0%
ME 3	39 58 10	2005	Above Normal	April	--	21,370.4	21,365.7	4.6	0.0%	21,364.6	5.8	0.0%	21,363.4	6.9	0.0%	21,362.3	8.1	0.0%	21,360.0	10.4	0.0%	21,358.8	11.6	0.1%
ME 3	39 58 10	2005	Above Normal	May	--	19,481.5	19,468.8	12.7	0.1%	19,466.4	15.0	0.1%	19,463.0	18.5	0.1%	19,459.5	22.0	0.1%	19,454.9	26.6	0.1%	19,451.4	30.1	0.2%
ME 3	39 58 10	2005	Above Normal	June	--	15,767.4	15,747.7	19.7	0.1%	15,744.2	23.1	0.1%	15,738.4	28.9	0.2%	15,732.6	34.7	0.2%	15,726.9	40.5	0.3%	15,722.2	45.1	0.3%
ME 3	39 58 10	2005	Above Normal	July	--	2,860.0	2,842.4	17.6	0.6%	2,839.8	20.1	0.7%	2,834.8	25.1	0.9%	2,829.7	30.2	1.1%	2,824.8	35.2	1.2%	2,819.8	40.2	1.4%
ME 3	39 58 10	2005	Above Normal	August	--	974.7	959.3	15.5	1.6%	957.1	17.7	1.8%	952.6	22.1	2.3%	948.2	26.5	2.7%	943.8	30.9	3.2%	939.4	35.3	3.6%
ME 3	39 58 10	2005	Above Normal	September	Used in Summary Table Analysis	516.6	503.3	13.4	2.6%	501.4	15.3	3.0%	497.5	19.1	3.7%	493.7	22.9	4.4%	489.9	26.7	5.2%	486.1	30.5	5.9%
ME 3	39 58 10	2006	Wet	October	Used in Summary Table Analysis	625.6	615.0	10.6	1.7%	613.5	12.1	1.9%	610.5	15.1	2.4%	607.5	18.2	2.9%	604.5	21.2	3.4%	601.4	24.2	3.9%
ME 3	39 58 10	2006	Wet	November	Used in Summary Table Analysis	9,220.4	9,212.3	8.1	0.1%	9,211.1	9.3	0.1%	9,208.8	11.6	0.1%	9,206.4	14.0	0.2%	9,204.1	16.3	0.2%	9,201.7	18.6	0.2%
ME 3	39 58 10	2006	Wet	December	--	43,221.1	43,214.1	6.9	0.0%	43,213.0	8.1	0.0%	43,211.8	9.3	0.0%	43,209.5	11.6	0.0%	43,207.2	13.9	0.0%	43,204.9	16.2	0.0%
ME 3	39 58 10	2006	Wet	January	--	46,046.3	46,039.4	6.9	0.0%	46,039.4	6.9	0.0%	46,037.0	9.3	0.0%	46,034.7	11.6	0.0%	46,033.6	12.7	0.0%	46,031.3	15.0	0.0%
ME 3	39 58 10	2006	Wet	February	--	26,509.3	26,503.5	5.8	0.0%	26,502.3	6.9	0.0%	26,501.2	8.1	0.0%	26,498.8	10.4	0.0%	26,497.7	11.6	0.0%	26,495.4	13.9	0.1%
ME 3	39 58 10	2006	Wet	March	--	46,959.5	46,953.7	5.8	0.0%	46,953.7	5.8	0.0%	46,951.4	8.1	0.0%	46,950.2	9.3	0.0%	46,949.1	10.4	0.0%	46,946.8	12.7	0.0%
ME 3	39 58 10	2006	Wet	April	--	30,347.2	30,342.6	4.6	0.0%	30,341.4	5.8	0.0%	30,340.3	6.9	0.0%	30,339.1	8.1	0.0%	30,338.0	9.3	0.0%	30,335.6	11.6	0.0%
ME 3	39 58 10	2006	Wet	May	--	14,159.7	14,151.6	8.1	0.1%	14,150.5	9.3	0.1%	14,148.1	11.6	0.1%	14,147.0	12.7	0.1%	14,144.7	15.0	0.1%	14,142.4	17.4	0.1%
ME 3	39 58 10	2006	Wet	June	--	3,539.8	3,523.3	16.6	0.5%	3,520.8	19.0	0.5%	3,516.2	23.6	0.7%	3,511.5	28.4	0.8%	3,506.8	33.0	0.9%	3,502.2	37.6	1.1%
ME 3	39 58 10	2006	Wet	July	--	1,269.9	1,253.0	16.9	1.3%	1,250.6	19.3	1.5%	1,245.8	24.1	1.9%	1,241.0	28.9	2.3%	1,236.2	33.7	2.7%	1,231.5	38.4	3.0%
ME 3	39 58 10	2006	Wet	August	--	656.3	640.3	16.0	2.4%	638.1	18.2	2.8%	633.5	22.8	3.5%	629.0	27.3	4.2%	624.5	31.8	4.8%	620.0	36.3	5.5%
ME 3	39 58 10	2006	Wet	September	Used in Summary Table Analysis	417.9	404.4	13.6	3.2%	402.5	15.5	3.7%	398.6	19.3	4.6%	394.8	23.2	5.5%	390.9	27.0	6.5%	387.0	30.9	7.4%
ME 3	39 58 10	2007	Above Normal	October	Used in Summary Table Analysis	267.3	256.5	10.7	4.0%	255.0	12.2	4.6%	251.9	15.3	5.7%	248.9	18.4	6.9%	245.8	21.5	8.0%	242.7	24.6	9.2%
ME 3	39 58 10	2007	Above Normal	November	Used in Summary Table Analysis	8,591.1	8,582.6	8.4	0.1%	8,581.4	9.7	0.1%	8,578.9	12.2	0.1%	8,576.5	14.6	0.2%	8,574.1	17.0	0.2%	8,571.6	19.4	0.2%
ME 3	39 58 10	2007	Above Normal	December	--	20,258.1	20,251.2	6.9	0.0%	20,250.0	8.1	0.0%	20,247.7	10.4	0.1%	20,245.4	12.7	0.1%	20,243.1	15.0	0.1%	20,241.9	16.2	0.1%
ME 3	39 58 10	2007	Above Normal	January	--	10,209.0	10,202.5	6.5	0.1%	10,201.6	7.4	0.1%	10,199.8	9.3	0.1%	10,197.9	11.1	0.1%	10,196.1	13.0	0.1%	10,194.1	14.9	0.1%
ME 3	39 58 10	2007	Above Normal	February	--	30,401.6	30,395.8	5.8	0.0%	30,394.7	6.9	0.0%	30,392.4	9.3	0.0%	30,391.2	10.4	0.0%	30,388.9	12.7	0.0%	30,387.7	13.9	0.0%
ME 3	39 58 10	2007	Above Normal	March	--	13,069.4	13,063.7	5.8	0.0%	13,063.7	5.8	0.0%	13,061.3	8.1	0.1%	13,060.2	9.3	0.1%	13,057.9	11.6	0.1%	13,056.7	12.7	0.1%
ME 3	39 58 10	2007	Above Normal	April	--	11,505.1	11,492.5	12.6	0.1%	11,490.6	14.5	0.1%	11,487.0	18.1	0.2%	11,483.3	21.8	0.2%	11,479.7	25.3	0.2%	11,476.0	29.1	0.3%
ME 3	39 58 10	2007	Above Normal	May	--	4,125.0	4,110.1	14.9	0.4%	4,108.0	17.0	0.4%	4,103.7	21.3	0.5%	4,099.4	25.6	0.6%	4,095.0	30.0	0.7%	4,090.7	34.3	0.8%
ME 3	39 58 10	2007	Above Normal	June	--	1,487.7	1,469.3	18.4	1.2%	1,466.7	21.1	1.4%	1,461.5	26.3	1.8%	1,456.3	31.5	2.1%	1,451.0	36.7	2.5%	1,445.8	41.9	2.8%
ME 3	39 58 10	2007	Above Normal	July	--	490.4	472.5	17.9	3.6%	469.9	20.4	4.2%	464.9	25.5	5.2%	459.8	30.6	6.2%	454.7	35.6	7.3%	449.7	40.7	8.3%
ME 3	39 58 10	2007	Above Normal	August	--	216.4	200.6	15.8	7.3%	198.4	18.0	8.3%	193.9	22.5	10.4%	189.4	26.9	12.5%	185.0	31.4	14.5%	180.5	35.9	16.6%
ME 3	39 58 10	2007	Above Normal	September	Used in Summary Table Analysis	144.1	129.6	14.5	10.1%	127.5	16.6	11.5%	123.4	20.7	14.4%	119.3	24.8	17.2%	115.1	29.0	20.1%	111.0	33.1	23.0%
ME 3	39 58 10	2008	Dry	October	Used in Summary Table Analysis	3,405.1	3,393.6	11.5	0.3%	3,392.0	13.1	0.4%	3,388.8	16.3	0.5%	3,385.4	19.7	0.6%	3,382.2	22.9	0.7%	3,378.8	26.3	0.8%
ME 3	39 58 10	2008	Dry	November	Used in Summary Table Analysis	3,247.3	3,238.7	8.7	0.3%	3,237.5	9.8	0.3%	3,235.0	12.4	0.4%	3,232.5	14.8	0.5%	3,230.0	17.4	0.5%	3,227.5	19.8	0.6%
ME 3	39 58 10	2008	Dry	December	--	22,929.4	22,922.5	6.9	0.0%	22,921.3	8.1	0.0%	22,919.0	10.4	0.0%	22,916.7	12.7	0.1%	22,914.4	15.0	0.1%	22,912.0	17.4	0.1%
ME 3	39 58 10	2008	Dry	January	--	37,342.6	37,335.6	6.9	0.0%	37,334.5	8.1	0.0%	37,332.2	10.4	0.0%	37,329.9	12.7	0.0%	37,328.7	13.9	0.0%	37,326.4	16.2	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 58 10	2008	Dry	February	--	26,222.2	26,216.4	5.8	0.0%	26,215.3	6.9	0.0%	26,214.1	8.1	0.0%	26,211.8	10.4	0.0%	26,210.6	11.6	0.0%	26,208.3	13.9	0.1%
ME 3	39 58 10	2008	Dry	March	--	11,770.8	11,765.0	5.8	0.0%	11,765.0	5.8	0.0%	11,762.7	8.1	0.1%	11,761.6	9.3	0.1%	11,759.3	11.6	0.1%	11,758.1	12.7	0.1%
ME 3	39 58 10	2008	Dry	April	--	8,997.7	8,984.5	13.2	0.1%	8,982.6	15.0	0.2%	8,978.8	18.9	0.2%	8,975.0	22.7	0.3%	8,971.2	26.5	0.3%	8,967.5	30.2	0.3%
ME 3	39 58 10	2008	Dry	May	--	1,358.6	1,344.7	13.9	1.0%	1,342.7	15.9	1.2%	1,338.7	19.9	1.5%	1,334.8	23.7	1.7%	1,331.0	27.5	2.0%	1,327.3	31.3	2.3%
ME 3	39 58 10	2008	Dry	June	--	431.9	411.6	20.3	4.7%	408.7	23.1	5.4%	403.0	28.9	6.7%	397.3	34.5	8.0%	391.6	40.3	9.3%	385.9	45.9	10.6%
ME 3	39 58 10	2008	Dry	July	--	250.5	231.3	19.2	7.7%	228.5	21.9	8.8%	223.0	27.4	10.9%	217.6	32.9	13.1%	212.1	38.3	15.3%	206.7	43.8	17.5%
ME 3	39 58 10	2008	Dry	August	--	173.6	155.3	18.3	10.5%	152.7	20.9	12.0%	147.5	26.1	15.0%	142.3	31.3	18.0%	137.1	36.5	21.0%	131.9	41.7	24.0%
ME 3	39 58 10	2008	Dry	September	Used in Summary Table Analysis	135.4	118.0	17.4	12.9%	115.5	19.9	14.7%	110.5	24.9	18.4%	105.5	29.9	22.1%	100.5	34.9	25.7%	95.6	39.8	29.4%
ME 3	39 58 10	2009	Critical	October	Used in Summary Table Analysis	916.5	903.3	13.1	1.4%	901.4	15.1	1.6%	897.7	18.8	2.1%	893.9	22.6	2.5%	890.3	26.2	2.9%	886.5	30.0	3.3%
ME 3	39 58 10	2009	Critical	November	Used in Summary Table Analysis	5,462.0	5,452.2	9.8	0.2%	5,450.8	11.2	0.2%	5,447.9	14.1	0.3%	5,445.1	16.9	0.3%	5,442.2	19.8	0.4%	5,439.5	22.6	0.4%
ME 3	39 58 10	2009	Critical	December	--	12,063.7	12,055.6	8.1	0.1%	12,054.4	9.3	0.1%	12,052.1	11.6	0.1%	12,049.8	13.9	0.1%	12,046.3	17.4	0.1%	12,044.0	19.7	0.2%
ME 3	39 58 10	2009	Critical	January	--	8,765.7	8,758.1	7.6	0.1%	8,757.1	8.7	0.1%	8,754.7	11.0	0.1%	8,752.5	13.2	0.2%	8,750.3	15.4	0.2%	8,748.1	17.6	0.2%
ME 3	39 58 10	2009	Critical	February	--	22,528.9	22,523.1	5.8	0.0%	22,522.0	6.9	0.0%	22,519.7	9.3	0.0%	22,518.5	10.4	0.0%	22,516.2	12.7	0.1%	22,513.9	15.0	0.1%
ME 3	39 58 10	2009	Critical	March	--	21,056.7	21,050.9	5.8	0.0%	21,049.8	6.9	0.0%	21,048.6	8.1	0.0%	21,046.3	10.4	0.0%	21,045.1	11.6	0.1%	21,042.8	13.9	0.1%
ME 3	39 58 10	2009	Critical	April	--	10,086.7	10,073.0	13.7	0.1%	10,071.1	15.6	0.2%	10,067.1	19.6	0.2%	10,063.2	23.5	0.2%	10,059.3	27.4	0.3%	10,055.3	31.4	0.3%
ME 3	39 58 10	2009	Critical	May	--	15,549.8	15,533.6	16.2	0.1%	15,531.3	18.5	0.1%	15,525.5	24.3	0.2%	15,520.8	28.9	0.2%	15,516.2	33.6	0.2%	15,511.6	38.2	0.2%
ME 3	39 58 10	2009	Critical	June	--	3,152.7	3,131.0	21.6	0.7%	3,128.0	24.7	0.8%	3,121.8	30.9	1.0%	3,115.6	37.0	1.2%	3,109.5	43.2	1.4%	3,103.4	49.3	1.6%
ME 3	39 58 10	2009	Critical	July	--	1,256.1	1,236.7	19.4	1.5%	1,233.9	22.2	1.8%	1,228.4	27.8	2.2%	1,222.9	33.2	2.6%	1,217.5	38.7	3.1%	1,212.0	44.1	3.5%
ME 3	39 58 10	2009	Critical	August	--	662.0	643.6	18.4	2.8%	641.0	21.0	3.2%	635.8	26.3	4.0%	630.6	31.5	4.8%	625.3	36.7	5.6%	620.1	42.0	6.3%
ME 3	39 58 10	2009	Critical	September	Used in Summary Table Analysis	383.8	367.7	16.1	4.2%	365.5	18.3	4.8%	360.9	22.9	6.0%	356.3	27.5	7.2%	351.7	32.1	8.4%	347.1	36.7	9.6%
ME 3	39 58 10	2010	Below Normal	October	Used in Summary Table Analysis	6,079.5	6,066.3	13.2	0.2%	6,064.4	15.2	0.2%	6,060.6	18.9	0.3%	6,056.8	22.7	0.4%	6,053.1	26.4	0.4%	6,049.3	30.2	0.5%
ME 3	39 58 10	2010	Below Normal	November	Used in Summary Table Analysis	8,256.1	8,245.9	10.2	0.1%	8,244.6	11.6	0.1%	8,241.7	14.5	0.2%	8,238.7	17.5	0.2%	8,235.8	20.4	0.2%	8,232.9	23.3	0.3%
ME 3	39 58 10	2010	Below Normal	December	--	12,289.4	12,280.1	9.3	0.1%	12,278.9	10.4	0.1%	12,276.6	12.7	0.1%	12,274.3	15.0	0.1%	12,272.0	17.4	0.1%	12,269.7	19.7	0.2%
ME 3	39 58 10	2010	Below Normal	January	--	36,019.7	36,011.6	8.1	0.0%	36,010.4	9.3	0.0%	36,008.1	11.6	0.0%	36,005.8	13.9	0.0%	36,003.5	16.2	0.0%	36,001.2	18.5	0.1%
ME 3	39 58 10	2010	Below Normal	February	--	27,181.7	27,175.9	5.8	0.0%	27,174.8	6.9	0.0%	27,172.5	9.3	0.0%	27,170.1	11.6	0.0%	27,169.0	12.7	0.0%	27,166.7	15.0	0.1%
ME 3	39 58 10	2010	Below Normal	March	--	28,782.4	28,776.6	5.8	0.0%	28,775.5	6.9	0.0%	28,773.1	9.3	0.0%	28,772.0	10.4	0.0%	28,769.7	12.7	0.0%	28,768.5	13.9	0.0%
ME 3	39 58 10	2010	Below Normal	April	--	39,915.5	39,909.7	5.8	0.0%	39,908.6	6.9	0.0%	39,907.4	8.1	0.0%	39,905.1	10.4	0.0%	39,902.8	12.7	0.0%	39,901.6	13.9	0.0%
ME 3	39 58 10	2010	Below Normal	May	--	20,192.1	20,178.2	13.9	0.1%	20,175.9	16.2	0.1%	20,172.5	19.7	0.1%	20,167.8	24.3	0.1%	20,164.4	27.8	0.1%	20,159.7	32.4	0.2%
ME 3	39 58 10	2010	Below Normal	June	--	9,289.2	9,268.5	20.7	0.2%	9,265.5	23.7	0.3%	9,259.7	29.5	0.3%	9,253.9	35.3	0.4%	9,248.1	41.1	0.4%	9,242.4	46.9	0.5%
ME 3	39 58 10	2010	Below Normal	July	--	1,447.9	1,430.1	17.8	1.2%	1,427.5	20.4	1.4%	1,422.5	25.5	1.8%	1,417.2	30.7	2.1%	1,412.2	35.8	2.5%	1,407.3	40.6	2.8%
ME 3	39 58 10	2010	Below Normal	August	--	560.8	544.9	15.9	2.8%	542.7	18.2	3.2%	538.1	22.7	4.1%	533.6	27.2	4.8%	529.1	31.7	5.7%	524.6	36.3	6.5%
ME 3	39 58 10	2010	Below Normal	September	Used in Summary Table Analysis	642.9	627.8	15.1	2.3%	625.6	17.2	2.7%	621.3	21.5	3.4%	617.1	25.8	4.0%	612.8	30.1	4.7%	608.5	34.4	5.4%
ME 3	39 58 10	2011	Wet	October	Used in Summary Table Analysis	9,586.9	9,576.0	10.9	0.1%	9,574.4	12.5	0.1%	9,571.3	15.6	0.2%	9,568.2	18.8	0.2%	9,565.0	21.9	0.2%	9,561.9	25.0	0.3%
ME 3	39 58 10	2011	Wet	November	Used in Summary Table Analysis	14,166.7	14,158.6	8.1	0.1%	14,157.4	9.3	0.1%	14,155.1	11.6	0.1%	14,152.8	13.9	0.1%	14,150.5	16.2	0.1%	14,148.1	18.5	0.1%
ME 3	39 58 10	2011	Wet	December	--	33,493.1	33,486.1	6.9	0.0%	33,485.0	8.1	0.0%	33,482.6	10.4	0.0%	33,480.3	12.7	0.0%	33,478.0	15.0	0.0%	33,476.9	16.2	0.0%
ME 3	39 58 10	2011	Wet	January	--	14,114.6	14,107.6	6.9	0.0%	14,106.5	8.1	0.1%	14,105.3	9.3	0.1%	14,103.0	11.6	0.1%	14,101.9	12.7	0.1%	14,099.5	15.0	0.1%
ME 3	39 58 10	2011	Wet	February	--	20,726.9	20,721.1	5.8	0.0%	20,719.9	6.9	0.0%	20,718.8	8.1	0.0%	20,716.4	10.4	0.1%	20,715.3	11.6	0.1%	20,713.0	13.9	0.1%
ME 3	39 58 10	2011	Wet	March	--	51,869.2	51,863.4	5.8	0.0%	51,862.3	6.9	0.0%	51,861.1	8.1	0.0%	51,858.8	10.4	0.0%	51,857.6	11.6	0.0%	51,855.3	13.9	0.0%
ME 3	39 58 10	2011	Wet	April	--	24,750.0	24,745.4	4.6	0.0%	24,744.2	5.8	0.0%	24,743.1	6.9	0.0%	24,740.7	9.3	0.0%	24,739.6	10.4	0.0%	24,737.3	12.7	0.1%
ME 3	39 58 10	2011	Wet	May	--	11,357.9	11,344.7	13.2	0.1%	11,342.7	15.2	0.1%	11,338.9	19.0	0.2%	11,335.1	22.8	0.2%	11,331.3	26.6	0.2%	11,327.4	30.4	0.3%
ME 3	39 58 10	2011	Wet	June	--	7,032.1	7,011.8	20.3	0.3%	7,009.0	23.0	0.3%	7,003.2	28.8	0.4%	6,997.6	34.5	0.5%	6,991.8	40.3	0.6%	6,986.1	45.9	0.7%
ME 3	39 58 10	2011	Wet	July	--	1,823.8	1,804.5	19.3	1.1%	1,801.7	22.1	1.2%	1,796.3	27.5	1.5%	1,790.7	33.1	1.8%	1,785.3	38.5	2.1%	1,779.9	44.0	2.4%
ME 3	39 58 10	2011	Wet	August	--	769.8	754.1	15.7	2.0%	751.9	17.9	2.3%	747.4	22.4	2.9%	743.0	26.9	3.5%	738.5	31.4	4.1%	734.0	35.8	4.6%
ME 3	39 58 10	2011	Wet	September	Used in Summary Table Analysis	426.5	412.7	13.9	3.3%	410.7	15.9	3.7%	406.7	19.8	4.6%	402.8	23.7	5.6%	398.8	27.7	6.5%	394.9	31.6	7.4%
ME 3	39 58 10	2012	Below Normal	October	Used in Summary Table Analysis	4,516.7	4,505.7	11.0	0.2%	4,504.1	12.6	0.3%	4,500.9	15.7	0.3%	4,497.8	18.9	0.4%	4,494.6	22.1	0.5%	4,491.4	25.2	0.6%
ME 3	39 58 10	2012	Below Normal	November	Used in Summary Table Analysis	8,189.5	8,180.8	8.7	0.1%	8,179.6	9.8	0.1%	8,177.1	12.4	0.2%	8,174.7	14.8	0.2%	8,172.1	17.4	0.2%	8,169.6	19.9	0.2%
ME 3	39 58 10	2012	Below Normal	December	--	5,160.5	5,153.2	7.3	0.1%	5,152.2	8.3	0.2%	5,150.0	10.5	0.2%	5,147.9	12.6	0.2%	5,145.7	14.8	0.3%	5,143.6	16.9	0.3%
ME 3	39 58 10	2012	Below Normal	January	--	19,980.3	19,974.5	5.8	0.0%	19,973.4	6.9	0.0%	19,971.1	9.3	0.0%	19,968.8	11.6	0.1%	19,967.6	12.7	0.1%	19,965.3	15.0	0.1%
ME 3	39 58 10	2012	Below Normal	February	--	18,172.5	18,165.5	6.9	0.0%	18,165.5	6.9	0.0%	18,163.2	9.3	0.1%	18,162.0	10.4	0.1%	18,159.7	12.7	0.1%	18,158.6	13.9	0.1%
ME 3	39 58 10	2012	Below Normal	March	--	45,266.2	45,260.4	5.8	0.0%	45,259.3	6.9	0.0%	45,258.1	8.1	0.0%	45,255.8	10.4	0.0%	45,254.6	11.6	0.0%	45,252.3	13.9	0.0%
ME 3	39 58 10	2012	Below Normal	April	--	26,799.8	26,794.0	5.8	0.0%	26,792.8	6.9	0.0%	26,791.7	8.1	0.0%	26,790.5	9.3	0.0%	26,788.2	11.6	0.0%	26,787.0	12.7	0.0%
ME 3	39 58 10	2012	Below Normal	May	--	7,466.2	7,453.0	13.2	0.2%	7,451.2	15.0	0.2%	7,447.2	19.0	0.3%	7,443.4	22.8	0.3%	7,439.6	26.6	0.4%	7,435.9	30.3	0.4%
ME 3	39 58 10	2012	Below Normal	June	--	5,491.7	5,471.1	20.6	0.4%	5,468.2	23.5	0.4%	5,462.4	29.3	0.5%	5,456.6	35.1	0.6%	5,450.8	40.9	0.7%	5,444.9	46.8	0.9%
ME 3	39 58 10	2012	Below Normal	July	--	2,208.1	2,189.2	18.9	0.9%	2,186.6	21.5	1.0%	2,181.3	26.9	1.2%	2,175.9	32.2	1.5%	2,170.5	37.6	1.7%	2,165.2	42.9	1.9%
ME 3	39 58 10	2012	Below Normal	August	--	382.8	368.2	14.6	3.8%	366.1	16.7	4.4%	362.0	20.8	5.4%	357.8	25.0	6.5%	353.7	29.1	7.6%	349.5	33.2	8.7%
ME 3	39 58 10	2012	Below Normal	September	Used in Summary Table Analysis	242.4	229.7	12.8	5.3%	227.9	14.5	6.0%	224.3	18.2	7.5%	220.7	21.8	9.0%	217.1	25.4	10.5%	213.4	29.0	12.0%
ME 3	39 58 10	2013	Below Normal	October	Used in Summary Table Analysis	1,894.9	1,884.0	10.9	0.6%	1,882.5	12.4	0.7%	1,879.4	15.5	0.8%	1,876.4	18.5	1.0%	1,873.3	21.6	1.1%	1,870.1	24.8	1.3%
ME 3	39 58 10	2013	Below Normal	November	Used in Summary Table Analysis	14,598.4	14,590.3	8.1	0.1%	14,589.1	9.3	0.1%	14,586.8	11.6	0.1%	14,584.5	13.9	0.1%	14,581.0	17.4	0.1%	14,578.7	19.7	0.1%
ME 3	39 58 10	2013	Below Normal	December	--	59,798.6	59,791.7	6.9	0.0%	59,790.5	8.1	0.0%	59,788.2	10.4	0.0%	59,785.9	12.7	0.0%	59,783.6	15.0	0.0%	59,781.3	17.4	0.0%
ME 3	39 58 10	2013	Below Normal	January	--	22,142.4	22,135.4	6.9	0.0%	22,134.3	8.1	0.0%	22,133.1	9.3	0.0%	22,130.8	11.6	0.1%	22,128.5	13.9	0.1%	22,127.3	15.0	0.1%
ME 3	39 58 10	2013	Below Normal	February	--	8,816.6	8,810.5	6.0	0.1%	8,809.7	6.8	0.1%	8,807.9	8.7	0.1%	8,806.1	10.4	0.1%	8,804.4	12.2	0.1%	8,802.7	13.9	0.2%
ME 3	39 58 10	2013	Below Normal	March	--	10,287.8	10,282.2	5.7	0.1%	10,281.4	6.5	0.1%	10,279.6	8.2	0.1%	10,278.0	9.8	0.1%	10,276.3	11.6	0.1%	10,274.5	13.3	0.1%
ME 3	39 58 10	2013	Below Normal	April	--	8,276.4	8,264.0	12.4	0.1%	8,262.3	14.1	0.2%	8,258.7	17.7	0.2%	8,255.1	21.3	0.3%	8,251.6	24.8	0.3%	8,248.0	28.4	0.3%
ME 3	39 58 10	2013	Below Normal	May	--	4,412.7	4,397.8	14.9	0.3%	4,395.6	17.1	0.4%	4,391.3	21.4	0.5%	4,387.0	25.7	0.6%	4,382.8	30.0	0.7%	4,378.5	34.3	0.8%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 58 10	2013	Below Normal	June	--	2,102.8	2,084.4	18.4	0.9%	2,081.8	20.9	1.0%	2,076.6	26.2	1.2%	2,071.3	31.5	1.5%	2,066.1	36.7	1.7%	2,061.0	41.8	2.0%
ME 3	39 58 10	2013	Below Normal	July	--	713.5	696.5	17.0	2.4%	694.1	19.4	2.7%	689.2	24.2	3.4%	684.4	29.1	4.1%	679.6	33.9	4.7%	674.8	38.7	5.4%
ME 3	39 58 10	2013	Below Normal	August	--	334.2	318.5	15.7	4.7%	316.3	17.9	5.4%	311.8	22.4	6.7%	307.3	26.9	8.1%	302.9	31.4	9.4%	298.4	35.9	10.7%
ME 3	39 58 10	2013	Below Normal	September	Used in Summary Table Analysis	4,760.6	4,744.6	16.1	0.3%	4,742.2	18.4	0.4%	4,737.6	23.0	0.5%	4,733.0	27.7	0.6%	4,728.5	32.2	0.7%	4,723.8	36.8	0.8%
ME 3	39 58 10	2014	Critical	October	Used in Summary Table Analysis	278.0	266.8	11.2	4.0%	265.2	12.8	4.6%	262.0	16.0	5.8%	258.8	19.2	6.9%	255.5	22.4	8.1%	252.3	25.7	9.2%
ME 3	39 58 10	2014	Critical	November	Used in Summary Table Analysis	1,523.5	1,514.7	8.8	0.6%	1,513.4	10.1	0.7%	1,510.9	12.6	0.8%	1,508.3	15.2	1.0%	1,505.8	17.7	1.2%	1,503.2	20.3	1.3%
ME 3	39 58 10	2014	Critical	December	--	1,580.2	1,572.7	7.5	0.5%	1,571.6	8.6	0.5%	1,569.4	10.8	0.7%	1,567.2	13.0	0.8%	1,565.0	15.2	1.0%	1,562.8	17.4	1.1%
ME 3	39 58 10	2014	Critical	January	--	2,806.4	2,799.7	6.7	0.2%	2,798.7	7.6	0.3%	2,796.8	9.6	0.3%	2,794.9	11.5	0.4%	2,792.9	13.4	0.5%	2,791.0	15.4	0.5%
ME 3	39 58 10	2014	Critical	February	--	15,713.0	15,706.0	6.9	0.0%	15,706.0	6.9	0.0%	15,703.7	9.3	0.1%	15,702.5	10.4	0.1%	15,700.2	12.7	0.1%	15,697.9	15.0	0.1%
ME 3	39 58 10	2014	Critical	March	--	31,434.0	31,428.2	5.8	0.0%	31,427.1	6.9	0.0%	31,425.9	8.1	0.0%	31,423.6	10.4	0.0%	31,422.5	11.6	0.0%	31,420.1	13.9	0.0%
ME 3	39 58 10	2014	Critical	April	--	12,969.9	12,956.0	13.9	0.1%	12,954.9	15.0	0.1%	12,951.4	18.5	0.1%	12,946.8	23.1	0.2%	12,943.3	26.6	0.2%	12,938.7	31.3	0.2%
ME 3	39 58 10	2014	Critical	May	--	5,174.8	5,158.8	16.0	0.3%	5,156.5	18.3	0.4%	5,151.9	22.9	0.4%	5,147.2	27.5	0.5%	5,142.6	32.2	0.6%	5,138.1	36.7	0.7%
ME 3	39 58 10	2014	Critical	June	--	1,191.2	1,169.1	22.1	1.9%	1,166.0	25.2	2.1%	1,159.8	31.4	2.6%	1,153.6	37.6	3.2%	1,147.4	43.8	3.7%	1,141.2	50.0	4.2%
ME 3	39 58 10	2014	Critical	July	--	541.0	521.6	19.5	3.6%	518.8	22.3	4.1%	513.2	27.8	5.1%	507.7	33.4	6.2%	502.1	38.9	7.2%	496.6	44.4	8.2%
ME 3	39 58 10	2014	Critical	August	--	342.2	323.8	18.4	5.4%	321.2	21.0	6.1%	316.0	26.2	7.7%	310.7	31.4	9.2%	305.5	36.7	10.7%	300.3	41.9	12.2%
ME 3	39 58 10	2014	Critical	September	Used in Summary Table Analysis	2,560.2	2,542.2	17.9	0.7%	2,539.7	20.5	0.8%	2,534.6	25.6	1.0%	2,529.5	30.7	1.2%	2,524.4	35.8	1.4%	2,519.2	41.0	1.6%
ME 3	39 58 10	2015	Dry	October	Used in Summary Table Analysis	11,317.2	11,303.5	13.8	0.1%	11,301.5	15.7	0.1%	11,297.9	19.3	0.2%	11,294.0	23.3	0.2%	11,290.3	27.0	0.2%	11,286.2	31.0	0.3%
ME 3	39 58 10	2015	Dry	November	Used in Summary Table Analysis	8,992.7	8,982.9	9.8	0.1%	8,981.4	11.3	0.1%	8,978.6	14.1	0.2%	8,975.8	16.9	0.2%	8,972.9	19.8	0.2%	8,970.1	22.6	0.3%
ME 3	39 58 10	2015	Dry	December	--	32,451.4	32,443.3	8.1	0.0%	32,442.1	9.3	0.0%	32,439.8	11.6	0.0%	32,437.5	13.9	0.0%	32,435.2	16.2	0.0%	32,431.7	19.7	0.1%
ME 3	39 58 10	2015	Dry	January	--	14,549.8	14,541.7	8.1	0.1%	14,541.7	8.1	0.1%	14,539.4	10.4	0.1%	14,537.0	12.7	0.1%	14,534.7	15.0	0.1%	14,532.4	17.4	0.1%
ME 3	39 58 10	2015	Dry	February	--	27,166.7	27,160.9	5.8	0.0%	27,159.7	6.9	0.0%	27,157.4	9.3	0.0%	27,156.3	10.4	0.0%	27,153.9	12.7	0.0%	27,151.6	15.0	0.1%
ME 3	39 58 10	2015	Dry	March	--	11,552.7	11,546.8	5.9	0.1%	11,545.9	6.7	0.1%	11,544.2	8.4	0.1%	11,542.5	10.2	0.1%	11,540.9	11.8	0.1%	11,539.2	13.4	0.1%
ME 3	39 58 10	2015	Dry	April	--	8,341.9	8,328.4	13.5	0.2%	8,326.5	15.4	0.2%	8,322.6	19.3	0.2%	8,318.6	23.3	0.3%	8,314.8	27.1	0.3%	8,310.9	31.0	0.4%
ME 3	39 58 10	2015	Dry	May	--	1,505.6	1,489.6	16.0	1.1%	1,487.4	18.2	1.2%	1,482.9	22.7	1.5%	1,478.2	27.3	1.8%	1,473.7	31.8	2.1%	1,469.1	36.5	2.4%
ME 3	39 58 10	2015	Dry	June	--	648.2	627.6	20.6	3.2%	624.7	23.5	3.6%	618.9	29.3	4.5%	613.1	35.1	5.4%	607.4	40.9	6.3%	601.6	46.6	7.2%
ME 3	39 58 10	2015	Dry	July	--	264.1	244.8	19.4	7.3%	242.0	22.1	8.4%	236.5	27.6	10.5%	231.0	33.1	12.5%	225.5	38.6	14.6%	220.0	44.1	16.7%
ME 3	39 58 10	2015	Dry	August	--	161.0	142.6	18.4	11.4%	140.0	21.0	13.0%	134.8	26.2	16.3%	129.5	31.5	19.6%	124.3	36.7	22.8%	119.1	42.0	26.1%
ME 3	39 58 10	2015	Dry	September	Used in Summary Table Analysis	115.9	99.8	16.1	13.9%	97.5	18.4	15.9%	92.4	23.5	20.3%	87.5	28.4	24.5%	82.4	33.5	28.9%	77.4	38.5	33.2%
ME 3	39 58 10	2016	Above Normal	October	Used in Summary Table Analysis	81.5	67.2	14.2	17.5%	65.1	16.3	20.1%	61.2	20.3	24.9%	57.2	24.3	29.9%	53.3	28.2	34.6%	49.6	31.9	39.2%
ME 3	39 58 10	2016	Above Normal	November	Used in Summary Table Analysis	3,825.7	3,815.7	10.0	0.3%	3,814.2	11.5	0.3%	3,811.3	14.4	0.4%	3,808.4	17.2	0.5%	3,805.4	20.3	0.5%	3,802.4	23.3	0.6%
ME 3	39 58 10	2016	Above Normal	December	--	36,423.6	36,415.5	8.1	0.0%	36,414.4	9.3	0.0%	36,412.0	11.6	0.0%	36,408.6	15.0	0.0%	36,406.3	17.4	0.0%	36,403.9	19.7	0.1%
ME 3	39 58 10	2016	Above Normal	January	--	57,113.4	57,105.3	8.1	0.0%	57,104.2	9.3	0.0%	57,101.9	11.6	0.0%	57,099.5	13.9	0.0%	57,097.2	16.2	0.0%	57,094.9	18.5	0.0%
ME 3	39 58 10	2016	Above Normal	February	--	24,232.6	24,225.7	6.9	0.0%	24,224.5	8.1	0.0%	24,223.4	9.3	0.0%	24,221.1	11.6	0.0%	24,218.8	13.9	0.1%	24,217.6	15.0	0.1%
ME 3	39 58 10	2016	Above Normal	March	--	41,680.6	41,674.8	5.8	0.0%	41,673.6	6.9	0.0%	41,672.5	8.1	0.0%	41,670.1	10.4	0.0%	41,667.8	12.7	0.0%	41,666.7	13.9	0.0%
ME 3	39 58 10	2016	Above Normal	April	--	18,508.1	18,502.3	5.8	0.0%	18,501.2	6.9	0.0%	18,500.0	8.1	0.0%	18,498.8	9.3	0.1%	18,496.5	11.6	0.1%	18,495.4	12.7	0.1%
ME 3	39 58 10	2016	Above Normal	May	--	5,203.5	5,195.9	7.5	0.1%	5,194.9	8.6	0.2%	5,192.7	10.8	0.2%	5,190.5	13.0	0.2%	5,188.3	15.2	0.3%	5,186.1	17.4	0.3%
ME 3	39 58 10	2016	Above Normal	June	--	1,503.1	1,487.3	15.9	1.1%	1,485.1	18.1	1.2%	1,480.6	22.6	1.5%	1,476.2	27.0	1.8%	1,471.6	31.5	2.1%	1,467.2	35.9	2.4%
ME 3	39 58 10	2016	Above Normal	July	--	816.3	799.4	16.9	2.1%	796.9	19.4	2.4%	792.1	24.2	3.0%	787.3	29.1	3.6%	782.4	33.9	4.2%	777.7	38.7	4.7%
ME 3	39 58 10	2016	Above Normal	August	--	484.8	468.7	16.1	3.3%	466.4	18.4	3.8%	461.8	23.0	4.7%	457.2	27.5	5.7%	452.6	32.1	6.6%	448.0	36.7	7.6%
ME 3	39 58 10	2016	Above Normal	September	Used in Summary Table Analysis	321.4	307.6	13.8	4.3%	305.0	16.5	5.1%	300.8	20.6	6.4%	296.5	25.0	7.8%	292.2	29.2	9.1%	287.9	33.5	10.4%
ME 3	39 58 10	2017	Wet	October	Used in Summary Table Analysis	18,206.0	18,194.4	11.6	0.1%	18,193.3	12.7	0.1%	18,189.8	16.2	0.1%	18,186.3	19.7	0.1%	18,182.9	23.1	0.1%	18,180.6	25.5	0.1%
ME 3	39 58 10	2017	Wet	November	Used in Summary Table Analysis	18,737.3	18,728.0	9.3	0.0%	18,726.9	10.4	0.1%	18,724.5	12.7	0.1%	18,722.2	15.0	0.1%	18,719.9	17.4	0.1%	18,717.6	19.7	0.1%
ME 3	39 58 10	2017	Wet	December	--	23,978.0	23,971.1	6.9	0.0%	23,969.9	8.1	0.0%	23,967.6	10.4	0.0%	23,965.3	12.7	0.1%	23,963.0	15.0	0.1%	23,960.6	17.4	0.1%
ME 3	39 58 10	2017	Wet	January	--	106,510.4	106,503.5	6.9	0.0%	106,502.3	8.1	0.0%	106,501.2	9.3	0.0%	106,498.8	11.6	0.0%	106,496.5	13.9	0.0%	106,495.4	15.0	0.0%
ME 3	39 58 10	2017	Wet	February	--	81,606.5	81,600.7	5.8	0.0%	81,599.5	6.9	0.0%	81,598.4	8.1	0.0%	81,596.1	10.4	0.0%	81,594.9	11.6	0.0%	81,592.6	13.9	0.0%
ME 3	39 58 10	2017	Wet	March	--	27,199.1	27,194.4	4.6	0.0%	27,193.3	5.8	0.0%	27,191.0	8.1	0.0%	27,189.8	9.3	0.0%	27,187.5	11.6	0.0%	27,186.3	12.7	0.0%
ME 3	39 58 10	2017	Wet	April	--	22,857.6	22,851.9	5.8	0.0%	22,851.9	5.8	0.0%	22,849.5	8.1	0.0%	22,848.4	9.3	0.0%	22,847.2	10.4	0.0%	22,844.9	12.7	0.1%
ME 3	39 58 10	2017	Wet	May	--	6,267.5	6,259.8	7.6	0.1%	6,258.8	8.7	0.1%	6,256.7	10.8	0.2%	6,254.5	13.0	0.2%	6,252.3	15.2	0.2%	6,250.1	17.4	0.3%
ME 3	39 58 10	2017	Wet	June	--	2,104.1	2,087.7	16.3	0.8%	2,085.4	18.6	0.9%	2,080.8	23.3	1.1%	2,076.2	27.9	1.3%	2,071.5	32.5	1.5%	2,066.9	37.2	1.8%
ME 3	39 58 10	2017	Wet	July	--	925.8	908.7	17.1	1.8%	906.3	19.5	2.1%	901.5	24.3	2.6%	896.6	29.2	3.2%	891.8	34.0	3.7%	887.0	38.8	4.2%
ME 3	39 58 10	2017	Wet	August	--	498.1	482.0	16.1	3.2%	479.7	18.4	3.7%	475.2	22.9	4.6%	470.6	27.5	5.5%	466.1	32.0	6.4%	461.5	36.6	7.3%
ME 3	39 58 10	2017	Wet	September	Used in Summary Table Analysis	315.3	300.7	14.7	4.6%	298.6	16.7	5.3%	294.4	20.9	6.6%	290.2	25.1	8.0%	286.1	29.3	9.3%	281.9	33.5	10.6%
ME 3	39 58 10	2018	Above Normal	October	Used in Summary Table Analysis	268.2	257.0	11.1	4.2%	255.4	12.7	4.7%	252.2	15.9	5.9%	249.0	19.1	7.1%	245.8	22.3	8.3%	242.7	25.5	9.5%
ME 3	39 58 10	2018	Above Normal	November	Used in Summary Table Analysis	10,698.3	10,689.9	8.3	0.1%	10,688.7	9.6	0.1%	10,686.2	12.0	0.1%	10,683.8	14.5	0.1%	10,681.4	16.9	0.2%	10,678.9	19.3	0.2%
ME 3	39 58 10	2018	Above Normal	December	--	5,435.0	5,427.9	7.1	0.1%	5,427.0	8.0	0.1%	5,424.9	10.1	0.2%	5,422.8	12.2	0.2%	5,420.8	14.1	0.3%	5,418.8	16.2	0.3%
ME 3	39 58 10	2018	Above Normal	January	--	17,621.5	17,615.7	5.8	0.0%	17,614.6	6.9	0.0%	17,612.3	9.3	0.1%	17,611.1	10.4	0.1%	17,608.8	12.7	0.1%	17,606.5	15.0	0.1%
ME 3	39 58 10	2018	Above Normal	February	--	7,587.3	7,581.7	5.6	0.1%	7,580.9	6.4	0.1%	7,579.2	8.1	0.1%	7,577.5	9.7	0.1%	7,575.9	11.3	0.1%	7,574.2	13.1	0.2%
ME 3	39 58 10	2018	Above Normal	March	--	20,597.2	20,591.4	5.8	0.0%	20,590.3	6.9	0.0%	20,589.1	8.1	0.0%	20,588.0	9.3	0.0%	20,585.6	11.6	0.1%	20,584.5	12.7	0.1%
ME 3	39 58 10	2018	Above Normal	April	--	32,079.9	32,075.2	4.6	0.0%	32,074.1	5.8	0.0%	32,072.9	6.9	0.0%	32,071.8	8.1	0.0%	32,069.4	10.4	0.0%	32,068.3	11.6	0.0%
ME 3	39 58 10	2018	Above Normal	May	--	6,981.5	6,968.8	12.7	0.2%	6,966.9	14.6	0.2%	6,963.4	18.1	0.3%	6,959.7	21.8	0.3%	6,956.1	25.3	0.4%	6,952.8	28.7	0.4%
ME 3	39 58 10	2018	Above Normal	June	--	1,906.9	1,890.7	16.2	0.8%	1,888.3	18.6	1.0%	1,883.8	23.1	1.2%	1,879.2	27.8	1.5%	1,874.5	32.4	1.7%	1,869.9	37.0	1.9%
ME 3	39 58 10	2018	Above Normal	July	--	774.0	757.0	17.0	2.2%	754.6	19.4	2.5%	749.8	24.2	3.1%	745.0	29.0	3.7%	740.1	33.8	4.4%	735.3	38.6	5.0%
ME 3	39 58 10	2018	Above Normal	August	--	435.3	419.9	15.4	3.5%	417.7	17.6	4.0%	413.3	22.0	5.0%	409.0	26.3	6.1%	404.6	30.8	7.1%	400.2	35.1	8.1%
ME 3	39 58 10	2018	Above Normal	September	Used in Summary Table Analysis	293.2	278.6	14.6	5.0%	276.5	16.7	5.7%	272.3	20.9	7.1%	268.1	25.1	8.6%	263.9	29.3	10.0%	259.7	33.5	11.4%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 58 10	2019	Below Normal	October	Used in Summary Table Analysis	202.2	191.2	11.0	5.4%	189.7	12.5	6.2%	186.5	15.7	7.8%	183.3	18.9	9.4%	180.2	22.0	10.9%	177.1	25.1	12.4%
ME 3	39 58 10	2019	Below Normal	November	Used in Summary Table Analysis	6,561.6	6,553.0	8.6	0.1%	6,551.9	9.7	0.1%	6,549.4	12.2	0.2%	6,547.0	14.6	0.2%	6,544.4	17.1	0.3%	6,542.0	19.6	0.3%
ME 3	39 58 10	2019	Below Normal	December	--	14,561.3	14,554.4	6.9	0.0%	14,553.2	8.1	0.1%	14,550.9	10.4	0.1%	14,549.8	11.6	0.1%	14,547.5	13.9	0.1%	14,545.1	16.2	0.1%
ME 3	39 58 10	2019	Below Normal	January	--	35,011.6	35,004.6	6.9	0.0%	35,003.5	8.1	0.0%	35,002.3	9.3	0.0%	35,000.0	11.6	0.0%	34,997.7	13.9	0.0%	34,996.5	15.0	0.0%
ME 3	39 58 10	2019	Below Normal	February	--	141,701.4	141,689.8	11.6	0.0%	141,689.8	11.6	0.0%	141,689.8	11.6	0.0%	141,689.8	11.6	0.0%	141,689.8	11.6	0.0%	141,689.8	11.6	0.0%
ME 3	39 58 10	2019	Below Normal	March	--	42,203.7	42,199.1	4.6	0.0%	42,197.9	5.8	0.0%	42,196.8	6.9	0.0%	42,194.4	9.3	0.0%	42,193.3	10.4	0.0%	42,191.0	12.7	0.0%
ME 3	39 58 10	2019	Below Normal	April	--	15,238.4	15,232.6	5.8	0.0%	15,232.6	5.8	0.0%	15,231.5	6.9	0.0%	15,229.2	9.3	0.1%	15,228.0	10.4	0.1%	15,226.9	11.6	0.1%
ME 3	39 58 10	2019	Below Normal	May	--	16,781.3	16,768.5	12.7	0.1%	16,766.2	15.0	0.1%	16,762.7	18.5	0.1%	16,758.1	23.1	0.1%	16,754.6	26.6	0.2%	16,751.2	30.1	0.2%
ME 3	39 58 10	2019	Below Normal	June	--	4,240.3	4,222.6	17.7	0.4%	4,220.0	20.3	0.5%	4,215.2	25.1	0.6%	4,210.4	29.9	0.7%	4,205.7	34.6	0.8%	4,201.0	39.2	0.9%
ME 3	39 58 10	2019	Below Normal	July	--	1,352.3	1,335.3	17.0	1.3%	1,332.9	19.4	1.4%	1,328.0	24.3	1.8%	1,323.3	29.1	2.1%	1,318.4	33.9	2.5%	1,313.5	38.8	2.9%
ME 3	39 58 10	2019	Below Normal	August	--	588.2	572.4	15.8	2.7%	570.2	18.0	3.1%	565.7	22.5	3.8%	561.2	27.0	4.6%	556.7	31.5	5.3%	552.3	35.9	6.1%
ME 3	39 58 10	2019	Below Normal	September	Used in Summary Table Analysis	455.5	441.0	14.5	3.2%	438.9	16.6	3.7%	434.7	20.8	4.6%	430.6	25.0	5.5%	426.4	29.1	6.4%	422.2	33.3	7.3%
ME 3	39 58 10	2020	Dry	October	Used in Summary Table Analysis	350.1	339.6	10.5	3.0%	338.1	12.0	3.4%	335.1	15.0	4.3%	332.1	18.0	5.1%	329.1	21.0	6.0%	326.1	24.0	6.9%
ME 3	39 58 10	2020	Dry	November	Used in Summary Table Analysis	309.5	301.7	7.8	2.5%	300.6	8.9	2.9%	298.3	11.2	3.6%	296.1	13.5	4.4%	293.8	15.8	5.1%	291.5	18.1	5.8%
ME 3	39 58 10	2020	Dry	December	--	13,134.3	13,126.2	8.1	0.1%	13,126.2	8.1	0.1%	13,123.8	10.4	0.1%	13,121.5	12.7	0.1%	13,119.2	15.0	0.1%	13,116.9	17.4	0.1%
ME 3	39 58 10	2020	Dry	January	--	22,209.5	22,203.7	5.8	0.0%	22,202.5	6.9	0.0%	22,200.2	9.3	0.0%	22,199.1	10.4	0.0%	22,196.8	12.7	0.1%	22,195.6	13.9	0.1%
ME 3	39 58 10	2020	Dry	February	--	7,406.7	7,401.0	5.7	0.1%	7,400.2	6.5	0.1%	7,398.5	8.2	0.1%	7,396.8	10.0	0.1%	7,395.1	11.6	0.2%	7,393.5	13.2	0.2%
ME 3	39 58 10	2020	Dry	March	--	7,220.3	7,214.9	5.3	0.1%	7,214.1	6.1	0.1%	7,212.6	7.6	0.1%	7,211.0	9.3	0.1%	7,209.4	10.9	0.2%	7,207.9	12.4	0.2%
ME 3	39 58 10	2020	Dry	April	--	5,456.8	5,443.5	13.3	0.2%	5,441.7	15.2	0.3%	5,437.8	19.0	0.3%	5,434.0	22.8	0.4%	5,430.2	26.6	0.5%	5,426.4	30.4	0.6%
ME 3	39 58 10	2020	Dry	May	--	7,344.1	7,328.1	16.0	0.2%	7,325.9	18.2	0.2%	7,321.3	22.8	0.3%	7,316.7	27.4	0.4%	7,312.2	31.9	0.4%	7,307.5	36.6	0.5%
ME 3	39 58 10	2020	Dry	June	--	2,101.2	2,080.1	21.1	1.0%	2,077.1	24.1	1.1%	2,071.4	29.7	1.4%	2,065.9	35.3	1.7%	2,060.1	41.1	2.0%	2,054.4	46.8	2.2%
ME 3	39 58 10	2020	Dry	July	--	790.4	770.7	19.7	2.5%	767.8	22.6	2.9%	762.2	28.2	3.6%	756.6	33.8	4.3%	750.9	39.5	5.0%	745.3	45.1	5.7%
ME 3	39 58 10	2020	Dry	August	--	392.9	373.9	19.1	4.9%	371.1	21.8	5.5%	365.7	27.2	6.9%	360.3	32.7	8.3%	354.8	38.1	9.7%	349.4	43.6	11.1%
ME 3	39 58 10	2020	Dry	September	Used in Summary Table Analysis	242.5	225.9	16.7	6.9%	223.5	19.1	7.9%	217.9	24.7	10.2%	212.8	29.7	12.2%	207.6	35.0	14.4%	202.4	40.2	16.6%
ME 3	39 57 11	2000	Above Normal	October	Used in Summary Table Analysis	809.2	797.2	12.0	1.5%	795.5	13.7	1.7%	792.1	17.1	2.1%	788.6	20.6	2.5%	785.1	24.1	3.0%	781.7	27.5	3.4%
ME 3	39 57 11	2000	Above Normal	November	Used in Summary Table Analysis	12,006.9	11,997.7	9.3	0.1%	11,996.5	10.4	0.1%	11,993.1	13.9	0.1%	11,990.7	16.2	0.1%	11,988.4	18.5	0.2%	11,985.0	22.0	0.2%
ME 3	39 57 11	2000	Above Normal	December	--	10,751.2	10,743.1	8.1	0.1%	10,741.9	9.3	0.1%	10,739.6	11.6	0.1%	10,737.3	13.9	0.1%	10,734.8	16.3	0.2%	10,732.5	18.6	0.2%
ME 3	39 57 11	2000	Above Normal	January	--	28,388.9	28,381.9	6.9	0.0%	28,380.8	8.1	0.0%	28,378.5	10.4	0.0%	28,376.2	12.7	0.0%	28,375.0	13.9	0.0%	28,372.7	16.2	0.1%
ME 3	39 57 11	2000	Above Normal	February	--	36,919.0	36,912.0	6.9	0.0%	36,912.0	6.9	0.0%	36,909.7	9.3	0.0%	36,907.4	11.6	0.0%	36,905.1	13.9	0.0%	36,903.9	15.0	0.0%
ME 3	39 57 11	2000	Above Normal	March	--	18,277.8	18,272.0	5.8	0.0%	18,270.8	6.9	0.0%	18,268.5	9.3	0.1%	18,267.4	10.4	0.1%	18,265.0	12.7	0.1%	18,263.9	13.9	0.1%
ME 3	39 57 11	2000	Above Normal	April	--	12,284.7	12,278.9	5.8	0.0%	12,277.8	6.9	0.1%	12,276.6	8.1	0.1%	12,274.3	10.4	0.1%	12,273.1	11.6	0.1%	12,270.8	13.9	0.1%
ME 3	39 57 11	2000	Above Normal	May	--	7,070.3	7,056.3	14.0	0.2%	7,054.2	16.1	0.2%	7,050.1	20.1	0.3%	7,046.1	24.2	0.3%	7,042.0	28.2	0.4%	7,038.0	32.3	0.5%
ME 3	39 57 11	2000	Above Normal	June	--	2,601.4	2,580.4	20.9	0.8%	2,577.4	24.0	0.9%	2,571.4	30.0	1.2%	2,565.5	35.9	1.4%	2,559.6	41.8	1.6%	2,553.6	47.8	1.8%
ME 3	39 57 11	2000	Above Normal	July	--	986.7	968.4	18.3	1.9%	965.8	20.9	2.1%	960.6	26.2	2.7%	955.4	31.3	3.2%	950.2	36.5	3.7%	945.1	41.7	4.2%
ME 3	39 57 11	2000	Above Normal	August	--	516.6	499.6	16.9	3.3%	497.2	19.3	3.7%	492.4	24.1	4.7%	487.6	28.9	5.6%	482.8	33.7	6.5%	478.0	38.5	7.5%
ME 3	39 57 11	2000	Above Normal	September	Used in Summary Table Analysis	290.6	275.9	14.7	5.1%	273.8	16.8	5.8%	269.6	21.0	7.2%	265.4	25.2	8.7%	261.2	29.4	10.1%	257.0	33.6	11.6%
ME 3	39 57 11	2001	Dry	October	Used in Summary Table Analysis	3,789.1	3,777.2	11.9	0.3%	3,775.5	13.7	0.4%	3,772.1	17.0	0.4%	3,768.6	20.5	0.5%	3,765.3	23.8	0.6%	3,761.9	27.2	0.7%
ME 3	39 57 11	2001	Dry	November	Used in Summary Table Analysis	6,082.2	6,072.8	9.4	0.2%	6,071.4	10.8	0.2%	6,068.8	13.4	0.2%	6,066.0	16.2	0.3%	6,063.3	18.9	0.3%	6,060.5	21.6	0.4%
ME 3	39 57 11	2001	Dry	December	--	8,796.4	8,788.2	8.2	0.1%	8,787.0	9.4	0.1%	8,784.6	11.8	0.1%	8,782.3	14.1	0.2%	8,779.9	16.6	0.2%	8,777.5	18.9	0.2%
ME 3	39 57 11	2001	Dry	January	--	12,710.6	12,703.7	6.9	0.1%	12,702.5	8.1	0.1%	12,700.2	10.4	0.1%	12,697.9	12.7	0.1%	12,695.6	15.0	0.1%	12,693.3	17.4	0.1%
ME 3	39 57 11	2001	Dry	February	--	17,421.3	17,414.4	6.9	0.0%	17,413.2	8.1	0.0%	17,410.9	10.4	0.1%	17,409.7	11.6	0.1%	17,407.4	13.9	0.1%	17,405.1	16.2	0.1%
ME 3	39 57 11	2001	Dry	March	--	12,270.8	12,263.9	6.9	0.1%	12,262.7	8.1	0.1%	12,261.6	9.3	0.1%	12,259.3	11.6	0.1%	12,258.1	12.7	0.1%	12,255.8	15.0	0.1%
ME 3	39 57 11	2001	Dry	April	--	10,944.3	10,929.7	14.6	0.1%	10,927.8	16.6	0.2%	10,923.6	20.7	0.2%	10,919.3	25.0	0.2%	10,915.3	29.1	0.3%	10,911.1	33.2	0.3%
ME 3	39 57 11	2001	Dry	May	--	2,635.8	2,618.8	17.0	0.6%	2,616.3	19.4	0.7%	2,611.5	24.3	0.9%	2,606.6	29.2	1.1%	2,601.7	34.0	1.3%	2,596.9	38.9	1.5%
ME 3	39 57 11	2001	Dry	June	--	2,630.4	2,607.2	23.3	0.9%	2,603.9	26.5	1.0%	2,597.3	33.1	1.3%	2,590.9	39.6	1.5%	2,584.4	46.1	1.8%	2,577.9	52.5	2.0%
ME 3	39 57 11	2001	Dry	July	--	716.3	695.3	21.0	2.9%	692.3	24.0	3.3%	686.3	29.9	4.2%	680.4	35.9	5.0%	674.5	41.8	5.8%	668.5	47.7	6.7%
ME 3	39 57 11	2001	Dry	August	--	168.7	148.6	20.2	11.9%	145.7	23.0	13.6%	140.0	28.8	17.1%	134.2	34.5	20.4%	128.5	40.2	23.8%	122.8	45.9	27.2%
ME 3	39 57 11	2001	Dry	September	Used in Summary Table Analysis	91.4	73.7	17.6	19.3%	71.2	20.1	22.1%	66.2	25.2	27.5%	61.2	30.2	33.0%	56.2	35.2	38.5%	51.1	40.2	44.0%
ME 3	39 57 11	2002	Below Normal	October	Used in Summary Table Analysis	260.5	246.1	14.4	5.5%	244.1	16.5	6.3%	239.9	20.6	7.9%	235.7	24.8	9.5%	231.6	28.9	11.1%	227.5	33.1	12.7%
ME 3	39 57 11	2002	Below Normal	November	Used in Summary Table Analysis	11,969.9	11,959.5	10.4	0.1%	11,957.2	12.7	0.1%	11,953.7	16.2	0.1%	11,951.4	18.5	0.2%	11,947.9	22.0	0.2%	11,944.4	25.5	0.2%
ME 3	39 57 11	2002	Below Normal	December	--	35,515.0	35,504.6	10.4	0.0%	35,503.5	11.6	0.0%	35,500.0	15.0	0.0%	35,497.7	17.4	0.0%	35,494.2	20.8	0.1%	35,491.9	23.1	0.1%
ME 3	39 57 11	2002	Below Normal	January	--	30,770.8	30,761.6	9.3	0.0%	30,760.4	10.4	0.0%	30,758.1	12.7	0.0%	30,755.8	15.0	0.0%	30,753.5	17.4	0.1%	30,750.0	20.8	0.1%
ME 3	39 57 11	2002	Below Normal	February	--	24,613.4	24,605.3	8.1	0.0%	24,604.2	9.3	0.0%	24,601.9	11.6	0.0%	24,599.5	13.9	0.1%	24,597.2	16.2	0.1%	24,594.9	18.5	0.1%
ME 3	39 57 11	2002	Below Normal	March	--	17,729.2	17,721.1	8.1	0.0%	17,719.9	9.3	0.1%	17,717.6	11.6	0.1%	17,715.3	13.9	0.1%	17,713.0	16.2	0.1%	17,711.8	17.4	0.1%
ME 3	39 57 11	2002	Below Normal	April	--	9,905.2	9,890.9	14.4	0.1%	9,888.8	16.4	0.2%	9,884.7	20.5	0.2%	9,880.6	24.7	0.2%	9,876.5	28.7	0.3%	9,872.5	32.8	0.3%
ME 3	39 57 11	2002	Below Normal	May	--	3,311.9	3,295.0	16.9	0.5%	3,292.6	19.3	0.6%	3,287.7	24.2	0.7%	3,282.9	29.1	0.9%	3,278.0	33.9	1.0%	3,273.3	38.7	1.2%
ME 3	39 57 11	2002	Below Normal	June	--	850.2	831.1	19.1	2.2%	828.4	21.8	2.6%	823.0	27.2	3.2%	817.6	32.5	3.8%	812.2	38.0	4.5%	806.9	43.3	5.1%
ME 3	39 57 11	2002	Below Normal	July	--	358.6	339.7	18.8	5.3%	337.0	21.5	6.0%	331.7	26.9	7.5%	326.3	32.2	9.0%	321.0	37.6	10.5%	315.6	42.9	12.0%
ME 3	39 57 11	2002	Below Normal	August	--	222.5	205.1	17.4	7.8%	202.7	19.9	8.9%	197.7	24.8	11.2%	192.7	29.8	13.4%	187.8	34.7	15.6%	182.8	39.7	17.8%
ME 3	39 57 11	2002	Below Normal	September	Used in Summary Table Analysis	159.6	143.4	16.2	10.1%	141.1	18.5	11.6%	136.5	23.1	14.5%	131.9	27.7	17.4%	127.2	32.4	20.3%	122.6	37.0	23.2%
ME 3	39 57 11	2003	Wet	October	Used in Summary Table Analysis	124.7	111.8	12.9	10.4%	109.9	14.8	11.8%	106.2	18.5	14.8%	102.5	22.2	17.8%	98.8	25.9	20.8%	95.0	29.6	23.8%
ME 3	39 57 11	2003	Wet	November	Used in Summary Table Analysis	890.7	880.5	10.1	1.1%	879.1	11.6	1.3%	876.1	14.5	1.6%	873.2	17.5	2.0%	870.3	20.3	2.3%	867.4	23.3	2.6%
ME 3	39 57 11	2003	Wet	December	--	56,423.6	56,414.4	9.3	0.0%	56,413.2	10.4	0.0%	56,410.9	12.7	0.0%	56,408.6	15.0	0.0%	56,405.1	18.5	0.0%	56,402.8	20.8	0.0%
ME 3	39 57 11	2003	Wet	January	--	31,447.9	31,439.8	8.1	0.0%	31,438.7	9.3	0.0%	31,436.3	11.6	0.0%	31,434.0	13.9	0.0%	31,431.7	16.2	0.1%	31,429.4	18.5	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 57 11	2003	Wet	February	--	20,310.2	20,302.1	8.1	0.0%	20,300.9	9.3	0.0%	20,299.8	10.4	0.1%	20,297.5	12.7	0.1%	20,295.1	15.0	0.1%	20,292.8	17.4	0.1%
ME 3	39 57 11	2003	Wet	March	--	23,966.4	23,959.5	6.9	0.0%	23,959.5	6.9	0.0%	23,957.2	9.3	0.0%	23,954.9	11.6	0.0%	23,952.5	13.9	0.1%	23,951.4	15.0	0.1%
ME 3	39 57 11	2003	Wet	April	--	42,748.8	42,741.9	6.9	0.0%	42,740.7	8.1	0.0%	42,738.4	10.4	0.0%	42,737.3	11.6	0.0%	42,735.0	13.9	0.0%	42,732.6	16.2	0.0%
ME 3	39 57 11	2003	Wet	May	--	12,201.4	12,186.3	15.0	0.1%	12,184.0	17.4	0.1%	12,180.6	20.8	0.2%	12,175.9	25.5	0.2%	12,172.5	28.9	0.2%	12,167.8	33.6	0.3%
ME 3	39 57 11	2003	Wet	June	--	3,160.6	3,142.2	18.4	0.6%	3,139.6	21.1	0.7%	3,134.5	26.2	0.8%	3,129.3	31.4	1.0%	3,124.2	36.5	1.2%	3,119.1	41.6	1.3%
ME 3	39 57 11	2003	Wet	July	--	1,467.9	1,449.2	18.8	1.3%	1,446.5	21.4	1.5%	1,441.2	26.7	1.8%	1,435.9	32.1	2.2%	1,430.6	37.4	2.5%	1,425.2	42.7	2.9%
ME 3	39 57 11	2003	Wet	August	--	754.4	736.6	17.9	2.4%	734.0	20.5	2.7%	728.9	25.6	3.4%	723.8	30.6	4.1%	718.7	35.8	4.7%	713.5	41.0	5.4%
ME 3	39 57 11	2003	Wet	September	Used in Summary Table Analysis	452.8	437.9	14.9	3.3%	435.8	17.0	3.8%	431.5	21.3	4.7%	427.3	25.5	5.6%	423.0	29.8	6.6%	418.8	34.0	7.5%
ME 3	39 57 11	2004	Wet	October	Used in Summary Table Analysis	319.9	307.8	12.1	3.8%	306.1	13.8	4.3%	302.7	17.2	5.4%	299.2	20.7	6.5%	295.7	24.2	7.6%	292.3	27.6	8.6%
ME 3	39 57 11	2004	Wet	November	Used in Summary Table Analysis	5,759.0	5,749.4	9.6	0.2%	5,748.0	11.0	0.2%	5,745.3	13.8	0.2%	5,742.6	16.4	0.3%	5,739.7	19.3	0.3%	5,736.9	22.1	0.4%
ME 3	39 57 11	2004	Wet	December	--	36,116.9	36,107.6	9.3	0.0%	36,106.5	10.4	0.0%	36,104.2	12.7	0.0%	36,101.9	15.0	0.0%	36,099.5	17.4	0.0%	36,097.2	19.7	0.1%
ME 3	39 57 11	2004	Wet	January	--	31,341.4	31,333.3	8.1	0.0%	31,332.2	9.3	0.0%	31,329.9	11.6	0.0%	31,328.7	12.7	0.0%	31,326.4	15.0	0.0%	31,324.1	17.4	0.1%
ME 3	39 57 11	2004	Wet	February	--	38,108.8	38,101.9	6.9	0.0%	38,100.7	8.1	0.0%	38,099.5	9.3	0.0%	38,097.2	11.6	0.0%	38,094.9	13.9	0.0%	38,092.6	16.2	0.0%
ME 3	39 57 11	2004	Wet	March	--	16,500.0	16,494.2	5.8	0.0%	16,493.1	6.9	0.0%	16,490.7	9.3	0.1%	16,489.6	10.4	0.1%	16,487.3	12.7	0.1%	16,485.0	15.0	0.1%
ME 3	39 57 11	2004	Wet	April	--	9,433.0	9,426.9	6.1	0.1%	9,425.9	7.1	0.1%	9,424.1	8.9	0.1%	9,422.3	10.6	0.1%	9,420.5	12.5	0.1%	9,418.6	14.4	0.2%
ME 3	39 57 11	2004	Wet	May	--	3,405.9	3,391.8	14.1	0.4%	3,389.7	16.2	0.5%	3,385.6	20.3	0.6%	3,381.6	24.3	0.7%	3,377.5	28.4	0.8%	3,373.5	32.4	1.0%
ME 3	39 57 11	2004	Wet	June	--	688.4	670.8	17.6	2.6%	668.3	20.1	2.9%	663.3	25.1	3.6%	658.3	30.1	4.4%	653.4	35.0	5.1%	648.4	40.0	5.8%
ME 3	39 57 11	2004	Wet	July	--	351.4	333.1	18.4	5.2%	330.4	21.0	6.0%	325.2	26.2	7.5%	320.0	31.5	9.0%	314.7	36.7	10.4%	309.5	41.9	11.9%
ME 3	39 57 11	2004	Wet	August	--	220.8	203.8	17.0	7.7%	201.3	19.4	8.8%	196.5	24.3	11.0%	191.6	29.1	13.2%	186.8	34.0	15.4%	181.9	38.8	17.6%
ME 3	39 57 11	2004	Wet	September	Used in Summary Table Analysis	158.2	142.2	16.0	10.1%	139.9	18.3	11.6%	135.3	22.9	14.4%	130.8	27.4	17.3%	126.2	32.0	20.2%	121.6	36.6	23.1%
ME 3	39 57 11	2005	Above Normal	October	Used in Summary Table Analysis	7,625.5	7,613.2	12.3	0.2%	7,611.3	14.1	0.2%	7,607.9	17.6	0.2%	7,604.3	21.2	0.3%	7,600.8	24.7	0.3%	7,597.2	28.2	0.4%
ME 3	39 57 11	2005	Above Normal	November	Used in Summary Table Analysis	2,248.4	2,238.9	9.5	0.4%	2,237.5	10.9	0.5%	2,234.8	13.5	0.6%	2,232.1	16.3	0.7%	2,229.3	19.1	0.8%	2,226.5	21.9	1.0%
ME 3	39 57 11	2005	Above Normal	December	--	20,864.6	20,856.5	8.1	0.0%	20,855.3	9.3	0.0%	20,853.0	11.6	0.1%	20,850.7	13.9	0.1%	20,848.4	16.2	0.1%	20,846.1	18.5	0.1%
ME 3	39 57 11	2005	Above Normal	January	--	22,256.9	22,250.0	6.9	0.0%	22,248.8	8.1	0.0%	22,246.5	10.4	0.0%	22,244.2	12.7	0.1%	22,241.9	15.0	0.1%	22,240.7	16.2	0.1%
ME 3	39 57 11	2005	Above Normal	February	--	13,988.4	13,981.5	6.9	0.0%	13,980.3	8.1	0.1%	13,978.0	10.4	0.1%	13,976.9	11.6	0.1%	13,974.5	13.9	0.1%	13,972.2	16.2	0.1%
ME 3	39 57 11	2005	Above Normal	March	--	28,471.1	28,464.1	6.9	0.0%	28,463.0	8.1	0.0%	28,460.6	10.4	0.0%	28,459.5	11.6	0.0%	28,457.2	13.9	0.0%	28,456.0	15.0	0.1%
ME 3	39 57 11	2005	Above Normal	April	--	21,380.8	21,375.0	5.8	0.0%	21,373.8	6.9	0.0%	21,372.7	8.1	0.0%	21,370.4	10.4	0.0%	21,369.2	11.6	0.1%	21,366.9	13.9	0.1%
ME 3	39 57 11	2005	Above Normal	May	--	19,494.2	19,479.2	15.0	0.1%	19,476.9	17.4	0.1%	19,473.4	20.8	0.1%	19,468.8	25.5	0.1%	19,465.3	28.9	0.1%	19,460.6	33.6	0.2%
ME 3	39 57 11	2005	Above Normal	June	--	15,781.3	15,760.4	20.8	0.1%	15,756.9	24.3	0.2%	15,751.2	30.1	0.2%	15,744.2	37.0	0.2%	15,738.4	42.8	0.3%	15,732.6	48.6	0.3%
ME 3	39 57 11	2005	Above Normal	July	--	2,862.0	2,842.8	19.2	0.7%	2,840.2	21.9	0.8%	2,834.7	27.3	1.0%	2,829.3	32.8	1.1%	2,823.8	38.2	1.3%	2,818.4	43.6	1.5%
ME 3	39 57 11	2005	Above Normal	August	--	977.0	960.1	17.0	1.7%	957.6	19.4	2.0%	952.8	24.2	2.5%	948.0	29.1	3.0%	943.1	33.9	3.5%	938.3	38.7	4.0%
ME 3	39 57 11	2005	Above Normal	September	Used in Summary Table Analysis	518.8	504.1	14.7	2.8%	502.0	16.9	3.2%	497.8	21.1	4.1%	493.6	25.3	4.9%	489.4	29.4	5.7%	485.2	33.6	6.5%
ME 3	39 57 11	2006	Wet	October	Used in Summary Table Analysis	627.9	616.2	11.7	1.9%	614.5	13.4	2.1%	611.2	16.7	2.7%	607.8	20.1	3.2%	604.5	23.4	3.7%	601.1	26.8	4.3%
ME 3	39 57 11	2006	Wet	November	Used in Summary Table Analysis	9,231.6	9,222.5	9.1	0.1%	9,221.2	10.4	0.1%	9,218.5	13.1	0.1%	9,216.0	15.6	0.2%	9,213.3	18.3	0.2%	9,210.6	20.9	0.2%
ME 3	39 57 11	2006	Wet	December	--	43,255.8	43,247.7	8.1	0.0%	43,246.5	9.3	0.0%	43,244.2	11.6	0.0%	43,241.9	13.9	0.0%	43,239.6	16.2	0.0%	43,236.1	19.7	0.0%
ME 3	39 57 11	2006	Wet	January	--	46,077.5	46,070.6	6.9	0.0%	46,069.4	8.1	0.0%	46,067.1	10.4	0.0%	46,064.8	12.7	0.0%	46,062.5	15.0	0.0%	46,060.2	17.4	0.0%
ME 3	39 57 11	2006	Wet	February	--	26,524.3	26,517.4	6.9	0.0%	26,516.2	8.1	0.0%	26,513.9	10.4	0.0%	26,512.7	11.6	0.0%	26,510.4	13.9	0.1%	26,508.1	16.2	0.1%
ME 3	39 57 11	2006	Wet	March	--	46,985.0	46,978.0	6.9	0.0%	46,978.0	6.9	0.0%	46,975.7	9.3	0.0%	46,973.4	11.6	0.0%	46,972.2	12.7	0.0%	46,969.9	15.0	0.0%
ME 3	39 57 11	2006	Wet	April	--	30,358.8	30,353.0	5.8	0.0%	30,351.9	6.9	0.0%	30,350.7	8.1	0.0%	30,348.4	10.4	0.0%	30,347.2	11.6	0.0%	30,344.9	13.9	0.0%
ME 3	39 57 11	2006	Wet	May	--	14,166.7	14,158.6	8.1	0.1%	14,157.4	9.3	0.1%	14,155.1	11.6	0.1%	14,152.8	13.9	0.1%	14,149.3	17.4	0.1%	14,147.0	19.7	0.1%
ME 3	39 57 11	2006	Wet	June	--	3,542.2	3,524.5	17.7	0.5%	3,522.0	20.3	0.6%	3,516.9	25.3	0.7%	3,511.9	30.3	0.9%	3,506.9	35.3	1.0%	3,502.0	40.3	1.1%
ME 3	39 57 11	2006	Wet	July	--	1,272.3	1,254.1	18.3	1.4%	1,251.5	20.8	1.6%	1,246.3	26.0	2.0%	1,241.1	31.3	2.5%	1,235.9	36.5	2.9%	1,230.8	41.6	3.3%
ME 3	39 57 11	2006	Wet	August	--	658.6	641.2	17.4	2.6%	638.7	19.9	3.0%	633.8	24.8	3.8%	628.9	29.8	4.5%	623.9	34.7	5.3%	619.0	39.6	6.0%
ME 3	39 57 11	2006	Wet	September	Used in Summary Table Analysis	420.2	405.2	14.9	3.6%	403.1	17.0	4.1%	398.9	21.3	5.1%	394.6	25.5	6.1%	390.4	29.7	7.1%	386.2	34.0	8.1%
ME 3	39 57 11	2007	Above Normal	October	Used in Summary Table Analysis	269.4	257.5	11.9	4.4%	255.8	13.6	5.0%	252.4	17.0	6.3%	249.0	20.4	7.6%	245.6	23.8	8.8%	242.2	27.2	10.1%
ME 3	39 57 11	2007	Above Normal	November	Used in Summary Table Analysis	8,601.2	8,591.7	9.5	0.1%	8,590.3	10.9	0.1%	8,587.6	13.5	0.2%	8,584.8	16.3	0.2%	8,582.1	19.1	0.2%	8,579.4	21.8	0.3%
ME 3	39 57 11	2007	Above Normal	December	--	20,277.8	20,269.7	8.1	0.0%	20,268.5	9.3	0.0%	20,266.2	11.6	0.1%	20,262.7	15.0	0.1%	20,260.4	17.4	0.1%	20,258.1	19.7	0.1%
ME 3	39 57 11	2007	Above Normal	January	--	10,215.7	10,208.3	7.4	0.1%	10,207.2	8.6	0.1%	10,205.1	10.6	0.1%	10,202.9	12.8	0.1%	10,200.8	14.9	0.1%	10,198.6	17.1	0.2%
ME 3	39 57 11	2007	Above Normal	February	--	30,422.5	30,415.5	6.9	0.0%	30,414.4	8.1	0.0%	30,413.2	9.3	0.0%	30,410.9	11.6	0.0%	30,408.6	13.9	0.0%	30,406.3	16.2	0.1%
ME 3	39 57 11	2007	Above Normal	March	--	13,075.2	13,068.3	6.9	0.1%	13,068.3	6.9	0.1%	13,066.0	9.3	0.1%	13,063.7	11.6	0.1%	13,061.3	13.9	0.1%	13,060.2	15.0	0.1%
ME 3	39 57 11	2007	Above Normal	April	--	11,510.2	11,496.3	13.9	0.1%	11,494.3	15.9	0.1%	11,490.4	19.8	0.2%	11,486.3	23.8	0.2%	11,482.4	27.8	0.2%	11,478.5	31.7	0.3%
ME 3	39 57 11	2007	Above Normal	May	--	4,128.4	4,111.9	16.4	0.4%	4,109.6	18.8	0.5%	4,105.0	23.4	0.6%	4,100.2	28.1	0.7%	4,095.5	32.9	0.8%	4,090.9	37.5	0.9%
ME 3	39 57 11	2007	Above Normal	June	--	1,490.5	1,470.7	19.8	1.3%	1,467.9	22.6	1.5%	1,462.4	28.1	1.9%	1,456.8	33.7	2.3%	1,451.3	39.2	2.6%	1,445.7	44.8	3.0%
ME 3	39 57 11	2007	Above Normal	July	--	492.4	473.0	19.4	3.9%	470.3	22.1	4.5%	464.8	27.6	5.6%	459.3	33.0	6.7%	453.9	38.5	7.8%	448.4	44.0	8.9%
ME 3	39 57 11	2007	Above Normal	August	--	218.5	201.4	17.1	7.8%	199.0	19.5	8.9%	194.1	24.4	11.1%	189.3	29.2	13.4%	184.4	34.1	15.6%	179.6	38.9	17.8%
ME 3	39 57 11	2007	Above Normal	September	Used in Summary Table Analysis	146.2	130.2	15.9	10.9%	128.0	18.2	12.4%	123.4	22.7	15.5%	118.9	27.2	18.6%	114.4	31.8	21.7%	109.9	36.3	24.8%
ME 3	39 57 11	2008	Dry	October	Used in Summary Table Analysis	3,409.7	3,397.1	12.6	0.4%	3,395.4	14.4	0.4%	3,391.8	17.9	0.5%	3,388.1	21.6	0.6%	3,384.5	25.2	0.7%	3,380.8	28.9	0.8%
ME 3	39 57 11	2008	Dry	November	Used in Summary Table Analysis	3,252.0	3,242.4	9.6	0.3%	3,241.0	11.0	0.3%	3,238.2	13.8	0.4%	3,235.4	16.6	0.5%	3,232.6	19.3	0.6%	3,229.9	22.1	0.7%
ME 3	39 57 11	2008	Dry	December	--	22,953.7	22,945.6	8.1	0.0%	22,944.4	9.3	0.0%	22,942.1	11.6	0.1%	22,939.8	13.9	0.1%	22,936.3	17.4	0.1%	22,934.0	19.7	0.1%
ME 3	39 57 11	2008	Dry	January	--	37,366.9	37,358.8	8.1	0.0%	37,357.6	9.3	0.0%	37,355.3	11.6	0.0%	37,353.0	13.9	0.0%	37,350.7	16.2	0.0%	37,348.4	18.5	0.0%
ME 3	39 57 11	2008	Dry	February	--	26,230.3	26,223.4	6.9	0.0%	26,222.2	8.1	0.0%	26,219.9	10.4	0.0%	26,218.8	11.6	0.0%	26,216.4	13.9	0.1%	26,214.1	16.2	0.1%
ME 3	39 57 11	2008	Dry	March	--	11,775.5	11,768.5	6.9	0.1%	11,768.5	6.9	0.1%	11,766.2	9.3	0.1%	11,763.9	11.6	0.1%	11,762.7	12.7	0.1%	11,760.4	15.0	0.1%
ME 3	39 57 11	2008	Dry	April	--	9,001.5	8,987.4	14.1	0.2%	8,985.4	16.1	0.2%	8,981.3	20.3	0.2%	8,977.3	24.2	0.3%	8,973.1	28.4	0.3%	8,969.1	32.4	0.4%
ME 3	39 57 11	2008	Dry	May	--	1,360.3	1,345.4	14.9	1.1%	1,343.2	17.1	1.3%	1,338.9	21.4	1.6%	1,334.7	25.6	1.9%	1,330.6	29.7	2.2%	1,326.6	33.7	2.5%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 57 11	2008	Dry	June	--	433.9	412.5	21.5	4.9%	409.4	24.5	5.6%	403.4	30.6	7.0%	397.3	36.6	8.4%	391.3	42.7	9.8%	385.3	48.6	11.2%
ME 3	39 57 11	2008	Dry	July	--	252.4	231.9	20.5	8.1%	229.0	23.4	9.3%	223.1	29.3	11.6%	217.3	35.1	13.9%	211.5	41.0	16.2%	205.6	46.8	18.5%
ME 3	39 57 11	2008	Dry	August	--	175.6	156.0	19.6	11.2%	153.2	22.4	12.8%	147.6	28.0	15.9%	142.1	33.6	19.1%	136.5	39.1	22.3%	130.9	44.7	25.4%
ME 3	39 57 11	2008	Dry	September	Used in Summary Table Analysis	137.4	118.7	18.6	13.6%	116.1	21.3	15.5%	110.7	26.6	19.4%	105.4	31.9	23.2%	100.1	37.2	27.1%	94.8	42.5	31.0%
ME 3	39 57 11	2009	Critical	October	Used in Summary Table Analysis	918.7	904.4	14.3	1.6%	902.4	16.3	1.8%	898.3	20.4	2.2%	894.2	24.5	2.7%	890.3	28.4	3.1%	886.1	32.6	3.5%
ME 3	39 57 11	2009	Critical	November	Used in Summary Table Analysis	5,469.2	5,458.3	10.9	0.2%	5,456.8	12.4	0.2%	5,453.7	15.5	0.3%	5,450.6	18.6	0.3%	5,447.5	21.8	0.4%	5,444.3	24.9	0.5%
ME 3	39 57 11	2009	Critical	December	--	12,077.5	12,068.3	9.3	0.1%	12,067.1	10.4	0.1%	12,063.7	13.9	0.1%	12,061.3	16.2	0.1%	12,057.9	19.7	0.2%	12,055.6	22.0	0.2%
ME 3	39 57 11	2009	Critical	January	--	8,770.9	8,762.3	8.7	0.1%	8,761.0	10.0	0.1%	8,758.6	12.4	0.1%	8,756.0	14.9	0.2%	8,753.6	17.4	0.2%	8,751.0	19.9	0.2%
ME 3	39 57 11	2009	Critical	February	--	22,541.7	22,533.6	8.1	0.0%	22,532.4	9.3	0.0%	22,530.1	11.6	0.1%	22,527.8	13.9	0.1%	22,525.5	16.2	0.1%	22,523.1	18.5	0.1%
ME 3	39 57 11	2009	Critical	March	--	21,066.0	21,059.0	6.9	0.0%	21,057.9	8.1	0.0%	21,056.7	9.3	0.0%	21,054.4	11.6	0.1%	21,052.1	13.9	0.1%	21,049.8	16.2	0.1%
ME 3	39 57 11	2009	Critical	April	--	10,089.7	10,075.1	14.6	0.1%	10,073.0	16.7	0.2%	10,068.9	20.8	0.2%	10,064.6	25.1	0.2%	10,060.4	29.3	0.3%	10,056.3	33.4	0.3%
ME 3	39 57 11	2009	Critical	May	--	15,555.6	15,537.0	18.5	0.1%	15,534.7	20.8	0.1%	15,530.1	25.5	0.2%	15,525.5	30.1	0.2%	15,519.7	35.9	0.2%	15,515.0	40.5	0.3%
ME 3	39 57 11	2009	Critical	June	--	3,155.2	3,132.4	22.8	0.7%	3,129.2	26.0	0.8%	3,122.6	32.6	1.0%	3,116.1	39.1	1.2%	3,109.6	45.6	1.4%	3,103.1	52.1	1.7%
ME 3	39 57 11	2009	Critical	July	--	1,258.3	1,237.6	20.7	1.6%	1,234.6	23.7	1.9%	1,228.7	29.6	2.4%	1,222.9	35.4	2.8%	1,217.0	41.3	3.3%	1,211.2	47.1	3.7%
ME 3	39 57 11	2009	Critical	August	--	664.2	644.5	19.7	3.0%	641.7	22.5	3.4%	636.0	28.1	4.2%	630.5	33.7	5.1%	624.8	39.3	5.9%	619.2	44.9	6.8%
ME 3	39 57 11	2009	Critical	September	Used in Summary Table Analysis	385.8	368.6	17.3	4.5%	366.1	19.7	5.1%	361.2	24.6	6.4%	356.3	29.5	7.7%	351.4	34.5	8.9%	346.5	39.4	10.2%
ME 3	39 57 11	2010	Below Normal	October	Used in Summary Table Analysis	6,081.9	6,067.5	14.5	0.2%	6,065.4	16.6	0.3%	6,061.3	20.6	0.3%	6,057.2	24.8	0.4%	6,053.2	28.7	0.5%	6,049.1	32.9	0.5%
ME 3	39 57 11	2010	Below Normal	November	Used in Summary Table Analysis	8,261.6	8,250.5	11.1	0.1%	8,248.8	12.7	0.2%	8,245.6	16.0	0.2%	8,242.5	19.1	0.2%	8,239.2	22.3	0.3%	8,236.0	25.6	0.3%
ME 3	39 57 11	2010	Below Normal	December	--	12,298.6	12,289.4	9.3	0.1%	12,287.0	11.6	0.1%	12,284.7	13.9	0.1%	12,282.4	16.2	0.1%	12,278.9	19.7	0.2%	12,276.6	22.0	0.2%
ME 3	39 57 11	2010	Below Normal	January	--	36,047.5	36,038.2	9.3	0.0%	36,037.0	10.4	0.0%	36,034.7	12.7	0.0%	36,032.4	15.0	0.0%	36,030.1	17.4	0.0%	36,026.6	20.8	0.1%
ME 3	39 57 11	2010	Below Normal	February	--	27,192.1	27,184.0	8.1	0.0%	27,182.9	9.3	0.0%	27,180.6	11.6	0.0%	27,178.2	13.9	0.1%	27,175.9	16.2	0.1%	27,173.6	18.5	0.1%
ME 3	39 57 11	2010	Below Normal	March	--	28,791.7	28,783.6	8.1	0.0%	28,782.4	9.3	0.0%	28,781.3	10.4	0.0%	28,778.9	12.7	0.0%	28,776.6	15.0	0.1%	28,774.3	17.4	0.1%
ME 3	39 57 11	2010	Below Normal	April	--	39,929.4	39,922.5	6.9	0.0%	39,921.3	8.1	0.0%	39,919.0	10.4	0.0%	39,917.8	11.6	0.0%	39,915.5	13.9	0.0%	39,913.2	16.2	0.0%
ME 3	39 57 11	2010	Below Normal	May	--	20,203.7	20,188.7	15.0	0.1%	20,186.3	17.4	0.1%	20,181.7	22.0	0.1%	20,177.1	26.6	0.1%	20,173.6	30.1	0.1%	20,169.0	34.7	0.2%
ME 3	39 57 11	2010	Below Normal	June	--	9,298.5	9,276.4	22.1	0.2%	9,273.3	25.2	0.3%	9,267.0	31.5	0.3%	9,260.9	37.6	0.4%	9,254.7	43.8	0.5%	9,248.5	50.0	0.5%
ME 3	39 57 11	2010	Below Normal	July	--	1,450.2	1,430.9	19.3	1.3%	1,428.1	22.1	1.5%	1,422.6	27.7	1.9%	1,417.0	33.2	2.3%	1,411.5	38.8	2.7%	1,406.3	44.0	3.0%
ME 3	39 57 11	2010	Below Normal	August	--	563.1	545.7	17.4	3.1%	543.2	19.9	3.5%	538.2	24.9	4.4%	533.3	29.8	5.3%	528.4	34.7	6.2%	523.4	39.7	7.0%
ME 3	39 57 11	2010	Below Normal	September	Used in Summary Table Analysis	645.1	628.7	16.4	2.5%	626.3	18.8	2.9%	621.6	23.5	3.6%	617.0	28.1	4.4%	612.3	32.8	5.1%	607.6	37.5	5.8%
ME 3	39 57 11	2011	Wet	October	Used in Summary Table Analysis	9,594.1	9,581.9	12.2	0.1%	9,580.2	13.9	0.1%	9,576.7	17.4	0.2%	9,573.4	20.7	0.2%	9,569.9	24.2	0.3%	9,566.4	27.7	0.3%
ME 3	39 57 11	2011	Wet	November	Used in Summary Table Analysis	14,174.8	14,165.5	9.3	0.1%	14,164.4	10.4	0.1%	14,162.0	12.7	0.1%	14,158.6	16.2	0.1%	14,156.3	18.5	0.1%	14,153.9	20.8	0.1%
ME 3	39 57 11	2011	Wet	December	--	33,520.8	33,512.7	8.1	0.0%	33,511.6	9.3	0.0%	33,509.3	11.6	0.0%	33,506.9	13.9	0.0%	33,504.6	16.2	0.0%	33,502.3	18.5	0.1%
ME 3	39 57 11	2011	Wet	January	--	14,121.5	14,114.6	6.9	0.0%	14,113.4	8.1	0.1%	14,111.1	10.4	0.1%	14,108.8	12.7	0.1%	14,106.5	15.0	0.1%	14,104.2	17.4	0.1%
ME 3	39 57 11	2011	Wet	February	--	20,733.8	20,726.9	6.9	0.0%	20,725.7	8.1	0.0%	20,723.4	10.4	0.1%	20,722.2	11.6	0.1%	20,719.9	13.9	0.1%	20,717.6	16.2	0.1%
ME 3	39 57 11	2011	Wet	March	--	51,887.7	51,881.9	5.8	0.0%	51,880.8	6.9	0.0%	51,878.5	9.3	0.0%	51,877.3	10.4	0.0%	51,875.0	12.7	0.0%	51,872.7	15.0	0.0%
ME 3	39 57 11	2011	Wet	April	--	24,759.3	24,752.3	6.9	0.0%	24,751.2	8.1	0.0%	24,748.8	10.4	0.0%	24,747.7	11.6	0.0%	24,745.4	13.9	0.1%	24,744.2	15.0	0.1%
ME 3	39 57 11	2011	Wet	May	--	11,362.7	11,348.4	14.4	0.1%	11,346.3	16.4	0.1%	11,342.2	20.5	0.2%	11,338.1	24.7	0.2%	11,333.9	28.8	0.3%	11,329.7	33.0	0.3%
ME 3	39 57 11	2011	Wet	June	--	7,036.7	7,015.2	21.5	0.3%	7,012.2	24.5	0.3%	7,006.0	30.7	0.4%	7,000.0	36.7	0.5%	6,993.9	42.8	0.6%	6,987.7	49.0	0.7%
ME 3	39 57 11	2011	Wet	July	--	1,825.9	1,805.1	20.8	1.1%	1,802.1	23.8	1.3%	1,796.2	29.7	1.6%	1,790.3	35.6	2.0%	1,784.3	41.7	2.3%	1,778.4	47.6	2.6%
ME 3	39 57 11	2011	Wet	August	--	772.0	754.7	17.3	2.2%	752.3	19.7	2.6%	747.3	24.7	3.2%	742.4	29.5	3.8%	737.5	34.5	4.5%	732.7	39.3	5.1%
ME 3	39 57 11	2011	Wet	September	Used in Summary Table Analysis	428.6	413.2	15.4	3.6%	411.0	17.6	4.1%	406.6	22.0	5.1%	402.3	26.4	6.2%	397.9	30.8	7.2%	393.5	35.1	8.2%
ME 3	39 57 11	2012	Below Normal	October	Used in Summary Table Analysis	4,521.1	4,508.8	12.3	0.3%	4,507.1	14.0	0.3%	4,503.5	17.6	0.4%	4,500.0	21.1	0.5%	4,496.4	24.7	0.5%	4,492.8	28.2	0.6%
ME 3	39 57 11	2012	Below Normal	November	Used in Summary Table Analysis	8,197.0	8,187.3	9.7	0.1%	8,185.9	11.1	0.1%	8,183.1	13.9	0.2%	8,180.3	16.7	0.2%	8,177.4	19.6	0.2%	8,174.7	22.3	0.3%
ME 3	39 57 11	2012	Below Normal	December	--	5,164.9	5,156.5	8.4	0.2%	5,155.3	9.6	0.2%	5,152.9	12.0	0.2%	5,150.5	14.5	0.3%	5,148.0	16.9	0.3%	5,145.6	19.3	0.4%
ME 3	39 57 11	2012	Below Normal	January	--	19,998.8	19,991.9	6.9	0.0%	19,990.7	8.1	0.0%	19,988.4	10.4	0.1%	19,986.1	12.7	0.1%	19,983.8	15.0	0.1%	19,981.5	17.4	0.1%
ME 3	39 57 11	2012	Below Normal	February	--	18,179.4	18,172.5	6.9	0.0%	18,171.3	8.1	0.0%	18,169.0	10.4	0.1%	18,166.7	12.7	0.1%	18,165.5	13.9	0.1%	18,163.2	16.2	0.1%
ME 3	39 57 11	2012	Below Normal	March	--	45,288.2	45,281.3	6.9	0.0%	45,280.1	8.1	0.0%	45,277.8	10.4	0.0%	45,276.6	11.6	0.0%	45,274.3	13.9	0.0%	45,272.0	16.2	0.0%
ME 3	39 57 11	2012	Below Normal	April	--	26,809.0	26,802.1	6.9	0.0%	26,802.1	6.9	0.0%	26,799.8	9.3	0.0%	26,797.5	11.6	0.0%	26,796.3	12.7	0.0%	26,794.0	15.0	0.1%
ME 3	39 57 11	2012	Below Normal	May	--	7,470.1	7,455.8	14.4	0.2%	7,453.8	16.3	0.2%	7,449.5	20.6	0.3%	7,445.5	24.7	0.3%	7,441.3	28.8	0.4%	7,437.3	32.9	0.4%
ME 3	39 57 11	2012	Below Normal	June	--	5,496.2	5,474.2	22.0	0.4%	5,471.1	25.1	0.5%	5,464.9	31.3	0.6%	5,458.7	37.5	0.7%	5,452.5	43.6	0.8%	5,446.3	49.9	0.9%
ME 3	39 57 11	2012	Below Normal	July	--	2,211.5	2,191.3	20.1	0.9%	2,188.5	22.9	1.0%	2,182.8	28.7	1.3%	2,177.1	34.4	1.6%	2,171.3	40.2	1.8%	2,165.5	45.9	2.1%
ME 3	39 57 11	2012	Below Normal	August	--	384.8	369.0	15.8	4.1%	366.8	18.0	4.7%	362.3	22.5	5.9%	357.8	27.0	7.0%	353.3	31.5	8.2%	348.8	36.0	9.3%
ME 3	39 57 11	2012	Below Normal	September	Used in Summary Table Analysis	244.5	230.6	13.9	5.7%	228.7	15.8	6.5%	224.7	19.8	8.1%	220.8	23.7	9.7%	216.9	27.6	11.3%	213.0	31.6	12.9%
ME 3	39 57 11	2013	Below Normal	October	Used in Summary Table Analysis	1,898.3	1,886.3	11.9	0.6%	1,884.7	13.5	0.7%	1,881.3	17.0	0.9%	1,877.9	20.4	1.1%	1,874.5	23.7	1.2%	1,871.1	27.2	1.4%
ME 3	39 57 11	2013	Below Normal	November	Used in Summary Table Analysis	14,611.1	14,601.9	9.3	0.1%	14,599.5	11.6	0.1%	14,597.2	13.9	0.1%	14,594.9	16.2	0.1%	14,591.4	19.7	0.1%	14,589.1	22.0	0.2%
ME 3	39 57 11	2013	Below Normal	December	--	59,825.2	59,817.1	8.1	0.0%	59,816.0	9.3	0.0%	59,812.5	12.7	0.0%	59,810.2	15.0	0.0%	59,807.9	17.4	0.0%	59,805.6	19.7	0.0%
ME 3	39 57 11	2013	Below Normal	January	--	22,151.6	22,144.7	6.9	0.0%	22,143.5	8.1	0.0%	22,141.2	10.4	0.0%	22,138.9	12.7	0.1%	22,136.6	15.0	0.1%	22,135.4	16.2	0.1%
ME 3	39 57 11	2013	Below Normal	February	--	8,822.0	8,815.0	6.9	0.1%	8,814.0	8.0	0.1%	8,811.9	10.1	0.1%	8,810.0	12.0	0.1%	8,807.9	14.1	0.2%	8,805.8	16.2	0.2%
ME 3	39 57 11	2013	Below Normal	March	--	10,294.8	10,288.0	6.8	0.1%	10,287.0	7.8	0.1%	10,285.1	9.7	0.1%	10,283.1	11.7	0.1%	10,281.0	13.8	0.1%	10,279.1	15.7	0.2%
ME 3	39 57 11	2013	Below Normal	April	--	8,279.7	8,266.2	13.5	0.2%	8,264.2	15.5	0.2%	8,260.4	19.3	0.2%	8,256.5	23.3	0.3%	8,252.7	27.1	0.3%	8,248.7	31.0	0.4%
ME 3	39 57 11	2013	Below Normal	May	--	4,416.4	4,400.1	16.3	0.4%	4,397.8	18.6	0.4%	4,393.1	23.4	0.5%	4,388.4	28.0	0.6%	4,383.7	32.8	0.7%	4,378.9	37.5	0.8%
ME 3	39 57 11	2013	Below Normal	June	--	2,105.1	2,085.5	19.6	0.9%	2,082.8	22.3	1.1%	2,077.1	28.0	1.3%	2,071.5	33.6	1.6%	2,066.0	39.1	1.9%	2,060.5	44.6	2.1%
ME 3	39 57 11	2013	Below Normal	July	--	715.4	696.9	18.5	2.6%	694.3	21.1	2.9%	689.1	26.3	3.7%	683.9	31.6	4.4%	678.6	36.8	5.1%	673.4	42.0	5.9%
ME 3	39 57 11	2013	Below Normal	August	--	336.3	319.2	17.0	5.1%	316.8	19.5	5.8%	312.0	24.3	7.2%	307.1	29.2	8.7%	302.2	34.0	10.1%	297.4	38.9	11.6%
ME 3	39 57 11	2013	Below Normal	September	Used in Summary Table Analysis	4,765.2	4,747.6	17.6	0.4%	4,745.1	20.0	0.4%	4,740.2	25.0	0.5%	4,735.1	30.1	0.6%	4,730.1	35.1	0.7%	4,725.1	40.0	0.8%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 57 11	2014	Critical	October	Used in Summary Table Analysis	279.8	267.4	12.4	4.4%	265.6	14.2	5.1%	262.1	17.7	6.3%	258.5	21.3	7.6%	254.9	24.8	8.9%	251.3	28.4	10.2%
ME 3	39 57 11	2014	Critical	November	Used in Summary Table Analysis	1,526.6	1,516.8	9.8	0.6%	1,515.4	11.2	0.7%	1,512.5	14.1	0.9%	1,509.6	17.0	1.1%	1,506.8	19.8	1.3%	1,503.9	22.7	1.5%
ME 3	39 57 11	2014	Critical	December	--	1,582.9	1,574.2	8.7	0.5%	1,572.9	10.0	0.6%	1,570.5	12.4	0.8%	1,567.9	14.9	0.9%	1,565.4	17.5	1.1%	1,563.0	19.9	1.3%
ME 3	39 57 11	2014	Critical	January	--	2,809.6	2,801.9	7.8	0.3%	2,800.8	8.8	0.3%	2,798.5	11.1	0.4%	2,796.3	13.3	0.5%	2,794.1	15.5	0.6%	2,791.8	17.8	0.6%
ME 3	39 57 11	2014	Critical	February	--	15,718.8	15,711.8	6.9	0.0%	15,710.6	8.1	0.1%	15,708.3	10.4	0.1%	15,707.2	11.6	0.1%	15,704.9	13.9	0.1%	15,702.5	16.2	0.1%
ME 3	39 57 11	2014	Critical	March	--	31,442.1	31,435.2	6.9	0.0%	31,434.0	8.1	0.0%	31,432.9	9.3	0.0%	31,430.6	11.6	0.0%	31,428.2	13.9	0.0%	31,425.9	16.2	0.1%
ME 3	39 57 11	2014	Critical	April	--	12,974.5	12,959.5	15.0	0.1%	12,957.2	17.4	0.1%	12,953.7	20.8	0.2%	12,949.1	25.5	0.2%	12,945.6	28.9	0.2%	12,941.0	33.6	0.3%
ME 3	39 57 11	2014	Critical	May	--	5,178.0	5,160.8	17.2	0.3%	5,158.3	19.7	0.4%	5,153.4	24.7	0.5%	5,148.4	29.6	0.6%	5,143.4	34.6	0.7%	5,138.5	39.5	0.8%
ME 3	39 57 11	2014	Critical	June	--	1,193.5	1,169.9	23.6	2.0%	1,166.6	27.0	2.3%	1,159.8	33.7	2.8%	1,153.2	40.3	3.4%	1,146.6	46.9	3.9%	1,140.0	53.5	4.5%
ME 3	39 57 11	2014	Critical	July	--	543.0	521.9	21.1	3.9%	518.9	24.1	4.4%	512.9	30.1	5.5%	507.0	36.0	6.6%	501.0	42.0	7.7%	495.0	48.0	8.8%
ME 3	39 57 11	2014	Critical	August	--	344.2	324.4	19.8	5.8%	321.6	22.7	6.6%	315.9	28.3	8.2%	310.3	33.9	9.9%	304.7	39.6	11.5%	299.0	45.2	13.1%
ME 3	39 57 11	2014	Critical	September	Used in Summary Table Analysis	2,563.1	2,543.9	19.2	0.7%	2,541.2	21.9	0.9%	2,535.8	27.3	1.1%	2,530.2	32.9	1.3%	2,524.8	38.3	1.5%	2,519.2	43.9	1.7%
ME 3	39 57 11	2015	Dry	October	Used in Summary Table Analysis	11,324.3	11,309.5	14.8	0.1%	11,307.3	17.0	0.2%	11,303.4	20.9	0.2%	11,299.2	25.1	0.2%	11,295.1	29.2	0.3%	11,290.7	33.6	0.3%
ME 3	39 57 11	2015	Dry	November	Used in Summary Table Analysis	9,000.2	8,989.4	10.9	0.1%	8,987.8	12.4	0.1%	8,984.7	15.5	0.2%	8,981.6	18.6	0.2%	8,978.5	21.8	0.2%	8,975.3	24.9	0.3%
ME 3	39 57 11	2015	Dry	December	--	32,474.5	32,465.3	9.3	0.0%	32,464.1	10.4	0.0%	32,460.6	13.9	0.0%	32,458.3	16.2	0.0%	32,456.0	18.5	0.1%	32,452.5	22.0	0.1%
ME 3	39 57 11	2015	Dry	January	--	14,555.6	14,546.3	9.3	0.1%	14,545.1	10.4	0.1%	14,542.8	12.7	0.1%	14,540.5	15.0	0.1%	14,538.2	17.4	0.1%	14,535.9	19.7	0.1%
ME 3	39 57 11	2015	Dry	February	--	27,177.1	27,170.1	6.9	0.0%	27,169.0	8.1	0.0%	27,166.7	10.4	0.0%	27,164.4	12.7	0.0%	27,162.0	15.0	0.1%	27,159.7	17.4	0.1%
ME 3	39 57 11	2015	Dry	March	--	11,556.8	11,550.0	6.8	0.1%	11,549.1	7.8	0.1%	11,547.1	9.7	0.1%	11,545.1	11.7	0.1%	11,543.3	13.5	0.1%	11,541.3	15.5	0.1%
ME 3	39 57 11	2015	Dry	April	--	8,349.2	8,334.8	14.4	0.2%	8,332.8	16.4	0.2%	8,328.6	20.6	0.2%	8,324.4	24.8	0.3%	8,320.3	28.9	0.3%	8,316.2	33.0	0.4%
ME 3	39 57 11	2015	Dry	May	--	1,507.5	1,490.5	17.0	1.1%	1,488.1	19.4	1.3%	1,483.2	24.3	1.6%	1,478.4	29.2	1.9%	1,473.5	34.0	2.3%	1,468.6	38.9	2.6%
ME 3	39 57 11	2015	Dry	June	--	650.1	628.3	21.8	3.4%	625.2	24.9	3.8%	619.1	31.1	4.8%	613.0	37.2	5.7%	606.9	43.2	6.7%	600.8	49.3	7.6%
ME 3	39 57 11	2015	Dry	July	--	266.0	245.3	20.7	7.8%	242.4	23.6	8.9%	236.5	29.5	11.1%	230.6	35.4	13.3%	224.7	41.3	15.5%	218.9	47.1	17.7%
ME 3	39 57 11	2015	Dry	August	--	162.9	143.3	19.7	12.1%	140.5	22.5	13.8%	134.8	28.1	17.2%	129.2	33.7	20.7%	123.6	39.3	24.1%	118.0	44.9	27.6%
ME 3	39 57 11	2015	Dry	September	Used in Summary Table Analysis	117.8	100.5	17.3	14.7%	98.0	19.8	16.8%	92.5	25.3	21.4%	87.3	30.5	25.9%	81.9	35.9	30.5%	76.5	41.2	35.0%
ME 3	39 57 11	2016	Above Normal	October	Used in Summary Table Analysis	83.3	68.0	15.4	18.4%	65.7	17.6	21.1%	61.4	21.9	26.3%	57.1	26.2	31.5%	52.9	30.4	36.5%	48.9	34.5	41.3%
ME 3	39 57 11	2016	Above Normal	November	Used in Summary Table Analysis	3,832.2	3,821.2	11.0	0.3%	3,819.6	12.6	0.3%	3,816.3	15.9	0.4%	3,813.1	19.1	0.5%	3,809.8	22.3	0.6%	3,806.6	25.6	0.7%
ME 3	39 57 11	2016	Above Normal	December	--	36,451.4	36,441.0	10.4	0.0%	36,439.8	11.6	0.0%	36,437.5	13.9	0.0%	36,434.0	17.4	0.0%	36,431.7	19.7	0.1%	36,428.2	23.1	0.1%
ME 3	39 57 11	2016	Above Normal	January	--	57,141.2	57,133.1	8.1	0.0%	57,130.8	10.4	0.0%	57,128.5	12.7	0.0%	57,126.2	15.0	0.0%	57,123.8	17.4	0.0%	57,120.4	20.8	0.0%
ME 3	39 57 11	2016	Above Normal	February	--	24,239.6	24,231.5	8.1	0.0%	24,230.3	9.3	0.0%	24,229.2	10.4	0.0%	24,226.9	12.7	0.1%	24,224.5	15.0	0.1%	24,222.2	17.4	0.1%
ME 3	39 57 11	2016	Above Normal	March	--	41,695.6	41,688.7	6.9	0.0%	41,687.5	8.1	0.0%	41,685.2	10.4	0.0%	41,682.9	12.7	0.0%	41,680.6	15.0	0.0%	41,678.2	17.4	0.0%
ME 3	39 57 11	2016	Above Normal	April	--	18,513.9	18,506.9	6.9	0.0%	18,505.8	8.1	0.0%	18,504.6	9.3	0.1%	18,502.3	11.6	0.1%	18,500.0	13.9	0.1%	18,498.8	15.0	0.1%
ME 3	39 57 11	2016	Above Normal	May	--	5,206.6	5,198.1	8.4	0.2%	5,196.9	9.7	0.2%	5,194.4	12.2	0.2%	5,192.0	14.6	0.3%	5,189.5	17.1	0.3%	5,187.0	19.6	0.4%
ME 3	39 57 11	2016	Above Normal	June	--	1,505.2	1,488.2	17.0	1.1%	1,485.8	19.4	1.3%	1,481.0	24.2	1.6%	1,476.2	29.1	1.9%	1,471.4	33.8	2.2%	1,466.7	38.5	2.6%
ME 3	39 57 11	2016	Above Normal	July	--	818.4	800.2	18.3	2.2%	797.5	20.9	2.6%	792.3	26.1	3.2%	787.1	31.3	3.8%	781.9	36.5	4.5%	776.7	41.7	5.1%
ME 3	39 57 11	2016	Above Normal	August	--	486.9	469.4	17.5	3.6%	466.8	20.0	4.1%	461.9	25.0	5.1%	456.9	30.0	6.2%	451.9	35.0	7.2%	446.9	39.9	8.2%
ME 3	39 57 11	2016	Above Normal	September	Used in Summary Table Analysis	323.5	308.3	15.2	4.7%	305.5	18.0	5.6%	300.9	22.6	7.0%	296.2	27.3	8.4%	291.5	32.0	9.9%	286.8	36.7	11.3%
ME 3	39 57 11	2017	Wet	October	Used in Summary Table Analysis	18,217.6	18,204.9	12.7	0.1%	18,203.7	13.9	0.1%	18,200.2	17.4	0.1%	18,196.8	20.8	0.1%	18,192.1	25.5	0.1%	18,188.7	28.9	0.2%
ME 3	39 57 11	2017	Wet	November	Used in Summary Table Analysis	18,750.0	18,740.7	9.3	0.0%	18,738.4	11.6	0.1%	18,736.1	13.9	0.1%	18,733.8	16.2	0.1%	18,730.3	19.7	0.1%	18,728.0	22.0	0.1%
ME 3	39 57 11	2017	Wet	December	--	23,996.5	23,988.4	8.1	0.0%	23,987.3	9.3	0.0%	23,985.0	11.6	0.0%	23,982.6	13.9	0.1%	23,980.3	16.2	0.1%	23,978.0	18.5	0.1%
ME 3	39 57 11	2017	Wet	January	--	106,562.5	106,554.4	8.1	0.0%	106,553.2	9.3	0.0%	106,550.9	11.6	0.0%	106,548.6	13.9	0.0%	106,546.3	16.2	0.0%	106,545.1	17.4	0.0%
ME 3	39 57 11	2017	Wet	February	--	81,638.9	81,631.9	6.9	0.0%	81,630.8	8.1	0.0%	81,628.5	10.4	0.0%	81,626.2	12.7	0.0%	81,625.0	13.9	0.0%	81,622.7	16.2	0.0%
ME 3	39 57 11	2017	Wet	March	--	27,211.8	27,204.9	6.9	0.0%	27,203.7	8.1	0.0%	27,201.4	10.4	0.0%	27,200.2	11.6	0.0%	27,197.9	13.9	0.1%	27,195.6	16.2	0.1%
ME 3	39 57 11	2017	Wet	April	--	22,869.2	22,863.4	5.8	0.0%	22,862.3	6.9	0.0%	22,860.0	9.3	0.0%	22,858.8	10.4	0.0%	22,856.5	12.7	0.1%	22,855.3	13.9	0.1%
ME 3	39 57 11	2017	Wet	May	--	6,269.8	6,261.1	8.7	0.1%	6,260.0	9.8	0.2%	6,257.4	12.4	0.2%	6,255.0	14.8	0.2%	6,252.4	17.4	0.3%	6,249.9	19.9	0.3%
ME 3	39 57 11	2017	Wet	June	--	2,106.9	2,089.5	17.5	0.8%	2,086.9	20.0	1.0%	2,081.9	25.0	1.2%	2,077.0	30.0	1.4%	2,072.1	34.8	1.7%	2,067.1	39.8	1.9%
ME 3	39 57 11	2017	Wet	July	--	928.1	909.6	18.5	2.0%	907.0	21.1	2.3%	901.7	26.4	2.8%	896.5	31.6	3.4%	891.3	36.8	4.0%	886.1	42.0	4.5%
ME 3	39 57 11	2017	Wet	August	--	500.3	482.8	17.6	3.5%	480.3	20.1	4.0%	475.3	25.0	5.0%	470.3	30.0	6.0%	465.4	35.0	7.0%	460.4	40.0	8.0%
ME 3	39 57 11	2017	Wet	September	Used in Summary Table Analysis	317.4	301.4	16.0	5.0%	299.2	18.3	5.8%	294.6	22.8	7.2%	290.0	27.4	8.6%	285.5	31.9	10.1%	280.9	36.5	11.5%
ME 3	39 57 11	2018	Above Normal	October	Used in Summary Table Analysis	270.3	257.9	12.3	4.6%	256.1	14.1	5.2%	252.6	17.7	6.5%	249.0	21.2	7.9%	245.5	24.8	9.2%	242.0	28.3	10.5%
ME 3	39 57 11	2018	Above Normal	November	Used in Summary Table Analysis	10,711.0	10,701.5	9.5	0.1%	10,700.1	10.9	0.1%	10,697.5	13.5	0.1%	10,694.7	16.3	0.2%	10,691.9	19.1	0.2%	10,689.2	21.8	0.2%
ME 3	39 57 11	2018	Above Normal	December	--	5,437.8	5,429.9	8.0	0.1%	5,428.7	9.1	0.2%	5,426.4	11.5	0.2%	5,424.1	13.8	0.3%	5,421.8	16.1	0.3%	5,419.3	18.5	0.3%
ME 3	39 57 11	2018	Above Normal	January	--	17,642.4	17,635.4	6.9	0.0%	17,634.3	8.1	0.0%	17,631.9	10.4	0.1%	17,629.6	12.7	0.1%	17,627.3	15.0	0.1%	17,626.2	16.2	0.1%
ME 3	39 57 11	2018	Above Normal	February	--	7,590.3	7,583.8	6.5	0.1%	7,582.8	7.5	0.1%	7,580.9	9.4	0.1%	7,578.9	11.3	0.1%	7,577.1	13.2	0.2%	7,575.1	15.2	0.2%
ME 3	39 57 11	2018	Above Normal	March	--	20,611.1	20,604.2	6.9	0.0%	20,604.2	6.9	0.0%	20,601.9	9.3	0.0%	20,599.5	11.6	0.1%	20,598.4	12.7	0.1%	20,596.1	15.0	0.1%
ME 3	39 57 11	2018	Above Normal	April	--	32,096.1	32,090.3	5.8	0.0%	32,090.3	5.8	0.0%	32,088.0	8.1	0.0%	32,086.8	9.3	0.0%	32,084.5	11.6	0.0%	32,083.3	12.7	0.0%
ME 3	39 57 11	2018	Above Normal	May	--	6,984.3	6,970.5	13.8	0.2%	6,968.5	15.7	0.2%	6,964.7	19.6	0.3%	6,960.8	23.5	0.3%	6,956.9	27.3	0.4%	6,953.2	31.0	0.4%
ME 3	39 57 11	2018	Above Normal	June	--	1,909.3	1,891.8	17.5	0.9%	1,889.2	20.0	1.0%	1,884.3	25.0	1.3%	1,879.4	29.9	1.6%	1,874.4	34.8	1.8%	1,869.4	39.8	2.1%
ME 3	39 57 11	2018	Above Normal	July	--	776.2	757.7	18.4	2.4%	755.1	21.1	2.7%	749.9	26.3	3.4%	744.6	31.6	4.1%	739.4	36.8	4.7%	734.2	42.0	5.4%
ME 3	39 57 11	2018	Above Normal	August	--	437.5	420.6	16.8	3.8%	418.2	19.2	4.4%	413.4	24.0	5.5%	408.6	28.8	6.6%	403.8	33.6	7.7%	399.1	38.4	8.8%
ME 3	39 57 11	2018	Above Normal	September	Used in Summary Table Analysis	295.3	279.3	16.0	5.4%	277.0	18.3	6.2%	272.4	22.9	7.7%	267.9	27.4	9.3%	263.3	32.0	10.8%	258.7	36.6	12.4%
ME 3	39 57 11	2019	Below Normal	October	Used in Summary Table Analysis	204.1	192.0	12.1	5.9%	190.3	13.8	6.8%	186.8	17.3	8.5%	183.3	20.9	10.2%	179.9	24.2	11.9%	176.4	27.7	13.6%
ME 3	39 57 11	2019	Below Normal	November	Used in Summary Table Analysis	6,570.5	6,560.9	9.6	0.1%	6,559.5	11.0	0.2%	6,556.8	13.7	0.2%	6,554.1	16.4	0.3%	6,551.3	19.2	0.3%	6,548.5	22.0	0.3%
ME 3	39 57 11	2019	Below Normal	December	--	14,576.4	14,568.3	8.1	0.1%	14,566.0	10.4	0.1%	14,563.7	12.7	0.1%	14,561.3	15.0	0.1%	14,559.0	17.4	0.1%	14,556.7	19.7	0.1%
ME 3	39 57 11	2019	Below Normal	January	--	35,038.2	35,031.3	6.9	0.0%	35,030.1	8.1	0.0%	35,027.8	10.4	0.0%	35,025.5	12.7	0.0%	35,024.3	13.9	0.0%	35,022.0	16.2	0.0%

Table A.1

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Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 57 11	2019	Below Normal	February	--	141,724.5	141,724.5	0.0	0.0%	141,724.5	0.0	0.0%	141,713.0	11.6	0.0%	141,713.0	11.6	0.0%	141,713.0	11.6	0.0%	141,713.0	11.6	0.0%
ME 3	39 57 11	2019	Below Normal	March	--	42,221.1	42,214.1	6.9	0.0%	42,213.0	8.1	0.0%	42,211.8	9.3	0.0%	42,209.5	11.6	0.0%	42,208.3	12.7	0.0%	42,206.0	15.0	0.0%
ME 3	39 57 11	2019	Below Normal	April	--	15,244.2	15,238.4	5.8	0.0%	15,237.3	6.9	0.0%	15,236.1	8.1	0.1%	15,233.8	10.4	0.1%	15,232.6	11.6	0.1%	15,230.3	13.9	0.1%
ME 3	39 57 11	2019	Below Normal	May	--	16,802.1	16,788.2	13.9	0.1%	16,785.9	16.2	0.1%	16,781.3	20.8	0.1%	16,777.8	24.3	0.1%	16,773.1	28.9	0.2%	16,769.7	32.4	0.2%
ME 3	39 57 11	2019	Below Normal	June	--	4,242.2	4,223.1	19.1	0.5%	4,220.5	21.8	0.5%	4,215.2	27.1	0.6%	4,210.1	32.2	0.8%	4,205.1	37.2	0.9%	4,200.0	42.2	1.0%
ME 3	39 57 11	2019	Below Normal	July	--	1,354.7	1,336.2	18.5	1.4%	1,333.6	21.2	1.6%	1,328.4	26.4	1.9%	1,323.0	31.7	2.3%	1,317.8	36.9	2.7%	1,312.5	42.2	3.1%
ME 3	39 57 11	2019	Below Normal	August	--	590.4	573.1	17.3	2.9%	570.6	19.8	3.4%	565.7	24.7	4.2%	560.8	29.6	5.0%	555.9	34.5	5.9%	551.0	39.5	6.7%
ME 3	39 57 11	2019	Below Normal	September	Used in Summary Table Analysis	457.6	441.7	15.9	3.5%	439.4	18.2	4.0%	434.8	22.8	5.0%	430.3	27.3	6.0%	425.8	31.9	7.0%	421.2	36.4	8.0%
ME 3	39 57 11	2020	Dry	October	Used in Summary Table Analysis	352.0	340.4	11.6	3.3%	338.8	13.3	3.8%	335.4	16.6	4.7%	332.1	20.0	5.7%	328.7	23.3	6.6%	325.4	26.7	7.6%
ME 3	39 57 11	2020	Dry	November	Used in Summary Table Analysis	312.0	303.1	8.9	2.8%	301.8	10.2	3.3%	299.2	12.8	4.1%	296.6	15.3	4.9%	294.0	17.9	5.7%	291.4	20.5	6.6%
ME 3	39 57 11	2020	Dry	December	--	13,153.9	13,145.8	8.1	0.1%	13,144.7	9.3	0.1%	13,142.4	11.6	0.1%	13,140.0	13.9	0.1%	13,137.7	16.2	0.1%	13,135.4	18.5	0.1%
ME 3	39 57 11	2020	Dry	January	--	22,226.9	22,218.8	8.1	0.0%	22,217.6	9.3	0.0%	22,215.3	11.6	0.1%	22,213.0	13.9	0.1%	22,211.8	15.0	0.1%	22,209.5	17.4	0.1%
ME 3	39 57 11	2020	Dry	February	--	7,409.5	7,402.9	6.6	0.1%	7,401.9	7.6	0.1%	7,399.9	9.6	0.1%	7,397.9	11.6	0.2%	7,395.9	13.5	0.2%	7,394.0	15.5	0.2%
ME 3	39 57 11	2020	Dry	March	--	7,224.7	7,218.4	6.3	0.1%	7,217.5	7.2	0.1%	7,215.6	9.0	0.1%	7,213.7	11.0	0.2%	7,211.8	12.8	0.2%	7,210.0	14.7	0.2%
ME 3	39 57 11	2020	Dry	April	--	5,461.5	5,447.1	14.4	0.3%	5,445.0	16.4	0.3%	5,441.0	20.5	0.4%	5,436.8	24.7	0.5%	5,432.6	28.8	0.5%	5,428.6	32.9	0.6%
ME 3	39 57 11	2020	Dry	May	--	7,349.5	7,332.4	17.1	0.2%	7,329.9	19.7	0.3%	7,325.0	24.5	0.3%	7,320.0	29.5	0.4%	7,315.2	34.4	0.5%	7,310.2	39.4	0.5%
ME 3	39 57 11	2020	Dry	June	--	2,103.1	2,080.6	22.6	1.1%	2,077.4	25.7	1.2%	2,071.4	31.7	1.5%	2,065.4	37.7	1.8%	2,059.3	43.9	2.1%	2,053.2	49.9	2.4%
ME 3	39 57 11	2020	Dry	July	--	792.5	771.1	21.4	2.7%	768.0	24.5	3.1%	761.9	30.6	3.9%	755.8	36.7	4.6%	749.7	42.8	5.4%	743.6	48.9	6.2%
ME 3	39 57 11	2020	Dry	August	--	395.0	374.2	20.8	5.3%	371.2	23.8	6.0%	365.3	29.7	7.5%	359.4	35.6	9.0%	353.4	41.5	10.5%	347.5	47.4	12.0%
ME 3	39 57 11	2020	Dry	September	Used in Summary Table Analysis	244.6	226.3	18.2	7.5%	223.7	20.8	8.5%	217.7	26.9	11.0%	212.2	32.4	13.2%	206.5	38.1	15.6%	200.8	43.7	17.9%
ME 3	38 57 12	2000	Above Normal	October	Used in Summary Table Analysis	810.6	798.2	12.4	1.5%	796.5	14.2	1.7%	793.0	17.7	2.2%	789.4	21.3	2.6%	785.8	24.8	3.1%	782.2	28.4	3.5%
ME 3	38 57 12	2000	Above Normal	November	Used in Summary Table Analysis	12,023.1	12,013.9	9.3	0.1%	12,012.7	10.4	0.1%	12,009.3	13.9	0.1%	12,006.9	16.2	0.1%	12,003.5	19.7	0.2%	12,001.2	22.0	0.2%
ME 3	38 57 12	2000	Above Normal	December	--	10,760.4	10,752.2	8.2	0.1%	10,750.9	9.5	0.1%	10,748.5	11.9	0.1%	10,746.1	14.4	0.1%	10,743.6	16.8	0.2%	10,741.2	19.2	0.2%
ME 3	38 57 12	2000	Above Normal	January	--	28,416.7	28,408.6	8.1	0.0%	28,407.4	9.3	0.0%	28,406.3	10.4	0.0%	28,403.9	12.7	0.0%	28,401.6	15.0	0.1%	28,399.3	17.4	0.1%
ME 3	38 57 12	2000	Above Normal	February	--	36,937.5	36,930.6	6.9	0.0%	36,929.4	8.1	0.0%	36,928.2	9.3	0.0%	36,925.9	11.6	0.0%	36,923.6	13.9	0.0%	36,921.3	16.2	0.0%
ME 3	38 57 12	2000	Above Normal	March	--	18,284.7	18,277.8	6.9	0.0%	18,276.6	8.1	0.0%	18,275.5	9.3	0.1%	18,273.1	11.6	0.1%	18,270.8	13.9	0.1%	18,269.7	15.0	0.1%
ME 3	38 57 12	2000	Above Normal	April	--	12,290.5	12,283.6	6.9	0.1%	12,282.4	8.1	0.1%	12,281.3	9.3	0.1%	12,278.9	11.6	0.1%	12,277.8	12.7	0.1%	12,275.5	15.0	0.1%
ME 3	38 57 12	2000	Above Normal	May	--	7,074.5	7,060.2	14.4	0.2%	7,058.1	16.4	0.2%	7,054.1	20.5	0.3%	7,049.9	24.7	0.3%	7,045.7	28.8	0.4%	7,041.7	32.9	0.5%
ME 3	38 57 12	2000	Above Normal	June	--	2,603.5	2,582.1	21.4	0.8%	2,579.1	24.4	0.9%	2,572.9	30.6	1.2%	2,566.9	36.6	1.4%	2,560.8	42.7	1.6%	2,554.7	48.7	1.9%
ME 3	38 57 12	2000	Above Normal	July	--	987.9	969.1	18.8	1.9%	966.5	21.5	2.2%	961.1	26.8	2.7%	955.8	32.1	3.3%	950.5	37.4	3.8%	945.2	42.7	4.3%
ME 3	38 57 12	2000	Above Normal	August	--	517.7	500.3	17.4	3.4%	497.9	19.9	3.8%	492.9	24.8	4.8%	488.0	29.7	5.7%	483.1	34.7	6.7%	478.1	39.6	7.7%
ME 3	38 57 12	2000	Above Normal	September	Used in Summary Table Analysis	291.7	276.5	15.2	5.2%	274.3	17.3	5.9%	270.0	21.6	7.4%	265.7	26.0	8.9%	261.4	30.3	10.4%	257.1	34.6	11.9%
ME 3	38 57 12	2001	Dry	October	Used in Summary Table Analysis	3,793.3	3,781.0	12.3	0.3%	3,779.3	14.0	0.4%	3,775.8	17.5	0.5%	3,772.2	21.1	0.6%	3,768.8	24.5	0.6%	3,765.3	28.0	0.7%
ME 3	38 57 12	2001	Dry	November	Used in Summary Table Analysis	6,088.8	6,079.1	9.7	0.2%	6,077.7	11.1	0.2%	6,074.9	13.9	0.2%	6,072.0	16.8	0.3%	6,069.2	19.6	0.3%	6,066.4	22.3	0.4%
ME 3	38 57 12	2001	Dry	December	--	8,803.1	8,794.7	8.4	0.1%	8,793.4	9.7	0.1%	8,791.0	12.2	0.1%	8,788.5	14.6	0.2%	8,786.1	17.0	0.2%	8,783.6	19.6	0.2%
ME 3	38 57 12	2001	Dry	January	--	12,723.4	12,715.3	8.1	0.1%	12,714.1	9.3	0.1%	12,711.8	11.6	0.1%	12,709.5	13.9	0.1%	12,707.2	16.2	0.1%	12,704.9	18.5	0.1%
ME 3	38 57 12	2001	Dry	February	--	17,429.4	17,422.5	6.9	0.0%	17,421.3	8.1	0.0%	17,419.0	10.4	0.1%	17,417.8	11.6	0.1%	17,415.5	13.9	0.1%	17,413.2	16.2	0.1%
ME 3	38 57 12	2001	Dry	March	--	12,275.5	12,268.5	6.9	0.1%	12,267.4	8.1	0.1%	12,266.2	9.3	0.1%	12,263.9	11.6	0.1%	12,261.6	13.9	0.1%	12,260.4	15.0	0.1%
ME 3	38 57 12	2001	Dry	April	--	10,949.1	10,934.4	14.7	0.1%	10,932.2	16.9	0.2%	10,928.0	21.1	0.2%	10,923.7	25.3	0.2%	10,919.6	29.5	0.3%	10,915.3	33.8	0.3%
ME 3	38 57 12	2001	Dry	May	--	2,636.6	2,619.3	17.2	0.7%	2,616.8	19.8	0.8%	2,611.8	24.8	0.9%	2,606.8	29.7	1.1%	2,601.9	34.7	1.3%	2,597.0	39.6	1.5%
ME 3	38 57 12	2001	Dry	June	--	2,633.4	2,609.8	23.6	0.9%	2,606.5	27.0	1.0%	2,599.8	33.7	1.3%	2,593.2	40.3	1.5%	2,586.5	47.0	1.8%	2,579.9	53.6	2.0%
ME 3	38 57 12	2001	Dry	July	--	717.1	695.6	21.5	3.0%	692.5	24.6	3.4%	686.4	30.7	4.3%	680.3	36.8	5.1%	674.3	42.8	6.0%	668.1	48.9	6.8%
ME 3	38 57 12	2001	Dry	August	--	169.7	149.0	20.7	12.2%	146.0	23.7	14.0%	140.1	29.6	17.4%	134.2	35.5	20.9%	128.4	41.3	24.4%	122.5	47.2	27.8%
ME 3	38 57 12	2001	Dry	September	Used in Summary Table Analysis	92.3	74.2	18.2	19.7%	71.6	20.7	22.5%	66.4	25.9	28.1%	61.2	31.1	33.7%	56.1	36.2	39.3%	50.9	41.4	44.9%
ME 3	38 57 12	2002	Below Normal	October	Used in Summary Table Analysis	261.6	246.7	14.9	5.7%	244.6	17.0	6.5%	240.3	21.3	8.1%	236.0	25.5	9.8%	231.8	29.8	11.4%	227.5	34.1	13.0%
ME 3	38 57 12	2002	Below Normal	November	Used in Summary Table Analysis	11,979.2	11,967.6	11.6	0.1%	11,965.3	13.9	0.1%	11,961.8	17.4	0.1%	11,959.5	19.7	0.2%	11,956.0	23.1	0.2%	11,952.5	26.6	0.2%
ME 3	38 57 12	2002	Below Normal	December	--	35,539.4	35,528.9	10.4	0.0%	35,527.8	11.6	0.0%	35,525.5	13.9	0.0%	35,522.0	17.4	0.0%	35,519.7	19.7	0.1%	35,516.2	23.1	0.1%
ME 3	38 57 12	2002	Below Normal	January	--	30,787.0	30,777.8	9.3	0.0%	30,776.6	10.4	0.0%	30,774.3	12.7	0.0%	30,770.8	16.2	0.1%	30,768.5	18.5	0.1%	30,766.2	20.8	0.1%
ME 3	38 57 12	2002	Below Normal	February	--	24,622.7	24,614.6	8.1	0.0%	24,613.4	9.3	0.0%	24,611.1	11.6	0.0%	24,608.8	13.9	0.1%	24,606.5	16.2	0.1%	24,604.2	18.5	0.1%
ME 3	38 57 12	2002	Below Normal	March	--	17,737.3	17,729.2	8.1	0.0%	17,728.0	9.3	0.1%	17,725.7	11.6	0.1%	17,723.4	13.9	0.1%	17,721.1	16.2	0.1%	17,718.8	18.5	0.1%
ME 3	38 57 12	2002	Below Normal	April	--	9,908.9	9,894.2	14.7	0.1%	9,892.1	16.8	0.2%	9,888.0	20.9	0.2%	9,883.8	25.1	0.3%	9,879.6	29.3	0.3%	9,875.5	33.4	0.3%
ME 3	38 57 12	2002	Below Normal	May	--	3,313.7	3,296.3	17.4	0.5%	3,293.9	19.8	0.6%	3,288.9	24.8	0.7%	3,284.0	29.6	0.9%	3,279.1	34.6	1.0%	3,274.1	39.6	1.2%
ME 3	38 57 12	2002	Below Normal	June	--	851.2	831.8	19.4	2.3%	829.0	22.2	2.6%	823.5	27.7	3.3%	818.0	33.2	3.9%	812.5	38.8	4.6%	807.0	44.2	5.2%
ME 3	38 57 12	2002	Below Normal	July	--	359.5	340.2	19.3	5.4%	337.5	22.1	6.1%	332.0	27.6	7.7%	326.5	33.1	9.2%	321.0	38.5	10.7%	315.5	44.0	12.2%
ME 3	38 57 12	2002	Below Normal	August	--	223.6	205.7	17.9	8.0%	203.1	20.4	9.1%	198.1	25.5	11.4%	193.0	30.6	13.7%	187.9	35.7	16.0%	182.8	40.8	18.3%
ME 3	38 57 12	2002	Below Normal	September	Used in Summary Table Analysis	160.6	143.9	16.7	10.4%	141.6	19.0	11.9%	136.8	23.8	14.8%	132.0	28.6	17.8%	127.3	33.3	20.7%	122.5	38.1	23.7%
ME 3	38 57 12	2003	Wet	October	Used in Summary Table Analysis	125.7	112.4	13.3	10.6%	110.5	15.2	12.1%	106.6	19.0	15.2%	102.8	22.9	18.2%	99.0	26.7	21.3%	95.1	30.6	24.3%
ME 3	38 57 12	2003	Wet	November	Used in Summary Table Analysis	891.9	881.4	10.5	1.2%	879.9	12.0	1.3%	876.9	15.0	1.7%	873.8	18.1	2.0%	870.9	21.0	2.4%	867.8	24.0	2.7%
ME 3	38 57 12	2003	Wet	December	--	56,480.3	56,471.1	9.3	0.0%	56,469.9	10.4	0.0%	56,467.6	12.7	0.0%	56,465.3	15.0	0.0%	56,461.8	18.5	0.0%	56,459.5	20.8	0.0%
ME 3	38 57 12	2003	Wet	January	--	31,460.6	31,452.5	8.1	0.0%	31,451.4	9.3	0.0%	31,449.1	11.6	0.0%	31,446.8	13.9	0.0%	31,444.4	16.2	0.1%	31,442.1	18.5	0.1%
ME 3	38 57 12	2003	Wet	February	--	20,317.1	20,309.0	8.1	0.0%	20,307.9	9.3	0.0%	20,306.7	10.4	0.1%	20,304.4	12.7	0.1%	20,302.1	15.0	0.1%	20,299.8	17.4	0.1%
ME 3	38 57 12	2003	Wet	March	--	23,976.9	23,969.9	6.9	0.0%	23,968.8	8.1	0.0%	23,967.6	9.3	0.0%	23,965.3	11.6	0.0%	23,963.0	13.9	0.1%	23,960.6	16.2	0.1%
ME 3	38 57 12	2003	Wet	April	--	42,773.1	42,766.2	6.9	0.0%	42,765.0	8.1	0.0%	42,762.7	10.4	0.0%	42,761.6	11.6	0.0%	42,759.3	13.9	0.0%	42,756.9	16.2	0.0%
ME 3	38 57 12	2003	Wet	May	--	12,206.0	12,191.0	15.0	0.1%	12,188.7	17.4	0.1%	12,184.0	22.0	0.2%	12,180.6	25.5	0.2%	12,175.9	30.1	0.2%	12,171.3	34.7	0.3%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 57 12	2003	Wet	June	--	3,162.2	3,143.3	18.9	0.6%	3,140.6	21.5	0.7%	3,135.3	26.9	0.8%	3,130.1	32.1	1.0%	3,124.9	37.3	1.2%	3,119.7	42.5	1.3%
ME 3	38 57 12	2003	Wet	July	--	1,469.3	1,450.1	19.2	1.3%	1,447.3	22.0	1.5%	1,441.9	27.4	1.9%	1,436.5	32.9	2.2%	1,431.0	38.3	2.6%	1,425.6	43.8	3.0%
ME 3	38 57 12	2003	Wet	August	--	755.7	737.3	18.4	2.4%	734.7	21.0	2.8%	729.5	26.2	3.5%	724.2	31.5	4.2%	719.0	36.7	4.9%	713.6	42.1	5.6%
ME 3	38 57 12	2003	Wet	September	Used in Summary Table Analysis	453.9	438.6	15.4	3.4%	436.4	17.6	3.9%	432.0	21.9	4.8%	427.6	26.3	5.8%	423.3	30.7	6.8%	418.9	35.0	7.7%
ME 3	38 57 12	2004	Wet	October	Used in Summary Table Analysis	321.0	308.6	12.4	3.9%	306.8	14.2	4.4%	303.2	17.8	5.5%	299.7	21.3	6.6%	296.1	24.9	7.8%	292.5	28.5	8.9%
ME 3	38 57 12	2004	Wet	November	Used in Summary Table Analysis	5,766.0	5,756.0	10.0	0.2%	5,754.6	11.3	0.2%	5,751.7	14.2	0.2%	5,749.0	17.0	0.3%	5,746.1	19.9	0.3%	5,743.2	22.8	0.4%
ME 3	38 57 12	2004	Wet	December	--	36,147.0	36,137.7	9.3	0.0%	36,136.6	10.4	0.0%	36,134.3	12.7	0.0%	36,131.9	15.0	0.0%	36,128.5	18.5	0.1%	36,126.2	20.8	0.1%
ME 3	38 57 12	2004	Wet	January	--	31,361.1	31,354.2	6.9	0.0%	31,353.0	8.1	0.0%	31,350.7	10.4	0.0%	31,348.4	12.7	0.0%	31,346.1	15.0	0.0%	31,343.8	17.4	0.1%
ME 3	38 57 12	2004	Wet	February	--	38,128.5	38,121.5	6.9	0.0%	38,120.4	8.1	0.0%	38,119.2	9.3	0.0%	38,116.9	11.6	0.0%	38,114.6	13.9	0.0%	38,112.3	16.2	0.0%
ME 3	38 57 12	2004	Wet	March	--	16,504.6	16,498.8	5.8	0.0%	16,497.7	6.9	0.0%	16,495.4	9.3	0.1%	16,493.1	11.6	0.1%	16,491.9	12.7	0.1%	16,489.6	15.0	0.1%
ME 3	38 57 12	2004	Wet	April	--	9,436.3	9,430.0	6.4	0.1%	9,429.1	7.3	0.1%	9,427.2	9.1	0.1%	9,425.3	11.0	0.1%	9,423.4	13.0	0.1%	9,421.5	14.8	0.2%
ME 3	38 57 12	2004	Wet	May	--	3,408.6	3,394.1	14.5	0.4%	3,392.0	16.6	0.5%	3,388.0	20.6	0.6%	3,383.8	24.8	0.7%	3,379.7	28.8	0.8%	3,375.6	33.0	1.0%
ME 3	38 57 12	2004	Wet	June	--	689.4	671.4	18.0	2.6%	668.9	20.5	3.0%	663.8	25.6	3.7%	658.7	30.7	4.5%	653.6	35.8	5.2%	648.5	40.9	5.9%
ME 3	38 57 12	2004	Wet	July	--	352.5	333.7	18.8	5.3%	331.0	21.5	6.1%	325.6	26.9	7.6%	320.3	32.3	9.2%	314.9	37.6	10.7%	309.5	43.0	12.2%
ME 3	38 57 12	2004	Wet	August	--	221.8	204.3	17.5	7.9%	201.8	20.0	9.0%	196.8	25.0	11.3%	191.8	30.0	13.5%	186.9	34.9	15.7%	181.9	39.9	18.0%
ME 3	38 57 12	2004	Wet	September	Used in Summary Table Analysis	159.2	142.7	16.4	10.3%	140.4	18.8	11.8%	135.7	23.5	14.8%	131.0	28.2	17.7%	126.3	32.9	20.7%	121.6	37.6	23.6%
ME 3	38 57 12	2005	Above Normal	October	Used in Summary Table Analysis	7,634.3	7,621.6	12.6	0.2%	7,619.8	14.5	0.2%	7,616.2	18.1	0.2%	7,612.5	21.8	0.3%	7,608.9	25.3	0.3%	7,605.2	29.1	0.4%
ME 3	38 57 12	2005	Above Normal	November	Used in Summary Table Analysis	2,250.3	2,240.5	9.8	0.4%	2,239.1	11.2	0.5%	2,236.2	14.1	0.6%	2,233.4	16.9	0.8%	2,230.6	19.8	0.9%	2,227.8	22.6	1.0%
ME 3	38 57 12	2005	Above Normal	December	--	20,890.0	20,880.8	9.3	0.0%	20,879.6	10.4	0.0%	20,877.3	12.7	0.1%	20,875.0	15.0	0.1%	20,872.7	17.4	0.1%	20,869.2	20.8	0.1%
ME 3	38 57 12	2005	Above Normal	January	--	22,277.8	22,269.7	8.1	0.0%	22,268.5	9.3	0.0%	22,266.2	11.6	0.1%	22,263.9	13.9	0.1%	22,261.6	16.2	0.1%	22,259.3	18.5	0.1%
ME 3	38 57 12	2005	Above Normal	February	--	13,993.1	13,985.0	8.1	0.1%	13,985.0	8.1	0.1%	13,982.6	10.4	0.1%	13,980.3	12.7	0.1%	13,978.0	15.0	0.1%	13,976.9	16.2	0.1%
ME 3	38 57 12	2005	Above Normal	March	--	28,486.1	28,479.2	6.9	0.0%	28,478.0	8.1	0.0%	28,475.7	10.4	0.0%	28,474.5	11.6	0.0%	28,472.2	13.9	0.0%	28,469.9	16.2	0.1%
ME 3	38 57 12	2005	Above Normal	April	--	21,392.4	21,385.4	6.9	0.0%	21,384.3	8.1	0.0%	21,383.1	9.3	0.0%	21,380.8	11.6	0.1%	21,378.5	13.9	0.1%	21,377.3	15.0	0.1%
ME 3	38 57 12	2005	Above Normal	May	--	19,505.8	19,491.9	13.9	0.1%	19,489.6	16.2	0.1%	19,485.0	20.8	0.1%	19,480.3	25.5	0.1%	19,476.9	28.9	0.1%	19,472.2	33.6	0.2%
ME 3	38 57 12	2005	Above Normal	June	--	15,795.1	15,773.1	22.0	0.1%	15,770.8	24.3	0.2%	15,763.9	31.3	0.2%	15,758.1	37.0	0.2%	15,752.3	42.8	0.3%	15,745.4	49.8	0.3%
ME 3	38 57 12	2005	Above Normal	July	--	2,863.1	2,843.5	19.6	0.7%	2,840.6	22.5	0.8%	2,835.1	28.0	1.0%	2,829.5	33.6	1.2%	2,824.0	39.1	1.4%	2,818.4	44.7	1.6%
ME 3	38 57 12	2005	Above Normal	August	--	978.4	960.9	17.5	1.8%	958.4	19.9	2.0%	953.4	24.9	2.5%	948.5	29.9	3.1%	943.5	34.8	3.6%	938.6	39.8	4.1%
ME 3	38 57 12	2005	Above Normal	September	Used in Summary Table Analysis	520.1	504.9	15.2	2.9%	502.7	17.3	3.3%	498.4	21.7	4.2%	494.1	26.0	5.0%	489.8	30.3	5.8%	485.4	34.6	6.7%
ME 3	38 57 12	2006	Wet	October	Used in Summary Table Analysis	629.2	617.2	12.0	1.9%	615.5	13.8	2.2%	612.0	17.2	2.7%	608.5	20.7	3.3%	605.1	24.1	3.8%	601.6	27.6	4.4%
ME 3	38 57 12	2006	Wet	November	Used in Summary Table Analysis	9,243.1	9,233.7	9.4	0.1%	9,232.3	10.8	0.1%	9,229.6	13.4	0.1%	9,226.9	16.2	0.2%	9,224.2	18.9	0.2%	9,221.4	21.6	0.2%
ME 3	38 57 12	2006	Wet	December	--	43,292.8	43,284.7	8.1	0.0%	43,283.6	9.3	0.0%	43,280.1	12.7	0.0%	43,277.8	15.0	0.0%	43,275.5	17.4	0.0%	43,273.1	19.7	0.0%
ME 3	38 57 12	2006	Wet	January	--	46,111.1	46,103.0	8.1	0.0%	46,103.0	8.1	0.0%	46,100.7	10.4	0.0%	46,098.4	12.7	0.0%	46,096.1	15.0	0.0%	46,093.8	17.4	0.0%
ME 3	38 57 12	2006	Wet	February	--	26,539.4	26,532.4	6.9	0.0%	26,531.3	8.1	0.0%	26,528.9	10.4	0.0%	26,527.8	11.6	0.0%	26,525.5	13.9	0.1%	26,523.1	16.2	0.1%
ME 3	38 57 12	2006	Wet	March	--	47,011.6	47,004.6	6.9	0.0%	47,004.6	6.9	0.0%	47,002.3	9.3	0.0%	47,000.0	11.6	0.0%	46,998.8	12.7	0.0%	46,996.5	15.0	0.0%
ME 3	38 57 12	2006	Wet	April	--	30,370.4	30,364.6	5.8	0.0%	30,363.4	6.9	0.0%	30,362.3	8.1	0.0%	30,360.0	10.4	0.0%	30,357.6	12.7	0.0%	30,356.5	13.9	0.0%
ME 3	38 57 12	2006	Wet	May	--	14,173.6	14,165.5	8.1	0.1%	14,164.4	9.3	0.1%	14,160.9	12.7	0.1%	14,158.6	15.0	0.1%	14,156.3	17.4	0.1%	14,153.9	19.7	0.1%
ME 3	38 57 12	2006	Wet	June	--	3,543.8	3,525.6	18.2	0.5%	3,523.0	20.7	0.6%	3,517.9	25.8	0.7%	3,512.8	30.9	0.9%	3,507.8	36.0	1.0%	3,502.7	41.1	1.2%
ME 3	38 57 12	2006	Wet	July	--	1,273.8	1,255.1	18.8	1.5%	1,252.4	21.4	1.7%	1,247.1	26.7	2.1%	1,241.8	32.1	2.5%	1,236.5	37.4	2.9%	1,231.3	42.6	3.3%
ME 3	38 57 12	2006	Wet	August	--	660.0	642.1	17.9	2.7%	639.6	20.4	3.1%	634.5	25.5	3.9%	629.4	30.6	4.6%	624.4	35.6	5.4%	619.3	40.7	6.2%
ME 3	38 57 12	2006	Wet	September	Used in Summary Table Analysis	421.4	406.1	15.4	3.6%	403.9	17.5	4.2%	399.5	21.9	5.2%	395.2	26.3	6.2%	390.8	30.6	7.3%	386.4	35.0	8.3%
ME 3	38 57 12	2007	Above Normal	October	Used in Summary Table Analysis	270.5	258.3	12.2	4.5%	256.5	14.0	5.2%	253.0	17.5	6.5%	249.5	21.0	7.8%	246.0	24.5	9.1%	242.5	28.0	10.4%
ME 3	38 57 12	2007	Above Normal	November	Used in Summary Table Analysis	8,611.2	8,601.5	9.7	0.1%	8,600.1	11.1	0.1%	8,597.3	13.9	0.2%	8,594.4	16.8	0.2%	8,591.7	19.6	0.2%	8,588.8	22.5	0.3%
ME 3	38 57 12	2007	Above Normal	December	--	20,298.6	20,289.4	9.3	0.0%	20,288.2	10.4	0.1%	20,285.9	12.7	0.1%	20,283.6	15.0	0.1%	20,280.1	18.5	0.1%	20,277.8	20.8	0.1%
ME 3	38 57 12	2007	Above Normal	January	--	10,221.9	10,214.2	7.6	0.1%	10,213.2	8.7	0.1%	10,211.0	10.9	0.1%	10,208.7	13.2	0.1%	10,206.5	15.4	0.2%	10,204.3	17.6	0.2%
ME 3	38 57 12	2007	Above Normal	February	--	30,445.6	30,438.7	6.9	0.0%	30,437.5	8.1	0.0%	30,435.2	10.4	0.0%	30,432.9	12.7	0.0%	30,430.6	15.0	0.0%	30,428.2	17.4	0.1%
ME 3	38 57 12	2007	Above Normal	March	--	13,081.0	13,072.9	8.1	0.1%	13,072.9	8.1	0.1%	13,070.6	10.4	0.1%	13,068.3	12.7	0.1%	13,066.0	15.0	0.1%	13,063.7	17.4	0.1%
ME 3	38 57 12	2007	Above Normal	April	--	11,514.6	11,500.5	14.1	0.1%	11,498.5	16.1	0.1%	11,494.4	20.1	0.2%	11,490.4	24.2	0.2%	11,486.3	28.2	0.2%	11,482.3	32.3	0.3%
ME 3	38 57 12	2007	Above Normal	May	--	4,130.8	4,114.0	16.8	0.4%	4,111.7	19.1	0.5%	4,106.8	24.0	0.6%	4,102.1	28.7	0.7%	4,097.2	33.6	0.8%	4,092.5	38.3	0.9%
ME 3	38 57 12	2007	Above Normal	June	--	1,492.1	1,472.1	20.0	1.3%	1,469.2	22.9	1.5%	1,463.5	28.6	1.9%	1,457.9	34.3	2.3%	1,452.2	39.9	2.7%	1,446.5	45.6	3.1%
ME 3	38 57 12	2007	Above Normal	July	--	493.4	473.6	19.8	4.0%	470.7	22.6	4.6%	465.1	28.2	5.7%	459.5	33.8	6.9%	453.9	39.5	8.0%	448.3	45.0	9.1%
ME 3	38 57 12	2007	Above Normal	August	--	219.5	202.0	17.5	8.0%	199.5	20.0	9.1%	194.5	25.0	11.4%	189.5	30.0	13.7%	184.5	35.0	15.9%	179.6	40.0	18.2%
ME 3	38 57 12	2007	Above Normal	September	Used in Summary Table Analysis	147.2	130.8	16.4	11.1%	128.5	18.7	12.7%	123.8	23.4	15.9%	119.2	28.0	19.0%	114.5	32.7	22.2%	109.8	37.4	25.4%
ME 3	38 57 12	2008	Dry	October	Used in Summary Table Analysis	3,413.8	3,400.8	13.0	0.4%	3,399.0	14.8	0.4%	3,395.1	18.6	0.5%	3,391.4	22.3	0.7%	3,387.7	26.0	0.8%	3,383.9	29.9	0.9%
ME 3	38 57 12	2008	Dry	November	Used in Summary Table Analysis	3,255.9	3,245.9	10.0	0.3%	3,244.6	11.3	0.3%	3,241.7	14.2	0.4%	3,238.9	17.0	0.5%	3,236.0	19.9	0.6%	3,233.1	22.8	0.7%
ME 3	38 57 12	2008	Dry	December	--	22,980.3	22,971.1	9.3	0.0%	22,969.9	10.4	0.0%	22,967.6	12.7	0.1%	22,965.3	15.0	0.1%	22,963.0	17.4	0.1%	22,959.5	20.8	0.1%
ME 3	38 57 12	2008	Dry	January	--	37,392.4	37,384.3	8.1	0.0%	37,383.1	9.3	0.0%	37,380.8	11.6	0.0%	37,377.3	15.0	0.0%	37,375.0	17.4	0.0%	37,372.7	19.7	0.1%
ME 3	38 57 12	2008	Dry	February	--	26,237.3	26,230.3	6.9	0.0%	26,229.2	8.1	0.0%	26,226.9	10.4	0.0%	26,225.7	11.6	0.0%	26,223.4	13.9	0.1%	26,221.1	16.2	0.1%
ME 3	38 57 12	2008	Dry	March	--	11,778.9	11,772.0	6.9	0.1%	11,772.0	6.9	0.1%	11,769.7	9.3	0.1%	11,767.4	11.6	0.1%	11,766.2	12.7	0.1%	11,763.9	15.0	0.1%
ME 3	38 57 12	2008	Dry	April	--	9,004.5	8,990.2	14.4	0.2%	8,988.1	16.4	0.2%	8,984.0	20.5	0.2%	8,979.9	24.7	0.3%	8,975.7	28.8	0.3%	8,971.6	32.9	0.4%
ME 3	38 57 12	2008	Dry	May	--	1,360.9	1,345.6	15.3	1.1%	1,343.4	17.5	1.3%	1,339.0	21.9	1.6%	1,334.7	26.2	1.9%	1,330.4	30.4	2.2%	1,326.4	34.5	2.5%
ME 3	38 57 12	2008	Dry	June	--	435.0	413.1	21.9	5.0%	410.0	25.0	5.7%	403.8	31.2	7.2%	397.6	37.3	8.6%	391.4	43.5	10.0%	385.3	49.6	11.4%
ME 3	38 57 12	2008	Dry	July	--	253.4	232.3	21.0	8.3%	229.3	24.0	9.5%	223.3	30.0	11.8%	217.4	36.0	14.2%	211.4	42.0	16.6%	205.5	47.9	18.9%
ME 3	38 57 12	2008	Dry	August	--	176.6	156.4	20.1	11.4%	153.6	23.0	13.0%	147.8	28.8	16.3%	142.1	34.5	19.5%	136.4	40.2	22.8%	130.7	45.9	26.0%
ME 3	38 57 12	2008	Dry	September	Used in Summary Table Analysis	138.3	119.2	19.1	13.8%	116.4	21.9	15.8%	111.0	27.3	19.8%	105.5	32.8	23.7%	100.1	38.3	27.7%	94.6	43.7	31.6%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 57 12	2009	Critical	October	Used in Summary Table Analysis	919.9	905.3	14.7	1.6%	903.1	16.8	1.8%	898.9	21.0	2.3%	894.7	25.3	2.7%	890.6	29.3	3.2%	886.4	33.5	3.6%
ME 3	38 57 12	2009	Critical	November	Used in Summary Table Analysis	5,476.0	5,464.8	11.2	0.2%	5,463.2	12.8	0.2%	5,460.0	16.1	0.3%	5,456.7	19.3	0.4%	5,453.6	22.5	0.4%	5,450.3	25.7	0.5%
ME 3	38 57 12	2009	Critical	December	--	12,091.4	12,081.0	10.4	0.1%	12,079.9	11.6	0.1%	12,077.5	13.9	0.1%	12,074.1	17.4	0.1%	12,071.8	19.7	0.2%	12,068.3	23.1	0.2%
ME 3	38 57 12	2009	Critical	January	--	8,775.6	8,766.8	8.8	0.1%	8,765.4	10.2	0.1%	8,762.8	12.7	0.1%	8,760.3	15.3	0.2%	8,757.6	17.9	0.2%	8,755.1	20.5	0.2%
ME 3	38 57 12	2009	Critical	February	--	22,553.2	22,545.1	8.1	0.0%	22,544.0	9.3	0.0%	22,541.7	11.6	0.1%	22,539.4	13.9	0.1%	22,537.0	16.2	0.1%	22,534.7	18.5	0.1%
ME 3	38 57 12	2009	Critical	March	--	21,075.2	21,068.3	6.9	0.0%	21,067.1	8.1	0.0%	21,064.8	10.4	0.0%	21,063.7	11.6	0.1%	21,061.3	13.9	0.1%	21,059.0	16.2	0.1%
ME 3	38 57 12	2009	Critical	April	--	10,091.7	10,076.9	14.8	0.1%	10,074.8	16.9	0.2%	10,070.5	21.2	0.2%	10,066.2	25.5	0.3%	10,062.0	29.6	0.3%	10,057.8	33.9	0.3%
ME 3	38 57 12	2009	Critical	May	--	15,560.2	15,542.8	17.4	0.1%	15,539.4	20.8	0.1%	15,534.7	25.5	0.2%	15,530.1	30.1	0.2%	15,524.3	35.9	0.2%	15,518.5	41.7	0.3%
ME 3	38 57 12	2009	Critical	June	--	3,156.7	3,133.4	23.3	0.7%	3,130.2	26.5	0.8%	3,123.5	33.2	1.1%	3,116.9	39.8	1.3%	3,110.2	46.5	1.5%	3,103.7	53.0	1.7%
ME 3	38 57 12	2009	Critical	July	--	1,259.6	1,238.2	21.4	1.7%	1,235.2	24.4	1.9%	1,229.2	30.4	2.4%	1,223.1	36.5	2.9%	1,217.1	42.5	3.4%	1,211.2	48.4	3.8%
ME 3	38 57 12	2009	Critical	August	--	665.3	645.0	20.3	3.0%	642.2	23.1	3.5%	636.4	28.9	4.3%	630.7	34.7	5.2%	624.9	40.4	6.1%	619.1	46.2	6.9%
ME 3	38 57 12	2009	Critical	September	Used in Summary Table Analysis	386.9	369.1	17.8	4.6%	366.6	20.3	5.2%	361.5	25.4	6.6%	356.5	30.4	7.9%	351.4	35.5	9.2%	346.3	40.5	10.5%
ME 3	38 57 12	2010	Below Normal	October	Used in Summary Table Analysis	6,083.4	6,068.6	14.8	0.2%	6,066.6	16.9	0.3%	6,062.3	21.2	0.3%	6,058.0	25.5	0.4%	6,053.9	29.5	0.5%	6,049.7	33.8	0.6%
ME 3	38 57 12	2010	Below Normal	November	Used in Summary Table Analysis	8,266.7	8,255.2	11.5	0.1%	8,253.5	13.2	0.2%	8,250.1	16.6	0.2%	8,246.9	19.8	0.2%	8,243.5	23.1	0.3%	8,240.2	26.5	0.3%
ME 3	38 57 12	2010	Below Normal	December	--	12,307.9	12,297.5	10.4	0.1%	12,296.3	11.6	0.1%	12,294.0	13.9	0.1%	12,290.5	17.4	0.1%	12,288.2	19.7	0.2%	12,284.7	23.1	0.2%
ME 3	38 57 12	2010	Below Normal	January	--	36,077.5	36,068.3	9.3	0.0%	36,067.1	10.4	0.0%	36,064.8	12.7	0.0%	36,062.5	15.0	0.0%	36,059.0	18.5	0.1%	36,056.7	20.8	0.1%
ME 3	38 57 12	2010	Below Normal	February	--	27,201.4	27,193.3	8.1	0.0%	27,192.1	9.3	0.0%	27,189.8	11.6	0.0%	27,187.5	13.9	0.1%	27,185.2	16.2	0.1%	27,182.9	18.5	0.1%
ME 3	38 57 12	2010	Below Normal	March	--	28,799.8	28,791.7	8.1	0.0%	28,790.5	9.3	0.0%	28,789.4	10.4	0.0%	28,787.0	12.7	0.0%	28,784.7	15.0	0.1%	28,782.4	17.4	0.1%
ME 3	38 57 12	2010	Below Normal	April	--	39,944.4	39,937.5	6.9	0.0%	39,936.3	8.1	0.0%	39,934.0	10.4	0.0%	39,931.7	12.7	0.0%	39,929.4	15.0	0.0%	39,927.1	17.4	0.0%
ME 3	38 57 12	2010	Below Normal	May	--	20,215.3	20,199.1	16.2	0.1%	20,196.8	18.5	0.1%	20,192.1	23.1	0.1%	20,188.7	26.6	0.1%	20,184.0	31.3	0.2%	20,179.4	35.9	0.2%
ME 3	38 57 12	2010	Below Normal	June	--	9,307.3	9,285.0	22.3	0.2%	9,281.7	25.6	0.3%	9,275.3	31.9	0.3%	9,269.1	38.2	0.4%	9,262.8	44.4	0.5%	9,256.5	50.8	0.5%
ME 3	38 57 12	2010	Below Normal	July	--	1,451.5	1,431.7	19.8	1.4%	1,428.8	22.7	1.6%	1,423.1	28.4	2.0%	1,417.5	34.0	2.3%	1,411.8	39.7	2.7%	1,406.4	45.1	3.1%
ME 3	38 57 12	2010	Below Normal	August	--	564.4	546.5	17.9	3.2%	543.9	20.4	3.6%	538.8	25.6	4.5%	533.8	30.6	5.4%	528.7	35.7	6.3%	523.6	40.8	7.2%
ME 3	38 57 12	2010	Below Normal	September	Used in Summary Table Analysis	646.4	629.5	16.9	2.6%	627.1	19.3	3.0%	622.2	24.1	3.7%	617.5	28.9	4.5%	612.7	33.7	5.2%	607.8	38.5	6.0%
ME 3	38 57 12	2011	Wet	October	Used in Summary Table Analysis	9,601.0	9,588.5	12.5	0.1%	9,586.8	14.2	0.1%	9,583.2	17.8	0.2%	9,579.6	21.4	0.2%	9,576.0	25.0	0.3%	9,572.5	28.6	0.3%
ME 3	38 57 12	2011	Wet	November	Used in Summary Table Analysis	14,184.0	14,173.6	10.4	0.1%	14,172.5	11.6	0.1%	14,169.0	15.0	0.1%	14,166.7	17.4	0.1%	14,164.4	19.7	0.1%	14,160.9	23.1	0.2%
ME 3	38 57 12	2011	Wet	December	--	33,550.9	33,542.8	8.1	0.0%	33,541.7	9.3	0.0%	33,539.4	11.6	0.0%	33,537.0	13.9	0.0%	33,534.7	16.2	0.0%	33,531.3	19.7	0.1%
ME 3	38 57 12	2011	Wet	January	--	14,128.5	14,120.4	8.1	0.1%	14,119.2	9.3	0.1%	14,116.9	11.6	0.1%	14,114.6	13.9	0.1%	14,112.3	16.2	0.1%	14,110.0	18.5	0.1%
ME 3	38 57 12	2011	Wet	February	--	20,740.7	20,732.6	8.1	0.0%	20,732.6	8.1	0.0%	20,730.3	10.4	0.1%	20,728.0	12.7	0.1%	20,725.7	15.0	0.1%	20,723.4	17.4	0.1%
ME 3	38 57 12	2011	Wet	March	--	51,908.6	51,902.8	5.8	0.0%	51,901.6	6.9	0.0%	51,899.3	9.3	0.0%	51,897.0	11.6	0.0%	51,895.8	12.7	0.0%	51,893.5	15.0	0.0%
ME 3	38 57 12	2011	Wet	April	--	24,766.2	24,760.4	5.8	0.0%	24,759.3	6.9	0.0%	24,756.9	9.3	0.0%	24,754.6	11.6	0.0%	24,753.5	12.7	0.1%	24,751.2	15.0	0.1%
ME 3	38 57 12	2011	Wet	May	--	11,366.9	11,352.3	14.6	0.1%	11,350.2	16.7	0.1%	11,345.9	20.9	0.2%	11,341.7	25.2	0.2%	11,337.5	29.4	0.3%	11,333.3	33.6	0.3%
ME 3	38 57 12	2011	Wet	June	--	7,040.7	7,018.8	22.0	0.3%	7,015.6	25.1	0.4%	7,009.5	31.3	0.4%	7,003.2	37.5	0.5%	6,997.1	43.6	0.6%	6,990.9	49.9	0.7%
ME 3	38 57 12	2011	Wet	July	--	1,827.0	1,805.6	21.4	1.2%	1,802.5	24.4	1.3%	1,796.5	30.4	1.7%	1,790.5	36.5	2.0%	1,784.4	42.6	2.3%	1,778.4	48.6	2.7%
ME 3	38 57 12	2011	Wet	August	--	773.2	755.4	17.7	2.3%	752.9	20.3	2.6%	747.8	25.3	3.3%	742.8	30.4	3.9%	737.8	35.4	4.6%	732.8	40.4	5.2%
ME 3	38 57 12	2011	Wet	September	Used in Summary Table Analysis	429.7	413.9	15.9	3.7%	411.6	18.1	4.2%	407.1	22.7	5.3%	402.6	27.1	6.3%	398.1	31.7	7.4%	393.6	36.2	8.4%
ME 3	38 57 12	2012	Below Normal	October	Used in Summary Table Analysis	4,524.9	4,512.3	12.6	0.3%	4,510.4	14.5	0.3%	4,506.7	18.2	0.4%	4,503.1	21.8	0.5%	4,499.5	25.3	0.6%	4,495.8	29.1	0.6%
ME 3	38 57 12	2012	Below Normal	November	Used in Summary Table Analysis	8,204.3	8,194.3	10.0	0.1%	8,192.8	11.5	0.1%	8,189.9	14.4	0.2%	8,187.2	17.1	0.2%	8,184.1	20.1	0.2%	8,181.3	23.0	0.3%
ME 3	38 57 12	2012	Below Normal	December	--	5,168.6	5,160.0	8.7	0.2%	5,158.8	9.8	0.2%	5,156.3	12.4	0.2%	5,153.8	14.8	0.3%	5,151.3	17.4	0.3%	5,148.7	19.9	0.4%
ME 3	38 57 12	2012	Below Normal	January	--	20,018.5	20,011.6	6.9	0.0%	20,010.4	8.1	0.0%	20,008.1	10.4	0.1%	20,005.8	12.7	0.1%	20,003.5	15.0	0.1%	20,001.2	17.4	0.1%
ME 3	38 57 12	2012	Below Normal	February	--	18,185.2	18,178.2	6.9	0.0%	18,177.1	8.1	0.0%	18,175.9	9.3	0.1%	18,173.6	11.6	0.1%	18,171.3	13.9	0.1%	18,169.0	16.2	0.1%
ME 3	38 57 12	2012	Below Normal	March	--	45,312.5	45,305.6	6.9	0.0%	45,304.4	8.1	0.0%	45,302.1	10.4	0.0%	45,299.8	12.7	0.0%	45,297.5	15.0	0.0%	45,295.1	17.4	0.0%
ME 3	38 57 12	2012	Below Normal	April	--	26,818.3	26,811.3	6.9	0.0%	26,811.3	6.9	0.0%	26,809.0	9.3	0.0%	26,806.7	11.6	0.0%	26,805.6	12.7	0.0%	26,803.2	15.0	0.1%
ME 3	38 57 12	2012	Below Normal	May	--	7,473.0	7,458.4	14.6	0.2%	7,456.5	16.6	0.2%	7,452.2	20.8	0.3%	7,447.9	25.1	0.3%	7,443.8	29.3	0.4%	7,439.6	33.4	0.4%
ME 3	38 57 12	2012	Below Normal	June	--	5,500.0	5,477.7	22.3	0.4%	5,474.5	25.5	0.5%	5,468.2	31.8	0.6%	5,461.8	38.2	0.7%	5,455.6	44.4	0.8%	5,449.2	50.8	0.9%
ME 3	38 57 12	2012	Below Normal	July	--	2,214.1	2,193.5	20.6	0.9%	2,190.6	23.5	1.1%	2,184.7	29.4	1.3%	2,178.8	35.3	1.6%	2,173.0	41.1	1.9%	2,167.1	47.0	2.1%
ME 3	38 57 12	2012	Below Normal	August	--	385.8	369.6	16.2	4.2%	367.3	18.5	4.8%	362.7	23.1	6.0%	358.1	27.8	7.2%	353.4	32.4	8.4%	348.9	36.9	9.6%
ME 3	38 57 12	2012	Below Normal	September	Used in Summary Table Analysis	245.6	231.3	14.3	5.8%	229.3	16.3	6.6%	225.2	20.4	8.3%	221.2	24.4	9.9%	217.2	28.4	11.6%	213.1	32.5	13.2%
ME 3	38 57 12	2013	Below Normal	October	Used in Summary Table Analysis	1,900.9	1,888.7	12.3	0.6%	1,886.9	14.0	0.7%	1,883.4	17.5	0.9%	1,880.0	20.9	1.1%	1,876.4	24.5	1.3%	1,872.9	28.0	1.5%
ME 3	38 57 12	2013	Below Normal	November	Used in Summary Table Analysis	14,623.8	14,613.4	10.4	0.1%	14,612.3	11.6	0.1%	14,610.0	13.9	0.1%	14,606.5	17.4	0.1%	14,604.2	19.7	0.1%	14,601.9	22.0	0.2%
ME 3	38 57 12	2013	Below Normal	December	--	59,854.2	59,844.9	9.3	0.0%	59,843.8	10.4	0.0%	59,841.4	12.7	0.0%	59,839.1	15.0	0.0%	59,836.8	17.4	0.0%	59,833.3	20.8	0.0%
ME 3	38 57 12	2013	Below Normal	January	--	22,160.9	22,153.9	6.9	0.0%	22,152.8	8.1	0.0%	22,150.5	10.4	0.0%	22,148.1	12.7	0.1%	22,145.8	15.0	0.1%	22,143.5	17.4	0.1%
ME 3	38 57 12	2013	Below Normal	February	--	8,826.5	8,819.4	7.1	0.1%	8,818.4	8.1	0.1%	8,816.2	10.3	0.1%	8,814.1	12.4	0.1%	8,812.0	14.5	0.2%	8,810.0	16.6	0.2%
ME 3	38 57 12	2013	Below Normal	March	--	10,301.3	10,294.2	7.1	0.1%	10,293.3	8.0	0.1%	10,291.2	10.1	0.1%	10,289.2	12.0	0.1%	10,287.2	14.1	0.1%	10,285.1	16.2	0.2%
ME 3	38 57 12	2013	Below Normal	April	--	8,282.4	8,268.5	13.9	0.2%	8,266.6	15.9	0.2%	8,262.6	19.8	0.2%	8,258.7	23.7	0.3%	8,254.7	27.7	0.3%	8,250.7	31.7	0.4%
ME 3	38 57 12	2013	Below Normal	May	--	4,419.4	4,402.8	16.7	0.4%	4,400.3	19.1	0.4%	4,395.6	23.8	0.5%	4,390.7	28.7	0.6%	4,386.0	33.4	0.8%	4,381.3	38.2	0.9%
ME 3	38 57 12	2013	Below Normal	June	--	2,106.5	2,086.6	19.9	0.9%	2,083.7	22.8	1.1%	2,078.0	28.5	1.4%	2,072.3	34.1	1.6%	2,066.7	39.8	1.9%	2,061.0	45.5	2.2%
ME 3	38 57 12	2013	Below Normal	July	--	716.4	697.4	18.9	2.6%	694.7	21.6	3.0%	689.4	27.0	3.8%	684.0	32.3	4.5%	678.7	37.7	5.3%	673.3	43.0	6.0%
ME 3	38 57 12	2013	Below Normal	August	--	337.3	319.8	17.5	5.2%	317.3	20.0	5.9%	312.3	25.0	7.4%	307.3	30.0	8.9%	302.3	35.0	10.4%	297.4	39.9	11.8%
ME 3	38 57 12	2013	Below Normal	September	Used in Summary Table Analysis	4,769.1	4,751.0	18.1	0.4%	4,748.5	20.6	0.4%	4,743.4	25.7	0.5%	4,738.2	30.9	0.6%	4,733.1	36.0	0.8%	4,728.0	41.1	0.9%
ME 3	38 57 12	2014	Critical	October	Used in Summary Table Analysis	280.5	267.8	12.8	4.6%	265.9	14.6	5.2%	262.3	18.3	6.5%	258.6	21.9	7.8%	254.9	25.6	9.1%	251.2	29.3	10.5%
ME 3	38 57 12	2014	Critical	November	Used in Summary Table Analysis	1,528.9	1,518.8	10.2	0.7%	1,517.4	11.6	0.8%	1,514.4	14.6	1.0%	1,511.5	17.5	1.1%	1,508.4	20.5	1.3%	1,505.6	23.4	1.5%
ME 3	38 57 12	2014	Critical	December	--	1,584.5	1,575.6	8.9	0.6%	1,574.3	10.2	0.6%	1,571.6	12.8	0.8%	1,569.1	15.4	1.0%	1,566.6	17.9	1.1%	1,563.9	20.6	1.3%
ME 3	38 57 12	2014	Critical	January	--	2,812.0	2,804.1	8.0	0.3%	2,802.9	9.1	0.3%	2,800.7	11.3	0.4%	2,798.3	13.8	0.5%	2,795.9	16.1	0.6%	2,793.6	18.4	0.7%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 57 12	2014	Critical	February	--	15,725.7	15,717.6	8.1	0.1%	15,716.4	9.3	0.1%	15,715.3	10.4	0.1%	15,713.0	12.7	0.1%	15,710.6	15.0	0.1%	15,708.3	17.4	0.1%
ME 3	38 57 12	2014	Critical	March	--	31,450.2	31,443.3	6.9	0.0%	31,442.1	8.1	0.0%	31,441.0	9.3	0.0%	31,438.7	11.6	0.0%	31,436.3	13.9	0.0%	31,434.0	16.2	0.1%
ME 3	38 57 12	2014	Critical	April	--	12,978.0	12,963.0	15.0	0.1%	12,960.6	17.4	0.1%	12,957.2	20.8	0.2%	12,952.5	25.5	0.2%	12,947.9	30.1	0.2%	12,944.4	33.6	0.3%
ME 3	38 57 12	2014	Critical	May	--	5,180.4	5,162.7	17.7	0.3%	5,160.3	20.1	0.4%	5,155.2	25.2	0.5%	5,150.1	30.3	0.6%	5,145.1	35.3	0.7%	5,140.0	40.4	0.8%
ME 3	38 57 12	2014	Critical	June	--	1,194.8	1,170.7	24.1	2.0%	1,167.2	27.5	2.3%	1,160.4	34.4	2.9%	1,153.7	41.1	3.4%	1,146.9	47.9	4.0%	1,140.2	54.6	4.6%
ME 3	38 57 12	2014	Critical	July	--	543.9	522.3	21.6	4.0%	519.3	24.7	4.5%	513.1	30.8	5.7%	507.0	36.9	6.8%	500.9	43.1	7.9%	494.7	49.2	9.0%
ME 3	38 57 12	2014	Critical	August	--	345.2	324.9	20.4	5.9%	322.0	23.3	6.7%	316.2	29.1	8.4%	310.4	34.8	10.1%	304.6	40.6	11.8%	298.8	46.4	13.4%
ME 3	38 57 12	2014	Critical	September	Used in Summary Table Analysis	2,565.3	2,545.5	19.8	0.8%	2,542.7	22.6	0.9%	2,537.2	28.1	1.1%	2,531.5	33.8	1.3%	2,525.9	39.4	1.5%	2,520.3	45.0	1.8%
ME 3	38 57 12	2015	Dry	October	Used in Summary Table Analysis	11,331.1	11,316.0	15.2	0.1%	11,313.8	17.4	0.2%	11,309.6	21.5	0.2%	11,305.3	25.8	0.2%	11,301.2	30.0	0.3%	11,296.6	34.5	0.3%
ME 3	38 57 12	2015	Dry	November	Used in Summary Table Analysis	9,007.5	8,996.3	11.2	0.1%	8,994.7	12.8	0.1%	8,991.4	16.1	0.2%	8,988.3	19.2	0.2%	8,985.1	22.5	0.2%	8,981.8	25.7	0.3%
ME 3	38 57 12	2015	Dry	December	--	32,498.8	32,489.6	9.3	0.0%	32,488.4	10.4	0.0%	32,486.1	12.7	0.0%	32,482.6	16.2	0.0%	32,480.3	18.5	0.1%	32,476.9	22.0	0.1%
ME 3	38 57 12	2015	Dry	January	--	14,560.2	14,550.9	9.3	0.1%	14,549.8	10.4	0.1%	14,547.5	12.7	0.1%	14,545.1	15.0	0.1%	14,542.8	17.4	0.1%	14,540.5	19.7	0.1%
ME 3	38 57 12	2015	Dry	February	--	27,187.5	27,180.6	6.9	0.0%	27,179.4	8.1	0.0%	27,177.1	10.4	0.0%	27,174.8	12.7	0.0%	27,172.5	15.0	0.1%	27,170.1	17.4	0.1%
ME 3	38 57 12	2015	Dry	March	--	11,560.1	11,553.1	6.9	0.1%	11,552.1	8.0	0.1%	11,550.1	10.0	0.1%	11,548.0	12.0	0.1%	11,546.1	14.0	0.1%	11,544.1	16.0	0.1%
ME 3	38 57 12	2015	Dry	April	--	8,356.1	8,341.6	14.6	0.2%	8,339.4	16.8	0.2%	8,335.2	20.9	0.3%	8,330.9	25.2	0.3%	8,326.7	29.4	0.4%	8,322.6	33.6	0.4%
ME 3	38 57 12	2015	Dry	May	--	1,508.4	1,491.1	17.4	1.2%	1,488.5	19.9	1.3%	1,483.7	24.8	1.6%	1,478.7	29.7	2.0%	1,473.7	34.7	2.3%	1,468.8	39.7	2.6%
ME 3	38 57 12	2015	Dry	June	--	651.0	628.7	22.3	3.4%	625.6	25.4	3.9%	619.3	31.7	4.9%	613.1	37.9	5.8%	606.9	44.1	6.8%	600.7	50.3	7.7%
ME 3	38 57 12	2015	Dry	July	--	266.9	245.7	21.2	7.9%	242.7	24.2	9.1%	236.6	30.2	11.3%	230.6	36.3	13.6%	224.6	42.3	15.8%	218.6	48.3	18.1%
ME 3	38 57 12	2015	Dry	August	--	163.9	143.7	20.2	12.3%	140.8	23.1	14.1%	135.0	28.9	17.6%	129.3	34.6	21.1%	123.5	40.4	24.7%	117.8	46.2	28.2%
ME 3	38 57 12	2015	Dry	September	Used in Summary Table Analysis	118.6	100.8	17.8	15.0%	98.3	20.4	17.2%	92.7	26.0	21.9%	87.3	31.4	26.4%	81.7	36.9	31.1%	76.2	42.4	35.7%
ME 3	38 57 12	2016	Above Normal	October	Used in Summary Table Analysis	84.2	68.4	15.8	18.7%	66.1	18.1	21.5%	61.7	22.5	26.7%	57.2	27.0	32.0%	52.9	31.3	37.2%	48.7	35.4	42.1%
ME 3	38 57 12	2016	Above Normal	November	Used in Summary Table Analysis	3,838.2	3,826.9	11.3	0.3%	3,825.2	13.0	0.3%	3,821.9	16.3	0.4%	3,818.5	19.7	0.5%	3,815.2	23.0	0.6%	3,811.8	26.4	0.7%
ME 3	38 57 12	2016	Above Normal	December	--	36,480.3	36,471.1	9.3	0.0%	36,468.8	11.6	0.0%	36,466.4	13.9	0.0%	36,463.0	17.4	0.0%	36,460.6	19.7	0.1%	36,457.2	23.1	0.1%
ME 3	38 57 12	2016	Above Normal	January	--	57,172.5	57,163.2	9.3	0.0%	57,162.0	10.4	0.0%	57,158.6	13.9	0.0%	57,156.3	16.2	0.0%	57,153.9	18.5	0.0%	57,150.5	22.0	0.0%
ME 3	38 57 12	2016	Above Normal	February	--	24,245.4	24,237.3	8.1	0.0%	24,236.1	9.3	0.0%	24,233.8	11.6	0.0%	24,232.6	12.7	0.1%	24,230.3	15.0	0.1%	24,228.0	17.4	0.1%
ME 3	38 57 12	2016	Above Normal	March	--	41,710.6	41,703.7	6.9	0.0%	41,702.5	8.1	0.0%	41,700.2	10.4	0.0%	41,697.9	12.7	0.0%	41,695.6	15.0	0.0%	41,693.3	17.4	0.0%
ME 3	38 57 12	2016	Above Normal	April	--	18,518.5	18,512.7	5.8	0.0%	18,511.6	6.9	0.0%	18,509.3	9.3	0.0%	18,506.9	11.6	0.1%	18,505.8	12.7	0.1%	18,503.5	15.0	0.1%
ME 3	38 57 12	2016	Above Normal	May	--	5,208.8	5,200.1	8.7	0.2%	5,198.8	10.0	0.2%	5,196.3	12.5	0.2%	5,193.9	14.9	0.3%	5,191.2	17.6	0.3%	5,188.7	20.1	0.4%
ME 3	38 57 12	2016	Above Normal	June	--	1,506.5	1,489.1	17.4	1.2%	1,486.6	19.9	1.3%	1,481.7	24.8	1.6%	1,476.9	29.6	2.0%	1,471.9	34.6	2.3%	1,467.0	39.5	2.6%
ME 3	38 57 12	2016	Above Normal	July	--	819.6	800.9	18.7	2.3%	798.2	21.4	2.6%	792.9	26.8	3.3%	787.5	32.1	3.9%	782.2	37.4	4.6%	776.9	42.7	5.2%
ME 3	38 57 12	2016	Above Normal	August	--	488.0	470.1	18.0	3.7%	467.5	20.6	4.2%	462.4	25.7	5.3%	457.2	30.8	6.3%	452.1	35.9	7.4%	447.0	41.0	8.4%
ME 3	38 57 12	2016	Above Normal	September	Used in Summary Table Analysis	324.6	308.9	15.7	4.8%	306.1	18.6	5.7%	301.4	23.3	7.2%	296.5	28.1	8.7%	291.7	32.9	10.1%	286.9	37.7	11.6%
ME 3	38 57 12	2017	Wet	October	Used in Summary Table Analysis	18,229.2	18,216.4	12.7	0.1%	18,214.1	15.0	0.1%	18,210.6	18.5	0.1%	18,207.2	22.0	0.1%	18,202.5	26.6	0.1%	18,199.1	30.1	0.2%
ME 3	38 57 12	2017	Wet	November	Used in Summary Table Analysis	18,762.7	18,753.5	9.3	0.0%	18,752.3	10.4	0.1%	18,748.8	13.9	0.1%	18,746.5	16.2	0.1%	18,743.1	19.7	0.1%	18,740.7	22.0	0.1%
ME 3	38 57 12	2017	Wet	December	--	24,016.2	24,008.1	8.1	0.0%	24,006.9	9.3	0.0%	24,004.6	11.6	0.0%	24,002.3	13.9	0.1%	24,000.0	16.2	0.1%	23,996.5	19.7	0.1%
ME 3	38 57 12	2017	Wet	January	--	106,619.2	106,611.1	8.1	0.0%	106,610.0	9.3	0.0%	106,608.8	10.4	0.0%	106,605.3	13.9	0.0%	106,603.0	16.2	0.0%	106,600.7	18.5	0.0%
ME 3	38 57 12	2017	Wet	February	--	81,673.6	81,665.5	8.1	0.0%	81,664.4	9.3	0.0%	81,662.0	11.6	0.0%	81,659.7	13.9	0.0%	81,658.6	15.0	0.0%	81,656.3	17.4	0.0%
ME 3	38 57 12	2017	Wet	March	--	27,223.4	27,216.4	6.9	0.0%	27,215.3	8.1	0.0%	27,213.0	10.4	0.0%	27,210.6	12.7	0.0%	27,208.3	15.0	0.1%	27,207.2	16.2	0.1%
ME 3	38 57 12	2017	Wet	April	--	22,880.8	22,875.0	5.8	0.0%	22,873.8	6.9	0.0%	22,872.7	8.1	0.0%	22,870.4	10.4	0.0%	22,868.1	12.7	0.1%	22,866.9	13.9	0.1%
ME 3	38 57 12	2017	Wet	May	--	6,271.3	6,262.4	8.9	0.1%	6,261.1	10.2	0.2%	6,258.6	12.7	0.2%	6,256.0	15.3	0.2%	6,253.4	17.9	0.3%	6,250.8	20.5	0.3%
ME 3	38 57 12	2017	Wet	June	--	2,109.0	2,091.2	17.8	0.8%	2,088.7	20.4	1.0%	2,083.6	25.5	1.2%	2,078.5	30.6	1.4%	2,073.5	35.5	1.7%	2,068.4	40.6	1.9%
ME 3	38 57 12	2017	Wet	July	--	929.5	910.5	19.0	2.0%	907.9	21.7	2.3%	902.5	27.0	2.9%	897.1	32.4	3.5%	891.8	37.7	4.1%	886.4	43.1	4.6%
ME 3	38 57 12	2017	Wet	August	--	501.7	483.7	18.0	3.6%	481.1	20.6	4.1%	476.0	25.7	5.1%	470.9	30.8	6.1%	465.8	35.9	7.2%	460.7	41.1	8.2%
ME 3	38 57 12	2017	Wet	September	Used in Summary Table Analysis	318.7	302.2	16.4	5.2%	299.9	18.8	5.9%	295.2	23.5	7.4%	290.5	28.2	8.8%	285.8	32.8	10.3%	281.1	37.5	11.8%
ME 3	38 57 12	2018	Above Normal	October	Used in Summary Table Analysis	271.5	258.7	12.7	4.7%	256.9	14.6	5.4%	253.3	18.2	6.7%	249.6	21.9	8.1%	245.9	25.5	9.4%	242.3	29.1	10.7%
ME 3	38 57 12	2018	Above Normal	November	Used in Summary Table Analysis	10,724.2	10,714.5	9.7	0.1%	10,713.0	11.2	0.1%	10,710.2	14.0	0.1%	10,707.4	16.8	0.2%	10,704.5	19.7	0.2%	10,701.7	22.5	0.2%
ME 3	38 57 12	2018	Above Normal	December	--	5,440.0	5,431.8	8.2	0.2%	5,430.7	9.4	0.2%	5,428.2	11.8	0.2%	5,425.8	14.2	0.3%	5,423.4	16.7	0.3%	5,420.9	19.1	0.4%
ME 3	38 57 12	2018	Above Normal	January	--	17,664.4	17,657.4	6.9	0.0%	17,656.3	8.1	0.0%	17,653.9	10.4	0.1%	17,651.6	12.7	0.1%	17,649.3	15.0	0.1%	17,647.0	17.4	0.1%
ME 3	38 57 12	2018	Above Normal	February	--	7,592.4	7,585.6	6.7	0.1%	7,584.6	7.8	0.1%	7,582.6	9.7	0.1%	7,580.7	11.7	0.2%	7,578.7	13.7	0.2%	7,576.7	15.6	0.2%
ME 3	38 57 12	2018	Above Normal	March	--	20,626.2	20,619.2	6.9	0.0%	20,618.1	8.1	0.0%	20,616.9	9.3	0.0%	20,614.6	11.6	0.1%	20,612.3	13.9	0.1%	20,611.1	15.0	0.1%
ME 3	38 57 12	2018	Above Normal	April	--	32,114.6	32,107.6	6.9	0.0%	32,107.6	6.9	0.0%	32,105.3	9.3	0.0%	32,104.2	10.4	0.0%	32,101.9	12.7	0.0%	32,100.7	13.9	0.0%
ME 3	38 57 12	2018	Above Normal	May	--	6,985.9	6,972.0	13.9	0.2%	6,969.9	16.0	0.2%	6,966.0	19.9	0.3%	6,962.0	23.8	0.3%	6,958.1	27.8	0.4%	6,954.4	31.5	0.5%
ME 3	38 57 12	2018	Above Normal	June	--	1,910.6	1,892.7	17.9	0.9%	1,890.2	20.5	1.1%	1,885.1	25.6	1.3%	1,880.1	30.6	1.6%	1,875.0	35.6	1.9%	1,869.9	40.7	2.1%
ME 3	38 57 12	2018	Above Normal	July	--	777.4	758.5	18.9	2.4%	755.9	21.6	2.8%	750.5	27.0	3.5%	745.1	32.3	4.2%	739.7	37.7	4.9%	734.4	43.0	5.5%
ME 3	38 57 12	2018	Above Normal	August	--	438.7	421.4	17.3	3.9%	418.9	19.8	4.5%	414.0	24.7	5.6%	409.1	29.6	6.8%	404.1	34.5	7.9%	399.2	39.5	9.0%
ME 3	38 57 12	2018	Above Normal	September	Used in Summary Table Analysis	296.4	280.0	16.4	5.5%	277.7	18.8	6.3%	273.0	23.5	7.9%	268.3	28.2	9.5%	263.6	32.9	11.1%	258.8	37.6	12.7%
ME 3	38 57 12	2019	Below Normal	October	Used in Summary Table Analysis	205.1	192.6	12.5	6.1%	190.9	14.2	6.9%	187.3	17.8	8.7%	183.6	21.5	10.5%	180.2	25.0	12.2%	176.6	28.6	13.9%
ME 3	38 57 12	2019	Below Normal	November	Used in Summary Table Analysis	6,579.3	6,569.4	9.8	0.1%	6,568.1	11.2	0.2%	6,565.2	14.1	0.2%	6,562.4	16.9	0.3%	6,559.5	19.8	0.3%	6,556.6	22.7	0.3%
ME 3	38 57 12	2019	Below Normal	December	--	14,590.3	14,582.2	8.1	0.1%	14,581.0	9.3	0.1%	14,578.7	11.6	0.1%	14,576.4	13.9	0.1%	14,574.1	16.2	0.1%	14,571.8	18.5	0.1%
ME 3	38 57 12	2019	Below Normal	January	--	35,068.3	35,061.3	6.9	0.0%	35,060.2	8.1	0.0%	35,057.9	10.4	0.0%	35,055.6	12.7	0.0%	35,053.2	15.0	0.0%	35,050.9	17.4	0.0%
ME 3	38 57 12	2019	Below Normal	February	--	141,759.3	141,759.3	0.0	0.0%	141,747.7	11.6	0.0%	141,747.7	11.6	0.0%	141,747.7	11.6	0.0%	141,747.7	11.6	0.0%	141,747.7	11.6	0.0%
ME 3	38 57 12	2019	Below Normal	March	--	42,237.3	42,231.5	5.8	0.0%	42,230.3	6.9	0.0%	42,228.0	9.3	0.0%	42,226.9	10.4	0.0%	42,224.5	12.7	0.0%	42,222.2	15.0	0.0%
ME 3	38 57 12	2019	Below Normal	April	--	15,250.0	15,244.2	5.8	0.0%	15,243.1	6.9	0.0%	15,240.7	9.3	0.1%	15,239.6	10.4	0.1%	15,237.3	12.7	0.1%	15,236.1	13.9	0.1%
ME 3	38 57 12	2019	Below Normal	May	--	16,825.2	16,810.2	15.0	0.1%	16,807.9	17.4	0.1%	16,803.2	22.0	0.1%	16,799.8	25.5	0.2%	16,795.1	30.1	0.2%	16,790.5	34.7	0.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 57 12	2019	Below Normal	June	--	4,243.2	4,223.8	19.3	0.5%	4,221.1	22.1	0.5%	4,215.6	27.5	0.6%	4,210.4	32.8	0.8%	4,205.3	37.8	0.9%	4,200.1	43.1	1.0%
ME 3	38 57 12	2019	Below Normal	July	--	1,356.3	1,337.3	19.0	1.4%	1,334.5	21.8	1.6%	1,329.2	27.1	2.0%	1,323.7	32.5	2.4%	1,318.4	37.8	2.8%	1,313.0	43.3	3.2%
ME 3	38 57 12	2019	Below Normal	August	--	591.8	574.0	17.8	3.0%	571.4	20.4	3.4%	566.4	25.4	4.3%	561.3	30.5	5.1%	556.3	35.5	6.0%	551.2	40.6	6.9%
ME 3	38 57 12	2019	Below Normal	September	Used in Summary Table Analysis	458.8	442.4	16.4	3.6%	440.1	18.7	4.1%	435.4	23.4	5.1%	430.7	28.1	6.1%	426.1	32.7	7.1%	421.4	37.4	8.2%
ME 3	38 57 12	2020	Dry	October	Used in Summary Table Analysis	353.0	341.1	12.0	3.4%	339.3	13.7	3.9%	335.9	17.1	4.9%	332.4	20.6	5.8%	329.0	24.0	6.8%	325.5	27.5	7.8%
ME 3	38 57 12	2020	Dry	November	Used in Summary Table Analysis	313.5	304.3	9.2	2.9%	303.0	10.5	3.4%	300.3	13.2	4.2%	297.6	15.9	5.1%	295.0	18.5	5.9%	292.3	21.2	6.8%
ME 3	38 57 12	2020	Dry	December	--	13,174.8	13,166.7	8.1	0.1%	13,165.5	9.3	0.1%	13,163.2	11.6	0.1%	13,159.7	15.0	0.1%	13,157.4	17.4	0.1%	13,155.1	19.7	0.1%
ME 3	38 57 12	2020	Dry	January	--	22,244.2	22,236.1	8.1	0.0%	22,235.0	9.3	0.0%	22,232.6	11.6	0.1%	22,230.3	13.9	0.1%	22,228.0	16.2	0.1%	22,225.7	18.5	0.1%
ME 3	38 57 12	2020	Dry	February	--	7,411.2	7,404.4	6.8	0.1%	7,403.4	7.9	0.1%	7,401.4	9.8	0.1%	7,399.3	11.9	0.2%	7,397.2	14.0	0.2%	7,395.3	16.0	0.2%
ME 3	38 57 12	2020	Dry	March	--	7,228.5	7,221.9	6.6	0.1%	7,220.9	7.5	0.1%	7,219.0	9.5	0.1%	7,217.1	11.3	0.2%	7,215.2	13.3	0.2%	7,213.2	15.3	0.2%
ME 3	38 57 12	2020	Dry	April	--	5,465.5	5,450.9	14.6	0.3%	5,448.8	16.7	0.3%	5,444.6	20.9	0.4%	5,440.4	25.1	0.5%	5,436.2	29.3	0.5%	5,431.9	33.6	0.6%
ME 3	38 57 12	2020	Dry	May	--	7,354.4	7,336.9	17.5	0.2%	7,334.5	19.9	0.3%	7,329.5	24.9	0.3%	7,324.4	30.0	0.4%	7,319.3	35.1	0.5%	7,314.4	40.0	0.5%
ME 3	38 57 12	2020	Dry	June	--	2,104.1	2,081.1	22.9	1.1%	2,077.9	26.2	1.2%	2,071.8	32.3	1.5%	2,065.5	38.5	1.8%	2,059.4	44.7	2.1%	2,053.1	50.9	2.4%
ME 3	38 57 12	2020	Dry	July	--	793.6	771.6	22.0	2.8%	768.5	25.1	3.2%	762.2	31.4	4.0%	756.0	37.6	4.7%	749.7	43.9	5.5%	743.4	50.1	6.3%
ME 3	38 57 12	2020	Dry	August	--	396.1	374.7	21.4	5.4%	371.6	24.4	6.2%	365.5	30.5	7.7%	359.5	36.6	9.2%	353.4	42.7	10.8%	347.3	48.8	12.3%
ME 3	38 57 12	2020	Dry	September	Used in Summary Table Analysis	245.6	226.8	18.8	7.6%	224.1	21.5	8.7%	217.9	27.7	11.3%	212.3	33.3	13.6%	206.4	39.2	16.0%	200.6	45.0	18.3%
ME 3	38 56 13	2000	Above Normal	October	Used in Summary Table Analysis	811.9	799.2	12.7	1.6%	797.4	14.5	1.8%	793.8	18.1	2.2%	790.1	21.7	2.7%	786.5	25.4	3.1%	782.8	29.0	3.6%
ME 3	38 56 13	2000	Above Normal	November	Used in Summary Table Analysis	12,046.3	12,035.9	10.4	0.1%	12,034.7	11.6	0.1%	12,031.3	15.0	0.1%	12,028.9	17.4	0.1%	12,025.5	20.8	0.2%	12,023.1	23.1	0.2%
ME 3	38 56 13	2000	Above Normal	December	--	10,771.9	10,763.3	8.6	0.1%	10,762.2	9.7	0.1%	10,759.6	12.3	0.1%	10,757.1	14.8	0.1%	10,754.6	17.2	0.2%	10,752.1	19.8	0.2%
ME 3	38 56 13	2000	Above Normal	January	--	28,453.7	28,445.6	8.1	0.0%	28,444.4	9.3	0.0%	28,442.1	11.6	0.0%	28,439.8	13.9	0.0%	28,437.5	16.2	0.1%	28,435.2	18.5	0.1%
ME 3	38 56 13	2000	Above Normal	February	--	36,961.8	36,953.7	8.1	0.0%	36,953.7	8.1	0.0%	36,951.4	10.4	0.0%	36,949.1	12.7	0.0%	36,946.8	15.0	0.0%	36,944.4	17.4	0.0%
ME 3	38 56 13	2000	Above Normal	March	--	18,290.5	18,284.7	5.8	0.0%	18,283.6	6.9	0.0%	18,281.3	9.3	0.1%	18,278.9	11.6	0.1%	18,277.8	12.7	0.1%	18,275.5	15.0	0.1%
ME 3	38 56 13	2000	Above Normal	April	--	12,295.1	12,288.2	6.9	0.1%	12,288.2	6.9	0.1%	12,285.9	9.3	0.1%	12,283.6	11.6	0.1%	12,282.4	12.7	0.1%	12,280.1	15.0	0.1%
ME 3	38 56 13	2000	Above Normal	May	--	7,078.7	7,064.1	14.6	0.2%	7,062.0	16.7	0.2%	7,057.9	20.8	0.3%	7,053.6	25.1	0.4%	7,049.4	29.3	0.4%	7,045.3	33.4	0.5%
ME 3	38 56 13	2000	Above Normal	June	--	2,604.9	2,583.2	21.6	0.8%	2,580.2	24.7	0.9%	2,574.0	30.9	1.2%	2,567.8	37.0	1.4%	2,561.7	43.2	1.7%	2,555.6	49.3	1.9%
ME 3	38 56 13	2000	Above Normal	July	--	988.6	969.4	19.1	1.9%	966.7	21.9	2.2%	961.3	27.3	2.8%	955.9	32.7	3.3%	950.5	38.1	3.9%	945.1	43.5	4.4%
ME 3	38 56 13	2000	Above Normal	August	--	518.5	500.8	17.7	3.4%	498.3	20.3	3.9%	493.2	25.3	4.9%	488.2	30.3	5.8%	483.2	35.4	6.8%	478.1	40.4	7.8%
ME 3	38 56 13	2000	Above Normal	September	Used in Summary Table Analysis	292.4	276.9	15.5	5.3%	274.7	17.7	6.0%	270.3	22.1	7.6%	265.9	26.5	9.1%	261.5	30.9	10.6%	257.1	35.3	12.1%
ME 3	38 56 13	2001	Dry	October	Used in Summary Table Analysis	3,798.5	3,785.9	12.6	0.3%	3,784.1	14.4	0.4%	3,780.6	17.9	0.5%	3,777.0	21.5	0.6%	3,773.4	25.1	0.7%	3,769.7	28.8	0.8%
ME 3	38 56 13	2001	Dry	November	Used in Summary Table Analysis	6,097.1	6,087.0	10.1	0.2%	6,085.6	11.5	0.2%	6,082.8	14.4	0.2%	6,079.9	17.2	0.3%	6,077.0	20.1	0.3%	6,074.1	23.0	0.4%
ME 3	38 56 13	2001	Dry	December	--	8,811.3	8,802.7	8.7	0.1%	8,801.4	10.0	0.1%	8,798.8	12.5	0.1%	8,796.3	15.0	0.2%	8,793.8	17.6	0.2%	8,791.2	20.1	0.2%
ME 3	38 56 13	2001	Dry	January	--	12,738.4	12,731.5	6.9	0.1%	12,730.3	8.1	0.1%	12,728.0	10.4	0.1%	12,725.7	12.7	0.1%	12,723.4	15.0	0.1%	12,721.1	17.4	0.1%
ME 3	38 56 13	2001	Dry	February	--	17,438.7	17,431.7	6.9	0.0%	17,430.6	8.1	0.0%	17,428.2	10.4	0.1%	17,425.9	12.7	0.1%	17,424.8	13.9	0.1%	17,422.5	16.2	0.1%
ME 3	38 56 13	2001	Dry	March	--	12,280.1	12,273.1	6.9	0.1%	12,272.0	8.1	0.1%	12,269.7	10.4	0.1%	12,268.5	11.6	0.1%	12,266.2	13.9	0.1%	12,263.9	16.2	0.1%
ME 3	38 56 13	2001	Dry	April	--	10,954.1	10,939.0	15.0	0.1%	10,936.9	17.1	0.2%	10,932.6	21.4	0.2%	10,928.2	25.8	0.2%	10,924.0	30.1	0.3%	10,919.7	34.4	0.3%
ME 3	38 56 13	2001	Dry	May	--	2,636.3	2,618.8	17.6	0.7%	2,616.2	20.1	0.8%	2,611.1	25.2	1.0%	2,606.1	30.2	1.1%	2,601.0	35.3	1.3%	2,596.1	40.3	1.5%
ME 3	38 56 13	2001	Dry	June	--	2,636.7	2,612.7	24.0	0.9%	2,609.4	27.3	1.0%	2,602.5	34.1	1.3%	2,595.8	40.9	1.5%	2,589.1	47.6	1.8%	2,582.4	54.3	2.1%
ME 3	38 56 13	2001	Dry	July	--	717.3	695.4	21.9	3.1%	692.3	25.0	3.5%	686.1	31.2	4.3%	679.9	37.4	5.2%	673.7	43.6	6.1%	667.5	49.8	6.9%
ME 3	38 56 13	2001	Dry	August	--	170.3	149.2	21.1	12.4%	146.2	24.1	14.1%	140.2	30.1	17.7%	134.2	36.1	21.2%	128.2	42.1	24.7%	122.2	48.1	28.2%
ME 3	38 56 13	2001	Dry	September	Used in Summary Table Analysis	93.1	74.6	18.5	19.9%	71.9	21.1	22.7%	66.7	26.4	28.4%	61.4	31.7	34.0%	56.1	36.9	39.7%	50.9	42.2	45.4%
ME 3	38 56 13	2002	Below Normal	October	Used in Summary Table Analysis	262.5	247.3	15.2	5.8%	245.2	17.3	6.6%	240.8	21.7	8.3%	236.4	26.1	9.9%	232.1	30.4	11.6%	227.7	34.8	13.2%
ME 3	38 56 13	2002	Below Normal	November	Used in Summary Table Analysis	11,989.6	11,978.0	11.6	0.1%	11,976.9	12.7	0.1%	11,973.4	16.2	0.1%	11,969.9	19.7	0.2%	11,966.4	23.1	0.2%	11,963.0	26.6	0.2%
ME 3	38 56 13	2002	Below Normal	December	--	35,572.9	35,562.5	10.4	0.0%	35,561.3	11.6	0.0%	35,557.9	15.0	0.0%	35,554.4	18.5	0.1%	35,552.1	20.8	0.1%	35,548.6	24.3	0.1%
ME 3	38 56 13	2002	Below Normal	January	--	30,806.7	30,797.5	9.3	0.0%	30,796.3	10.4	0.0%	30,794.0	12.7	0.0%	30,791.7	15.0	0.0%	30,788.2	18.5	0.1%	30,785.9	20.8	0.1%
ME 3	38 56 13	2002	Below Normal	February	--	24,635.4	24,626.2	9.3	0.0%	24,625.0	10.4	0.0%	24,622.7	12.7	0.1%	24,620.4	15.0	0.1%	24,618.1	17.4	0.1%	24,615.7	19.7	0.1%
ME 3	38 56 13	2002	Below Normal	March	--	17,746.5	17,738.4	8.1	0.0%	17,737.3	9.3	0.1%	17,735.0	11.6	0.1%	17,732.6	13.9	0.1%	17,729.2	17.4	0.1%	17,726.9	19.7	0.1%
ME 3	38 56 13	2002	Below Normal	April	--	9,911.9	9,897.1	14.8	0.1%	9,894.9	17.0	0.2%	9,890.6	21.3	0.2%	9,886.5	25.5	0.3%	9,882.2	29.7	0.3%	9,877.9	34.0	0.3%
ME 3	38 56 13	2002	Below Normal	May	--	3,314.5	3,296.9	17.6	0.5%	3,294.4	20.0	0.6%	3,289.4	25.1	0.8%	3,284.4	30.1	0.9%	3,279.3	35.2	1.1%	3,274.3	40.2	1.2%
ME 3	38 56 13	2002	Below Normal	June	--	851.6	831.8	19.7	2.3%	829.0	22.5	2.6%	823.4	28.1	3.3%	817.8	33.7	4.0%	812.2	39.3	4.6%	806.7	44.9	5.3%
ME 3	38 56 13	2002	Below Normal	July	--	360.1	340.5	19.6	5.5%	337.6	22.4	6.2%	332.0	28.0	7.8%	326.5	33.6	9.3%	320.9	39.2	10.9%	315.3	44.8	12.4%
ME 3	38 56 13	2002	Below Normal	August	--	224.4	206.2	18.2	8.1%	203.6	20.8	9.3%	198.4	26.0	11.6%	193.2	31.2	13.9%	188.0	36.4	16.2%	182.8	41.5	18.5%
ME 3	38 56 13	2002	Below Normal	September	Used in Summary Table Analysis	161.4	144.4	17.0	10.5%	142.0	19.4	12.0%	137.1	24.3	15.0%	132.3	29.1	18.0%	127.4	34.0	21.0%	122.6	38.8	24.1%
ME 3	38 56 13	2003	Wet	October	Used in Summary Table Analysis	126.5	112.9	13.6	10.8%	110.9	15.6	12.3%	107.0	19.5	15.4%	103.1	23.4	18.5%	99.2	27.3	21.6%	95.3	31.3	24.7%
ME 3	38 56 13	2003	Wet	November	Used in Summary Table Analysis	893.0	882.3	10.7	1.2%	880.8	12.3	1.4%	877.6	15.4	1.7%	874.5	18.5	2.1%	871.5	21.6	2.4%	868.4	24.6	2.8%
ME 3	38 56 13	2003	Wet	December	--	56,559.0	56,549.8	9.3	0.0%	56,548.6	10.4	0.0%	56,545.1	13.9	0.0%	56,542.8	16.2	0.0%	56,540.5	18.5	0.0%	56,537.0	22.0	0.0%
ME 3	38 56 13	2003	Wet	January	--	31,476.9	31,467.6	9.3	0.0%	31,466.4	10.4	0.0%	31,464.1	12.7	0.0%	31,461.8	15.0	0.0%	31,459.5	17.4	0.1%	31,457.2	19.7	0.1%
ME 3	38 56 13	2003	Wet	February	--	20,325.2	20,317.1	8.1	0.0%	20,316.0	9.3	0.0%	20,313.7	11.6	0.1%	20,311.3	13.9	0.1%	20,309.0	16.2	0.1%	20,306.7	18.5	0.1%
ME 3	38 56 13	2003	Wet	March	--	23,989.6	23,982.6	6.9	0.0%	23,981.5	8.1	0.0%	23,979.2	10.4	0.0%	23,976.9	12.7	0.1%	23,974.5	15.0	0.1%	23,973.4	16.2	0.1%
ME 3	38 56 13	2003	Wet	April	--	42,805.6	42,797.5	8.1	0.0%	42,796.3	9.3	0.0%	42,795.1	10.4	0.0%	42,792.8	12.7	0.0%	42,790.5	15.0	0.0%	42,788.2	17.4	0.0%
ME 3	38 56 13	2003	Wet	May	--	12,208.3	12,193.3	15.0	0.1%	12,191.0	17.4	0.1%	12,187.5	20.8	0.2%	12,182.9	25.5	0.2%	12,178.2	30.1	0.2%	12,174.8	33.6	0.3%
ME 3	38 56 13	2003	Wet	June	--	3,162.5	3,143.4	19.1	0.6%	3,140.6	21.9	0.7%	3,135.3	27.2	0.9%	3,130.0	32.5	1.0%	3,124.7	37.8	1.2%	3,119.4	43.1	1.4%
ME 3	38 56 13	2003	Wet	July	--	1,470.0	1,450.5	19.6	1.3%	1,447.7	22.3	1.5%	1,442.2	27.8	1.9%	1,436.7	33.3	2.3%	1,431.1	38.9	2.6%	1,425.6	44.4	3.0%
ME 3	38 56 13	2003	Wet	August	--	756.5	737.8	18.7	2.5%	735.1	21.4	2.8%	729.8	26.7	3.5%	724.4	32.1	4.2%	719.1	37.4	4.9%	713.6	42.9	5.7%
ME 3	38 56 13	2003	Wet	September	Used in Summary Table Analysis	454.8	439.1	15.7	3.4%	436.8	17.9	3.9%	432.4	22.4	4.9%	427.9	26.9	5.9%	423.4	31.3	6.9%	419.0	35.8	7.9%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 56 13	2004	Wet	October	Used in Summary Table Analysis	321.9	309.2	12.7	4.0%	307.3	14.5	4.5%	303.7	18.2	5.6%	300.0	21.8	6.8%	296.4	25.5	7.9%	292.7	29.2	9.1%
ME 3	38 56 13	2004	Wet	November	Used in Summary Table Analysis	5,775.0	5,764.8	10.2	0.2%	5,763.3	11.7	0.2%	5,760.4	14.6	0.3%	5,757.4	17.6	0.3%	5,754.5	20.5	0.4%	5,751.5	23.5	0.4%
ME 3	38 56 13	2004	Wet	December	--	36,186.3	36,177.1	9.3	0.0%	36,175.9	10.4	0.0%	36,173.6	12.7	0.0%	36,171.3	15.0	0.0%	36,167.8	18.5	0.1%	36,165.5	20.8	0.1%
ME 3	38 56 13	2004	Wet	January	--	31,387.7	31,379.6	8.1	0.0%	31,378.5	9.3	0.0%	31,376.2	11.6	0.0%	31,373.8	13.9	0.0%	31,372.7	15.0	0.0%	31,370.4	17.4	0.1%
ME 3	38 56 13	2004	Wet	February	--	38,153.9	38,147.0	6.9	0.0%	38,145.8	8.1	0.0%	38,143.5	10.4	0.0%	38,141.2	12.7	0.0%	38,138.9	15.0	0.0%	38,136.6	17.4	0.0%
ME 3	38 56 13	2004	Wet	March	--	16,508.1	16,501.2	6.9	0.0%	16,501.2	6.9	0.0%	16,498.8	9.3	0.1%	16,496.5	11.6	0.1%	16,494.2	13.9	0.1%	16,493.1	15.0	0.1%
ME 3	38 56 13	2004	Wet	April	--	9,439.0	9,432.4	6.6	0.1%	9,431.5	7.5	0.1%	9,429.5	9.5	0.1%	9,427.7	11.3	0.1%	9,425.6	13.4	0.1%	9,423.7	15.3	0.2%
ME 3	38 56 13	2004	Wet	May	--	3,410.8	3,396.2	14.6	0.4%	3,394.0	16.8	0.5%	3,389.8	20.9	0.6%	3,385.6	25.1	0.7%	3,381.5	29.3	0.9%	3,377.2	33.6	1.0%
ME 3	38 56 13	2004	Wet	June	--	689.7	671.4	18.3	2.6%	668.8	20.8	3.0%	663.6	26.0	3.8%	658.5	31.2	4.5%	653.3	36.4	5.3%	648.1	41.6	6.0%
ME 3	38 56 13	2004	Wet	July	--	353.2	334.1	19.2	5.4%	331.3	21.9	6.2%	325.9	27.4	7.7%	320.4	32.8	9.3%	314.9	38.3	10.8%	309.5	43.7	12.4%
ME 3	38 56 13	2004	Wet	August	--	222.5	204.7	17.8	8.0%	202.2	20.4	9.2%	197.1	25.5	11.4%	192.0	30.5	13.7%	186.9	35.6	16.0%	181.8	40.7	18.3%
ME 3	38 56 13	2004	Wet	September	Used in Summary Table Analysis	159.9	143.1	16.8	10.5%	140.7	19.2	12.0%	135.9	23.9	15.0%	131.2	28.7	18.0%	126.4	33.5	21.0%	121.5	38.4	24.0%
ME 3	38 56 13	2005	Above Normal	October	Used in Summary Table Analysis	7,646.1	7,633.1	13.0	0.2%	7,631.3	14.8	0.2%	7,627.4	18.6	0.2%	7,623.7	22.3	0.3%	7,620.0	26.0	0.3%	7,616.3	29.7	0.4%
ME 3	38 56 13	2005	Above Normal	November	Used in Summary Table Analysis	2,251.7	2,241.7	10.1	0.4%	2,240.3	11.5	0.5%	2,237.3	14.5	0.6%	2,234.4	17.4	0.8%	2,231.5	20.3	0.9%	2,228.6	23.1	1.0%
ME 3	38 56 13	2005	Above Normal	December	--	20,923.6	20,914.4	9.3	0.0%	20,913.2	10.4	0.0%	20,910.9	12.7	0.1%	20,907.4	16.2	0.1%	20,905.1	18.5	0.1%	20,902.8	20.8	0.1%
ME 3	38 56 13	2005	Above Normal	January	--	22,303.2	22,295.1	8.1	0.0%	22,294.0	9.3	0.0%	22,291.7	11.6	0.1%	22,289.4	13.9	0.1%	22,287.0	16.2	0.1%	22,284.7	18.5	0.1%
ME 3	38 56 13	2005	Above Normal	February	--	13,996.5	13,989.6	6.9	0.0%	13,988.4	8.1	0.1%	13,986.1	10.4	0.1%	13,983.8	12.7	0.1%	13,982.6	13.9	0.1%	13,980.3	16.2	0.1%
ME 3	38 56 13	2005	Above Normal	March	--	28,505.8	28,498.8	6.9	0.0%	28,497.7	8.1	0.0%	28,495.4	10.4	0.0%	28,493.1	12.7	0.0%	28,490.7	15.0	0.1%	28,489.6	16.2	0.1%
ME 3	38 56 13	2005	Above Normal	April	--	21,403.9	21,397.0	6.9	0.0%	21,397.0	6.9	0.0%	21,394.7	9.3	0.0%	21,392.4	11.6	0.1%	21,391.2	12.7	0.1%	21,388.9	15.0	0.1%
ME 3	38 56 13	2005	Above Normal	May	--	19,520.8	19,505.8	15.0	0.1%	19,503.5	17.4	0.1%	19,500.0	20.8	0.1%	19,495.4	25.5	0.1%	19,490.7	30.1	0.2%	19,486.1	34.7	0.2%
ME 3	38 56 13	2005	Above Normal	June	--	15,813.7	15,791.7	22.0	0.1%	15,788.2	25.5	0.2%	15,782.4	31.3	0.2%	15,775.5	38.2	0.2%	15,769.7	44.0	0.3%	15,762.7	50.9	0.3%
ME 3	38 56 13	2005	Above Normal	July	--	2,862.7	2,842.7	20.0	0.7%	2,839.9	22.8	0.8%	2,834.3	28.5	1.0%	2,828.6	34.1	1.2%	2,822.9	39.8	1.4%	2,817.2	45.5	1.6%
ME 3	38 56 13	2005	Above Normal	August	--	979.1	961.3	17.8	1.8%	958.8	20.3	2.1%	953.7	25.4	2.6%	948.6	30.5	3.1%	943.6	35.5	3.6%	938.5	40.6	4.1%
ME 3	38 56 13	2005	Above Normal	September	Used in Summary Table Analysis	520.9	505.4	15.5	3.0%	503.2	17.7	3.4%	498.8	22.1	4.3%	494.4	26.6	5.1%	490.0	31.0	5.9%	485.6	35.4	6.8%
ME 3	38 56 13	2006	Wet	October	Used in Summary Table Analysis	630.3	618.0	12.3	2.0%	616.3	14.1	2.2%	612.7	17.6	2.8%	609.2	21.2	3.4%	605.7	24.7	3.9%	602.1	28.2	4.5%
ME 3	38 56 13	2006	Wet	November	Used in Summary Table Analysis	9,258.4	9,248.8	9.6	0.1%	9,247.5	11.0	0.1%	9,244.7	13.8	0.1%	9,241.9	16.6	0.2%	9,239.0	19.4	0.2%	9,236.2	22.2	0.2%
ME 3	38 56 13	2006	Wet	December	--	43,342.6	43,334.5	8.1	0.0%	43,333.3	9.3	0.0%	43,329.9	12.7	0.0%	43,327.5	15.0	0.0%	43,325.2	17.4	0.0%	43,322.9	19.7	0.0%
ME 3	38 56 13	2006	Wet	January	--	46,156.3	46,148.1	8.1	0.0%	46,147.0	9.3	0.0%	46,144.7	11.6	0.0%	46,142.4	13.9	0.0%	46,140.0	16.2	0.0%	46,137.7	18.5	0.0%
ME 3	38 56 13	2006	Wet	February	--	26,557.9	26,550.9	6.9	0.0%	26,549.8	8.1	0.0%	26,547.5	10.4	0.0%	26,545.1	12.7	0.0%	26,542.8	15.0	0.1%	26,541.7	16.2	0.1%
ME 3	38 56 13	2006	Wet	March	--	47,046.3	47,040.5	5.8	0.0%	47,039.4	6.9	0.0%	47,037.0	9.3	0.0%	47,034.7	11.6	0.0%	47,033.6	12.7	0.0%	47,031.3	15.0	0.0%
ME 3	38 56 13	2006	Wet	April	--	30,383.1	30,377.3	5.8	0.0%	30,376.2	6.9	0.0%	30,373.8	9.3	0.0%	30,372.7	10.4	0.0%	30,370.4	12.7	0.0%	30,369.2	13.9	0.0%
ME 3	38 56 13	2006	Wet	May	--	14,180.6	14,172.5	8.1	0.1%	14,171.3	9.3	0.1%	14,167.8	12.7	0.1%	14,165.5	15.0	0.1%	14,163.2	17.4	0.1%	14,160.9	19.7	0.1%
ME 3	38 56 13	2006	Wet	June	--	3,543.9	3,525.6	18.3	0.5%	3,522.9	20.9	0.6%	3,517.7	26.2	0.7%	3,512.5	31.4	0.9%	3,507.4	36.5	1.0%	3,502.2	41.7	1.2%
ME 3	38 56 13	2006	Wet	July	--	1,274.5	1,255.6	19.0	1.5%	1,252.9	21.6	1.7%	1,247.5	27.1	2.1%	1,242.0	32.5	2.6%	1,236.7	37.8	3.0%	1,231.3	43.3	3.4%
ME 3	38 56 13	2006	Wet	August	--	660.9	642.7	18.2	2.8%	640.1	20.8	3.1%	635.0	26.0	3.9%	629.8	31.1	4.7%	624.6	36.3	5.5%	619.5	41.4	6.3%
ME 3	38 56 13	2006	Wet	September	Used in Summary Table Analysis	422.4	406.7	15.7	3.7%	404.5	17.9	4.2%	400.0	22.4	5.3%	395.6	26.8	6.3%	391.1	31.3	7.4%	386.6	35.7	8.5%
ME 3	38 56 13	2007	Above Normal	October	Used in Summary Table Analysis	271.3	258.8	12.5	4.6%	257.0	14.3	5.3%	253.4	17.9	6.6%	249.8	21.5	7.9%	246.3	25.1	9.2%	242.7	28.7	10.6%
ME 3	38 56 13	2007	Above Normal	November	Used in Summary Table Analysis	8,624.8	8,614.8	10.0	0.1%	8,613.3	11.5	0.1%	8,610.5	14.2	0.2%	8,607.6	17.1	0.2%	8,604.6	20.1	0.2%	8,601.7	23.0	0.3%
ME 3	38 56 13	2007	Above Normal	December	--	20,325.2	20,317.1	8.1	0.0%	20,314.8	10.4	0.1%	20,312.5	12.7	0.1%	20,310.2	15.0	0.1%	20,307.9	17.4	0.1%	20,304.4	20.8	0.1%
ME 3	38 56 13	2007	Above Normal	January	--	10,228.6	10,220.7	7.9	0.1%	10,219.6	9.0	0.1%	10,217.4	11.2	0.1%	10,215.0	13.5	0.1%	10,212.7	15.9	0.2%	10,210.4	18.2	0.2%
ME 3	38 56 13	2007	Above Normal	February	--	30,476.9	30,468.8	8.1	0.0%	30,467.6	9.3	0.0%	30,465.3	11.6	0.0%	30,463.0	13.9	0.0%	30,460.6	16.2	0.1%	30,458.3	18.5	0.1%
ME 3	38 56 13	2007	Above Normal	March	--	13,084.5	13,077.5	6.9	0.1%	13,076.4	8.1	0.1%	13,074.1	10.4	0.1%	13,072.9	11.6	0.1%	13,070.6	13.9	0.1%	13,068.3	16.2	0.1%
ME 3	38 56 13	2007	Above Normal	April	--	11,519.0	11,504.6	14.4	0.1%	11,502.5	16.4	0.1%	11,498.4	20.6	0.2%	11,494.3	24.7	0.2%	11,490.2	28.8	0.3%	11,486.1	32.9	0.3%
ME 3	38 56 13	2007	Above Normal	May	--	4,132.4	4,115.4	17.0	0.4%	4,113.1	19.3	0.5%	4,108.1	24.3	0.6%	4,103.2	29.2	0.7%	4,098.4	34.0	0.8%	4,093.4	39.0	0.9%
ME 3	38 56 13	2007	Above Normal	June	--	1,493.4	1,473.0	20.4	1.4%	1,470.1	23.3	1.6%	1,464.4	29.1	1.9%	1,458.7	34.7	2.3%	1,452.9	40.5	2.7%	1,447.1	46.3	3.1%
ME 3	38 56 13	2007	Above Normal	July	--	493.9	473.7	20.2	4.1%	470.9	23.0	4.7%	465.2	28.7	5.8%	459.5	34.4	7.0%	453.8	40.1	8.1%	448.1	45.8	9.3%
ME 3	38 56 13	2007	Above Normal	August	--	220.3	202.4	17.9	8.1%	199.9	20.4	9.3%	194.8	25.5	11.6%	189.7	30.6	13.9%	184.7	35.6	16.2%	179.6	40.7	18.5%
ME 3	38 56 13	2007	Above Normal	September	Used in Summary Table Analysis	148.1	131.3	16.7	11.3%	129.0	19.1	12.9%	124.2	23.9	16.1%	119.5	28.6	19.3%	114.7	33.4	22.5%	109.9	38.1	25.7%
ME 3	38 56 13	2008	Dry	October	Used in Summary Table Analysis	3,418.6	3,405.4	13.2	0.4%	3,403.6	15.0	0.4%	3,399.8	18.9	0.6%	3,395.9	22.7	0.7%	3,392.0	26.6	0.8%	3,388.2	30.4	0.9%
ME 3	38 56 13	2008	Dry	November	Used in Summary Table Analysis	3,260.5	3,250.3	10.2	0.3%	3,249.0	11.6	0.4%	3,245.9	14.6	0.4%	3,243.1	17.5	0.5%	3,240.2	20.4	0.6%	3,237.2	23.4	0.7%
ME 3	38 56 13	2008	Dry	December	--	23,016.2	23,006.9	9.3	0.0%	23,005.8	10.4	0.0%	23,003.5	12.7	0.1%	23,001.2	15.0	0.1%	22,997.7	18.5	0.1%	22,995.4	20.8	0.1%
ME 3	38 56 13	2008	Dry	January	--	37,425.9	37,417.8	8.1	0.0%	37,415.5	10.4	0.0%	37,413.2	12.7	0.0%	37,410.9	15.0	0.0%	37,408.6	17.4	0.0%	37,406.3	19.7	0.1%
ME 3	38 56 13	2008	Dry	February	--	26,245.4	26,237.3	8.1	0.0%	26,236.1	9.3	0.0%	26,235.0	10.4	0.0%	26,232.6	12.7	0.0%	26,230.3	15.0	0.1%	26,228.0	17.4	0.1%
ME 3	38 56 13	2008	Dry	March	--	11,782.4	11,775.5	6.9	0.1%	11,774.3	8.1	0.1%	11,772.0	10.4	0.1%	11,770.8	11.6	0.1%	11,768.5	13.9	0.1%	11,766.2	16.2	0.1%
ME 3	38 56 13	2008	Dry	April	--	9,007.1	8,992.5	14.6	0.2%	8,990.4	16.7	0.2%	8,986.2	20.8	0.2%	8,982.1	25.0	0.3%	8,977.9	29.2	0.3%	8,973.7	33.3	0.4%
ME 3	38 56 13	2008	Dry	May	--	1,360.2	1,344.7	15.5	1.1%	1,342.5	17.7	1.3%	1,338.0	22.2	1.6%	1,333.7	26.5	1.9%	1,329.4	30.8	2.3%	1,325.1	35.1	2.6%
ME 3	38 56 13	2008	Dry	June	--	435.5	413.3	22.2	5.1%	410.2	25.3	5.8%	403.9	31.6	7.2%	397.7	37.8	8.7%	391.4	44.1	10.1%	385.2	50.2	11.5%
ME 3	38 56 13	2008	Dry	July	--	253.9	232.6	21.3	8.4%	229.6	24.4	9.6%	223.5	30.5	12.0%	217.4	36.5	14.4%	211.4	42.6	16.8%	205.3	48.6	19.1%
ME 3	38 56 13	2008	Dry	August	--	177.3	156.8	20.5	11.5%	153.9	23.4	13.2%	148.1	29.2	16.5%	142.3	35.0	19.8%	136.4	40.8	23.0%	130.6	46.6	26.3%
ME 3	38 56 13	2008	Dry	September	Used in Summary Table Analysis	139.0	119.6	19.4	14.0%	116.8	22.2	16.0%	111.3	27.8	20.0%	105.7	33.3	24.0%	100.2	38.9	28.0%	94.6	44.4	31.9%
ME 3	38 56 13	2009	Critical	October	Used in Summary Table Analysis	921.1	906.1	15.0	1.6%	903.9	17.1	1.9%	899.6	21.5	2.3%	895.3	25.8	2.8%	891.2	29.9	3.2%	886.9	34.2	3.7%
ME 3	38 56 13	2009	Critical	November	Used in Summary Table Analysis	5,485.0	5,473.4	11.6	0.2%	5,471.8	13.2	0.2%	5,468.5	16.4	0.3%	5,465.2	19.8	0.4%	5,461.9	23.0	0.4%	5,458.6	26.4	0.5%
ME 3	38 56 13	2009	Critical	December	--	12,110.0	12,099.5	10.4	0.1%	12,098.4	11.6	0.1%	12,094.9	15.0	0.1%	12,092.6	17.4	0.1%	12,089.1	20.8	0.2%	12,086.8	23.1	0.2%
ME 3	38 56 13	2009	Critical	January	--	8,780.6	8,771.4	9.1	0.1%	8,770.0	10.5	0.1%	8,767.4	13.2	0.2%	8,764.8	15.7	0.2%	8,762.2	18.4	0.2%	8,759.5	21.1	0.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 56 13	2009	Critical	February	--	22,568.3	22,560.2	8.1	0.0%	22,559.0	9.3	0.0%	22,556.7	11.6	0.1%	22,554.4	13.9	0.1%	22,552.1	16.2	0.1%	22,549.8	18.5	0.1%
ME 3	38 56 13	2009	Critical	March	--	21,086.8	21,078.7	8.1	0.0%	21,078.7	8.1	0.0%	21,076.4	10.4	0.0%	21,074.1	12.7	0.1%	21,071.8	15.0	0.1%	21,069.4	17.4	0.1%
ME 3	38 56 13	2009	Critical	April	--	10,092.5	10,077.4	15.0	0.1%	10,075.2	17.2	0.2%	10,070.9	21.5	0.2%	10,066.6	25.9	0.3%	10,062.3	30.2	0.3%	10,058.0	34.5	0.3%
ME 3	38 56 13	2009	Critical	May	--	15,566.0	15,547.5	18.5	0.1%	15,545.1	20.8	0.1%	15,539.4	26.6	0.2%	15,534.7	31.3	0.2%	15,528.9	37.0	0.2%	15,524.3	41.7	0.3%
ME 3	38 56 13	2009	Critical	June	--	3,157.2	3,133.7	23.5	0.7%	3,130.3	26.9	0.9%	3,123.5	33.7	1.1%	3,116.8	40.4	1.3%	3,110.1	47.1	1.5%	3,103.5	53.7	1.7%
ME 3	38 56 13	2009	Critical	July	--	1,260.2	1,238.5	21.6	1.7%	1,235.4	24.8	2.0%	1,229.3	30.9	2.5%	1,223.3	36.9	2.9%	1,217.1	43.1	3.4%	1,211.1	49.1	3.9%
ME 3	38 56 13	2009	Critical	August	--	666.1	645.5	20.6	3.1%	642.5	23.5	3.5%	636.7	29.4	4.4%	630.8	35.2	5.3%	625.0	41.1	6.2%	619.1	46.9	7.0%
ME 3	38 56 13	2009	Critical	September	Used in Summary Table Analysis	387.6	369.5	18.1	4.7%	367.0	20.6	5.3%	361.8	25.8	6.7%	356.7	30.9	8.0%	351.5	36.1	9.3%	346.4	41.2	10.6%
ME 3	38 56 13	2010	Below Normal	October	Used in Summary Table Analysis	6,084.7	6,069.7	15.0	0.2%	6,067.5	17.2	0.3%	6,063.1	21.6	0.4%	6,058.8	25.9	0.4%	6,054.6	30.1	0.5%	6,050.2	34.5	0.6%
ME 3	38 56 13	2010	Below Normal	November	Used in Summary Table Analysis	8,272.6	8,260.8	11.8	0.1%	8,259.0	13.5	0.2%	8,255.7	16.9	0.2%	8,252.2	20.4	0.2%	8,248.8	23.7	0.3%	8,245.4	27.2	0.3%
ME 3	38 56 13	2010	Below Normal	December	--	12,319.4	12,310.2	9.3	0.1%	12,307.9	11.6	0.1%	12,305.6	13.9	0.1%	12,302.1	17.4	0.1%	12,299.8	19.7	0.2%	12,296.3	23.1	0.2%
ME 3	38 56 13	2010	Below Normal	January	--	36,118.1	36,108.8	9.3	0.0%	36,107.6	10.4	0.0%	36,104.2	13.9	0.0%	36,101.9	16.2	0.0%	36,099.5	18.5	0.1%	36,096.1	22.0	0.1%
ME 3	38 56 13	2010	Below Normal	February	--	27,211.8	27,203.7	8.1	0.0%	27,202.5	9.3	0.0%	27,200.2	11.6	0.0%	27,197.9	13.9	0.1%	27,195.6	16.2	0.1%	27,193.3	18.5	0.1%
ME 3	38 56 13	2010	Below Normal	March	--	28,809.0	28,800.9	8.1	0.0%	28,799.8	9.3	0.0%	28,797.5	11.6	0.0%	28,795.1	13.9	0.0%	28,792.8	16.2	0.1%	28,790.5	18.5	0.1%
ME 3	38 56 13	2010	Below Normal	April	--	39,961.8	39,954.9	6.9	0.0%	39,953.7	8.1	0.0%	39,951.4	10.4	0.0%	39,949.1	12.7	0.0%	39,946.8	15.0	0.0%	39,944.4	17.4	0.0%
ME 3	38 56 13	2010	Below Normal	May	--	20,228.0	20,213.0	15.0	0.1%	20,210.6	17.4	0.1%	20,206.0	22.0	0.1%	20,201.4	26.6	0.1%	20,196.8	31.3	0.2%	20,192.1	35.9	0.2%
ME 3	38 56 13	2010	Below Normal	June	--	9,318.1	9,295.3	22.8	0.2%	9,292.0	26.0	0.3%	9,285.6	32.4	0.3%	9,279.3	38.8	0.4%	9,272.9	45.1	0.5%	9,266.4	51.6	0.6%
ME 3	38 56 13	2010	Below Normal	July	--	1,451.7	1,431.6	20.1	1.4%	1,428.7	23.0	1.6%	1,422.9	28.8	2.0%	1,417.1	34.6	2.4%	1,411.3	40.4	2.8%	1,405.9	45.8	3.2%
ME 3	38 56 13	2010	Below Normal	August	--	565.2	546.9	18.2	3.2%	544.3	20.8	3.7%	539.1	26.1	4.6%	534.0	31.2	5.5%	528.8	36.4	6.4%	523.6	41.6	7.4%
ME 3	38 56 13	2010	Below Normal	September	Used in Summary Table Analysis	647.3	630.2	17.2	2.7%	627.7	19.7	3.0%	622.7	24.6	3.8%	617.9	29.5	4.6%	613.0	34.4	5.3%	608.0	39.3	6.1%
ME 3	38 56 13	2011	Wet	October	Used in Summary Table Analysis	9,609.8	9,597.1	12.7	0.1%	9,595.3	14.6	0.2%	9,591.7	18.2	0.2%	9,588.0	21.9	0.2%	9,584.3	25.6	0.3%	9,580.7	29.2	0.3%
ME 3	38 56 13	2011	Wet	November	Used in Summary Table Analysis	14,193.3	14,182.9	10.4	0.1%	14,181.7	11.6	0.1%	14,178.2	15.0	0.1%	14,175.9	17.4	0.1%	14,172.5	20.8	0.1%	14,170.1	23.1	0.2%
ME 3	38 56 13	2011	Wet	December	--	33,592.6	33,583.3	9.3	0.0%	33,582.2	10.4	0.0%	33,579.9	12.7	0.0%	33,577.5	15.0	0.0%	33,574.1	18.5	0.1%	33,571.8	20.8	0.1%
ME 3	38 56 13	2011	Wet	January	--	14,135.4	14,127.3	8.1	0.1%	14,126.2	9.3	0.1%	14,123.8	11.6	0.1%	14,121.5	13.9	0.1%	14,119.2	16.2	0.1%	14,116.9	18.5	0.1%
ME 3	38 56 13	2011	Wet	February	--	20,747.7	20,739.6	8.1	0.0%	20,738.4	9.3	0.0%	20,737.3	10.4	0.1%	20,735.0	12.7	0.1%	20,732.6	15.0	0.1%	20,730.3	17.4	0.1%
ME 3	38 56 13	2011	Wet	March	--	51,935.2	51,928.2	6.9	0.0%	51,927.1	8.1	0.0%	51,924.8	10.4	0.0%	51,923.6	11.6	0.0%	51,921.3	13.9	0.0%	51,919.0	16.2	0.0%
ME 3	38 56 13	2011	Wet	April	--	24,774.3	24,767.4	6.9	0.0%	24,767.4	6.9	0.0%	24,765.0	9.3	0.0%	24,762.7	11.6	0.0%	24,760.4	13.9	0.1%	24,759.3	15.0	0.1%
ME 3	38 56 13	2011	Wet	May	--	11,370.5	11,355.7	14.8	0.1%	11,353.5	17.0	0.1%	11,349.2	21.3	0.2%	11,344.9	25.6	0.2%	11,340.6	29.9	0.3%	11,336.3	34.1	0.3%
ME 3	38 56 13	2011	Wet	June	--	7,044.6	7,022.3	22.2	0.3%	7,019.2	25.3	0.4%	7,012.8	31.7	0.5%	7,006.6	38.0	0.5%	7,000.3	44.2	0.6%	6,994.1	50.5	0.7%
ME 3	38 56 13	2011	Wet	July	--	1,827.0	1,805.3	21.6	1.2%	1,802.2	24.8	1.4%	1,796.1	30.9	1.7%	1,789.9	37.0	2.0%	1,783.8	43.2	2.4%	1,777.7	49.3	2.7%
ME 3	38 56 13	2011	Wet	August	--	773.8	755.7	18.1	2.3%	753.1	20.7	2.7%	748.0	25.8	3.3%	742.8	31.0	4.0%	737.7	36.1	4.7%	732.6	41.2	5.3%
ME 3	38 56 13	2011	Wet	September	Used in Summary Table Analysis	430.5	414.3	16.2	3.8%	412.0	18.5	4.3%	407.3	23.2	5.4%	402.8	27.7	6.4%	398.1	32.4	7.5%	393.5	37.0	8.6%
ME 3	38 56 13	2012	Below Normal	October	Used in Summary Table Analysis	4,529.4	4,516.4	13.0	0.3%	4,514.6	14.8	0.3%	4,510.9	18.5	0.4%	4,507.2	22.2	0.5%	4,503.4	26.0	0.6%	4,499.7	29.7	0.7%
ME 3	38 56 13	2012	Below Normal	November	Used in Summary Table Analysis	8,213.5	8,203.2	10.3	0.1%	8,201.7	11.8	0.1%	8,198.7	14.8	0.2%	8,195.8	17.7	0.2%	8,192.8	20.7	0.3%	8,189.8	23.7	0.3%
ME 3	38 56 13	2012	Below Normal	December	--	5,172.5	5,163.5	8.9	0.2%	5,162.3	10.2	0.2%	5,159.7	12.7	0.2%	5,157.2	15.3	0.3%	5,154.6	17.8	0.3%	5,152.0	20.5	0.4%
ME 3	38 56 13	2012	Below Normal	January	--	20,045.1	20,037.0	8.1	0.0%	20,035.9	9.3	0.0%	20,033.6	11.6	0.1%	20,031.3	13.9	0.1%	20,028.9	16.2	0.1%	20,026.6	18.5	0.1%
ME 3	38 56 13	2012	Below Normal	February	--	18,193.3	18,185.2	8.1	0.0%	18,184.0	9.3	0.1%	18,181.7	11.6	0.1%	18,179.4	13.9	0.1%	18,178.2	15.0	0.1%	18,175.9	17.4	0.1%
ME 3	38 56 13	2012	Below Normal	March	--	45,342.6	45,335.6	6.9	0.0%	45,334.5	8.1	0.0%	45,332.2	10.4	0.0%	45,329.9	12.7	0.0%	45,327.5	15.0	0.0%	45,325.2	17.4	0.0%
ME 3	38 56 13	2012	Below Normal	April	--	26,828.7	26,821.8	6.9	0.0%	26,820.6	8.1	0.0%	26,819.4	9.3	0.0%	26,817.1	11.6	0.0%	26,814.8	13.9	0.1%	26,812.5	16.2	0.1%
ME 3	38 56 13	2012	Below Normal	May	--	7,475.0	7,460.2	14.8	0.2%	7,458.1	16.9	0.2%	7,453.7	21.3	0.3%	7,449.5	25.5	0.3%	7,445.3	29.7	0.4%	7,441.0	34.0	0.5%
ME 3	38 56 13	2012	Below Normal	June	--	5,503.9	5,481.3	22.7	0.4%	5,478.0	25.9	0.5%	5,471.6	32.3	0.6%	5,465.3	38.7	0.7%	5,458.8	45.1	0.8%	5,452.4	51.5	0.9%
ME 3	38 56 13	2012	Below Normal	July	--	2,216.4	2,195.6	20.8	0.9%	2,192.6	23.8	1.1%	2,186.6	29.9	1.3%	2,180.7	35.8	1.6%	2,174.8	41.7	1.9%	2,168.8	47.7	2.2%
ME 3	38 56 13	2012	Below Normal	August	--	386.2	369.7	16.5	4.3%	367.4	18.8	4.9%	362.7	23.6	6.1%	358.0	28.2	7.3%	353.3	32.9	8.5%	348.6	37.6	9.7%
ME 3	38 56 13	2012	Below Normal	September	Used in Summary Table Analysis	246.3	231.8	14.5	5.9%	229.7	16.6	6.7%	225.6	20.7	8.4%	221.5	24.8	10.1%	217.4	29.0	11.8%	213.2	33.1	13.4%
ME 3	38 56 13	2013	Below Normal	October	Used in Summary Table Analysis	1,903.9	1,891.4	12.5	0.7%	1,889.6	14.4	0.8%	1,886.0	17.9	0.9%	1,882.5	21.4	1.1%	1,878.9	25.0	1.3%	1,875.3	28.6	1.5%
ME 3	38 56 13	2013	Below Normal	November	Used in Summary Table Analysis	14,641.2	14,630.8	10.4	0.1%	14,629.6	11.6	0.1%	14,626.2	15.0	0.1%	14,623.8	17.4	0.1%	14,620.4	20.8	0.1%	14,618.1	23.1	0.2%
ME 3	38 56 13	2013	Below Normal	December	--	59,892.4	59,883.1	9.3	0.0%	59,881.9	10.4	0.0%	59,878.5	13.9	0.0%	59,876.2	16.2	0.0%	59,873.8	18.5	0.0%	59,870.4	22.0	0.0%
ME 3	38 56 13	2013	Below Normal	January	--	22,171.3	22,163.2	8.1	0.0%	22,162.0	9.3	0.0%	22,159.7	11.6	0.1%	22,157.4	13.9	0.1%	22,155.1	16.2	0.1%	22,152.8	18.5	0.1%
ME 3	38 56 13	2013	Below Normal	February	--	8,831.1	8,823.7	7.4	0.1%	8,822.7	8.4	0.1%	8,820.5	10.6	0.1%	8,818.4	12.7	0.1%	8,816.2	14.9	0.2%	8,814.0	17.1	0.2%
ME 3	38 56 13	2013	Below Normal	March	--	10,308.7	10,301.5	7.2	0.1%	10,300.5	8.2	0.1%	10,298.4	10.3	0.1%	10,296.3	12.4	0.1%	10,294.2	14.5	0.1%	10,292.0	16.7	0.2%
ME 3	38 56 13	2013	Below Normal	April	--	8,284.3	8,270.3	14.0	0.2%	8,268.2	16.1	0.2%	8,264.2	20.0	0.2%	8,260.2	24.1	0.3%	8,256.1	28.1	0.3%	8,252.1	32.2	0.4%
ME 3	38 56 13	2013	Below Normal	May	--	4,422.2	4,405.2	17.0	0.4%	4,402.8	19.4	0.4%	4,397.9	24.3	0.5%	4,393.1	29.2	0.7%	4,388.2	34.0	0.8%	4,383.2	39.0	0.9%
ME 3	38 56 13	2013	Below Normal	June	--	2,107.3	2,087.0	20.3	1.0%	2,084.1	23.1	1.1%	2,078.4	28.9	1.4%	2,072.6	34.7	1.6%	2,066.9	40.4	1.9%	2,061.1	46.2	2.2%
ME 3	38 56 13	2013	Below Normal	July	--	716.7	697.4	19.3	2.7%	694.7	22.0	3.1%	689.2	27.5	3.8%	683.8	32.9	4.6%	678.3	38.3	5.4%	672.9	43.8	6.1%
ME 3	38 56 13	2013	Below Normal	August	--	337.9	320.1	17.8	5.3%	317.6	20.3	6.0%	312.5	25.4	7.5%	307.4	30.5	9.0%	302.3	35.6	10.5%	297.3	40.7	12.0%
ME 3	38 56 13	2013	Below Normal	September	Used in Summary Table Analysis	4,773.8	4,755.4	18.4	0.4%	4,752.8	21.1	0.4%	4,747.6	26.3	0.6%	4,742.4	31.5	0.7%	4,737.2	36.7	0.8%	4,731.9	41.9	0.9%
ME 3	38 56 13	2014	Critical	October	Used in Summary Table Analysis	280.6	267.5	13.1	4.7%	265.7	14.9	5.3%	261.9	18.7	6.7%	258.1	22.4	8.0%	254.4	26.2	9.3%	250.6	30.0	10.7%
ME 3	38 56 13	2014	Critical	November	Used in Summary Table Analysis	1,531.5	1,521.1	10.4	0.7%	1,519.6	11.9	0.8%	1,516.6	14.9	1.0%	1,513.5	17.9	1.2%	1,510.5	20.9	1.4%	1,507.5	24.0	1.6%
ME 3	38 56 13	2014	Critical	December	--	1,586.0	1,576.7	9.3	0.6%	1,575.5	10.5	0.7%	1,572.8	13.2	0.8%	1,570.1	15.9	1.0%	1,567.5	18.5	1.2%	1,564.8	21.2	1.3%
ME 3	38 56 13	2014	Critical	January	--	2,814.7	2,806.5	8.2	0.3%	2,805.2	9.5	0.3%	2,802.9	11.8	0.4%	2,800.5	14.2	0.5%	2,798.1	16.6	0.6%	2,795.7	19.0	0.7%
ME 3	38 56 13	2014	Critical	February	--	15,732.6	15,725.7	6.9	0.0%	15,724.5	8.1	0.1%	15,722.2	10.4	0.1%	15,719.9	12.7	0.1%	15,717.6	15.0	0.1%	15,715.3	17.4	0.1%
ME 3	38 56 13	2014	Critical	March	--	31,459.5	31,452.5	6.9	0.0%	31,451.4	8.1	0.0%	31,449.1	10.4	0.0%	31,447.9	11.6	0.0%	31,445.6	13.9	0.0%	31,443.3	16.2	0.1%
ME 3	38 56 13	2014	Critical	April	--	12,980.3	12,965.3	15.0	0.1%	12,963.0	17.4	0.1%	12,959.5	20.8	0.2%	12,954.9	25.5	0.2%	12,950.2	30.1	0.2%	12,946.8	33.6	0.3%
ME 3	38 56 13	2014	Critical	May	--	5,182.2	5,164.2	17.9	0.3%	5,161.7	20.5	0.4%	5,156.5	25.7	0.5%	5,151.4	30.8	0.6%	5,146.3	35.9	0.7%	5,141.1	41.1	0.8%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 56 13	2014	Critical	June	--	1,195.4	1,170.9	24.4	2.0%	1,167.5	27.9	2.3%	1,160.6	34.7	2.9%	1,153.7	41.6	3.5%	1,146.9	48.5	4.1%	1,140.1	55.3	4.6%
ME 3	38 56 13	2014	Critical	July	--	544.4	522.4	22.0	4.0%	519.3	25.1	4.6%	513.1	31.3	5.8%	506.8	37.6	6.9%	500.6	43.8	8.0%	494.3	50.0	9.2%
ME 3	38 56 13	2014	Critical	August	--	345.9	325.2	20.7	6.0%	322.3	23.7	6.8%	316.4	29.6	8.5%	310.5	35.5	10.2%	304.6	41.3	12.0%	298.7	47.2	13.7%
ME 3	38 56 13	2014	Critical	September	Used in Summary Table Analysis	2,567.6	2,547.6	20.0	0.8%	2,544.7	22.9	0.9%	2,539.0	28.6	1.1%	2,533.3	34.3	1.3%	2,527.5	40.0	1.6%	2,521.8	45.8	1.8%
ME 3	38 56 13	2015	Dry	October	Used in Summary Table Analysis	11,339.7	11,324.2	15.5	0.1%	11,322.0	17.7	0.2%	11,317.8	21.9	0.2%	11,313.3	26.4	0.2%	11,309.1	30.6	0.3%	11,304.6	35.1	0.3%
ME 3	38 56 13	2015	Dry	November	Used in Summary Table Analysis	9,016.2	9,004.7	11.5	0.1%	9,003.1	13.1	0.1%	8,999.8	16.4	0.2%	8,996.5	19.7	0.2%	8,993.3	22.9	0.3%	8,989.9	26.3	0.3%
ME 3	38 56 13	2015	Dry	December	--	32,532.4	32,523.1	9.3	0.0%	32,522.0	10.4	0.0%	32,518.5	13.9	0.0%	32,516.2	16.2	0.0%	32,512.7	19.7	0.1%	32,510.4	22.0	0.1%
ME 3	38 56 13	2015	Dry	January	--	14,564.8	14,555.6	9.3	0.1%	14,554.4	10.4	0.1%	14,552.1	12.7	0.1%	14,548.6	16.2	0.1%	14,546.3	18.5	0.1%	14,544.0	20.8	0.1%
ME 3	38 56 13	2015	Dry	February	--	27,200.2	27,192.1	8.1	0.0%	27,191.0	9.3	0.0%	27,188.7	11.6	0.0%	27,186.3	13.9	0.1%	27,184.0	16.2	0.1%	27,181.7	18.5	0.1%
ME 3	38 56 13	2015	Dry	March	--	11,562.5	11,555.3	7.2	0.1%	11,554.3	8.2	0.1%	11,552.2	10.3	0.1%	11,550.1	12.4	0.1%	11,548.1	14.4	0.1%	11,546.1	16.4	0.1%
ME 3	38 56 13	2015	Dry	April	--	8,364.4	8,349.5	14.8	0.2%	8,347.3	17.0	0.2%	8,343.1	21.3	0.3%	8,338.8	25.6	0.3%	8,334.5	29.9	0.4%	8,330.2	34.1	0.4%
ME 3	38 56 13	2015	Dry	May	--	1,508.2	1,490.6	17.6	1.2%	1,488.1	20.1	1.3%	1,483.1	25.1	1.7%	1,478.1	30.1	2.0%	1,473.0	35.2	2.3%	1,468.1	40.2	2.7%
ME 3	38 56 13	2015	Dry	June	--	651.3	628.7	22.5	3.5%	625.5	25.7	3.9%	619.2	32.0	4.9%	612.9	38.4	5.9%	606.6	44.7	6.9%	600.3	50.9	7.8%
ME 3	38 56 13	2015	Dry	July	--	267.3	245.8	21.5	8.0%	242.7	24.6	9.2%	236.6	30.7	11.5%	230.5	36.8	13.8%	224.4	42.9	16.1%	218.3	49.0	18.3%
ME 3	38 56 13	2015	Dry	August	--	164.6	144.0	20.5	12.5%	141.1	23.5	14.3%	135.2	29.3	17.8%	129.4	35.2	21.4%	123.5	41.0	24.9%	117.7	46.9	28.5%
ME 3	38 56 13	2015	Dry	September	Used in Summary Table Analysis	119.2	101.1	18.1	15.2%	98.5	20.7	17.4%	92.8	26.4	22.1%	87.4	31.9	26.7%	81.7	37.5	31.5%	76.1	43.1	36.1%
ME 3	38 56 13	2016	Above Normal	October	Used in Summary Table Analysis	84.7	68.7	16.0	18.9%	66.3	18.4	21.7%	61.8	22.9	27.0%	57.3	27.4	32.4%	52.9	31.8	37.6%	48.7	36.1	42.6%
ME 3	38 56 13	2016	Above Normal	November	Used in Summary Table Analysis	3,846.2	3,834.6	11.6	0.3%	3,832.9	13.3	0.3%	3,829.4	16.8	0.4%	3,826.0	20.1	0.5%	3,822.6	23.6	0.6%	3,819.1	27.1	0.7%
ME 3	38 56 13	2016	Above Normal	December	--	36,519.7	36,509.3	10.4	0.0%	36,508.1	11.6	0.0%	36,505.8	13.9	0.0%	36,502.3	17.4	0.0%	36,498.8	20.8	0.1%	36,496.5	23.1	0.1%
ME 3	38 56 13	2016	Above Normal	January	--	57,213.0	57,203.7	9.3	0.0%	57,201.4	11.6	0.0%	57,199.1	13.9	0.0%	57,195.6	17.4	0.0%	57,193.3	19.7	0.0%	57,191.0	22.0	0.0%
ME 3	38 56 13	2016	Above Normal	February	--	24,251.2	24,243.1	8.1	0.0%	24,241.9	9.3	0.0%	24,239.6	11.6	0.0%	24,237.3	13.9	0.1%	24,235.0	16.2	0.1%	24,232.6	18.5	0.1%
ME 3	38 56 13	2016	Above Normal	March	--	41,729.2	41,721.1	8.1	0.0%	41,719.9	9.3	0.0%	41,717.6	11.6	0.0%	41,715.3	13.9	0.0%	41,713.0	16.2	0.0%	41,710.6	18.5	0.0%
ME 3	38 56 13	2016	Above Normal	April	--	18,523.1	18,516.2	6.9	0.0%	18,515.0	8.1	0.0%	18,512.7	10.4	0.1%	18,511.6	11.6	0.1%	18,509.3	13.9	0.1%	18,506.9	16.2	0.1%
ME 3	38 56 13	2016	Above Normal	May	--	5,210.0	5,201.0	8.9	0.2%	5,199.8	10.2	0.2%	5,197.2	12.7	0.2%	5,194.6	15.4	0.3%	5,191.9	18.1	0.3%	5,189.4	20.6	0.4%
ME 3	38 56 13	2016	Above Normal	June	--	1,506.8	1,489.2	17.6	1.2%	1,486.7	20.1	1.3%	1,481.7	25.1	1.7%	1,476.7	30.1	2.0%	1,471.8	35.1	2.3%	1,466.8	40.0	2.7%
ME 3	38 56 13	2016	Above Normal	July	--	820.2	801.2	19.0	2.3%	798.4	21.8	2.7%	793.0	27.2	3.3%	787.6	32.6	4.0%	782.2	38.0	4.6%	776.8	43.4	5.3%
ME 3	38 56 13	2016	Above Normal	August	--	488.8	470.5	18.3	3.7%	467.9	20.9	4.3%	462.7	26.1	5.3%	457.4	31.4	6.4%	452.2	36.6	7.5%	447.0	41.8	8.6%
ME 3	38 56 13	2016	Above Normal	September	Used in Summary Table Analysis	325.4	309.4	16.0	4.9%	306.5	18.9	5.8%	301.7	23.7	7.3%	296.7	28.7	8.8%	291.9	33.5	10.3%	286.9	38.5	11.8%
ME 3	38 56 13	2017	Wet	October	Used in Summary Table Analysis	18,244.2	18,231.5	12.7	0.1%	18,229.2	15.0	0.1%	18,225.7	18.5	0.1%	18,222.2	22.0	0.1%	18,217.6	26.6	0.1%	18,214.1	30.1	0.2%
ME 3	38 56 13	2017	Wet	November	Used in Summary Table Analysis	18,780.1	18,769.7	10.4	0.1%	18,768.5	11.6	0.1%	18,765.0	15.0	0.1%	18,762.7	17.4	0.1%	18,759.3	20.8	0.1%	18,756.9	23.1	0.1%
ME 3	38 56 13	2017	Wet	December	--	24,042.8	24,033.6	9.3	0.0%	24,032.4	10.4	0.0%	24,030.1	12.7	0.1%	24,027.8	15.0	0.1%	24,025.5	17.4	0.1%	24,022.0	20.8	0.1%
ME 3	38 56 13	2017	Wet	January	--	106,696.8	106,688.7	8.1	0.0%	106,687.5	9.3	0.0%	106,685.2	11.6	0.0%	106,682.9	13.9	0.0%	106,679.4	17.4	0.0%	106,677.1	19.7	0.0%
ME 3	38 56 13	2017	Wet	February	--	81,717.6	81,709.5	8.1	0.0%	81,708.3	9.3	0.0%	81,706.0	11.6	0.0%	81,703.7	13.9	0.0%	81,701.4	16.2	0.0%	81,700.2	17.4	0.0%
ME 3	38 56 13	2017	Wet	March	--	27,236.1	27,228.0	8.1	0.0%	27,226.9	9.3	0.0%	27,225.7	10.4	0.0%	27,223.4	12.7	0.0%	27,221.1	15.0	0.1%	27,218.8	17.4	0.1%
ME 3	38 56 13	2017	Wet	April	--	22,895.8	22,888.9	6.9	0.0%	22,887.7	8.1	0.0%	22,885.4	10.4	0.0%	22,884.3	11.6	0.1%	22,881.9	13.9	0.1%	22,879.6	16.2	0.1%
ME 3	38 56 13	2017	Wet	May	--	6,270.7	6,261.6	9.1	0.1%	6,260.3	10.4	0.2%	6,257.6	13.1	0.2%	6,255.1	15.6	0.2%	6,252.4	18.3	0.3%	6,249.8	20.9	0.3%
ME 3	38 56 13	2017	Wet	June	--	2,110.3	2,092.2	18.1	0.9%	2,089.7	20.6	1.0%	2,084.6	25.7	1.2%	2,079.4	30.9	1.5%	2,074.3	36.0	1.7%	2,069.2	41.1	1.9%
ME 3	38 56 13	2017	Wet	July	--	930.3	911.0	19.3	2.1%	908.3	22.0	2.4%	902.8	27.5	3.0%	897.4	32.9	3.5%	891.9	38.4	4.1%	886.5	43.8	4.7%
ME 3	38 56 13	2017	Wet	August	--	502.7	484.3	18.4	3.7%	481.7	21.0	4.2%	476.4	26.2	5.2%	471.2	31.4	6.3%	466.0	36.6	7.3%	460.8	41.8	8.3%
ME 3	38 56 13	2017	Wet	September	Used in Summary Table Analysis	319.5	302.8	16.8	5.2%	300.4	19.2	6.0%	295.6	23.9	7.5%	290.8	28.7	9.0%	286.0	33.5	10.5%	281.3	38.3	12.0%
ME 3	38 56 13	2018	Above Normal	October	Used in Summary Table Analysis	272.4	259.4	13.0	4.8%	257.5	14.9	5.5%	253.8	18.6	6.8%	250.0	22.4	8.2%	246.3	26.1	9.6%	242.6	29.8	10.9%
ME 3	38 56 13	2018	Above Normal	November	Used in Summary Table Analysis	10,742.0	10,731.9	10.1	0.1%	10,730.6	11.5	0.1%	10,727.7	14.4	0.1%	10,724.8	17.2	0.2%	10,721.8	20.3	0.2%	10,718.9	23.1	0.2%
ME 3	38 56 13	2018	Above Normal	December	--	5,441.3	5,432.9	8.4	0.2%	5,431.6	9.7	0.2%	5,429.2	12.2	0.2%	5,426.7	14.6	0.3%	5,424.2	17.1	0.3%	5,421.6	19.7	0.4%
ME 3	38 56 13	2018	Above Normal	January	--	17,695.6	17,687.5	8.1	0.0%	17,686.3	9.3	0.1%	17,684.0	11.6	0.1%	17,681.7	13.9	0.1%	17,679.4	16.2	0.1%	17,677.1	18.5	0.1%
ME 3	38 56 13	2018	Above Normal	February	--	7,593.3	7,586.3	6.9	0.1%	7,585.3	8.0	0.1%	7,583.3	10.0	0.1%	7,581.3	12.0	0.2%	7,579.2	14.1	0.2%	7,577.1	16.2	0.2%
ME 3	38 56 13	2018	Above Normal	March	--	20,644.7	20,638.9	5.8	0.0%	20,637.7	6.9	0.0%	20,635.4	9.3	0.0%	20,633.1	11.6	0.1%	20,631.9	12.7	0.1%	20,629.6	15.0	0.1%
ME 3	38 56 13	2018	Above Normal	April	--	32,136.6	32,130.8	5.8	0.0%	32,129.6	6.9	0.0%	32,127.3	9.3	0.0%	32,126.2	10.4	0.0%	32,123.8	12.7	0.0%	32,121.5	15.0	0.0%
ME 3	38 56 13	2018	Above Normal	May	--	6,985.9	6,971.8	14.1	0.2%	6,969.7	16.2	0.2%	6,965.6	20.3	0.3%	6,961.6	24.3	0.3%	6,957.6	28.2	0.4%	6,953.8	32.1	0.5%
ME 3	38 56 13	2018	Above Normal	June	--	1,911.0	1,892.8	18.2	1.0%	1,890.3	20.7	1.1%	1,885.2	25.8	1.4%	1,880.0	31.0	1.6%	1,874.9	36.1	1.9%	1,869.7	41.3	2.2%
ME 3	38 56 13	2018	Above Normal	July	--	778.2	759.0	19.2	2.5%	756.2	22.0	2.8%	750.8	27.4	3.5%	745.3	32.9	4.2%	739.8	38.4	4.9%	734.4	43.8	5.6%
ME 3	38 56 13	2018	Above Normal	August	--	439.5	421.9	17.6	4.0%	419.4	20.2	4.6%	414.4	25.2	5.7%	409.4	30.2	6.9%	404.3	35.2	8.0%	399.3	40.2	9.2%
ME 3	38 56 13	2018	Above Normal	September	Used in Summary Table Analysis	297.3	280.5	16.8	5.6%	278.1	19.2	6.4%	273.4	23.9	8.1%	268.6	28.7	9.7%	263.8	33.5	11.3%	259.0	38.3	12.9%
ME 3	38 56 13	2019	Below Normal	October	Used in Summary Table Analysis	205.8	193.1	12.8	6.2%	191.3	14.5	7.1%	187.6	18.2	8.9%	183.9	22.0	10.7%	180.3	25.5	12.4%	176.7	29.2	14.2%
ME 3	38 56 13	2019	Below Normal	November	Used in Summary Table Analysis	6,591.1	6,581.0	10.1	0.2%	6,579.5	11.6	0.2%	6,576.6	14.5	0.2%	6,573.7	17.4	0.3%	6,570.8	20.3	0.3%	6,567.8	23.3	0.4%
ME 3	38 56 13	2019	Below Normal	December	--	14,611.1	14,601.9	9.3	0.1%	14,600.7	10.4	0.1%	14,598.4	12.7	0.1%	14,596.1	15.0	0.1%	14,592.6	18.5	0.1%	14,590.3	20.8	0.1%
ME 3	38 56 13	2019	Below Normal	January	--	35,107.6	35,100.7	6.9	0.0%	35,099.5	8.1	0.0%	35,097.2	10.4	0.0%	35,094.9	12.7	0.0%	35,092.6	15.0	0.0%	35,090.3	17.4	0.0%
ME 3	38 56 13	2019	Below Normal	February	--	141,805.6	141,794.0	11.6	0.0%	141,794.0	11.6	0.0%	141,794.0	11.6	0.0%	141,794.0	11.6	0.0%	141,782.4	23.1	0.0%	141,782.4	23.1	0.0%
ME 3	38 56 13	2019	Below Normal	March	--	42,258.1	42,251.2	6.9	0.0%	42,251.2	6.9	0.0%	42,248.8	9.3	0.0%	42,246.5	11.6	0.0%	42,244.2	13.9	0.0%	42,243.1	15.0	0.0%
ME 3	38 56 13	2019	Below Normal	April	--	15,254.6	15,248.8	5.8	0.0%	15,247.7	6.9	0.0%	15,245.4	9.3	0.1%	15,244.2	10.4	0.1%	15,241.9	12.7	0.1%	15,239.6	15.0	0.1%
ME 3	38 56 13	2019	Below Normal	May	--	16,855.3	16,840.3	15.0	0.1%	16,838.0	17.4	0.1%	16,833.3	22.0	0.1%	16,828.7	26.6	0.2%	16,824.1	31.3	0.2%	16,820.6	34.7	0.2%
ME 3	38 56 13	2019	Below Normal	June	--	4,242.4	4,222.7	19.7	0.5%	4,219.9	22.5	0.5%	4,214.5	27.9	0.7%	4,209.1	33.2	0.8%	4,203.9	38.4	0.9%	4,198.7	43.6	1.0%
ME 3	38 56 13	2019	Below Normal	July	--	1,356.9	1,337.6	19.3	1.4%	1,334.8	22.1	1.6%	1,329.4	27.5	2.0%	1,324.0	33.0	2.4%	1,318.4	38.5	2.8%	1,313.0	44.0	3.2%
ME 3	38 56 13	2019	Below Normal	August	--	592.7	574.5	18.2	3.1%	571.9	20.8	3.5%	566.7	25.9	4.4%	561.6	31.1	5.2%	556.4	36.2	6.1%	551.3	41.4	7.0%
ME 3	38 56 13	2019	Below Normal	September	Used in Summary Table Analysis	459.6	442.9	16.7	3.6%	440.5	19.1	4.2%	435.7	23.9	5.2%	431.0	28.6	6.2%	426.2	33.4	7.3%	421.4	38.2	8.3%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 56 13	2020	Dry	October	Used in Summary Table Analysis	353.7	341.4	12.2	3.5%	339.6	14.0	4.0%	336.1	17.5	5.0%	332.6	21.1	6.0%	329.1	24.6	7.0%	325.5	28.1	8.0%
ME 3	38 56 13	2020	Dry	November	Used in Summary Table Analysis	315.0	305.5	9.5	3.0%	304.1	10.8	3.4%	301.4	13.6	4.3%	298.7	16.3	5.2%	295.9	19.1	6.1%	293.1	21.8	6.9%
ME 3	38 56 13	2020	Dry	December	--	13,203.7	13,195.6	8.1	0.1%	13,194.4	9.3	0.1%	13,191.0	12.7	0.1%	13,188.7	15.0	0.1%	13,186.3	17.4	0.1%	13,184.0	19.7	0.1%
ME 3	38 56 13	2020	Dry	January	--	22,266.2	22,258.1	8.1	0.0%	22,256.9	9.3	0.0%	22,254.6	11.6	0.1%	22,252.3	13.9	0.1%	22,250.0	16.2	0.1%	22,247.7	18.5	0.1%
ME 3	38 56 13	2020	Dry	February	--	7,411.7	7,404.5	7.2	0.1%	7,403.5	8.2	0.1%	7,401.4	10.3	0.1%	7,399.3	12.4	0.2%	7,397.2	14.5	0.2%	7,395.1	16.6	0.2%
ME 3	38 56 13	2020	Dry	March	--	7,232.2	7,225.5	6.7	0.1%	7,224.4	7.8	0.1%	7,222.5	9.7	0.1%	7,220.5	11.7	0.2%	7,218.4	13.8	0.2%	7,216.4	15.7	0.2%
ME 3	38 56 13	2020	Dry	April	--	5,469.8	5,454.9	14.9	0.3%	5,452.8	17.0	0.3%	5,448.5	21.3	0.4%	5,444.2	25.6	0.5%	5,439.9	29.9	0.5%	5,435.6	34.1	0.6%
ME 3	38 56 13	2020	Dry	May	--	7,360.1	7,342.4	17.7	0.2%	7,339.8	20.3	0.3%	7,334.7	25.3	0.3%	7,329.5	30.6	0.4%	7,324.4	35.6	0.5%	7,319.3	40.7	0.6%
ME 3	38 56 13	2020	Dry	June	--	2,103.9	2,080.7	23.3	1.1%	2,077.4	26.5	1.3%	2,071.2	32.8	1.6%	2,064.9	39.0	1.9%	2,058.6	45.4	2.2%	2,052.3	51.6	2.5%
ME 3	38 56 13	2020	Dry	July	--	794.2	771.8	22.3	2.8%	768.6	25.5	3.2%	762.3	31.9	4.0%	755.9	38.3	4.8%	749.5	44.6	5.6%	743.2	51.0	6.4%
ME 3	38 56 13	2020	Dry	August	--	396.8	375.0	21.8	5.5%	371.9	24.9	6.3%	365.7	31.1	7.8%	359.5	37.3	9.4%	353.3	43.5	11.0%	347.1	49.7	12.5%
ME 3	38 56 13	2020	Dry	September	Used in Summary Table Analysis	246.4	227.2	19.2	7.8%	224.5	21.9	8.9%	218.2	28.2	11.4%	212.4	34.0	13.8%	206.4	39.9	16.2%	200.5	45.8	18.6%
ME 4	37 55 15	2000	Above Normal	October	Used in Summary Table Analysis	814.1	801.0	13.1	1.6%	799.1	15.0	1.8%	795.4	18.7	2.3%	791.6	22.5	2.8%	787.8	26.3	3.2%	784.1	30.0	3.7%
ME 4	37 55 15	2000	Above Normal	November	Used in Summary Table Analysis	12,079.9	12,069.4	10.4	0.1%	12,067.1	12.7	0.1%	12,064.8	15.0	0.1%	12,061.3	18.5	0.2%	12,059.0	20.8	0.2%	12,055.6	24.3	0.2%
ME 4	37 55 15	2000	Above Normal	December	--	10,790.3	10,781.4	8.9	0.1%	10,780.1	10.2	0.1%	10,777.5	12.7	0.1%	10,775.0	15.3	0.1%	10,772.3	17.9	0.2%	10,769.7	20.6	0.2%
ME 4	37 55 15	2000	Above Normal	January	--	28,510.4	28,502.3	8.1	0.0%	28,501.2	9.3	0.0%	28,498.8	11.6	0.0%	28,496.5	13.9	0.0%	28,494.2	16.2	0.1%	28,491.9	18.5	0.1%
ME 4	37 55 15	2000	Above Normal	February	--	36,998.8	36,991.9	6.9	0.0%	36,990.7	8.1	0.0%	36,988.4	10.4	0.0%	36,986.1	12.7	0.0%	36,983.8	15.0	0.0%	36,981.5	17.4	0.0%
ME 4	37 55 15	2000	Above Normal	March	--	18,303.2	18,296.3	6.9	0.0%	18,295.1	8.1	0.0%	18,292.8	10.4	0.1%	18,291.7	11.6	0.1%	18,289.4	13.9	0.1%	18,287.0	16.2	0.1%
ME 4	37 55 15	2000	Above Normal	April	--	12,304.4	12,297.5	6.9	0.1%	12,296.3	8.1	0.1%	12,295.1	9.3	0.1%	12,292.8	11.6	0.1%	12,290.5	13.9	0.1%	12,289.4	15.0	0.1%
ME 4	37 55 15	2000	Above Normal	May	--	7,086.5	7,071.8	14.7	0.2%	7,069.6	16.9	0.2%	7,065.3	21.2	0.3%	7,061.1	25.3	0.4%	7,056.8	29.6	0.4%	7,052.5	33.9	0.5%
ME 4	37 55 15	2000	Above Normal	June	--	2,608.2	2,586.2	22.0	0.8%	2,583.1	25.1	1.0%	2,576.9	31.4	1.2%	2,570.6	37.6	1.4%	2,564.4	43.9	1.7%	2,558.1	50.1	1.9%
ME 4	37 55 15	2000	Above Normal	July	--	990.3	970.8	19.6	2.0%	968.0	22.4	2.3%	962.4	27.9	2.8%	956.9	33.4	3.4%	951.4	39.0	3.9%	945.8	44.5	4.5%
ME 4	37 55 15	2000	Above Normal	August	--	520.3	502.1	18.2	3.5%	499.5	20.8	4.0%	494.3	26.0	5.0%	489.2	31.1	6.0%	484.0	36.3	7.0%	478.8	41.5	8.0%
ME 4	37 55 15	2000	Above Normal	September	Used in Summary Table Analysis	294.0	278.0	15.9	5.4%	275.8	18.2	6.2%	271.2	22.8	7.7%	266.7	27.3	9.3%	262.1	31.9	10.8%	257.6	36.4	12.4%
ME 4	37 55 15	2001	Dry	October	Used in Summary Table Analysis	3,806.6	3,793.5	13.1	0.3%	3,791.7	14.9	0.4%	3,788.0	18.6	0.5%	3,784.3	22.3	0.6%	3,780.6	26.0	0.7%	3,776.9	29.7	0.8%
ME 4	37 55 15	2001	Dry	November	Used in Summary Table Analysis	6,110.1	6,099.7	10.4	0.2%	6,098.1	11.9	0.2%	6,095.1	14.9	0.2%	6,092.2	17.8	0.3%	6,089.2	20.8	0.3%	6,086.1	24.0	0.4%
ME 4	37 55 15	2001	Dry	December	--	8,824.4	8,815.4	9.0	0.1%	8,814.0	10.4	0.1%	8,811.5	13.0	0.1%	8,808.8	15.6	0.2%	8,806.3	18.2	0.2%	8,803.6	20.8	0.2%
ME 4	37 55 15	2001	Dry	January	--	12,763.9	12,755.8	8.1	0.1%	12,754.6	9.3	0.1%	12,752.3	11.6	0.1%	12,748.8	15.0	0.1%	12,746.5	17.4	0.1%	12,744.2	19.7	0.2%
ME 4	37 55 15	2001	Dry	February	--	17,454.9	17,446.8	8.1	0.0%	17,445.6	9.3	0.1%	17,444.4	10.4	0.1%	17,442.1	12.7	0.1%	17,439.8	15.0	0.1%	17,437.5	17.4	0.1%
ME 4	37 55 15	2001	Dry	March	--	12,288.2	12,281.3	6.9	0.1%	12,280.1	8.1	0.1%	12,277.8	10.4	0.1%	12,276.6	11.6	0.1%	12,274.3	13.9	0.1%	12,272.0	16.2	0.1%
ME 4	37 55 15	2001	Dry	April	--	10,962.7	10,947.6	15.2	0.1%	10,945.4	17.4	0.2%	10,941.0	21.8	0.2%	10,936.6	26.2	0.2%	10,932.3	30.4	0.3%	10,927.9	34.8	0.3%
ME 4	37 55 15	2001	Dry	May	--	2,637.0	2,619.1	17.9	0.7%	2,616.6	20.5	0.8%	2,611.5	25.6	1.0%	2,606.3	30.8	1.2%	2,601.2	35.9	1.4%	2,596.1	41.0	1.6%
ME 4	37 55 15	2001	Dry	June	--	2,642.4	2,617.9	24.4	0.9%	2,614.6	27.8	1.1%	2,607.6	34.7	1.3%	2,600.8	41.6	1.6%	2,593.9	48.5	1.8%	2,587.2	55.2	2.1%
ME 4	37 55 15	2001	Dry	July	--	718.2	695.8	22.4	3.1%	692.6	25.6	3.6%	686.3	32.0	4.4%	679.9	38.3	5.3%	673.6	44.6	6.2%	667.2	51.0	7.1%
ME 4	37 55 15	2001	Dry	August	--	171.6	150.0	21.7	12.6%	146.9	24.8	14.4%	140.7	30.9	18.0%	134.5	37.1	21.6%	128.4	43.2	25.2%	122.2	49.4	28.8%
ME 4	37 55 15	2001	Dry	September	Used in Summary Table Analysis	94.4	75.3	19.1	20.2%	72.6	21.8	23.1%	67.2	27.2	28.8%	61.8	32.7	34.6%	56.3	38.1	40.4%	50.9	43.5	46.1%
ME 4	37 55 15	2002	Below Normal	October	Used in Summary Table Analysis	264.0	248.2	15.7	6.0%	246.0	17.9	6.8%	241.5	22.5	8.5%	237.0	27.0	10.2%	232.5	31.5	11.9%	228.0	36.0	13.6%
ME 4	37 55 15	2002	Below Normal	November	Used in Summary Table Analysis	12,006.9	11,994.2	12.7	0.1%	11,993.1	13.9	0.1%	11,989.6	17.4	0.1%	11,986.1	20.8	0.2%	11,982.6	24.3	0.2%	11,979.2	27.8	0.2%
ME 4	37 55 15	2002	Below Normal	December	--	35,623.8	35,613.4	10.4	0.0%	35,611.1	12.7	0.0%	35,608.8	15.0	0.0%	35,605.3	18.5	0.1%	35,601.9	22.0	0.1%	35,598.4	25.5	0.1%
ME 4	37 55 15	2002	Below Normal	January	--	30,840.3	30,831.0	9.3	0.0%	30,828.7	11.6	0.0%	30,826.4	13.9	0.0%	30,824.1	16.2	0.1%	30,820.6	19.7	0.1%	30,818.3	22.0	0.1%
ME 4	37 55 15	2002	Below Normal	February	--	24,655.1	24,645.8	9.3	0.0%	24,644.7	10.4	0.0%	24,642.4	12.7	0.1%	24,640.0	15.0	0.1%	24,637.7	17.4	0.1%	24,634.3	20.8	0.1%
ME 4	37 55 15	2002	Below Normal	March	--	17,761.6	17,753.5	8.1	0.0%	17,752.3	9.3	0.1%	17,750.0	11.6	0.1%	17,747.7	13.9	0.1%	17,745.4	16.2	0.1%	17,741.9	19.7	0.1%
ME 4	37 55 15	2002	Below Normal	April	--	9,918.3	9,903.1	15.2	0.2%	9,900.9	17.4	0.2%	9,896.6	21.6	0.2%	9,892.4	25.9	0.3%	9,888.0	30.3	0.3%	9,883.7	34.6	0.3%
ME 4	37 55 15	2002	Below Normal	May	--	3,317.1	3,299.2	17.9	0.5%	3,296.6	20.5	0.6%	3,291.4	25.7	0.8%	3,286.3	30.8	0.9%	3,281.3	35.9	1.1%	3,276.0	41.1	1.2%
ME 4	37 55 15	2002	Below Normal	June	--	853.0	832.8	20.1	2.4%	829.9	23.0	2.7%	824.2	28.7	3.4%	818.5	34.4	4.0%	812.8	40.2	4.7%	807.1	45.8	5.4%
ME 4	37 55 15	2002	Below Normal	July	--	361.4	341.3	20.1	5.6%	338.5	23.0	6.4%	332.7	28.7	7.9%	327.0	34.4	9.5%	321.3	40.2	11.1%	315.6	45.9	12.7%
ME 4	37 55 15	2002	Below Normal	August	--	225.9	207.2	18.7	8.3%	204.5	21.4	9.5%	199.2	26.7	11.8%	193.8	32.1	14.2%	188.5	37.4	16.6%	183.2	42.7	18.9%
ME 4	37 55 15	2002	Below Normal	September	Used in Summary Table Analysis	162.9	145.3	17.5	10.8%	142.8	20.0	12.3%	137.8	25.0	15.4%	132.8	30.0	18.4%	127.8	35.0	21.5%	122.8	40.0	24.6%
ME 4	37 55 15	2003	Wet	October	Used in Summary Table Analysis	127.9	113.8	14.1	11.0%	111.8	16.1	12.6%	107.8	20.2	15.8%	103.7	24.2	18.9%	99.6	28.3	22.1%	95.6	32.4	25.3%
ME 4	37 55 15	2003	Wet	November	Used in Summary Table Analysis	894.8	883.7	11.1	1.2%	882.1	12.8	1.4%	878.8	16.0	1.8%	875.6	19.2	2.2%	872.4	22.4	2.5%	869.2	25.6	2.9%
ME 4	37 55 15	2003	Wet	December	--	56,679.4	56,669.0	10.4	0.0%	56,667.8	11.6	0.0%	56,664.4	15.0	0.0%	56,662.0	17.4	0.0%	56,658.6	20.8	0.0%	56,656.3	23.1	0.0%
ME 4	37 55 15	2003	Wet	January	--	31,502.3	31,493.1	9.3	0.0%	31,491.9	10.4	0.0%	31,489.6	12.7	0.0%	31,486.1	16.2	0.1%	31,483.8	18.5	0.1%	31,481.5	20.8	0.1%
ME 4	37 55 15	2003	Wet	February	--	20,338.0	20,329.9	8.1	0.0%	20,328.7	9.3	0.0%	20,326.4	11.6	0.1%	20,324.1	13.9	0.1%	20,321.8	16.2	0.1%	20,319.4	18.5	0.1%
ME 4	37 55 15	2003	Wet	March	--	24,010.4	24,002.3	8.1	0.0%	24,001.2	9.3	0.0%	24,000.0	10.4	0.0%	23,997.7	12.7	0.1%	23,995.4	15.0	0.1%	23,993.1	17.4	0.1%
ME 4	37 55 15	2003	Wet	April	--	42,855.3	42,847.2	8.1	0.0%	42,847.2	8.1	0.0%	42,844.9	10.4	0.0%	42,842.6	12.7	0.0%	42,840.3	15.0	0.0%	42,838.0	17.4	0.0%
ME 4	37 55 15	2003	Wet	May	--	12,216.4	12,201.4	15.0	0.1%	12,199.1	17.4	0.1%	12,194.4	22.0	0.2%	12,189.8	26.6	0.2%	12,185.2	31.3	0.3%	12,181.7	34.7	0.3%
ME 4	37 55 15	2003	Wet	June	--	3,164.6	3,145.1	19.4	0.6%	3,142.4	22.2	0.7%	3,136.9	27.7	0.9%	3,131.5	33.1	1.0%	3,126.2	38.4	1.2%	3,120.7	43.9	1.4%
ME 4	37 55 15	2003	Wet	July	--	1,472.2	1,452.2	20.0	1.4%	1,449.3	22.9	1.6%	1,443.6	28.6	1.9%	1,438.0	34.3	2.3%	1,432.3	39.9	2.7%	1,426.6	45.6	3.1%
ME 4	37 55 15	2003	Wet	August	--	758.4	739.2	19.2	2.5%	736.4	22.0	2.9%	731.0	27.5	3.6%	725.5	32.9	4.3%	720.0	38.4	5.1%	714.4	44.0	5.8%
ME 4	37 55 15	2003	Wet	September	Used in Summary Table Analysis	456.5	440.3	16.2	3.5%	438.0	18.5	4.1%	433.4	23.1	5.1%	428.8	27.7	6.1%	424.2	32.3	7.1%	419.6	36.9	8.1%
ME 4	37 55 15	2004	Wet	October	Used in Summary Table Analysis	323.6	310.4	13.2	4.1%	308.5	15.1	4.7%	304.7	18.8	5.8%	300.9	22.6	7.0%	297.2	26.4	8.2%	293.4	30.2	9.3%
ME 4	37 55 15	2004	Wet	November	Used in Summary Table Analysis	5,788.8	5,778.2	10.5	0.2%	5,776.7	12.0	0.2%	5,773.7	15.0	0.3%	5,770.6	18.2	0.3%	5,767.6	21.2	0.4%	5,764.5	24.3	0.4%
ME 4	37 55 15	2004	Wet	December	--	36,247.7	36,238.4	9.3	0.0%	36,236.1	11.6	0.0%	36,233.8	13.9	0.0%	36,231.5	16.2	0.0%	36,228.0	19.7	0.1%	36,225.7	22.0	0.1%
ME 4	37 55 15	2004	Wet	January	--	31,430.6	31,422.5	8.1	0.0%	31,421.3	9.3	0.0%	31,419.0	11.6	0.0%	31,415.5	15.0	0.0%	31,413.2	17.4	0.1%	31,410.9	19.7	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	37 55 15	2004	Wet	February	--	38,194.4	38,187.5	6.9	0.0%	38,186.3	8.1	0.0%	38,184.0	10.4	0.0%	38,181.7	12.7	0.0%	38,179.4	15.0	0.0%	38,177.1	17.4	0.0%
ME 4	37 55 15	2004	Wet	March	--	16,516.2	16,509.3	6.9	0.0%	16,508.1	8.1	0.0%	16,505.8	10.4	0.1%	16,504.6	11.6	0.1%	16,502.3	13.9	0.1%	16,500.0	16.2	0.1%
ME 4	37 55 15	2004	Wet	April	--	9,444.8	9,438.0	6.8	0.1%	9,437.0	7.8	0.1%	9,435.1	9.7	0.1%	9,433.0	11.8	0.1%	9,431.0	13.8	0.1%	9,428.9	15.9	0.2%
ME 4	37 55 15	2004	Wet	May	--	3,415.5	3,400.6	14.9	0.4%	3,398.5	17.0	0.5%	3,394.2	21.3	0.6%	3,389.9	25.6	0.7%	3,385.6	29.9	0.9%	3,381.4	34.1	1.0%
ME 4	37 55 15	2004	Wet	June	--	691.0	672.4	18.6	2.7%	669.8	21.2	3.1%	664.5	26.5	3.8%	659.2	31.8	4.6%	653.9	37.1	5.4%	648.7	42.3	6.1%
ME 4	37 55 15	2004	Wet	July	--	354.9	335.2	19.6	5.5%	332.4	22.4	6.3%	326.8	28.0	7.9%	321.3	33.6	9.5%	315.7	39.2	11.0%	310.1	44.8	12.6%
ME 4	37 55 15	2004	Wet	August	--	224.1	205.7	18.3	8.2%	203.1	20.9	9.3%	197.9	26.2	11.7%	192.7	31.4	14.0%	187.4	36.6	16.3%	182.2	41.8	18.7%
ME 4	37 55 15	2004	Wet	September	Used in Summary Table Analysis	161.3	144.0	17.2	10.7%	141.6	19.7	12.2%	136.6	24.7	15.3%	131.7	29.6	18.3%	126.8	34.5	21.4%	121.8	39.5	24.5%
ME 4	37 55 15	2005	Above Normal	October	Used in Summary Table Analysis	7,664.0	7,650.6	13.4	0.2%	7,648.6	15.4	0.2%	7,644.8	19.2	0.3%	7,641.0	23.0	0.3%	7,637.0	27.0	0.4%	7,633.2	30.8	0.4%
ME 4	37 55 15	2005	Above Normal	November	Used in Summary Table Analysis	2,254.6	2,244.1	10.5	0.5%	2,242.6	12.0	0.5%	2,239.6	15.0	0.7%	2,236.6	18.1	0.8%	2,233.6	21.1	0.9%	2,230.6	24.1	1.1%
ME 4	37 55 15	2005	Above Normal	December	--	20,974.5	20,965.3	9.3	0.0%	20,964.1	10.4	0.0%	20,960.6	13.9	0.1%	20,958.3	16.2	0.1%	20,956.0	18.5	0.1%	20,952.5	22.0	0.1%
ME 4	37 55 15	2005	Above Normal	January	--	22,343.8	22,335.6	8.1	0.0%	22,334.5	9.3	0.0%	22,332.2	11.6	0.1%	22,329.9	13.9	0.1%	22,326.4	17.4	0.1%	22,324.1	19.7	0.1%
ME 4	37 55 15	2005	Above Normal	February	--	14,004.6	13,996.5	8.1	0.1%	13,995.4	9.3	0.1%	13,993.1	11.6	0.1%	13,991.9	12.7	0.1%	13,989.6	15.0	0.1%	13,987.3	17.4	0.1%
ME 4	37 55 15	2005	Above Normal	March	--	28,535.9	28,528.9	6.9	0.0%	28,527.8	8.1	0.0%	28,525.5	10.4	0.0%	28,523.1	12.7	0.0%	28,522.0	13.9	0.0%	28,519.7	16.2	0.1%
ME 4	37 55 15	2005	Above Normal	April	--	21,424.8	21,417.8	6.9	0.0%	21,416.7	8.1	0.0%	21,414.4	10.4	0.0%	21,413.2	11.6	0.1%	21,410.9	13.9	0.1%	21,408.6	16.2	0.1%
ME 4	37 55 15	2005	Above Normal	May	--	19,545.1	19,530.1	15.0	0.1%	19,527.8	17.4	0.1%	19,523.1	22.0	0.1%	19,519.7	25.5	0.1%	19,515.0	30.1	0.2%	19,510.4	34.7	0.2%
ME 4	37 55 15	2005	Above Normal	June	--	15,842.6	15,819.4	23.1	0.1%	15,817.1	25.5	0.2%	15,810.2	32.4	0.2%	15,803.2	39.4	0.2%	15,797.5	45.1	0.3%	15,791.7	50.9	0.3%
ME 4	37 55 15	2005	Above Normal	July	--	2,863.7	2,843.3	20.4	0.7%	2,840.4	23.3	0.8%	2,834.5	29.2	1.0%	2,828.7	35.0	1.2%	2,822.9	40.7	1.4%	2,817.1	46.5	1.6%
ME 4	37 55 15	2005	Above Normal	August	--	981.1	962.8	18.3	1.9%	960.3	20.9	2.1%	955.0	26.1	2.7%	949.8	31.3	3.2%	944.6	36.5	3.7%	939.5	41.7	4.2%
ME 4	37 55 15	2005	Above Normal	September	Used in Summary Table Analysis	522.8	506.9	16.0	3.1%	504.6	18.3	3.5%	500.0	22.8	4.4%	495.5	27.4	5.2%	490.9	31.9	6.1%	486.4	36.5	7.0%
ME 4	37 55 15	2006	Wet	October	Used in Summary Table Analysis	632.4	619.7	12.8	2.0%	617.9	14.6	2.3%	614.2	18.2	2.9%	610.5	21.9	3.5%	606.9	25.5	4.0%	603.2	29.2	4.6%
ME 4	37 55 15	2006	Wet	November	Used in Summary Table Analysis	9,281.9	9,272.0	10.0	0.1%	9,270.5	11.5	0.1%	9,267.7	14.2	0.2%	9,264.8	17.1	0.2%	9,261.9	20.0	0.2%	9,259.0	22.9	0.2%
ME 4	37 55 15	2006	Wet	December	--	43,419.0	43,409.7	9.3	0.0%	43,408.6	10.4	0.0%	43,406.3	12.7	0.0%	43,403.9	15.0	0.0%	43,401.6	17.4	0.0%	43,398.1	20.8	0.0%
ME 4	37 55 15	2006	Wet	January	--	46,226.9	46,218.8	8.1	0.0%	46,217.6	9.3	0.0%	46,214.1	12.7	0.0%	46,211.8	15.0	0.0%	46,209.5	17.4	0.0%	46,207.2	19.7	0.0%
ME 4	37 55 15	2006	Wet	February	--	26,588.0	26,581.0	6.9	0.0%	26,579.9	8.1	0.0%	26,577.5	10.4	0.0%	26,575.2	12.7	0.0%	26,572.9	15.0	0.1%	26,571.8	16.2	0.1%
ME 4	37 55 15	2006	Wet	March	--	47,101.9	47,094.9	6.9	0.0%	47,093.8	8.1	0.0%	47,092.6	9.3	0.0%	47,090.3	11.6	0.0%	47,088.0	13.9	0.0%	47,085.6	16.2	0.0%
ME 4	37 55 15	2006	Wet	April	--	30,406.3	30,399.3	6.9	0.0%	30,398.1	8.1	0.0%	30,397.0	9.3	0.0%	30,394.7	11.6	0.0%	30,392.4	13.9	0.0%	30,391.2	15.0	0.0%
ME 4	37 55 15	2006	Wet	May	--	14,194.4	14,185.2	9.3	0.1%	14,184.0	10.4	0.1%	14,181.7	12.7	0.1%	14,178.2	16.2	0.1%	14,175.9	18.5	0.1%	14,173.6	20.8	0.1%
ME 4	37 55 15	2006	Wet	June	--	3,545.8	3,527.3	18.5	0.5%	3,524.7	21.2	0.6%	3,519.3	26.5	0.7%	3,514.0	31.8	0.9%	3,508.8	37.0	1.0%	3,503.6	42.2	1.2%
ME 4	37 55 15	2006	Wet	July	--	1,277.0	1,257.5	19.4	1.5%	1,254.7	22.2	1.7%	1,249.2	27.8	2.2%	1,243.6	33.3	2.6%	1,238.2	38.8	3.0%	1,232.6	44.3	3.5%
ME 4	37 55 15	2006	Wet	August	--	663.2	644.5	18.7	2.8%	641.8	21.4	3.2%	636.5	26.7	4.0%	631.2	32.0	4.8%	625.9	37.3	5.6%	620.6	42.5	6.4%
ME 4	37 55 15	2006	Wet	September	Used in Summary Table Analysis	424.4	408.2	16.2	3.8%	405.9	18.5	4.3%	401.3	23.1	5.4%	396.7	27.7	6.5%	392.2	32.2	7.6%	387.6	36.8	8.7%
ME 4	37 55 15	2007	Above Normal	October	Used in Summary Table Analysis	273.0	260.1	12.9	4.7%	258.3	14.8	5.4%	254.5	18.5	6.8%	250.8	22.2	8.1%	247.1	25.9	9.5%	243.4	29.7	10.9%
ME 4	37 55 15	2007	Above Normal	November	Used in Summary Table Analysis	8,645.6	8,635.2	10.4	0.1%	8,633.7	11.9	0.1%	8,630.7	14.9	0.2%	8,627.8	17.8	0.2%	8,624.7	20.9	0.2%	8,621.6	24.0	0.3%
ME 4	37 55 15	2007	Above Normal	December	--	20,368.1	20,358.8	9.3	0.0%	20,356.5	11.6	0.1%	20,354.2	13.9	0.1%	20,351.9	16.2	0.1%	20,348.4	19.7	0.1%	20,346.1	22.0	0.1%
ME 4	37 55 15	2007	Above Normal	January	--	10,240.3	10,232.1	8.2	0.1%	10,230.9	9.4	0.1%	10,228.6	11.7	0.1%	10,226.2	14.1	0.1%	10,223.8	16.4	0.2%	10,221.4	18.9	0.2%
ME 4	37 55 15	2007	Above Normal	February	--	30,523.1	30,516.2	6.9	0.0%	30,515.0	8.1	0.0%	30,512.7	10.4	0.0%	30,510.4	12.7	0.0%	30,508.1	15.0	0.0%	30,505.8	17.4	0.1%
ME 4	37 55 15	2007	Above Normal	March	--	13,093.8	13,085.6	8.1	0.1%	13,085.6	8.1	0.1%	13,083.3	10.4	0.1%	13,081.0	12.7	0.1%	13,078.7	15.0	0.1%	13,076.4	17.4	0.1%
ME 4	37 55 15	2007	Above Normal	April	--	11,527.0	11,512.4	14.6	0.1%	11,510.3	16.7	0.1%	11,506.1	20.8	0.2%	11,502.0	25.0	0.2%	11,497.7	29.3	0.3%	11,493.5	33.4	0.3%
ME 4	37 55 15	2007	Above Normal	May	--	4,136.5	4,119.1	17.4	0.4%	4,116.7	19.8	0.5%	4,111.7	24.8	0.6%	4,106.7	29.7	0.7%	4,101.7	34.7	0.8%	4,096.6	39.8	1.0%
ME 4	37 55 15	2007	Above Normal	June	--	1,496.2	1,475.5	20.7	1.4%	1,472.6	23.6	1.6%	1,466.7	29.5	2.0%	1,460.8	35.4	2.4%	1,454.9	41.3	2.8%	1,449.1	47.1	3.1%
ME 4	37 55 15	2007	Above Normal	July	--	495.2	474.6	20.6	4.2%	471.7	23.5	4.8%	465.8	29.4	5.9%	460.0	35.2	7.1%	454.2	41.0	8.3%	448.4	46.9	9.5%
ME 4	37 55 15	2007	Above Normal	August	--	221.9	203.5	18.4	8.3%	200.9	21.0	9.5%	195.7	26.2	11.8%	190.5	31.4	14.2%	185.3	36.6	16.5%	180.1	41.8	18.9%
ME 4	37 55 15	2007	Above Normal	September	Used in Summary Table Analysis	149.6	132.4	17.2	11.5%	129.9	19.7	13.1%	125.0	24.6	16.4%	120.1	29.5	19.7%	115.2	34.4	23.0%	110.3	39.3	26.2%
ME 4	37 55 15	2008	Dry	October	Used in Summary Table Analysis	3,426.4	3,412.6	13.8	0.4%	3,410.6	15.7	0.5%	3,406.7	19.7	0.6%	3,402.8	23.6	0.7%	3,398.8	27.5	0.8%	3,394.9	31.5	0.9%
ME 4	37 55 15	2008	Dry	November	Used in Summary Table Analysis	3,267.9	3,257.4	10.5	0.3%	3,255.9	12.0	0.4%	3,252.9	15.0	0.5%	3,249.8	18.2	0.6%	3,246.8	21.2	0.6%	3,243.8	24.2	0.7%
ME 4	37 55 15	2008	Dry	December	--	23,070.6	23,061.3	9.3	0.0%	23,060.2	10.4	0.0%	23,057.9	12.7	0.1%	23,054.4	16.2	0.1%	23,052.1	18.5	0.1%	23,049.8	20.8	0.1%
ME 4	37 55 15	2008	Dry	January	--	37,478.0	37,468.8	9.3	0.0%	37,467.6	10.4	0.0%	37,465.3	12.7	0.0%	37,463.0	15.0	0.0%	37,460.6	17.4	0.0%	37,458.3	19.7	0.1%
ME 4	37 55 15	2008	Dry	February	--	26,258.1	26,251.2	6.9	0.0%	26,250.0	8.1	0.0%	26,247.7	10.4	0.0%	26,245.4	12.7	0.0%	26,243.1	15.0	0.1%	26,240.7	17.4	0.1%
ME 4	37 55 15	2008	Dry	March	--	11,788.2	11,781.3	6.9	0.1%	11,781.3	6.9	0.1%	11,778.9	9.3	0.1%	11,776.6	11.6	0.1%	11,774.3	13.9	0.1%	11,773.1	15.0	0.1%
ME 4	37 55 15	2008	Dry	April	--	9,012.3	8,997.5	14.8	0.2%	8,995.3	17.0	0.2%	8,991.1	21.2	0.2%	8,986.8	25.5	0.3%	8,982.5	29.7	0.3%	8,978.2	34.0	0.4%
ME 4	37 55 15	2008	Dry	May	--	1,360.3	1,344.4	15.9	1.2%	1,342.2	18.1	1.3%	1,337.7	22.6	1.7%	1,333.2	27.1	2.0%	1,328.9	31.4	2.3%	1,324.7	35.6	2.6%
ME 4	37 55 15	2008	Dry	June	--	436.9	414.4	22.6	5.2%	411.2	25.8	5.9%	404.8	32.1	7.4%	398.4	38.5	8.8%	392.1	44.8	10.3%	385.8	51.2	11.7%
ME 4	37 55 15	2008	Dry	July	--	255.2	233.4	21.9	8.6%	230.3	25.0	9.8%	224.0	31.2	12.2%	217.8	37.4	14.7%	211.6	43.6	17.1%	205.4	49.8	19.5%
ME 4	37 55 15	2008	Dry	August	--	178.6	157.6	21.0	11.8%	154.6	24.0	13.5%	148.6	30.0	16.8%	142.6	36.0	20.2%	136.6	42.0	23.5%	130.7	48.0	26.8%
ME 4	37 55 15	2008	Dry	September	Used in Summary Table Analysis	140.3	120.3	20.0	14.3%	117.5	22.9	16.3%	111.7	28.6	20.4%	106.0	34.3	24.4%	100.3	40.0	28.5%	94.6	45.7	32.6%
ME 4	37 55 15	2009	Critical	October	Used in Summary Table Analysis	922.9	907.4	15.5	1.7%	905.1	17.8	1.9%	900.7	22.2	2.4%	896.2	26.7	2.9%	891.9	31.0	3.4%	887.4	35.5	3.8%
ME 4	37 55 15	2009	Critical	November	Used in Summary Table Analysis	5,498.5	5,486.6	11.9	0.2%	5,484.8	13.7	0.2%	5,481.4	17.1	0.3%	5,477.9	20.6	0.4%	5,474.5	24.0	0.4%	5,471.1	27.4	0.5%
ME 4	37 55 15	2009	Critical	December	--	12,137.7	12,127.3	10.4	0.1%	12,126.2	11.6	0.1%	12,122.7	15.0	0.1%	12,120.4	17.4	0.1%	12,116.9	20.8	0.2%	12,114.6	23.1	0.2%
ME 4	37 55 15	2009	Critical	January	--	8,788.9	8,779.5	9.4	0.1%	8,778.1	10.8	0.1%	8,775.3	13.5	0.2%	8,772.6	16.3	0.2%	8,769.8	19.1	0.2%	8,767.1	21.8	0.2%
ME 4	37 55 15	2009	Critical	February	--	22,591.4	22,583.3	8.1	0.0%	22,582.2	9.3	0.0%	22,579.9	11.6	0.1%	22,577.5	13.9	0.1%	22,575.2	16.2	0.1%	22,572.9	18.5	0.1%
ME 4	37 55 15	2009	Critical	March	--	21,104.2	21,097.2	6.9	0.0%	21,096.1	8.1	0.0%	21,093.8	10.4	0.0%	21,091.4	12.7	0.1%	21,089.1	15.0	0.1%	21,086.8	17.4	0.1%
ME 4	37 55 15	2009	Critical	April	--	10,095.1	10,079.9	15.3	0.2%	10,077.7	17.5	0.2%	10,073.3	21.9	0.2%	10,068.9	26.3	0.3%	10,064.5	30.7	0.3%	10,060.1	35.1	0.3%
ME 4	37 55 15	2009	Critical	May	--	15,575.2	15,556.7	18.5	0.1%	15,554.4	20.8	0.1%	15,548.6	26.6	0.2%	15,544.0	31.3	0.2%	15,538.2	37.0	0.2%	15,532.4	42.8	0.3%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	37 55 15	2009	Critical	June	--	3,159.1	3,135.2	24.0	0.8%	3,131.7	27.4	0.9%	3,124.9	34.3	1.1%	3,118.1	41.1	1.3%	3,111.2	47.9	1.5%	3,104.4	54.7	1.7%
ME 4	37 55 15	2009	Critical	July	--	1,261.8	1,239.6	22.2	1.8%	1,236.5	25.3	2.0%	1,230.2	31.6	2.5%	1,224.0	37.8	3.0%	1,217.7	44.1	3.5%	1,211.5	50.3	4.0%
ME 4	37 55 15	2009	Critical	August	--	667.7	646.5	21.2	3.2%	643.5	24.2	3.6%	637.5	30.2	4.5%	631.5	36.2	5.4%	625.4	42.2	6.3%	619.4	48.3	7.2%
ME 4	37 55 15	2009	Critical	September	Used in Summary Table Analysis	389.1	370.4	18.6	4.8%	367.8	21.3	5.5%	362.4	26.7	6.9%	357.1	32.0	8.2%	351.8	37.3	9.6%	346.5	42.6	11.0%
ME 4	37 55 15	2010	Below Normal	October	Used in Summary Table Analysis	6,087.0	6,071.3	15.7	0.3%	6,069.1	17.9	0.3%	6,064.6	22.5	0.4%	6,060.1	27.0	0.4%	6,055.7	31.4	0.5%	6,051.2	35.9	0.6%
ME 4	37 55 15	2010	Below Normal	November	Used in Summary Table Analysis	8,281.9	8,269.7	12.3	0.1%	8,267.9	14.0	0.2%	8,264.4	17.6	0.2%	8,260.8	21.2	0.3%	8,257.3	24.7	0.3%	8,253.7	28.2	0.3%
ME 4	37 55 15	2010	Below Normal	December	--	12,338.0	12,327.5	10.4	0.1%	12,326.4	11.6	0.1%	12,322.9	15.0	0.1%	12,320.6	17.4	0.1%	12,317.1	20.8	0.2%	12,313.7	24.3	0.2%
ME 4	37 55 15	2010	Below Normal	January	--	36,179.4	36,170.1	9.3	0.0%	36,169.0	10.4	0.0%	36,165.5	13.9	0.0%	36,163.2	16.2	0.0%	36,159.7	19.7	0.1%	36,157.4	22.0	0.1%
ME 4	37 55 15	2010	Below Normal	February	--	27,230.3	27,222.2	8.1	0.0%	27,219.9	10.4	0.0%	27,217.6	12.7	0.0%	27,215.3	15.0	0.1%	27,213.0	17.4	0.1%	27,210.6	19.7	0.1%
ME 4	37 55 15	2010	Below Normal	March	--	28,824.1	28,816.0	8.1	0.0%	28,814.8	9.3	0.0%	28,812.5	11.6	0.0%	28,810.2	13.9	0.0%	28,807.9	16.2	0.1%	28,805.6	18.5	0.1%
ME 4	37 55 15	2010	Below Normal	April	--	39,990.7	39,982.6	8.1	0.0%	39,981.5	9.3	0.0%	39,979.2	11.6	0.0%	39,976.9	13.9	0.0%	39,974.5	16.2	0.0%	39,972.2	18.5	0.0%
ME 4	37 55 15	2010	Below Normal	May	--	20,251.2	20,235.0	16.2	0.1%	20,232.6	18.5	0.1%	20,228.0	23.1	0.1%	20,223.4	27.8	0.1%	20,218.8	32.4	0.2%	20,214.1	37.0	0.2%
ME 4	37 55 15	2010	Below Normal	June	--	9,335.9	9,312.8	23.0	0.2%	9,309.5	26.4	0.3%	9,302.9	33.0	0.4%	9,296.5	39.4	0.4%	9,290.0	45.8	0.5%	9,283.4	52.4	0.6%
ME 4	37 55 15	2010	Below Normal	July	--	1,453.5	1,432.9	20.6	1.4%	1,429.9	23.6	1.6%	1,424.0	29.5	2.0%	1,418.1	35.4	2.4%	1,412.0	41.4	2.9%	1,406.5	47.0	3.2%
ME 4	37 55 15	2010	Below Normal	August	--	567.2	548.4	18.7	3.3%	545.8	21.4	3.8%	540.4	26.8	4.7%	535.1	32.0	5.7%	529.8	37.4	6.6%	524.5	42.7	7.5%
ME 4	37 55 15	2010	Below Normal	September	Used in Summary Table Analysis	649.4	631.7	17.7	2.7%	629.1	20.2	3.1%	624.0	25.3	3.9%	619.0	30.3	4.7%	614.0	35.4	5.4%	608.9	40.4	6.2%
ME 4	37 55 15	2011	Wet	October	Used in Summary Table Analysis	9,623.6	9,610.3	13.3	0.1%	9,608.4	15.2	0.2%	9,604.7	18.9	0.2%	9,600.9	22.7	0.2%	9,597.1	26.5	0.3%	9,593.3	30.3	0.3%
ME 4	37 55 15	2011	Wet	November	Used in Summary Table Analysis	14,209.5	14,199.1	10.4	0.1%	14,196.8	12.7	0.1%	14,194.4	15.0	0.1%	14,191.0	18.5	0.1%	14,187.5	22.0	0.2%	14,185.2	24.3	0.2%
ME 4	37 55 15	2011	Wet	December	--	33,655.1	33,645.8	9.3	0.0%	33,644.7	10.4	0.0%	33,642.4	12.7	0.0%	33,640.0	15.0	0.0%	33,636.6	18.5	0.1%	33,634.3	20.8	0.1%
ME 4	37 55 15	2011	Wet	January	--	14,148.1	14,140.0	8.1	0.1%	14,138.9	9.3	0.1%	14,136.6	11.6	0.1%	14,134.3	13.9	0.1%	14,130.8	17.4	0.1%	14,128.5	19.7	0.1%
ME 4	37 55 15	2011	Wet	February	--	20,759.3	20,752.3	6.9	0.0%	20,751.2	8.1	0.0%	20,748.8	10.4	0.1%	20,746.5	12.7	0.1%	20,744.2	15.0	0.1%	20,741.9	17.4	0.1%
ME 4	37 55 15	2011	Wet	March	--	51,976.9	51,969.9	6.9	0.0%	51,968.8	8.1	0.0%	51,966.4	10.4	0.0%	51,964.1	12.7	0.0%	51,961.8	15.0	0.0%	51,959.5	17.4	0.0%
ME 4	37 55 15	2011	Wet	April	--	24,790.5	24,782.4	8.1	0.0%	24,781.3	9.3	0.0%	24,780.1	10.4	0.0%	24,777.8	12.7	0.1%	24,775.5	15.0	0.1%	24,773.1	17.4	0.1%
ME 4	37 55 15	2011	Wet	May	--	11,378.0	11,362.8	15.2	0.1%	11,360.8	17.2	0.2%	11,356.4	21.6	0.2%	11,352.0	26.0	0.2%	11,347.6	30.4	0.3%	11,343.3	34.7	0.3%
ME 4	37 55 15	2011	Wet	June	--	7,051.9	7,029.3	22.6	0.3%	7,026.0	25.8	0.4%	7,019.7	32.2	0.5%	7,013.3	38.5	0.5%	7,006.9	44.9	0.6%	7,000.6	51.3	0.7%
ME 4	37 55 15	2011	Wet	July	--	1,828.1	1,806.0	22.1	1.2%	1,802.9	25.2	1.4%	1,796.6	31.5	1.7%	1,790.4	37.7	2.1%	1,784.0	44.1	2.4%	1,777.8	50.3	2.8%
ME 4	37 55 15	2011	Wet	August	--	775.5	756.9	18.6	2.4%	754.3	21.2	2.7%	749.0	26.5	3.4%	743.7	31.8	4.1%	738.4	37.1	4.8%	733.2	42.3	5.5%
ME 4	37 55 15	2011	Wet	September	Used in Summary Table Analysis	432.2	415.5	16.7	3.9%	413.1	19.1	4.4%	408.3	23.8	5.5%	403.6	28.6	6.6%	398.8	33.3	7.7%	394.1	38.1	8.8%
ME 4	37 55 15	2012	Below Normal	October	Used in Summary Table Analysis	4,536.7	4,523.1	13.5	0.3%	4,521.3	15.4	0.3%	4,517.4	19.3	0.4%	4,513.5	23.1	0.5%	4,509.7	27.0	0.6%	4,505.8	30.9	0.7%
ME 4	37 55 15	2012	Below Normal	November	Used in Summary Table Analysis	8,228.0	8,217.4	10.6	0.1%	8,215.7	12.3	0.1%	8,212.7	15.3	0.2%	8,209.6	18.4	0.2%	8,206.5	21.5	0.3%	8,203.5	24.5	0.3%
ME 4	37 55 15	2012	Below Normal	December	--	5,179.2	5,169.9	9.3	0.2%	5,168.6	10.5	0.2%	5,166.0	13.2	0.3%	5,163.3	15.9	0.3%	5,160.6	18.5	0.4%	5,157.9	21.3	0.4%
ME 4	37 55 15	2012	Below Normal	January	--	20,086.8	20,078.7	8.1	0.0%	20,076.4	10.4	0.1%	20,074.1	12.7	0.1%	20,071.8	15.0	0.1%	20,069.4	17.4	0.1%	20,067.1	19.7	0.1%
ME 4	37 55 15	2012	Below Normal	February	--	18,204.9	18,196.8	8.1	0.0%	18,196.8	8.1	0.0%	18,194.4	10.4	0.1%	18,192.1	12.7	0.1%	18,189.8	15.0	0.1%	18,187.5	17.4	0.1%
ME 4	37 55 15	2012	Below Normal	March	--	45,391.2	45,383.1	8.1	0.0%	45,381.9	9.3	0.0%	45,379.6	11.6	0.0%	45,377.3	13.9	0.0%	45,375.0	16.2	0.0%	45,372.7	18.5	0.0%
ME 4	37 55 15	2012	Below Normal	April	--	26,847.2	26,840.3	6.9	0.0%	26,839.1	8.1	0.0%	26,836.8	10.4	0.0%	26,834.5	12.7	0.0%	26,832.2	15.0	0.1%	26,831.0	16.2	0.1%
ME 4	37 55 15	2012	Below Normal	May	--	7,480.0	7,464.9	15.0	0.2%	7,462.7	17.2	0.2%	7,458.3	21.6	0.3%	7,454.1	25.9	0.3%	7,449.8	30.2	0.4%	7,445.4	34.6	0.5%
ME 4	37 55 15	2012	Below Normal	June	--	5,511.1	5,488.1	23.0	0.4%	5,484.8	26.3	0.5%	5,478.2	32.9	0.6%	5,471.8	39.4	0.7%	5,465.3	45.8	0.8%	5,458.8	52.3	0.9%
ME 4	37 55 15	2012	Below Normal	July	--	2,221.1	2,199.7	21.4	1.0%	2,196.6	24.4	1.1%	2,190.6	30.4	1.4%	2,184.5	36.6	1.6%	2,178.5	42.6	1.9%	2,172.3	48.7	2.2%
ME 4	37 55 15	2012	Below Normal	August	--	387.6	370.6	17.0	4.4%	368.2	19.4	5.0%	363.4	24.2	6.2%	358.5	29.0	7.5%	353.7	33.8	8.7%	348.9	38.7	10.0%
ME 4	37 55 15	2012	Below Normal	September	Used in Summary Table Analysis	247.9	232.9	15.0	6.0%	230.8	17.1	6.9%	226.5	21.4	8.6%	222.3	25.6	10.3%	218.1	29.8	12.0%	213.8	34.1	13.8%
ME 4	37 55 15	2013	Below Normal	October	Used in Summary Table Analysis	1,908.8	1,895.8	13.0	0.7%	1,894.0	14.8	0.8%	1,890.3	18.5	1.0%	1,886.6	22.2	1.2%	1,882.9	25.9	1.4%	1,879.2	29.6	1.6%
ME 4	37 55 15	2013	Below Normal	November	Used in Summary Table Analysis	14,666.7	14,656.3	10.4	0.1%	14,655.1	11.6	0.1%	14,652.8	13.9	0.1%	14,649.3	17.4	0.1%	14,645.8	20.8	0.1%	14,643.5	23.1	0.2%
ME 4	37 55 15	2013	Below Normal	December	--	59,950.2	59,941.0	9.3	0.0%	59,938.7	11.6	0.0%	59,936.3	13.9	0.0%	59,934.0	16.2	0.0%	59,930.6	19.7	0.0%	59,928.2	22.0	0.0%
ME 4	37 55 15	2013	Below Normal	January	--	22,188.7	22,180.6	8.1	0.0%	22,179.4	9.3	0.0%	22,177.1	11.6	0.1%	22,174.8	13.9	0.1%	22,172.5	16.2	0.1%	22,170.1	18.5	0.1%
ME 4	37 55 15	2013	Below Normal	February	--	8,839.8	8,832.2	7.6	0.1%	8,831.0	8.8	0.1%	8,828.8	11.0	0.1%	8,826.6	13.2	0.1%	8,824.3	15.5	0.2%	8,822.1	17.7	0.2%
ME 4	37 55 15	2013	Below Normal	March	--	10,321.3	10,313.9	7.4	0.1%	10,312.8	8.4	0.1%	10,310.6	10.6	0.1%	10,308.6	12.7	0.1%	10,306.4	14.9	0.1%	10,304.2	17.1	0.2%
ME 4	37 55 15	2013	Below Normal	April	--	8,288.4	8,274.2	14.2	0.2%	8,272.1	16.3	0.2%	8,268.1	20.4	0.2%	8,263.9	24.5	0.3%	8,259.8	28.6	0.3%	8,255.7	32.8	0.4%
ME 4	37 55 15	2013	Below Normal	May	--	4,427.4	4,410.2	17.2	0.4%	4,407.6	19.8	0.4%	4,402.7	24.8	0.6%	4,397.8	29.6	0.7%	4,392.8	34.6	0.8%	4,387.8	39.6	0.9%
ME 4	37 55 15	2013	Below Normal	June	--	2,109.4	2,088.7	20.7	1.0%	2,085.8	23.6	1.1%	2,079.9	29.5	1.4%	2,074.0	35.4	1.7%	2,068.2	41.2	2.0%	2,062.3	47.1	2.2%
ME 4	37 55 15	2013	Below Normal	July	--	717.8	698.0	19.7	2.7%	695.2	22.5	3.1%	689.7	28.1	3.9%	684.1	33.7	4.7%	678.5	39.3	5.5%	673.0	44.8	6.2%
ME 4	37 55 15	2013	Below Normal	August	--	339.4	321.0	18.3	5.4%	318.4	20.9	6.2%	313.2	26.1	7.7%	308.0	31.4	9.2%	302.8	36.6	10.8%	297.6	41.8	12.3%
ME 4	37 55 15	2013	Below Normal	September	Used in Summary Table Analysis	4,781.3	4,762.3	19.0	0.4%	4,759.6	21.6	0.5%	4,754.3	27.0	0.6%	4,748.8	32.4	0.7%	4,743.5	37.7	0.8%	4,738.1	43.2	0.9%
ME 4	37 55 15	2014	Critical	October	Used in Summary Table Analysis	281.2	267.7	13.5	4.8%	265.7	15.4	5.5%	261.9	19.3	6.9%	258.0	23.2	8.3%	254.1	27.1	9.6%	250.2	31.0	11.0%
ME 4	37 55 15	2014	Critical	November	Used in Summary Table Analysis	1,535.5	1,524.8	10.8	0.7%	1,523.1	12.4	0.8%	1,520.0	15.5	1.0%	1,516.9	18.6	1.2%	1,513.8	21.8	1.4%	1,510.6	24.9	1.6%
ME 4	37 55 15	2014	Critical	December	--	1,588.5	1,578.9	9.6	0.6%	1,577.7	10.9	0.7%	1,574.9	13.7	0.9%	1,572.1	16.4	1.0%	1,569.3	19.2	1.2%	1,566.6	22.0	1.4%
ME 4	37 55 15	2014	Critical	January	--	2,818.9	2,810.4	8.4	0.3%	2,809.1	9.7	0.3%	2,806.7	12.2	0.4%	2,804.2	14.7	0.5%	2,801.7	17.1	0.6%	2,799.2	19.7	0.7%
ME 4	37 55 15	2014	Critical	February	--	15,745.4	15,737.3	8.1	0.1%	15,736.1	9.3	0.1%	15,733.8	11.6	0.1%	15,731.5	13.9	0.1%	15,729.2	16.2	0.1%	15,726.9	18.5	0.1%
ME 4	37 55 15	2014	Critical	March	--	31,475.7	31,467.6	8.1	0.0%	31,466.4	9.3	0.0%	31,464.1	11.6	0.0%	31,463.0	12.7	0.0%	31,460.6	15.0	0.0%	31,458.3	17.4	0.1%
ME 4	37 55 15	2014	Critical	April	--	12,986.1	12,971.1	15.0	0.1%	12,968.8	17.4	0.1%	12,965.3	20.8	0.2%	12,960.6	25.5	0.2%	12,956.0	30.1	0.2%	12,951.4	34.7	0.3%
ME 4	37 55 15	2014	Critical	May	--	5,185.9	5,167.6	18.3	0.4%	5,165.0	20.8	0.4%	5,159.8	26.0	0.5%	5,154.6	31.3	0.6%	5,149.4	36.5	0.7%	5,144.2	41.7	0.8%
ME 4	37 55 15	2014	Critical	June	--	1,197.1	1,172.2	24.9	2.1%	1,168.8	28.4	2.4%	1,161.8	35.3	2.9%	1,154.7	42.4	3.5%	1,147.8	49.3	4.1%	1,140.8	56.3	4.7%
ME 4	37 55 15	2014	Critical	July	--	545.6	523.1	22.5	4.1%	519.9	25.7	4.7%	513.5	32.1	5.9%	507.1	38.5	7.1%	500.7	44.9	8.2%	494.3	51.3	9.4%
ME 4	37 55 15	2014	Critical	August	--	347.3	326.1	21.3	6.1%	323.0	24.3	7.0%	317.0	30.4	8.7%	310.9	36.4	10.5%	304.8	42.5	12.2%	298.8	48.5	14.0%
ME 4	37 55 15	2014	Critical	September	Used in Summary Table Analysis	2,571.3	2,550.6	20.7	0.8%	2,547.7	23.6	0.9%	2,541.9	29.4	1.1%	2,536.0	35.3	1.4%	2,530.1	41.2	1.6%	2,524.2	47.1	1.8%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	37 55 15	2015	Dry	October	Used in Summary Table Analysis	11,353.0	11,336.9	16.1	0.1%	11,334.7	18.3	0.2%	11,330.3	22.7	0.2%	11,325.7	27.3	0.2%	11,321.4	31.6	0.3%	11,316.7	36.3	0.3%
ME 4	37 55 15	2015	Dry	November	Used in Summary Table Analysis	9,030.1	9,018.3	11.8	0.1%	9,016.6	13.5	0.1%	9,013.2	16.9	0.2%	9,009.7	20.4	0.2%	9,006.4	23.7	0.3%	9,002.9	27.2	0.3%
ME 4	37 55 15	2015	Dry	December	--	32,583.3	32,574.1	9.3	0.0%	32,571.8	11.6	0.0%	32,569.4	13.9	0.0%	32,566.0	17.4	0.1%	32,563.7	19.7	0.1%	32,560.2	23.1	0.1%
ME 4	37 55 15	2015	Dry	January	--	14,572.9	14,563.7	9.3	0.1%	14,562.5	10.4	0.1%	14,560.2	12.7	0.1%	14,556.7	16.2	0.1%	14,554.4	18.5	0.1%	14,552.1	20.8	0.1%
ME 4	37 55 15	2015	Dry	February	--	27,221.1	27,213.0	8.1	0.0%	27,211.8	9.3	0.0%	27,209.5	11.6	0.0%	27,207.2	13.9	0.1%	27,204.9	16.2	0.1%	27,202.5	18.5	0.1%
ME 4	37 55 15	2015	Dry	March	--	11,567.9	11,560.4	7.5	0.1%	11,559.4	8.6	0.1%	11,557.3	10.6	0.1%	11,555.1	12.8	0.1%	11,553.0	14.9	0.1%	11,550.8	17.1	0.1%
ME 4	37 55 15	2015	Dry	April	--	8,378.0	8,362.8	15.2	0.2%	8,360.6	17.4	0.2%	8,356.4	21.6	0.3%	8,352.0	26.0	0.3%	8,347.6	30.4	0.4%	8,343.3	34.7	0.4%
ME 4	37 55 15	2015	Dry	May	--	1,509.0	1,491.1	17.9	1.2%	1,488.5	20.5	1.4%	1,483.4	25.6	1.7%	1,478.4	30.7	2.0%	1,473.3	35.8	2.4%	1,468.1	41.0	2.7%
ME 4	37 55 15	2015	Dry	June	--	652.3	629.3	23.0	3.5%	626.1	26.2	4.0%	619.6	32.7	5.0%	613.2	39.1	6.0%	606.8	45.5	7.0%	600.4	51.9	8.0%
ME 4	37 55 15	2015	Dry	July	--	268.3	246.3	22.0	8.2%	243.2	25.2	9.4%	236.9	31.4	11.7%	230.6	37.7	14.1%	224.4	44.0	16.4%	218.1	50.2	18.7%
ME 4	37 55 15	2015	Dry	August	--	165.8	144.7	21.1	12.7%	141.7	24.1	14.6%	135.7	30.2	18.2%	129.7	36.2	21.8%	123.6	42.2	25.5%	117.6	48.2	29.1%
ME 4	37 55 15	2015	Dry	September	Used in Summary Table Analysis	120.3	101.6	18.7	15.5%	98.9	21.4	17.8%	93.1	27.2	22.6%	87.4	32.9	27.3%	81.6	38.7	32.2%	75.9	44.4	36.9%
ME 4	37 55 15	2016	Above Normal	October	Used in Summary Table Analysis	85.8	69.2	16.5	19.3%	66.7	19.0	22.2%	62.1	23.6	27.6%	57.4	28.3	33.0%	52.8	32.9	38.4%	48.5	37.3	43.5%
ME 4	37 55 15	2016	Above Normal	November	Used in Summary Table Analysis	3,858.2	3,846.2	12.0	0.3%	3,844.3	13.9	0.4%	3,840.9	17.4	0.4%	3,837.3	20.9	0.5%	3,833.7	24.5	0.6%	3,830.1	28.1	0.7%
ME 4	37 55 15	2016	Above Normal	December	--	36,579.9	36,569.4	10.4	0.0%	36,567.1	12.7	0.0%	36,564.8	15.0	0.0%	36,561.3	18.5	0.1%	36,557.9	22.0	0.1%	36,555.6	24.3	0.1%
ME 4	37 55 15	2016	Above Normal	January	--	57,275.5	57,266.2	9.3	0.0%	57,263.9	11.6	0.0%	57,261.6	13.9	0.0%	57,258.1	17.4	0.0%	57,255.8	19.7	0.0%	57,252.3	23.1	0.0%
ME 4	37 55 15	2016	Above Normal	February	--	24,261.6	24,253.5	8.1	0.0%	24,252.3	9.3	0.0%	24,250.0	11.6	0.0%	24,247.7	13.9	0.1%	24,245.4	16.2	0.1%	24,243.1	18.5	0.1%
ME 4	37 55 15	2016	Above Normal	March	--	41,758.1	41,750.0	8.1	0.0%	41,748.8	9.3	0.0%	41,746.5	11.6	0.0%	41,744.2	13.9	0.0%	41,741.9	16.2	0.0%	41,739.6	18.5	0.0%
ME 4	37 55 15	2016	Above Normal	April	--	18,532.4	18,525.5	6.9	0.0%	18,524.3	8.1	0.0%	18,522.0	10.4	0.1%	18,519.7	12.7	0.1%	18,517.4	15.0	0.1%	18,515.0	17.4	0.1%
ME 4	37 55 15	2016	Above Normal	May	--	5,213.4	5,204.4	9.0	0.2%	5,203.0	10.4	0.2%	5,200.3	13.1	0.3%	5,197.7	15.7	0.3%	5,194.9	18.5	0.4%	5,192.2	21.2	0.4%
ME 4	37 55 15	2016	Above Normal	June	--	1,508.4	1,490.5	17.9	1.2%	1,488.0	20.5	1.4%	1,482.9	25.6	1.7%	1,477.8	30.7	2.0%	1,472.7	35.8	2.4%	1,467.7	40.7	2.7%
ME 4	37 55 15	2016	Above Normal	July	--	821.9	802.4	19.5	2.4%	799.6	22.3	2.7%	794.1	27.8	3.4%	788.5	33.4	4.1%	783.0	38.9	4.7%	777.5	44.5	5.4%
ME 4	37 55 15	2016	Above Normal	August	--	490.5	471.7	18.8	3.8%	469.0	21.5	4.4%	463.6	26.9	5.5%	458.3	32.2	6.6%	452.9	37.6	7.7%	447.5	43.0	8.8%
ME 4	37 55 15	2016	Above Normal	September	Used in Summary Table Analysis	327.0	310.5	16.5	5.1%	307.5	19.5	6.0%	302.6	24.4	7.5%	297.5	29.5	9.0%	292.4	34.6	10.6%	287.4	39.6	12.1%
ME 4	37 55 15	2017	Wet	October	Used in Summary Table Analysis	18,268.5	18,254.6	13.9	0.1%	18,252.3	16.2	0.1%	18,248.8	19.7	0.1%	18,245.4	23.1	0.1%	18,240.7	27.8	0.2%	18,237.3	31.3	0.2%
ME 4	37 55 15	2017	Wet	November	Used in Summary Table Analysis	18,805.6	18,795.1	10.4	0.1%	18,794.0	11.6	0.1%	18,791.7	13.9	0.1%	18,788.2	17.4	0.1%	18,784.7	20.8	0.1%	18,782.4	23.1	0.1%
ME 4	37 55 15	2017	Wet	December	--	24,083.3	24,074.1	9.3	0.0%	24,072.9	10.4	0.0%	24,070.6	12.7	0.1%	24,068.3	15.0	0.1%	24,064.8	18.5	0.1%	24,062.5	20.8	0.1%
ME 4	37 55 15	2017	Wet	January	--	106,814.8	106,806.7	8.1	0.0%	106,805.6	9.3	0.0%	106,803.2	11.6	0.0%	106,800.9	13.9	0.0%	106,797.5	17.4	0.0%	106,795.1	19.7	0.0%
ME 4	37 55 15	2017	Wet	February	--	81,788.2	81,780.1	8.1	0.0%	81,778.9	9.3	0.0%	81,776.6	11.6	0.0%	81,774.3	13.9	0.0%	81,772.0	16.2	0.0%	81,769.7	18.5	0.0%
ME 4	37 55 15	2017	Wet	March	--	27,258.1	27,251.2	6.9	0.0%	27,250.0	8.1	0.0%	27,247.7	10.4	0.0%	27,245.4	12.7	0.0%	27,243.1	15.0	0.1%	27,241.9	16.2	0.1%
ME 4	37 55 15	2017	Wet	April	--	22,919.0	22,912.0	6.9	0.0%	22,912.0	6.9	0.0%	22,909.7	9.3	0.0%	22,907.4	11.6	0.1%	22,906.3	12.7	0.1%	22,903.9	15.0	0.1%
ME 4	37 55 15	2017	Wet	May	--	6,272.3	6,263.0	9.4	0.1%	6,261.7	10.6	0.2%	6,259.0	13.3	0.2%	6,256.3	16.1	0.3%	6,253.6	18.8	0.3%	6,250.8	21.5	0.3%
ME 4	37 55 15	2017	Wet	June	--	2,113.9	2,095.5	18.4	0.9%	2,092.8	21.1	1.0%	2,087.6	26.3	1.2%	2,082.4	31.5	1.5%	2,077.2	36.7	1.7%	2,072.0	41.9	2.0%
ME 4	37 55 15	2017	Wet	July	--	932.5	912.8	19.7	2.1%	910.0	22.5	2.4%	904.5	28.1	3.0%	898.9	33.7	3.6%	893.3	39.2	4.2%	887.7	44.8	4.8%
ME 4	37 55 15	2017	Wet	August	--	504.8	485.9	18.9	3.7%	483.3	21.6	4.3%	477.9	26.9	5.3%	472.5	32.3	6.4%	467.2	37.6	7.5%	461.8	43.0	8.5%
ME 4	37 55 15	2017	Wet	September	Used in Summary Table Analysis	321.3	304.1	17.2	5.4%	301.6	19.7	6.1%	296.7	24.6	7.7%	291.8	29.5	9.2%	286.9	34.5	10.7%	282.0	39.4	12.3%
ME 4	37 55 15	2018	Above Normal	October	Used in Summary Table Analysis	274.2	260.7	13.5	4.9%	258.8	15.4	5.6%	254.9	19.2	7.0%	251.0	23.1	8.4%	247.2	27.0	9.8%	243.3	30.8	11.2%
ME 4	37 55 15	2018	Above Normal	November	Used in Summary Table Analysis	10,769.2	10,758.8	10.4	0.1%	10,757.3	11.9	0.1%	10,754.3	14.9	0.1%	10,751.3	17.9	0.2%	10,748.3	20.9	0.2%	10,745.3	24.0	0.2%
ME 4	37 55 15	2018	Above Normal	December	--	5,444.4	5,435.5	8.9	0.2%	5,434.3	10.2	0.2%	5,431.7	12.7	0.2%	5,429.2	15.3	0.3%	5,426.5	17.9	0.3%	5,424.0	20.5	0.4%
ME 4	37 55 15	2018	Above Normal	January	--	17,741.9	17,733.8	8.1	0.0%	17,732.6	9.3	0.1%	17,730.3	11.6	0.1%	17,728.0	13.9	0.1%	17,725.7	16.2	0.1%	17,723.4	18.5	0.1%
ME 4	37 55 15	2018	Above Normal	February	--	7,596.2	7,589.0	7.2	0.1%	7,587.8	8.3	0.1%	7,585.8	10.4	0.1%	7,583.7	12.5	0.2%	7,581.5	14.7	0.2%	7,579.4	16.8	0.2%
ME 4	37 55 15	2018	Above Normal	March	--	20,674.8	20,667.8	6.9	0.0%	20,667.8	6.9	0.0%	20,665.5	9.3	0.0%	20,663.2	11.6	0.1%	20,660.9	13.9	0.1%	20,658.6	16.2	0.1%
ME 4	37 55 15	2018	Above Normal	April	--	32,172.5	32,165.5	6.9	0.0%	32,164.4	8.1	0.0%	32,163.2	9.3	0.0%	32,160.9	11.6	0.0%	32,158.6	13.9	0.0%	32,157.4	15.0	0.0%
ME 4	37 55 15	2018	Above Normal	May	--	6,987.8	6,973.5	14.4	0.2%	6,971.3	16.6	0.2%	6,967.4	20.5	0.3%	6,963.2	24.7	0.4%	6,959.1	28.7	0.4%	6,955.3	32.5	0.5%
ME 4	37 55 15	2018	Above Normal	June	--	1,912.8	1,894.3	18.5	1.0%	1,891.7	21.2	1.1%	1,886.5	26.4	1.4%	1,881.3	31.6	1.7%	1,876.0	36.8	1.9%	1,870.7	42.1	2.2%
ME 4	37 55 15	2018	Above Normal	July	--	780.1	760.4	19.7	2.5%	757.6	22.5	2.9%	752.0	28.1	3.6%	746.4	33.7	4.3%	740.8	39.3	5.0%	735.2	44.8	5.7%
ME 4	37 55 15	2018	Above Normal	August	--	441.4	423.2	18.1	4.1%	420.6	20.7	4.7%	415.5	25.9	5.9%	410.3	31.0	7.0%	405.2	36.2	8.2%	400.0	41.4	9.4%
ME 4	37 55 15	2018	Above Normal	September	Used in Summary Table Analysis	299.0	281.7	17.2	5.8%	279.2	19.7	6.6%	274.3	24.6	8.2%	269.4	29.6	9.9%	264.4	34.5	11.5%	259.5	39.4	13.2%
ME 4	37 55 15	2019	Below Normal	October	Used in Summary Table Analysis	207.2	194.0	13.2	6.4%	192.1	15.0	7.3%	188.3	18.9	9.1%	184.4	22.8	11.0%	180.8	26.4	12.8%	177.0	30.2	14.6%
ME 4	37 55 15	2019	Below Normal	November	Used in Summary Table Analysis	6,609.0	6,598.6	10.4	0.2%	6,597.1	11.9	0.2%	6,594.1	14.9	0.2%	6,591.1	17.9	0.3%	6,588.0	21.1	0.3%	6,585.0	24.1	0.4%
ME 4	37 55 15	2019	Below Normal	December	--	14,641.2	14,631.9	9.3	0.1%	14,630.8	10.4	0.1%	14,628.5	12.7	0.1%	14,625.0	16.2	0.1%	14,622.7	18.5	0.1%	14,620.4	20.8	0.1%
ME 4	37 55 15	2019	Below Normal	January	--	35,169.0	35,160.9	8.1	0.0%	35,159.7	9.3	0.0%	35,157.4	11.6	0.0%	35,155.1	13.9	0.0%	35,152.8	16.2	0.0%	35,150.5	18.5	0.1%
ME 4	37 55 15	2019	Below Normal	February	--	141,863.4	141,863.4	0.0	0.0%	141,863.4	0.0	0.0%	141,851.9	11.6	0.0%	141,851.9	11.6	0.0%	141,851.9	11.6	0.0%	141,851.9	11.6	0.0%
ME 4	37 55 15	2019	Below Normal	March	--	42,292.8	42,285.9	6.9	0.0%	42,285.9	6.9	0.0%	42,283.6	9.3	0.0%	42,281.3	11.6	0.0%	42,278.9	13.9	0.0%	42,276.6	16.2	0.0%
ME 4	37 55 15	2019	Below Normal	April	--	15,265.0	15,258.1	6.9	0.0%	15,256.9	8.1	0.1%	15,255.8	9.3	0.1%	15,253.5	11.6	0.1%	15,251.2	13.9	0.1%	15,250.0	15.0	0.1%
ME 4	37 55 15	2019	Below Normal	May	--	16,901.6	16,886.6	15.0	0.1%	16,884.3	17.4	0.1%	16,879.6	22.0	0.1%	16,876.2	25.5	0.2%	16,871.5	30.1	0.2%	16,866.9	34.7	0.2%
ME 4	37 55 15	2019	Below Normal	June	--	4,243.2	4,223.1	20.0	0.5%	4,220.3	22.9	0.5%	4,214.7	28.5	0.7%	4,209.4	33.8	0.8%	4,203.9	39.2	0.9%	4,198.6	44.6	1.1%
ME 4	37 55 15	2019	Below Normal	July	--	1,359.3	1,339.6	19.7	1.4%	1,336.7	22.6	1.7%	1,331.1	28.1	2.1%	1,325.5	33.8	2.5%	1,319.9	39.4	2.9%	1,314.2	45.0	3.3%
ME 4	37 55 15	2019	Below Normal	August	--	594.8	576.1	18.7	3.1%	573.4	21.3	3.6%	568.1	26.6	4.5%	562.8	31.9	5.4%	557.5	37.2	6.3%	552.3	42.5	7.1%
ME 4	37 55 15	2019	Below Normal	September	Used in Summary Table Analysis	461.4	444.2	17.2	3.7%	441.7	19.6	4.3%	436.8	24.6	5.3%	431.9	29.5	6.4%	427.0	34.4	7.5%	422.1	39.3	8.5%
ME 4	37 55 15	2020	Dry	October	Used in Summary Table Analysis	355.0	342.3	12.7	3.6%	340.5	14.5	4.1%	336.9	18.2	5.1%	333.2	21.8	6.1%	329.5	25.5	7.2%	325.9	29.1	8.2%
ME 4	37 55 15	2020	Dry	November	Used in Summary Table Analysis	317.5	307.7	9.8	3.1%	306.2	11.3	3.5%	303.4	14.1	4.5%	300.5	17.0	5.3%	297.7	19.8	6.2%	294.8	22.7	7.2%
ME 4	37 55 15	2020	Dry	December	--	13,247.7	13,239.6	8.1	0.1%	13,237.3	10.4	0.1%	13,235.0	12.7	0.1%	13,232.6	15.0	0.1%	13,230.3	17.4	0.1%	13,226.9	20.8	0.2%
ME 4	37 55 15	2020	Dry	January	--	22,300.9	22,292.8	8.1	0.0%	22,291.7	9.3	0.0%	22,289.4	11.6	0.1%	22,287.0	13.9	0.1%	22,284.7	16.2	0.1%	22,282.4	18.5	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	37 55 15	2020	Dry	February	--	7,413.8	7,406.5	7.3	0.1%	7,405.3	8.4	0.1%	7,403.2	10.5	0.1%	7,401.0	12.7	0.2%	7,398.8	14.9	0.2%	7,396.6	17.1	0.2%
ME 4	37 55 15	2020	Dry	March	--	7,238.9	7,231.9	6.9	0.1%	7,230.9	8.0	0.1%	7,228.9	10.0	0.1%	7,226.9	12.0	0.2%	7,224.8	14.1	0.2%	7,222.7	16.2	0.2%
ME 4	37 55 15	2020	Dry	April	--	5,477.1	5,462.0	15.0	0.3%	5,460.0	17.1	0.3%	5,455.6	21.5	0.4%	5,451.2	25.9	0.5%	5,446.9	30.2	0.6%	5,442.5	34.6	0.6%
ME 4	37 55 15	2020	Dry	May	--	7,369.3	7,351.3	18.1	0.2%	7,348.7	20.6	0.3%	7,343.5	25.8	0.4%	7,338.3	31.0	0.4%	7,333.1	36.2	0.5%	7,327.9	41.4	0.6%
ME 4	37 55 15	2020	Dry	June	--	2,104.6	2,081.0	23.6	1.1%	2,077.7	27.0	1.3%	2,071.3	33.3	1.6%	2,064.9	39.7	1.9%	2,058.4	46.2	2.2%	2,052.1	52.5	2.5%
ME 4	37 55 15	2020	Dry	July	--	795.6	772.7	22.9	2.9%	769.5	26.2	3.3%	762.9	32.7	4.1%	756.4	39.2	4.9%	749.9	45.7	5.7%	743.4	52.2	6.6%
ME 4	37 55 15	2020	Dry	August	--	398.3	375.9	22.4	5.6%	372.7	25.5	6.4%	366.3	31.9	8.0%	360.0	38.3	9.6%	353.6	44.7	11.2%	347.2	51.0	12.8%
ME 4	37 55 15	2020	Dry	September	Used in Summary Table Analysis	247.8	228.0	19.8	8.0%	225.2	22.6	9.1%	218.7	29.1	11.7%	212.8	35.0	14.1%	206.6	41.1	16.6%	200.6	47.2	19.0%
ME 4	36 55 16	2000	Above Normal	October	Used in Summary Table Analysis	814.6	801.2	13.5	1.7%	799.2	15.4	1.9%	795.4	19.2	2.4%	791.5	23.1	2.8%	787.6	27.0	3.3%	783.7	30.9	3.8%
ME 4	36 55 16	2000	Above Normal	November	Used in Summary Table Analysis	12,093.8	12,083.3	10.4	0.1%	12,081.0	12.7	0.1%	12,078.7	15.0	0.1%	12,075.2	18.5	0.2%	12,071.8	22.0	0.2%	12,069.4	24.3	0.2%
ME 4	36 55 16	2000	Above Normal	December	--	10,797.9	10,788.8	9.1	0.1%	10,787.5	10.4	0.1%	10,784.8	13.1	0.1%	10,782.2	15.7	0.1%	10,779.4	18.5	0.2%	10,776.7	21.2	0.2%
ME 4	36 55 16	2000	Above Normal	January	--	28,534.7	28,526.6	8.1	0.0%	28,525.5	9.3	0.0%	28,523.1	11.6	0.0%	28,519.7	15.0	0.1%	28,517.4	17.4	0.1%	28,515.0	19.7	0.1%
ME 4	36 55 16	2000	Above Normal	February	--	37,015.0	37,006.9	8.1	0.0%	37,005.8	9.3	0.0%	37,003.5	11.6	0.0%	37,001.2	13.9	0.0%	36,998.8	16.2	0.0%	36,996.5	18.5	0.1%
ME 4	36 55 16	2000	Above Normal	March	--	18,309.0	18,300.9	8.1	0.0%	18,300.9	8.1	0.0%	18,298.6	10.4	0.1%	18,296.3	12.7	0.1%	18,294.0	15.0	0.1%	18,291.7	17.4	0.1%
ME 4	36 55 16	2000	Above Normal	April	--	12,307.9	12,300.9	6.9	0.1%	12,300.9	6.9	0.1%	12,298.6	9.3	0.1%	12,296.3	11.6	0.1%	12,294.0	13.9	0.1%	12,292.8	15.0	0.1%
ME 4	36 55 16	2000	Above Normal	May	--	7,089.7	7,074.8	14.9	0.2%	7,072.6	17.1	0.2%	7,068.3	21.4	0.3%	7,064.0	25.7	0.4%	7,059.7	30.0	0.4%	7,055.4	34.3	0.5%
ME 4	36 55 16	2000	Above Normal	June	--	2,609.5	2,587.3	22.2	0.9%	2,584.0	25.5	1.0%	2,577.7	31.8	1.2%	2,571.4	38.1	1.5%	2,565.2	44.3	1.7%	2,558.8	50.7	1.9%
ME 4	36 55 16	2000	Above Normal	July	--	990.8	970.9	19.9	2.0%	968.0	22.7	2.3%	962.4	28.4	2.9%	956.8	34.0	3.4%	951.1	39.6	4.0%	945.5	45.2	4.6%
ME 4	36 55 16	2000	Above Normal	August	--	520.7	502.2	18.6	3.6%	499.5	21.2	4.1%	494.2	26.5	5.1%	489.0	31.8	6.1%	483.7	37.0	7.1%	478.4	42.3	8.1%
ME 4	36 55 16	2000	Above Normal	September	Used in Summary Table Analysis	294.3	277.9	16.3	5.5%	275.6	18.6	6.3%	270.9	23.3	7.9%	266.3	28.0	9.5%	261.7	32.6	11.1%	257.0	37.3	12.7%
ME 4	36 55 16	2001	Dry	October	Used in Summary Table Analysis	3,809.5	3,796.2	13.3	0.3%	3,794.2	15.3	0.4%	3,790.4	19.1	0.5%	3,786.6	22.9	0.6%	3,782.8	26.7	0.7%	3,778.9	30.6	0.8%
ME 4	36 55 16	2001	Dry	November	Used in Summary Table Analysis	6,115.0	6,104.4	10.6	0.2%	6,102.9	12.2	0.2%	6,099.8	15.3	0.2%	6,096.8	18.3	0.3%	6,093.6	21.4	0.4%	6,090.5	24.5	0.4%
ME 4	36 55 16	2001	Dry	December	--	8,829.5	8,820.3	9.3	0.1%	8,818.9	10.6	0.1%	8,816.2	13.3	0.2%	8,813.5	16.0	0.2%	8,810.9	18.6	0.2%	8,808.1	21.4	0.2%
ME 4	36 55 16	2001	Dry	January	--	12,773.1	12,765.0	8.1	0.1%	12,763.9	9.3	0.1%	12,761.6	11.6	0.1%	12,759.3	13.9	0.1%	12,756.9	16.2	0.1%	12,754.6	18.5	0.1%
ME 4	36 55 16	2001	Dry	February	--	17,460.6	17,453.7	6.9	0.0%	17,452.5	8.1	0.0%	17,450.2	10.4	0.1%	17,447.9	12.7	0.1%	17,445.6	15.0	0.1%	17,443.3	17.4	0.1%
ME 4	36 55 16	2001	Dry	March	--	12,291.7	12,284.7	6.9	0.1%	12,283.6	8.1	0.1%	12,281.3	10.4	0.1%	12,278.9	12.7	0.1%	12,276.6	15.0	0.1%	12,274.3	17.4	0.1%
ME 4	36 55 16	2001	Dry	April	--	10,966.1	10,950.8	15.3	0.1%	10,948.6	17.5	0.2%	10,944.2	21.9	0.2%	10,939.7	26.4	0.2%	10,935.3	30.8	0.3%	10,930.9	35.2	0.3%
ME 4	36 55 16	2001	Dry	May	--	2,637.0	2,619.0	18.1	0.7%	2,616.4	20.6	0.8%	2,611.2	25.8	1.0%	2,606.0	31.0	1.2%	2,600.8	36.2	1.4%	2,595.6	41.4	1.6%
ME 4	36 55 16	2001	Dry	June	--	2,644.4	2,619.8	24.7	0.9%	2,616.2	28.2	1.1%	2,609.3	35.2	1.3%	2,602.3	42.1	1.6%	2,595.4	49.1	1.9%	2,588.4	56.0	2.1%
ME 4	36 55 16	2001	Dry	July	--	718.2	695.4	22.8	3.2%	692.2	26.1	3.6%	685.7	32.5	4.5%	679.2	39.0	5.4%	672.8	45.4	6.3%	666.3	51.9	7.2%
ME 4	36 55 16	2001	Dry	August	--	171.8	149.7	22.1	12.9%	146.5	25.3	14.7%	140.2	31.6	18.4%	133.9	37.9	22.0%	127.7	44.1	25.7%	121.4	50.4	29.4%
ME 4	36 55 16	2001	Dry	September	Used in Summary Table Analysis	94.6	75.0	19.6	20.7%	72.2	22.4	23.6%	66.7	27.9	29.5%	61.1	33.5	35.4%	55.5	39.1	41.3%	49.9	44.6	47.2%
ME 4	36 55 16	2002	Below Normal	October	Used in Summary Table Analysis	264.1	247.9	16.2	6.1%	245.6	18.5	7.0%	240.9	23.1	8.8%	236.3	27.8	10.5%	231.7	32.4	12.3%	227.0	37.1	14.0%
ME 4	36 55 16	2002	Below Normal	November	Used in Summary Table Analysis	12,013.9	12,001.2	12.7	0.1%	11,998.8	15.0	0.1%	11,995.4	18.5	0.2%	11,991.9	22.0	0.2%	11,988.4	25.5	0.2%	11,985.0	28.9	0.2%
ME 4	36 55 16	2002	Below Normal	December	--	35,645.8	35,634.3	11.6	0.0%	35,633.1	12.7	0.0%	35,629.6	16.2	0.0%	35,626.2	19.7	0.1%	35,622.7	23.1	0.1%	35,619.2	26.6	0.1%
ME 4	36 55 16	2002	Below Normal	January	--	30,854.2	30,843.8	10.4	0.0%	30,842.6	11.6	0.0%	30,840.3	13.9	0.0%	30,836.8	17.4	0.1%	30,834.5	19.7	0.1%	30,831.0	23.1	0.1%
ME 4	36 55 16	2002	Below Normal	February	--	24,663.2	24,653.9	9.3	0.0%	24,652.8	10.4	0.0%	24,650.5	12.7	0.1%	24,648.1	15.0	0.1%	24,644.7	18.5	0.1%	24,642.4	20.8	0.1%
ME 4	36 55 16	2002	Below Normal	March	--	17,768.5	17,759.3	9.3	0.1%	17,758.1	10.4	0.1%	17,755.8	12.7	0.1%	17,753.5	15.0	0.1%	17,751.2	17.4	0.1%	17,748.8	19.7	0.1%
ME 4	36 55 16	2002	Below Normal	April	--	9,920.8	9,905.4	15.4	0.2%	9,903.2	17.6	0.2%	9,898.8	22.0	0.2%	9,894.4	26.4	0.3%	9,890.2	30.7	0.3%	9,885.6	35.2	0.4%
ME 4	36 55 16	2002	Below Normal	May	--	3,317.9	3,299.9	18.1	0.5%	3,297.2	20.7	0.6%	3,292.0	25.9	0.8%	3,286.9	31.0	0.9%	3,281.7	36.2	1.1%	3,276.5	41.4	1.2%
ME 4	36 55 16	2002	Below Normal	June	--	853.3	832.8	20.4	2.4%	829.9	23.3	2.7%	824.1	29.1	3.4%	818.4	34.9	4.1%	812.5	40.7	4.8%	806.8	46.5	5.4%
ME 4	36 55 16	2002	Below Normal	July	--	361.7	341.2	20.5	5.7%	338.3	23.4	6.5%	332.4	29.3	8.1%	326.6	35.1	9.7%	320.8	40.9	11.3%	314.9	46.7	12.9%
ME 4	36 55 16	2002	Below Normal	August	--	226.2	207.0	19.1	8.5%	204.3	21.9	9.7%	198.9	27.3	12.1%	193.4	32.8	14.5%	188.0	38.2	16.9%	182.5	43.7	19.3%
ME 4	36 55 16	2002	Below Normal	September	Used in Summary Table Analysis	163.0	145.1	18.0	11.0%	142.5	20.5	12.6%	137.4	25.6	15.7%	132.3	30.8	18.9%	127.1	35.9	22.0%	122.0	41.0	25.2%
ME 4	36 55 16	2003	Wet	October	Used in Summary Table Analysis	128.0	113.5	14.5	11.3%	111.5	16.6	13.0%	107.3	20.8	16.2%	103.1	24.9	19.5%	98.9	29.1	22.7%	94.7	33.3	26.0%
ME 4	36 55 16	2003	Wet	November	Used in Summary Table Analysis	895.0	883.5	11.5	1.3%	881.8	13.2	1.5%	878.5	16.5	1.8%	875.1	19.9	2.2%	871.9	23.1	2.6%	868.5	26.5	3.0%
ME 4	36 55 16	2003	Wet	December	--	56,730.3	56,719.9	10.4	0.0%	56,718.8	11.6	0.0%	56,716.4	13.9	0.0%	56,713.0	17.4	0.0%	56,709.5	20.8	0.0%	56,707.2	23.1	0.0%
ME 4	36 55 16	2003	Wet	January	--	31,512.7	31,503.5	9.3	0.0%	31,502.3	10.4	0.0%	31,500.0	12.7	0.0%	31,496.5	16.2	0.1%	31,494.2	18.5	0.1%	31,491.9	20.8	0.1%
ME 4	36 55 16	2003	Wet	February	--	20,343.8	20,335.6	8.1	0.0%	20,334.5	9.3	0.0%	20,332.2	11.6	0.1%	20,329.9	13.9	0.1%	20,327.5	16.2	0.1%	20,325.2	18.5	0.1%
ME 4	36 55 16	2003	Wet	March	--	24,018.5	24,010.4	8.1	0.0%	24,010.4	8.1	0.0%	24,008.1	10.4	0.0%	24,005.8	12.7	0.1%	24,003.5	15.0	0.1%	24,001.2	17.4	0.1%
ME 4	36 55 16	2003	Wet	April	--	42,876.2	42,869.2	6.9	0.0%	42,868.1	8.1	0.0%	42,865.7	10.4	0.0%	42,863.4	12.7	0.0%	42,861.1	15.0	0.0%	42,858.8	17.4	0.0%
ME 4	36 55 16	2003	Wet	May	--	12,219.9	12,203.7	16.2	0.1%	12,201.4	18.5	0.2%	12,197.9	22.0	0.2%	12,193.3	26.6	0.2%	12,188.7	31.3	0.3%	12,184.0	35.9	0.3%
ME 4	36 55 16	2003	Wet	June	--	3,165.5	3,145.7	19.8	0.6%	3,142.9	22.6	0.7%	3,137.4	28.1	0.9%	3,131.9	33.6	1.1%	3,126.5	39.0	1.2%	3,120.9	44.6	1.4%
ME 4	36 55 16	2003	Wet	July	--	1,472.9	1,452.5	20.4	1.4%	1,449.7	23.3	1.6%	1,443.9	29.1	2.0%	1,438.1	34.8	2.4%	1,432.3	40.6	2.8%	1,426.5	46.4	3.2%
ME 4	36 55 16	2003	Wet	August	--	758.9	739.4	19.6	2.6%	736.5	22.4	3.0%	730.9	28.0	3.7%	725.3	33.6	4.4%	719.8	39.2	5.2%	714.0	44.9	5.9%
ME 4	36 55 16	2003	Wet	September	Used in Summary Table Analysis	456.9	440.3	16.6	3.6%	437.9	19.0	4.1%	433.2	23.7	5.2%	428.5	28.4	6.2%	423.8	33.1	7.2%	419.0	37.9	8.3%
ME 4	36 55 16	2004	Wet	October	Used in Summary Table Analysis	323.9	310.3	13.6	4.2%	308.4	15.5	4.8%	304.5	19.4	6.0%	300.6	23.3	7.2%	296.7	27.2	8.4%	292.8	31.1	9.6%
ME 4	36 55 16	2004	Wet	November	Used in Summary Table Analysis	5,794.2	5,783.3	10.9	0.2%	5,781.8	12.4	0.2%	5,778.6	15.6	0.3%	5,775.5	18.8	0.3%	5,772.3	21.9	0.4%	5,769.1	25.1	0.4%
ME 4	36 55 16	2004	Wet	December	--	36,273.1	36,262.7	10.4	0.0%	36,261.6	11.6	0.0%	36,259.3	13.9	0.0%	36,255.8	17.4	0.0%	36,253.5	19.7	0.1%	36,250.0	23.1	0.1%
ME 4	36 55 16	2004	Wet	January	--	31,447.9	31,439.8	8.1	0.0%	31,438.7	9.3	0.0%	31,436.3	11.6	0.0%	31,434.0	13.9	0.0%	31,431.7	16.2	0.1%	31,429.4	18.5	0.1%
ME 4	36 55 16	2004	Wet	February	--	38,211.8	38,203.7	8.1	0.0%	38,202.5	9.3	0.0%	38,200.2	11.6	0.0%	38,197.9	13.9	0.0%	38,195.6	16.2	0.0%	38,193.3	18.5	0.0%
ME 4	36 55 16	2004	Wet	March	--	16,519.7	16,512.7	6.9	0.0%	16,511.6	8.1	0.0%	16,509.3	10.4	0.1%	16,506.9	12.7	0.1%	16,504.6	15.0	0.1%	16,502.3	17.4	0.1%
ME 4	36 55 16	2004	Wet	April	--	9,447.1	9,440.2	6.9	0.1%	9,439.1	8.0	0.1%	9,437.0	10.1	0.1%	9,435.1	12.0	0.1%	9,432.9	14.2	0.2%	9,430.9	16.2	0.2%
ME 4	36 55 16	2004	Wet	May	--	3,417.4	3,402.3	15.0	0.4%	3,400.1	17.2	0.5%	3,395.8	21.5	0.6%	3,391.6	25.8	0.8%	3,387.3	30.1	0.9%	3,382.9	34.5	1.0%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 55 16	2004	Wet	June	--	691.3	672.5	18.8	2.7%	669.8	21.5	3.1%	664.5	26.9	3.9%	659.1	32.2	4.7%	653.8	37.5	5.4%	648.5	42.9	6.2%
ME 4	36 55 16	2004	Wet	July	--	355.2	335.3	20.0	5.6%	332.4	22.8	6.4%	326.7	28.5	8.0%	321.0	34.2	9.6%	315.3	39.9	11.2%	309.7	45.6	12.8%
ME 4	36 55 16	2004	Wet	August	--	224.3	205.6	18.7	8.3%	202.9	21.4	9.5%	197.6	26.7	11.9%	192.3	32.0	14.3%	186.9	37.4	16.7%	181.6	42.7	19.0%
ME 4	36 55 16	2004	Wet	September	Used in Summary Table Analysis	161.4	143.8	17.6	10.9%	141.3	20.2	12.5%	136.2	25.2	15.6%	131.2	30.3	18.7%	126.1	35.3	21.9%	121.1	40.4	25.0%
ME 4	36 55 16	2005	Above Normal	October	Used in Summary Table Analysis	7,671.2	7,657.3	13.9	0.2%	7,655.3	15.9	0.2%	7,651.4	19.8	0.3%	7,647.5	23.7	0.3%	7,643.4	27.8	0.4%	7,639.5	31.7	0.4%
ME 4	36 55 16	2005	Above Normal	November	Used in Summary Table Analysis	2,255.4	2,244.6	10.9	0.5%	2,243.1	12.4	0.5%	2,239.9	15.5	0.7%	2,236.8	18.6	0.8%	2,233.7	21.8	1.0%	2,230.6	24.9	1.1%
ME 4	36 55 16	2005	Above Normal	December	--	20,995.4	20,986.1	9.3	0.0%	20,985.0	10.4	0.0%	20,982.6	12.7	0.1%	20,979.2	16.2	0.1%	20,976.9	18.5	0.1%	20,974.5	20.8	0.1%
ME 4	36 55 16	2005	Above Normal	January	--	22,361.1	22,353.0	8.1	0.0%	22,350.7	10.4	0.0%	22,348.4	12.7	0.1%	22,346.1	15.0	0.1%	22,343.8	17.4	0.1%	22,341.4	19.7	0.1%
ME 4	36 55 16	2005	Above Normal	February	--	14,006.9	14,000.0	6.9	0.0%	13,998.8	8.1	0.1%	13,996.5	10.4	0.1%	13,994.2	12.7	0.1%	13,991.9	15.0	0.1%	13,989.6	17.4	0.1%
ME 4	36 55 16	2005	Above Normal	March	--	28,548.6	28,541.7	6.9	0.0%	28,540.5	8.1	0.0%	28,538.2	10.4	0.0%	28,535.9	12.7	0.0%	28,533.6	15.0	0.1%	28,532.4	16.2	0.1%
ME 4	36 55 16	2005	Above Normal	April	--	21,434.0	21,425.9	8.1	0.0%	21,425.9	8.1	0.0%	21,423.6	10.4	0.0%	21,421.3	12.7	0.1%	21,419.0	15.0	0.1%	21,416.7	17.4	0.1%
ME 4	36 55 16	2005	Above Normal	May	--	19,555.6	19,540.5	15.0	0.1%	19,538.2	17.4	0.1%	19,533.6	22.0	0.1%	19,528.9	26.6	0.1%	19,525.5	30.1	0.2%	19,520.8	34.7	0.2%
ME 4	36 55 16	2005	Above Normal	June	--	15,855.3	15,832.2	23.1	0.1%	15,828.7	26.6	0.2%	15,821.8	33.6	0.2%	15,816.0	39.4	0.2%	15,809.0	46.3	0.3%	15,803.2	52.1	0.3%
ME 4	36 55 16	2005	Above Normal	July	--	2,864.0	2,843.3	20.7	0.7%	2,840.3	23.7	0.8%	2,834.4	29.6	1.0%	2,828.5	35.5	1.2%	2,822.7	41.3	1.4%	2,816.8	47.2	1.6%
ME 4	36 55 16	2005	Above Normal	August	--	981.8	963.1	18.6	1.9%	960.5	21.3	2.2%	955.2	26.6	2.7%	949.9	31.9	3.3%	944.6	37.2	3.8%	939.3	42.5	4.3%
ME 4	36 55 16	2005	Above Normal	September	Used in Summary Table Analysis	523.3	507.0	16.3	3.1%	504.7	18.7	3.6%	500.0	23.3	4.5%	495.3	28.0	5.4%	490.7	32.7	6.2%	486.0	37.3	7.1%
ME 4	36 55 16	2006	Wet	October	Used in Summary Table Analysis	632.9	619.8	13.1	2.1%	618.0	15.0	2.4%	614.2	18.8	3.0%	610.4	22.5	3.6%	606.7	26.3	4.1%	602.9	30.0	4.7%
ME 4	36 55 16	2006	Wet	November	Used in Summary Table Analysis	9,291.6	9,281.3	10.3	0.1%	9,279.9	11.7	0.1%	9,276.9	14.7	0.2%	9,273.8	17.7	0.2%	9,270.9	20.6	0.2%	9,267.9	23.6	0.3%
ME 4	36 55 16	2006	Wet	December	--	43,451.4	43,442.1	9.3	0.0%	43,441.0	10.4	0.0%	43,438.7	12.7	0.0%	43,436.3	15.0	0.0%	43,432.9	18.5	0.0%	43,430.6	20.8	0.0%
ME 4	36 55 16	2006	Wet	January	--	46,256.9	46,248.8	8.1	0.0%	46,246.5	10.4	0.0%	46,244.2	12.7	0.0%	46,241.9	15.0	0.0%	46,239.6	17.4	0.0%	46,237.3	19.7	0.0%
ME 4	36 55 16	2006	Wet	February	--	26,601.9	26,593.8	8.1	0.0%	26,592.6	9.3	0.0%	26,590.3	11.6	0.0%	26,588.0	13.9	0.1%	26,586.8	15.0	0.1%	26,584.5	17.4	0.1%
ME 4	36 55 16	2006	Wet	March	--	47,126.2	47,118.1	8.1	0.0%	47,118.1	8.1	0.0%	47,115.7	10.4	0.0%	47,113.4	12.7	0.0%	47,111.1	15.0	0.0%	47,108.8	17.4	0.0%
ME 4	36 55 16	2006	Wet	April	--	30,415.5	30,408.6	6.9	0.0%	30,408.6	6.9	0.0%	30,406.3	9.3	0.0%	30,403.9	11.6	0.0%	30,401.6	13.9	0.0%	30,400.5	15.0	0.0%
ME 4	36 55 16	2006	Wet	May	--	14,200.2	14,191.0	9.3	0.1%	14,189.8	10.4	0.1%	14,187.5	12.7	0.1%	14,184.0	16.2	0.1%	14,181.7	18.5	0.1%	14,179.4	20.8	0.1%
ME 4	36 55 16	2006	Wet	June	--	3,546.8	3,528.0	18.8	0.5%	3,525.2	21.5	0.6%	3,519.9	26.9	0.8%	3,514.6	32.2	0.9%	3,509.3	37.5	1.1%	3,504.1	42.7	1.2%
ME 4	36 55 16	2006	Wet	July	--	1,277.8	1,258.1	19.7	1.5%	1,255.2	22.6	1.8%	1,249.7	28.1	2.2%	1,244.0	33.8	2.6%	1,238.4	39.4	3.1%	1,232.9	44.9	3.5%
ME 4	36 55 16	2006	Wet	August	--	663.9	644.8	19.1	2.9%	642.1	21.8	3.3%	636.7	27.2	4.1%	631.3	32.6	4.9%	625.9	38.0	5.7%	620.5	43.4	6.5%
ME 4	36 55 16	2006	Wet	September	Used in Summary Table Analysis	424.9	408.4	16.6	3.9%	406.0	18.9	4.4%	401.3	23.6	5.6%	396.6	28.3	6.7%	391.9	33.0	7.8%	387.2	37.7	8.9%
ME 4	36 55 16	2007	Above Normal	October	Used in Summary Table Analysis	273.4	260.1	13.3	4.9%	258.2	15.2	5.6%	254.4	19.0	7.0%	250.6	22.8	8.4%	246.7	26.7	9.8%	242.9	30.5	11.2%
ME 4	36 55 16	2007	Above Normal	November	Used in Summary Table Analysis	8,653.9	8,643.3	10.6	0.1%	8,641.8	12.2	0.1%	8,638.7	15.3	0.2%	8,635.5	18.4	0.2%	8,632.5	21.4	0.2%	8,629.4	24.5	0.3%
ME 4	36 55 16	2007	Above Normal	December	--	20,385.4	20,376.2	9.3	0.0%	20,375.0	10.4	0.1%	20,371.5	13.9	0.1%	20,369.2	16.2	0.1%	20,365.7	19.7	0.1%	20,363.4	22.0	0.1%
ME 4	36 55 16	2007	Above Normal	January	--	10,245.1	10,236.7	8.4	0.1%	10,235.5	9.6	0.1%	10,233.1	12.0	0.1%	10,230.7	14.5	0.1%	10,228.2	16.9	0.2%	10,225.7	19.4	0.2%
ME 4	36 55 16	2007	Above Normal	February	--	30,544.0	30,535.9	8.1	0.0%	30,534.7	9.3	0.0%	30,532.4	11.6	0.0%	30,530.1	13.9	0.0%	30,527.8	16.2	0.1%	30,524.3	19.7	0.1%
ME 4	36 55 16	2007	Above Normal	March	--	13,097.2	13,089.1	8.1	0.1%	13,089.1	8.1	0.1%	13,086.8	10.4	0.1%	13,084.5	12.7	0.1%	13,082.2	15.0	0.1%	13,079.9	17.4	0.1%
ME 4	36 55 16	2007	Above Normal	April	--	11,530.1	11,515.3	14.8	0.1%	11,513.2	16.9	0.1%	11,509.0	21.1	0.2%	11,504.7	25.3	0.2%	11,500.5	29.6	0.3%	11,496.3	33.8	0.3%
ME 4	36 55 16	2007	Above Normal	May	--	4,138.0	4,120.4	17.6	0.4%	4,117.9	20.0	0.5%	4,112.8	25.1	0.6%	4,107.9	30.1	0.7%	4,102.8	35.2	0.9%	4,097.8	40.2	1.0%
ME 4	36 55 16	2007	Above Normal	June	--	1,497.2	1,476.2	21.1	1.4%	1,473.1	24.1	1.6%	1,467.2	30.0	2.0%	1,461.2	36.0	2.4%	1,455.3	41.9	2.8%	1,449.4	47.8	3.2%
ME 4	36 55 16	2007	Above Normal	July	--	495.5	474.5	21.0	4.2%	471.5	23.9	4.8%	465.6	29.9	6.0%	459.7	35.8	7.2%	453.7	41.7	8.4%	447.8	47.7	9.6%
ME 4	36 55 16	2007	Above Normal	August	--	222.2	203.4	18.7	8.4%	200.8	21.4	9.6%	195.5	26.7	12.0%	190.1	32.1	14.4%	184.8	37.4	16.8%	179.5	42.7	19.2%
ME 4	36 55 16	2007	Above Normal	September	Used in Summary Table Analysis	149.8	132.2	17.6	11.8%	129.7	20.1	13.4%	124.7	25.2	16.8%	119.7	30.2	20.1%	114.7	35.2	23.5%	109.6	40.2	26.8%
ME 4	36 55 16	2008	Dry	October	Used in Summary Table Analysis	3,429.2	3,415.0	14.1	0.4%	3,413.0	16.2	0.5%	3,408.9	20.3	0.6%	3,404.9	24.3	0.7%	3,400.8	28.4	0.8%	3,396.8	32.4	0.9%
ME 4	36 55 16	2008	Dry	November	Used in Summary Table Analysis	3,270.7	3,259.7	11.0	0.3%	3,258.2	12.5	0.4%	3,255.1	15.6	0.5%	3,252.0	18.8	0.6%	3,248.7	22.0	0.7%	3,245.6	25.1	0.8%
ME 4	36 55 16	2008	Dry	December	--	23,093.8	23,084.5	9.3	0.0%	23,083.3	10.4	0.0%	23,079.9	13.9	0.1%	23,077.5	16.2	0.1%	23,074.1	19.7	0.1%	23,071.8	22.0	0.1%
ME 4	36 55 16	2008	Dry	January	--	37,500.0	37,490.7	9.3	0.0%	37,489.6	10.4	0.0%	37,487.3	12.7	0.0%	37,485.0	15.0	0.0%	37,482.6	17.4	0.0%	37,479.2	20.8	0.1%
ME 4	36 55 16	2008	Dry	February	--	26,263.9	26,255.8	8.1	0.0%	26,254.6	9.3	0.0%	26,252.3	11.6	0.0%	26,250.0	13.9	0.1%	26,247.7	16.2	0.1%	26,245.4	18.5	0.1%
ME 4	36 55 16	2008	Dry	March	--	11,791.7	11,784.7	6.9	0.1%	11,783.6	8.1	0.1%	11,781.3	10.4	0.1%	11,778.9	12.7	0.1%	11,776.6	15.0	0.1%	11,774.3	17.4	0.1%
ME 4	36 55 16	2008	Dry	April	--	9,014.1	8,999.1	15.0	0.2%	8,997.0	17.1	0.2%	8,992.6	21.5	0.2%	8,988.3	25.8	0.3%	8,984.0	30.1	0.3%	8,979.7	34.4	0.4%
ME 4	36 55 16	2008	Dry	May	--	1,360.2	1,344.2	16.0	1.2%	1,341.9	18.3	1.3%	1,337.3	22.9	1.7%	1,332.8	27.4	2.0%	1,328.4	31.8	2.3%	1,324.0	36.2	2.7%
ME 4	36 55 16	2008	Dry	June	--	437.2	414.4	22.9	5.2%	411.1	26.1	6.0%	404.7	32.6	7.4%	398.2	39.0	8.9%	391.8	45.5	10.4%	385.4	51.8	11.9%
ME 4	36 55 16	2008	Dry	July	--	255.4	233.1	22.3	8.7%	230.0	25.4	10.0%	223.6	31.8	12.4%	217.3	38.1	14.9%	211.0	44.4	17.4%	204.7	50.7	19.9%
ME 4	36 55 16	2008	Dry	August	--	178.8	157.3	21.5	12.0%	154.2	24.6	13.7%	148.1	30.7	17.2%	142.0	36.8	20.6%	135.9	42.9	24.0%	129.8	49.0	27.4%
ME 4	36 55 16	2008	Dry	September	Used in Summary Table Analysis	140.4	119.9	20.5	14.6%	117.0	23.5	16.7%	111.1	29.3	20.9%	105.3	35.2	25.0%	99.4	41.0	29.2%	93.6	46.9	33.4%
ME 4	36 55 16	2009	Critical	October	Used in Summary Table Analysis	923.1	907.1	16.0	1.7%	904.8	18.3	2.0%	900.2	22.9	2.5%	895.6	27.5	3.0%	891.2	31.9	3.5%	886.6	36.6	4.0%
ME 4	36 55 16	2009	Critical	November	Used in Summary Table Analysis	5,503.7	5,491.4	12.3	0.2%	5,489.6	14.1	0.3%	5,486.1	17.6	0.3%	5,482.5	21.2	0.4%	5,478.9	24.8	0.5%	5,475.3	28.4	0.5%
ME 4	36 55 16	2009	Critical	December	--	12,149.3	12,138.9	10.4	0.1%	12,137.7	11.6	0.1%	12,134.3	15.0	0.1%	12,130.8	18.5	0.2%	12,128.5	20.8	0.2%	12,125.0	24.3	0.2%
ME 4	36 55 16	2009	Critical	January	--	8,792.2	8,782.4	9.8	0.1%	8,781.0	11.2	0.1%	8,778.2	14.0	0.2%	8,775.3	16.9	0.2%	8,772.6	19.7	0.2%	8,769.7	22.6	0.3%
ME 4	36 55 16	2009	Critical	February	--	22,601.9	22,592.6	9.3	0.0%	22,591.4	10.4	0.0%	22,589.1	12.7	0.1%	22,586.8	15.0	0.1%	22,584.5	17.4	0.1%	22,582.2	19.7	0.1%
ME 4	36 55 16	2009	Critical	March	--	21,112.3	21,104.2	8.1	0.0%	21,103.0	9.3	0.0%	21,100.7	11.6	0.1%	21,098.4	13.9	0.1%	21,096.1	16.2	0.1%	21,093.8	18.5	0.1%
ME 4	36 55 16	2009	Critical	April	--	10,096.1	10,080.6	15.5	0.2%	10,078.4	17.7	0.2%	10,073.8	22.2	0.2%	10,069.4	26.6	0.3%	10,064.9	31.1	0.3%	10,060.5	35.5	0.4%
ME 4	36 55 16	2009	Critical	May	--	15,578.7	15,560.2	18.5	0.1%	15,556.7	22.0	0.1%	15,552.1	26.6	0.2%	15,546.3	32.4	0.2%	15,540.5	38.2	0.2%	15,535.9	42.8	0.3%
ME 4	36 55 16	2009	Critical	June	--	3,159.7	3,135.4	24.3	0.8%	3,131.9	27.8	0.9%	3,125.0	34.7	1.1%	3,118.1	41.7	1.3%	3,111.1	48.6	1.5%	3,104.3	55.4	1.8%
ME 4	36 55 16	2009	Critical	July	--	1,262.2	1,239.6	22.6	1.8%	1,236.3	25.8	2.0%	1,230.0	32.2	2.5%	1,223.6	38.5	3.1%	1,217.2	44.9	3.6%	1,210.9	51.3	4.1%
ME 4	36 55 16	2009	Critical	August	--	668.0	646.3	21.6	3.2%	643.3	24.7	3.7%	637.1	30.9	4.6%	630.9	37.0	5.5%	624.8	43.2	6.5%	618.6	49.4	7.4%
ME 4	36 55 16	2009	Critical	September	Used in Summary Table Analysis	389.3	370.1	19.2	4.9%	367.4	21.9	5.6%	361.9	27.4	7.0%	356.4	32.8	8.4%	351.0	38.3	9.8%	345.5	43.8	11.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 55 16	2010	Below Normal	October	Used in Summary Table Analysis	6,087.3	6,071.1	16.2	0.3%	6,068.8	18.5	0.3%	6,064.1	23.1	0.4%	6,059.5	27.8	0.5%	6,055.0	32.3	0.5%	6,050.3	36.9	0.6%
ME 4	36 55 16	2010	Below Normal	November	Used in Summary Table Analysis	8,285.4	8,272.7	12.7	0.2%	8,270.8	14.6	0.2%	8,267.2	18.2	0.2%	8,263.5	21.9	0.3%	8,259.8	25.6	0.3%	8,256.1	29.3	0.4%
ME 4	36 55 16	2010	Below Normal	December	--	12,346.1	12,335.6	10.4	0.1%	12,333.3	12.7	0.1%	12,329.9	16.2	0.1%	12,327.5	18.5	0.1%	12,324.1	22.0	0.2%	12,320.6	25.5	0.2%
ME 4	36 55 16	2010	Below Normal	January	--	36,206.0	36,195.6	10.4	0.0%	36,194.4	11.6	0.0%	36,192.1	13.9	0.0%	36,188.7	17.4	0.0%	36,186.3	19.7	0.1%	36,182.9	23.1	0.1%
ME 4	36 55 16	2010	Below Normal	February	--	27,237.3	27,229.2	8.1	0.0%	27,228.0	9.3	0.0%	27,224.5	12.7	0.0%	27,222.2	15.0	0.1%	27,219.9	17.4	0.1%	27,217.6	19.7	0.1%
ME 4	36 55 16	2010	Below Normal	March	--	28,831.0	28,822.9	8.1	0.0%	28,821.8	9.3	0.0%	28,818.3	12.7	0.0%	28,816.0	15.0	0.1%	28,813.7	17.4	0.1%	28,811.3	19.7	0.1%
ME 4	36 55 16	2010	Below Normal	April	--	40,002.3	39,994.2	8.1	0.0%	39,993.1	9.3	0.0%	39,990.7	11.6	0.0%	39,988.4	13.9	0.0%	39,986.1	16.2	0.0%	39,983.8	18.5	0.0%
ME 4	36 55 16	2010	Below Normal	May	--	20,260.4	20,244.2	16.2	0.1%	20,241.9	18.5	0.1%	20,237.3	23.1	0.1%	20,232.6	27.8	0.1%	20,228.0	32.4	0.2%	20,223.4	37.0	0.2%
ME 4	36 55 16	2010	Below Normal	June	--	9,343.6	9,320.3	23.4	0.3%	9,316.9	26.7	0.3%	9,310.3	33.3	0.4%	9,303.7	39.9	0.4%	9,297.2	46.4	0.5%	9,290.6	53.0	0.6%
ME 4	36 55 16	2010	Below Normal	July	--	1,454.1	1,433.1	20.9	1.4%	1,430.1	24.0	1.6%	1,424.1	30.0	2.1%	1,418.1	36.0	2.5%	1,411.9	42.1	2.9%	1,406.3	47.8	3.3%
ME 4	36 55 16	2010	Below Normal	August	--	567.8	548.7	19.1	3.4%	545.9	21.9	3.8%	540.5	27.3	4.8%	535.1	32.7	5.8%	529.6	38.2	6.7%	524.2	43.6	7.7%
ME 4	36 55 16	2010	Below Normal	September	Used in Summary Table Analysis	649.9	631.8	18.1	2.8%	629.2	20.7	3.2%	624.0	25.9	4.0%	618.9	31.0	4.8%	613.7	36.2	5.6%	608.5	41.4	6.4%
ME 4	36 55 16	2011	Wet	October	Used in Summary Table Analysis	9,628.8	9,615.3	13.5	0.1%	9,613.3	15.5	0.2%	9,609.5	19.3	0.2%	9,605.6	23.3	0.2%	9,601.6	27.2	0.3%	9,597.8	31.0	0.3%
ME 4	36 55 16	2011	Wet	November	Used in Summary Table Analysis	14,215.3	14,204.9	10.4	0.1%	14,202.5	12.7	0.1%	14,200.2	15.0	0.1%	14,196.8	18.5	0.1%	14,193.3	22.0	0.2%	14,191.0	24.3	0.2%
ME 4	36 55 16	2011	Wet	December	--	33,681.7	33,672.5	9.3	0.0%	33,671.3	10.4	0.0%	33,669.0	12.7	0.0%	33,665.5	16.2	0.0%	33,663.2	18.5	0.1%	33,660.9	20.8	0.1%
ME 4	36 55 16	2011	Wet	January	--	14,152.8	14,144.7	8.1	0.1%	14,143.5	9.3	0.1%	14,141.2	11.6	0.1%	14,138.9	13.9	0.1%	14,136.6	16.2	0.1%	14,134.3	18.5	0.1%
ME 4	36 55 16	2011	Wet	February	--	20,763.9	20,755.8	8.1	0.0%	20,754.6	9.3	0.0%	20,753.5	10.4	0.1%	20,751.2	12.7	0.1%	20,748.8	15.0	0.1%	20,746.5	17.4	0.1%
ME 4	36 55 16	2011	Wet	March	--	51,994.2	51,987.3	6.9	0.0%	51,986.1	8.1	0.0%	51,983.8	10.4	0.0%	51,981.5	12.7	0.0%	51,979.2	15.0	0.0%	51,976.9	17.4	0.0%
ME 4	36 55 16	2011	Wet	April	--	24,796.3	24,789.4	6.9	0.0%	24,788.2	8.1	0.0%	24,785.9	10.4	0.0%	24,783.6	12.7	0.1%	24,781.3	15.0	0.1%	24,780.1	16.2	0.1%
ME 4	36 55 16	2011	Wet	May	--	11,381.0	11,365.9	15.2	0.1%	11,363.7	17.4	0.2%	11,359.3	21.8	0.2%	11,354.7	26.3	0.2%	11,350.3	30.7	0.3%	11,346.1	35.0	0.3%
ME 4	36 55 16	2011	Wet	June	--	7,054.7	7,031.9	22.8	0.3%	7,028.7	26.0	0.4%	7,022.3	32.4	0.5%	7,015.9	38.9	0.6%	7,009.4	45.4	0.6%	7,003.0	51.7	0.7%
ME 4	36 55 16	2011	Wet	July	--	1,828.5	1,806.0	22.5	1.2%	1,802.9	25.6	1.4%	1,796.4	32.1	1.8%	1,790.0	38.4	2.1%	1,783.7	44.8	2.4%	1,777.3	51.2	2.8%
ME 4	36 55 16	2011	Wet	August	--	776.0	757.0	18.9	2.4%	754.3	21.6	2.8%	748.9	27.0	3.5%	743.6	32.4	4.2%	738.2	37.8	4.9%	732.8	43.1	5.6%
ME 4	36 55 16	2011	Wet	September	Used in Summary Table Analysis	432.5	415.5	17.1	3.9%	413.0	19.5	4.5%	408.1	24.4	5.6%	403.3	29.2	6.8%	398.4	34.1	7.9%	393.6	38.9	9.0%
ME 4	36 55 16	2012	Below Normal	October	Used in Summary Table Analysis	4,539.2	4,525.5	13.8	0.3%	4,523.5	15.7	0.3%	4,519.4	19.8	0.4%	4,515.5	23.7	0.5%	4,511.6	27.7	0.6%	4,507.5	31.7	0.7%
ME 4	36 55 16	2012	Below Normal	November	Used in Summary Table Analysis	8,233.7	8,222.7	11.0	0.1%	8,221.2	12.5	0.2%	8,217.9	15.7	0.2%	8,214.8	18.9	0.2%	8,211.6	22.1	0.3%	8,208.4	25.2	0.3%
ME 4	36 55 16	2012	Below Normal	December	--	5,181.6	5,172.1	9.5	0.2%	5,170.8	10.8	0.2%	5,168.1	13.5	0.3%	5,165.4	16.2	0.3%	5,162.6	19.0	0.4%	5,159.8	21.8	0.4%
ME 4	36 55 16	2012	Below Normal	January	--	20,104.2	20,094.9	9.3	0.0%	20,093.8	10.4	0.1%	20,091.4	12.7	0.1%	20,089.1	15.0	0.1%	20,086.8	17.4	0.1%	20,083.3	20.8	0.1%
ME 4	36 55 16	2012	Below Normal	February	--	18,209.5	18,202.5	6.9	0.0%	18,201.4	8.1	0.0%	18,199.1	10.4	0.1%	18,196.8	12.7	0.1%	18,194.4	15.0	0.1%	18,192.1	17.4	0.1%
ME 4	36 55 16	2012	Below Normal	March	--	45,410.9	45,403.9	6.9	0.0%	45,402.8	8.1	0.0%	45,399.3	11.6	0.0%	45,397.0	13.9	0.0%	45,394.7	16.2	0.0%	45,393.5	17.4	0.0%
ME 4	36 55 16	2012	Below Normal	April	--	26,855.3	26,847.2	8.1	0.0%	26,846.1	9.3	0.0%	26,844.9	10.4	0.0%	26,842.6	12.7	0.0%	26,840.3	15.0	0.1%	26,838.0	17.4	0.1%
ME 4	36 55 16	2012	Below Normal	May	--	7,482.1	7,466.9	15.2	0.2%	7,464.8	17.2	0.2%	7,460.3	21.8	0.3%	7,455.9	26.2	0.3%	7,451.6	30.4	0.4%	7,447.2	34.8	0.5%
ME 4	36 55 16	2012	Below Normal	June	--	5,513.9	5,490.6	23.3	0.4%	5,487.4	26.5	0.5%	5,480.8	33.1	0.6%	5,474.3	39.6	0.7%	5,467.7	46.2	0.8%	5,461.1	52.8	1.0%
ME 4	36 55 16	2012	Below Normal	July	--	2,222.7	2,201.0	21.6	1.0%	2,198.0	24.7	1.1%	2,191.8	30.9	1.4%	2,185.6	37.0	1.7%	2,179.5	43.2	1.9%	2,173.3	49.4	2.2%
ME 4	36 55 16	2012	Below Normal	August	--	387.9	370.5	17.3	4.5%	368.1	19.8	5.1%	363.2	24.7	6.4%	358.2	29.6	7.6%	353.3	34.5	8.9%	348.4	39.4	10.2%
ME 4	36 55 16	2012	Below Normal	September	Used in Summary Table Analysis	248.2	232.9	15.4	6.2%	230.7	17.5	7.1%	226.3	21.9	8.8%	222.0	26.2	10.6%	217.7	30.6	12.3%	213.3	34.9	14.1%
ME 4	36 55 16	2013	Below Normal	October	Used in Summary Table Analysis	1,910.4	1,897.1	13.3	0.7%	1,895.3	15.2	0.8%	1,891.4	19.0	1.0%	1,887.6	22.8	1.2%	1,883.9	26.5	1.4%	1,880.1	30.3	1.6%
ME 4	36 55 16	2013	Below Normal	November	Used in Summary Table Analysis	14,677.1	14,666.7	10.4	0.1%	14,665.5	11.6	0.1%	14,662.0	15.0	0.1%	14,659.7	17.4	0.1%	14,656.3	20.8	0.1%	14,653.9	23.1	0.2%
ME 4	36 55 16	2013	Below Normal	December	--	59,974.5	59,965.3	9.3	0.0%	59,963.0	11.6	0.0%	59,960.6	13.9	0.0%	59,958.3	16.2	0.0%	59,954.9	19.7	0.0%	59,952.5	22.0	0.0%
ME 4	36 55 16	2013	Below Normal	January	--	22,196.8	22,188.7	8.1	0.0%	22,187.5	9.3	0.0%	22,185.2	11.6	0.1%	22,182.9	13.9	0.1%	22,180.6	16.2	0.1%	22,178.2	18.5	0.1%
ME 4	36 55 16	2013	Below Normal	February	--	8,843.3	8,835.5	7.8	0.1%	8,834.4	8.9	0.1%	8,832.1	11.2	0.1%	8,829.9	13.4	0.2%	8,827.5	15.7	0.2%	8,825.2	18.1	0.2%
ME 4	36 55 16	2013	Below Normal	March	--	10,326.4	10,318.9	7.5	0.1%	10,317.8	8.6	0.1%	10,315.6	10.8	0.1%	10,313.4	13.0	0.1%	10,311.1	15.3	0.1%	10,308.9	17.5	0.2%
ME 4	36 55 16	2013	Below Normal	April	--	8,289.9	8,275.5	14.5	0.2%	8,273.4	16.6	0.2%	8,269.2	20.7	0.2%	8,265.2	24.8	0.3%	8,261.0	28.9	0.3%	8,256.8	33.1	0.4%
ME 4	36 55 16	2013	Below Normal	May	--	4,429.4	4,411.9	17.5	0.4%	4,409.5	19.9	0.4%	4,404.4	25.0	0.6%	4,399.4	30.0	0.7%	4,394.4	35.0	0.8%	4,389.4	40.0	0.9%
ME 4	36 55 16	2013	Below Normal	June	--	2,109.8	2,089.0	20.8	1.0%	2,086.0	23.8	1.1%	2,080.1	29.7	1.4%	2,074.1	35.8	1.7%	2,068.2	41.7	2.0%	2,062.3	47.6	2.3%
ME 4	36 55 16	2013	Below Normal	July	--	717.9	697.8	20.1	2.8%	695.0	22.9	3.2%	689.3	28.6	4.0%	683.6	34.3	4.8%	678.0	40.0	5.6%	672.3	45.6	6.4%
ME 4	36 55 16	2013	Below Normal	August	--	339.6	320.9	18.7	5.5%	318.2	21.3	6.3%	312.9	26.7	7.9%	307.6	32.0	9.4%	302.3	37.3	11.0%	296.9	42.7	12.6%
ME 4	36 55 16	2013	Below Normal	September	Used in Summary Table Analysis	4,783.8	4,764.6	19.2	0.4%	4,761.8	22.0	0.5%	4,756.3	27.5	0.6%	4,750.8	33.0	0.7%	4,745.4	38.4	0.8%	4,739.8	44.0	0.9%
ME 4	36 55 16	2014	Critical	October	Used in Summary Table Analysis	281.1	267.2	13.9	4.9%	265.2	15.9	5.6%	261.2	19.9	7.1%	257.2	23.9	8.5%	253.2	27.9	9.9%	249.2	31.9	11.3%
ME 4	36 55 16	2014	Critical	November	Used in Summary Table Analysis	1,536.8	1,525.7	11.1	0.7%	1,524.1	12.7	0.8%	1,520.9	15.9	1.0%	1,517.7	19.1	1.2%	1,514.5	22.3	1.5%	1,511.2	25.6	1.7%
ME 4	36 55 16	2014	Critical	December	--	1,589.1	1,579.3	9.8	0.6%	1,577.9	11.2	0.7%	1,575.1	14.0	0.9%	1,572.2	16.9	1.1%	1,569.4	19.7	1.2%	1,566.6	22.6	1.4%
ME 4	36 55 16	2014	Critical	January	--	2,820.1	2,811.5	8.7	0.3%	2,810.2	10.0	0.4%	2,807.6	12.5	0.4%	2,805.1	15.0	0.5%	2,802.5	17.6	0.6%	2,800.0	20.1	0.7%
ME 4	36 55 16	2014	Critical	February	--	15,748.8	15,740.7	8.1	0.1%	15,739.6	9.3	0.1%	15,737.3	11.6	0.1%	15,735.0	13.9	0.1%	15,732.6	16.2	0.1%	15,730.3	18.5	0.1%
ME 4	36 55 16	2014	Critical	March	--	31,481.5	31,473.4	8.1	0.0%	31,472.2	9.3	0.0%	31,469.9	11.6	0.0%	31,467.6	13.9	0.0%	31,465.3	16.2	0.1%	31,463.0	18.5	0.1%
ME 4	36 55 16	2014	Critical	April	--	12,988.4	12,973.4	15.0	0.1%	12,971.1	17.4	0.1%	12,966.4	22.0	0.2%	12,963.0	25.5	0.2%	12,958.3	30.1	0.2%	12,953.7	34.7	0.3%
ME 4	36 55 16	2014	Critical	May	--	5,187.3	5,168.8	18.5	0.4%	5,166.1	21.2	0.4%	5,160.9	26.4	0.5%	5,155.6	31.7	0.6%	5,150.3	36.9	0.7%	5,145.0	42.2	0.8%
ME 4	36 55 16	2014	Critical	June	--	1,197.6	1,172.5	25.1	2.1%	1,168.9	28.7	2.4%	1,161.8	35.8	3.0%	1,154.7	42.9	3.6%	1,147.6	49.9	4.2%	1,140.6	57.0	4.8%
ME 4	36 55 16	2014	Critical	July	--	545.7	522.8	22.9	4.2%	519.5	26.2	4.8%	513.0	32.7	6.0%	506.5	39.2	7.2%	500.0	45.7	8.4%	493.5	52.2	9.6%
ME 4	36 55 16	2014	Critical	August	--	347.5	325.8	21.7	6.3%	322.7	24.8	7.1%	316.5	31.0	8.9%	310.3	37.2	10.7%	304.1	43.4	12.5%	298.0	49.6	14.3%
ME 4	36 55 16	2014	Critical	September	Used in Summary Table Analysis	2,572.3	2,551.2	21.2	0.8%	2,548.1	24.2	0.9%	2,542.2	30.1	1.2%	2,536.1	36.2	1.4%	2,530.1	42.2	1.6%	2,524.1	48.3	1.9%
ME 4	36 55 16	2015	Dry	October	Used in Summary Table Analysis	11,358.0	11,341.4	16.6	0.1%	11,339.1	18.9	0.2%	11,334.6	23.4	0.2%	11,330.0	28.0	0.2%	11,325.5	32.5	0.3%	11,320.6	37.4	0.3%
ME 4	36 55 16	2015	Dry	November	Used in Summary Table Analysis	9,035.6	9,023.5	12.2	0.1%	9,021.6	14.0	0.2%	9,018.2	17.5	0.2%	9,014.7	20.9	0.2%	9,011.1	24.5	0.3%	9,007.6	28.0	0.3%
ME 4	36 55 16	2015	Dry	December	--	32,605.3	32,594.9	10.4	0.0%	32,593.8	11.6	0.0%	32,590.3	15.0	0.0%	32,586.8	18.5	0.1%	32,584.5	20.8	0.1%	32,581.0	24.3	0.1%
ME 4	36 55 16	2015	Dry	January	--	14,576.4	14,567.1	9.3	0.1%	14,566.0	10.4	0.1%	14,562.5	13.9	0.1%	14,560.2	16.2	0.1%	14,556.7	19.7	0.1%	14,554.4	22.0	0.2%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 55 16	2015	Dry	February	--	27,229.2	27,221.1	8.1	0.0%	27,219.9	9.3	0.0%	27,217.6	11.6	0.0%	27,214.1	15.0	0.1%	27,211.8	17.4	0.1%	27,209.5	19.7	0.1%
ME 4	36 55 16	2015	Dry	March	--	11,570.0	11,562.4	7.6	0.1%	11,561.2	8.8	0.1%	11,559.0	11.0	0.1%	11,556.8	13.2	0.1%	11,554.6	15.4	0.1%	11,552.5	17.5	0.2%
ME 4	36 55 16	2015	Dry	April	--	8,383.6	8,368.3	15.3	0.2%	8,366.1	17.5	0.2%	8,361.7	21.9	0.3%	8,357.3	26.3	0.3%	8,352.9	30.7	0.4%	8,348.5	35.1	0.4%
ME 4	36 55 16	2015	Dry	May	--	1,509.1	1,491.0	18.2	1.2%	1,488.4	20.7	1.4%	1,483.2	25.9	1.7%	1,478.1	31.0	2.1%	1,472.9	36.2	2.4%	1,467.7	41.4	2.7%
ME 4	36 55 16	2015	Dry	June	--	652.4	629.2	23.3	3.6%	625.9	26.5	4.1%	619.3	33.1	5.1%	612.8	39.6	6.1%	606.3	46.1	7.1%	599.8	52.6	8.1%
ME 4	36 55 16	2015	Dry	July	--	268.4	246.0	22.5	8.4%	242.8	25.6	9.6%	236.4	32.0	11.9%	230.0	38.4	14.3%	223.6	44.8	16.7%	217.2	51.2	19.1%
ME 4	36 55 16	2015	Dry	August	--	166.0	144.4	21.6	13.0%	141.3	24.7	14.9%	135.2	30.8	18.6%	129.0	37.0	22.3%	122.8	43.2	26.0%	116.7	49.3	29.7%
ME 4	36 55 16	2015	Dry	September	Used in Summary Table Analysis	120.3	101.2	19.2	15.9%	98.4	21.9	18.2%	92.4	27.9	23.2%	86.6	33.7	28.0%	80.6	39.7	33.0%	74.8	45.6	37.9%
ME 4	36 55 16	2016	Above Normal	October	Used in Summary Table Analysis	85.7	68.8	17.0	19.8%	66.2	19.5	22.8%	61.4	24.3	28.3%	56.6	29.1	34.0%	51.9	33.8	39.5%	47.4	38.4	44.7%
ME 4	36 55 16	2016	Above Normal	November	Used in Summary Table Analysis	3,862.8	3,850.5	12.4	0.3%	3,848.5	14.4	0.4%	3,844.9	17.9	0.5%	3,841.2	21.6	0.6%	3,837.5	25.3	0.7%	3,833.8	29.1	0.8%
ME 4	36 55 16	2016	Above Normal	December	--	36,605.3	36,593.8	11.6	0.0%	36,592.6	12.7	0.0%	36,589.1	16.2	0.0%	36,585.6	19.7	0.1%	36,582.2	23.1	0.1%	36,579.9	25.5	0.1%
ME 4	36 55 16	2016	Above Normal	January	--	57,302.1	57,292.8	9.3	0.0%	57,290.5	11.6	0.0%	57,288.2	13.9	0.0%	57,284.7	17.4	0.0%	57,282.4	19.7	0.0%	57,278.9	23.1	0.0%
ME 4	36 55 16	2016	Above Normal	February	--	24,267.4	24,258.1	9.3	0.0%	24,256.9	10.4	0.0%	24,254.6	12.7	0.1%	24,252.3	15.0	0.1%	24,250.0	17.4	0.1%	24,247.7	19.7	0.1%
ME 4	36 55 16	2016	Above Normal	March	--	41,770.8	41,762.7	8.1	0.0%	41,761.6	9.3	0.0%	41,759.3	11.6	0.0%	41,755.8	15.0	0.0%	41,753.5	17.4	0.0%	41,751.2	19.7	0.0%
ME 4	36 55 16	2016	Above Normal	April	--	18,535.9	18,528.9	6.9	0.0%	18,527.8	8.1	0.0%	18,525.5	10.4	0.1%	18,523.1	12.7	0.1%	18,520.8	15.0	0.1%	18,518.5	17.4	0.1%
ME 4	36 55 16	2016	Above Normal	May	--	5,214.9	5,205.7	9.3	0.2%	5,204.3	10.6	0.2%	5,201.6	13.3	0.3%	5,198.8	16.1	0.3%	5,196.1	18.9	0.4%	5,193.4	21.5	0.4%
ME 4	36 55 16	2016	Above Normal	June	--	1,509.0	1,490.9	18.2	1.2%	1,488.3	20.7	1.4%	1,483.2	25.8	1.7%	1,478.0	31.0	2.1%	1,472.9	36.1	2.4%	1,467.8	41.2	2.7%
ME 4	36 55 16	2016	Above Normal	July	--	822.4	802.6	19.8	2.4%	799.7	22.7	2.8%	794.1	28.3	3.4%	788.4	33.9	4.1%	782.8	39.6	4.8%	777.2	45.2	5.5%
ME 4	36 55 16	2016	Above Normal	August	--	490.9	471.7	19.2	3.9%	469.0	22.0	4.5%	463.5	27.4	5.6%	458.0	32.9	6.7%	452.5	38.4	7.8%	447.0	43.9	8.9%
ME 4	36 55 16	2016	Above Normal	September	Used in Summary Table Analysis	327.3	310.4	16.9	5.2%	307.3	20.0	6.1%	302.3	25.0	7.6%	297.1	30.2	9.2%	291.9	35.4	10.8%	286.7	40.6	12.4%
ME 4	36 55 16	2017	Wet	October	Used in Summary Table Analysis	18,277.8	18,263.9	13.9	0.1%	18,261.6	16.2	0.1%	18,258.1	19.7	0.1%	18,253.5	24.3	0.1%	18,248.8	28.9	0.2%	18,245.4	32.4	0.2%
ME 4	36 55 16	2017	Wet	November	Used in Summary Table Analysis	18,817.1	18,806.7	10.4	0.1%	18,804.4	12.7	0.1%	18,802.1	15.0	0.1%	18,798.6	18.5	0.1%	18,795.1	22.0	0.1%	18,792.8	24.3	0.1%
ME 4	36 55 16	2017	Wet	December	--	24,100.7	24,091.4	9.3	0.0%	24,090.3	10.4	0.0%	24,088.0	12.7	0.1%	24,084.5	16.2	0.1%	24,082.2	18.5	0.1%	24,079.9	20.8	0.1%
ME 4	36 55 16	2017	Wet	January	--	106,866.9	106,857.6	9.3	0.0%	106,856.5	10.4	0.0%	106,854.2	12.7	0.0%	106,851.9	15.0	0.0%	106,848.4	18.5	0.0%	106,846.1	20.8	0.0%
ME 4	36 55 16	2017	Wet	February	--	81,818.3	81,810.2	8.1	0.0%	81,809.0	9.3	0.0%	81,806.7	11.6	0.0%	81,804.4	13.9	0.0%	81,802.1	16.2	0.0%	81,799.8	18.5	0.0%
ME 4	36 55 16	2017	Wet	March	--	27,268.5	27,261.6	6.9	0.0%	27,260.4	8.1	0.0%	27,258.1	10.4	0.0%	27,255.8	12.7	0.0%	27,253.5	15.0	0.1%	27,251.2	17.4	0.1%
ME 4	36 55 16	2017	Wet	April	--	22,929.4	22,922.5	6.9	0.0%	22,921.3	8.1	0.0%	22,920.1	9.3	0.0%	22,917.8	11.6	0.1%	22,915.5	13.9	0.1%	22,914.4	15.0	0.1%
ME 4	36 55 16	2017	Wet	May	--	6,273.3	6,263.8	9.5	0.2%	6,262.4	10.9	0.2%	6,259.7	13.5	0.2%	6,256.9	16.3	0.3%	6,254.2	19.1	0.3%	6,251.4	21.9	0.3%
ME 4	36 55 16	2017	Wet	June	--	2,115.4	2,096.9	18.5	0.9%	2,094.2	21.2	1.0%	2,088.9	26.5	1.3%	2,083.6	31.8	1.5%	2,078.4	37.0	1.8%	2,073.1	42.2	2.0%
ME 4	36 55 16	2017	Wet	July	--	933.4	913.4	20.0	2.1%	910.5	22.9	2.4%	904.8	28.5	3.1%	899.2	34.2	3.7%	893.5	39.9	4.3%	887.9	45.5	4.9%
ME 4	36 55 16	2017	Wet	August	--	505.5	486.3	19.2	3.8%	483.5	22.0	4.4%	478.1	27.5	5.4%	472.6	32.9	6.5%	467.1	38.4	7.6%	461.7	43.8	8.7%
ME 4	36 55 16	2017	Wet	September	Used in Summary Table Analysis	321.8	304.2	17.6	5.5%	301.7	20.2	6.3%	296.7	25.2	7.8%	291.6	30.2	9.4%	286.6	35.2	11.0%	281.6	40.3	12.5%
ME 4	36 55 16	2018	Above Normal	October	Used in Summary Table Analysis	274.6	260.8	13.8	5.0%	258.8	15.8	5.8%	254.8	19.8	7.2%	250.8	23.8	8.7%	246.9	27.7	10.1%	242.9	31.7	11.5%
ME 4	36 55 16	2018	Above Normal	November	Used in Summary Table Analysis	10,780.4	10,769.7	10.8	0.1%	10,768.2	12.3	0.1%	10,765.0	15.4	0.1%	10,761.9	18.5	0.2%	10,758.8	21.6	0.2%	10,755.7	24.8	0.2%
ME 4	36 55 16	2018	Above Normal	December	--	5,445.5	5,436.3	9.1	0.2%	5,435.1	10.4	0.2%	5,432.4	13.1	0.2%	5,429.7	15.7	0.3%	5,427.1	18.4	0.3%	5,424.3	21.2	0.4%
ME 4	36 55 16	2018	Above Normal	January	--	17,761.6	17,753.5	8.1	0.0%	17,752.3	9.3	0.1%	17,750.0	11.6	0.1%	17,747.7	13.9	0.1%	17,745.4	16.2	0.1%	17,743.1	18.5	0.1%
ME 4	36 55 16	2018	Above Normal	February	--	7,597.1	7,589.7	7.4	0.1%	7,588.7	8.4	0.1%	7,586.5	10.6	0.1%	7,584.3	12.8	0.2%	7,582.1	15.0	0.2%	7,579.9	17.2	0.2%
ME 4	36 55 16	2018	Above Normal	March	--	20,687.5	20,680.6	6.9	0.0%	20,679.4	8.1	0.0%	20,677.1	10.4	0.1%	20,675.9	11.6	0.1%	20,673.6	13.9	0.1%	20,671.3	16.2	0.1%
ME 4	36 55 16	2018	Above Normal	April	--	32,187.5	32,180.6	6.9	0.0%	32,179.4	8.1	0.0%	32,177.1	10.4	0.0%	32,175.9	11.6	0.0%	32,173.6	13.9	0.0%	32,171.3	16.2	0.1%
ME 4	36 55 16	2018	Above Normal	May	--	6,988.8	6,974.2	14.6	0.2%	6,972.1	16.7	0.2%	6,968.1	20.7	0.3%	6,963.9	24.9	0.4%	6,959.7	29.1	0.4%	6,955.8	33.0	0.5%
ME 4	36 55 16	2018	Above Normal	June	--	1,913.4	1,894.8	18.6	1.0%	1,892.1	21.3	1.1%	1,886.8	26.6	1.4%	1,881.5	31.9	1.7%	1,876.2	37.3	1.9%	1,870.8	42.6	2.2%
ME 4	36 55 16	2018	Above Normal	July	--	780.6	760.6	20.0	2.6%	757.7	22.9	2.9%	752.1	28.5	3.7%	746.4	34.2	4.4%	740.7	39.9	5.1%	735.0	45.6	5.8%
ME 4	36 55 16	2018	Above Normal	August	--	441.8	423.3	18.5	4.2%	420.7	21.1	4.8%	415.4	26.4	6.0%	410.1	31.7	7.2%	404.8	36.9	8.4%	399.6	42.2	9.6%
ME 4	36 55 16	2018	Above Normal	September	Used in Summary Table Analysis	299.3	281.6	17.6	5.9%	279.1	20.2	6.7%	274.1	25.2	8.4%	269.1	30.2	10.1%	264.0	35.3	11.8%	258.9	40.3	13.5%
ME 4	36 55 16	2019	Below Normal	October	Used in Summary Table Analysis	207.3	193.8	13.6	6.5%	191.9	15.5	7.5%	188.0	19.4	9.3%	183.9	23.4	11.3%	180.2	27.2	13.1%	176.3	31.1	15.0%
ME 4	36 55 16	2019	Below Normal	November	Used in Summary Table Analysis	6,616.2	6,605.4	10.8	0.2%	6,603.9	12.3	0.2%	6,600.8	15.4	0.2%	6,597.7	18.5	0.3%	6,594.4	21.8	0.3%	6,591.3	24.9	0.4%
ME 4	36 55 16	2019	Below Normal	December	--	14,653.9	14,644.7	9.3	0.1%	14,643.5	10.4	0.1%	14,640.0	13.9	0.1%	14,637.7	16.2	0.1%	14,635.4	18.5	0.1%	14,631.9	22.0	0.2%
ME 4	36 55 16	2019	Below Normal	January	--	35,195.6	35,187.5	8.1	0.0%	35,186.3	9.3	0.0%	35,184.0	11.6	0.0%	35,181.7	13.9	0.0%	35,178.2	17.4	0.0%	35,175.9	19.7	0.1%
ME 4	36 55 16	2019	Below Normal	February	--	141,898.1	141,886.6	11.6	0.0%	141,886.6	11.6	0.0%	141,886.6	11.6	0.0%	141,886.6	11.6	0.0%	141,875.0	23.1	0.0%	141,875.0	23.1	0.0%
ME 4	36 55 16	2019	Below Normal	March	--	42,309.0	42,300.9	8.1	0.0%	42,300.9	8.1	0.0%	42,298.6	10.4	0.0%	42,296.3	12.7	0.0%	42,295.1	13.9	0.0%	42,292.8	16.2	0.0%
ME 4	36 55 16	2019	Below Normal	April	--	15,269.7	15,262.7	6.9	0.0%	15,261.6	8.1	0.1%	15,260.4	9.3	0.1%	15,258.1	11.6	0.1%	15,255.8	13.9	0.1%	15,253.5	16.2	0.1%
ME 4	36 55 16	2019	Below Normal	May	--	16,922.5	16,907.4	15.0	0.1%	16,905.1	17.4	0.1%	16,900.5	22.0	0.1%	16,895.8	26.6	0.2%	16,891.2	31.3	0.2%	16,886.6	35.9	0.2%
ME 4	36 55 16	2019	Below Normal	June	--	4,243.6	4,223.3	20.4	0.5%	4,220.4	23.3	0.5%	4,214.8	28.8	0.7%	4,209.4	34.3	0.8%	4,203.9	39.7	0.9%	4,198.5	45.1	1.1%
ME 4	36 55 16	2019	Below Normal	July	--	1,360.2	1,340.2	20.0	1.5%	1,337.3	22.9	1.7%	1,331.5	28.7	2.1%	1,325.8	34.4	2.5%	1,320.1	40.0	2.9%	1,314.4	45.8	3.4%
ME 4	36 55 16	2019	Below Normal	August	--	595.4	576.4	19.0	3.2%	573.7	21.8	3.7%	568.3	27.2	4.6%	562.9	32.5	5.5%	557.5	38.0	6.4%	552.1	43.4	7.3%
ME 4	36 55 16	2019	Below Normal	September	Used in Summary Table Analysis	461.8	444.3	17.6	3.8%	441.7	20.1	4.3%	436.7	25.1	5.4%	431.7	30.1	6.5%	426.7	35.2	7.6%	421.7	40.2	8.7%
ME 4	36 55 16	2020	Dry	October	Used in Summary Table Analysis	355.3	342.2	13.0	3.7%	340.3	14.9	4.2%	336.6	18.7	5.3%	332.8	22.4	6.3%	329.0	26.2	7.4%	325.3	30.0	8.4%
ME 4	36 55 16	2020	Dry	November	Used in Summary Table Analysis	318.2	308.0	10.2	3.2%	306.5	11.6	3.7%	303.6	14.6	4.6%	300.6	17.5	5.5%	297.7	20.5	6.4%	294.7	23.5	7.4%
ME 4	36 55 16	2020	Dry	December	--	13,266.2	13,256.9	9.3	0.1%	13,255.8	10.4	0.1%	13,253.5	12.7	0.1%	13,251.2	15.0	0.1%	13,247.7	18.5	0.1%	13,245.4	20.8	0.2%
ME 4	36 55 16	2020	Dry	January	--	22,316.0	22,307.9	8.1	0.0%	22,306.7	9.3	0.0%	22,303.2	12.7	0.1%	22,300.9	15.0	0.1%	22,298.6	17.4	0.1%	22,296.3	19.7	0.1%
ME 4	36 55 16	2020	Dry	February	--	7,414.6	7,406.9	7.6	0.1%	7,405.9	8.7	0.1%	7,403.7	10.9	0.1%	7,401.4	13.2	0.2%	7,399.2	15.4	0.2%	7,397.0	17.6	0.2%
ME 4	36 55 16	2020	Dry	March	--	7,241.4	7,234.4	7.1	0.1%	7,233.3	8.1	0.1%	7,231.1	10.3	0.1%	7,229.1	12.4	0.2%	7,226.9	14.6	0.2%	7,224.8	16.7	0.2%
ME 4	36 55 16	2020	Dry	April	--	5,480.0	5,464.7	15.3	0.3%	5,462.6	17.4	0.3%	5,458.2	21.8	0.4%	5,453.7	26.3	0.5%	5,449.3	30.7	0.6%	5,444.9	35.1	0.6%
ME 4	36 55 16	2020	Dry	May	--	7,372.9	7,354.6	18.3	0.2%	7,352.1	20.8	0.3%	7,346.9	26.0	0.4%	7,341.4	31.5	0.4%	7,336.2	36.7	0.5%	7,331.0	41.9	0.6%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 55 16	2020	Dry	June	--	2,104.6	2,080.7	24.0	1.1%	2,077.3	27.3	1.3%	2,070.8	33.8	1.6%	2,064.5	40.2	1.9%	2,057.9	46.8	2.2%	2,051.4	53.2	2.5%
ME 4	36 55 16	2020	Dry	July	--	795.9	772.6	23.3	2.9%	769.3	26.6	3.3%	762.6	33.3	4.2%	756.0	39.9	5.0%	749.3	46.6	5.8%	742.7	53.2	6.7%
ME 4	36 55 16	2020	Dry	August	--	398.5	375.7	22.8	5.7%	372.4	26.1	6.5%	365.9	32.6	8.2%	359.4	39.1	9.8%	352.9	45.6	11.4%	346.4	52.1	13.1%
ME 4	36 55 16	2020	Dry	September	Used in Summary Table Analysis	247.9	227.7	20.2	8.2%	224.8	23.1	9.3%	218.2	29.8	12.0%	212.1	35.8	14.5%	205.8	42.1	17.0%	199.6	48.3	19.5%
ME 4	36 54 17	2000	Above Normal	October	Used in Summary Table Analysis	815.5	801.9	13.6	1.7%	800.0	15.5	1.9%	796.2	19.4	2.4%	792.2	23.3	2.9%	788.3	27.2	3.3%	784.4	31.1	3.8%
ME 4	36 54 17	2000	Above Normal	November	Used in Summary Table Analysis	12,111.1	12,100.7	10.4	0.1%	12,098.4	12.7	0.1%	12,096.1	15.0	0.1%	12,092.6	18.5	0.2%	12,089.1	22.0	0.2%	12,086.8	24.3	0.2%
ME 4	36 54 17	2000	Above Normal	December	--	10,807.3	10,798.0	9.3	0.1%	10,796.8	10.5	0.1%	10,794.1	13.2	0.1%	10,791.3	16.0	0.1%	10,788.7	18.6	0.2%	10,785.9	21.4	0.2%
ME 4	36 54 17	2000	Above Normal	January	--	28,564.8	28,555.6	9.3	0.0%	28,554.4	10.4	0.0%	28,552.1	12.7	0.0%	28,549.8	15.0	0.1%	28,547.5	17.4	0.1%	28,545.1	19.7	0.1%
ME 4	36 54 17	2000	Above Normal	February	--	37,034.7	37,026.6	8.1	0.0%	37,025.5	9.3	0.0%	37,023.1	11.6	0.0%	37,020.8	13.9	0.0%	37,018.5	16.2	0.0%	37,016.2	18.5	0.1%
ME 4	36 54 17	2000	Above Normal	March	--	18,314.8	18,307.9	6.9	0.0%	18,306.7	8.1	0.0%	18,304.4	10.4	0.1%	18,303.2	11.6	0.1%	18,300.9	13.9	0.1%	18,298.6	16.2	0.1%
ME 4	36 54 17	2000	Above Normal	April	--	12,313.7	12,306.7	6.9	0.1%	12,305.6	8.1	0.1%	12,303.2	10.4	0.1%	12,300.9	12.7	0.1%	12,299.8	13.9	0.1%	12,297.5	16.2	0.1%
ME 4	36 54 17	2000	Above Normal	May	--	7,093.6	7,078.7	14.9	0.2%	7,076.5	17.1	0.2%	7,072.2	21.4	0.3%	7,067.8	25.8	0.4%	7,063.5	30.1	0.4%	7,059.3	34.4	0.5%
ME 4	36 54 17	2000	Above Normal	June	--	2,611.0	2,588.7	22.3	0.9%	2,585.5	25.5	1.0%	2,579.2	31.8	1.2%	2,572.8	38.2	1.5%	2,566.6	44.4	1.7%	2,560.2	50.8	1.9%
ME 4	36 54 17	2000	Above Normal	July	--	991.4	971.5	20.0	2.0%	968.6	22.8	2.3%	962.9	28.5	2.9%	957.3	34.1	3.4%	951.7	39.8	4.0%	946.0	45.4	4.6%
ME 4	36 54 17	2000	Above Normal	August	--	521.4	502.7	18.6	3.6%	500.1	21.3	4.1%	494.8	26.6	5.1%	489.5	31.9	6.1%	484.2	37.2	7.1%	478.9	42.5	8.1%
ME 4	36 54 17	2000	Above Normal	September	Used in Summary Table Analysis	294.7	278.3	16.4	5.6%	276.0	18.7	6.4%	271.3	23.4	7.9%	266.6	28.1	9.5%	262.0	32.8	11.1%	257.3	37.4	12.7%
ME 4	36 54 17	2001	Dry	October	Used in Summary Table Analysis	3,813.4	3,800.0	13.4	0.4%	3,798.1	15.3	0.4%	3,794.2	19.2	0.5%	3,790.4	23.0	0.6%	3,786.6	26.9	0.7%	3,782.8	30.7	0.8%
ME 4	36 54 17	2001	Dry	November	Used in Summary Table Analysis	6,121.6	6,110.9	10.8	0.2%	6,109.4	12.3	0.2%	6,106.3	15.4	0.3%	6,103.1	18.5	0.3%	6,100.1	21.5	0.4%	6,096.9	24.8	0.4%
ME 4	36 54 17	2001	Dry	December	--	8,836.1	8,826.7	9.4	0.1%	8,825.5	10.6	0.1%	8,822.7	13.4	0.2%	8,820.0	16.1	0.2%	8,817.4	18.8	0.2%	8,814.6	21.5	0.2%
ME 4	36 54 17	2001	Dry	January	--	12,785.9	12,777.8	8.1	0.1%	12,776.6	9.3	0.1%	12,774.3	11.6	0.1%	12,772.0	13.9	0.1%	12,769.7	16.2	0.1%	12,767.4	18.5	0.1%
ME 4	36 54 17	2001	Dry	February	--	17,468.8	17,461.8	6.9	0.0%	17,460.6	8.1	0.0%	17,458.3	10.4	0.1%	17,456.0	12.7	0.1%	17,453.7	15.0	0.1%	17,451.4	17.4	0.1%
ME 4	36 54 17	2001	Dry	March	--	12,296.3	12,288.2	8.1	0.1%	12,287.0	9.3	0.1%	12,285.9	10.4	0.1%	12,283.6	12.7	0.1%	12,281.3	15.0	0.1%	12,278.9	17.4	0.1%
ME 4	36 54 17	2001	Dry	April	--	10,970.6	10,955.2	15.4	0.1%	10,953.0	17.6	0.2%	10,948.6	22.0	0.2%	10,944.1	26.5	0.2%	10,939.7	30.9	0.3%	10,935.3	35.3	0.3%
ME 4	36 54 17	2001	Dry	May	--	2,637.3	2,619.1	18.2	0.7%	2,616.4	20.8	0.8%	2,611.2	26.0	1.0%	2,606.0	31.3	1.2%	2,600.8	36.5	1.4%	2,595.6	41.7	1.6%
ME 4	36 54 17	2001	Dry	June	--	2,647.1	2,622.3	24.8	0.9%	2,618.9	28.2	1.1%	2,611.8	35.3	1.3%	2,604.9	42.2	1.6%	2,597.9	49.2	1.9%	2,591.0	56.1	2.1%
ME 4	36 54 17	2001	Dry	July	--	718.4	695.5	22.9	3.2%	692.3	26.2	3.6%	685.8	32.7	4.5%	679.3	39.1	5.4%	672.8	45.6	6.3%	666.3	52.1	7.3%
ME 4	36 54 17	2001	Dry	August	--	172.1	149.9	22.2	12.9%	146.8	25.4	14.7%	140.4	31.7	18.4%	134.1	38.0	22.1%	127.8	44.3	25.7%	121.5	50.6	29.4%
ME 4	36 54 17	2001	Dry	September	Used in Summary Table Analysis	94.9	75.3	19.7	20.7%	72.5	22.5	23.7%	66.9	28.1	29.6%	61.3	33.7	35.5%	55.7	39.3	41.4%	50.1	44.9	47.3%
ME 4	36 54 17	2002	Below Normal	October	Used in Summary Table Analysis	264.5	248.2	16.3	6.2%	245.9	18.6	7.0%	241.2	23.3	8.8%	236.5	28.0	10.6%	231.9	32.6	12.3%	227.2	37.3	14.1%
ME 4	36 54 17	2002	Below Normal	November	Used in Summary Table Analysis	12,022.0	12,009.3	12.7	0.1%	12,008.1	13.9	0.1%	12,003.5	18.5	0.2%	12,000.0	22.0	0.2%	11,996.5	25.5	0.2%	11,993.1	28.9	0.2%
ME 4	36 54 17	2002	Below Normal	December	--	35,672.5	35,660.9	11.6	0.0%	35,659.7	12.7	0.0%	35,656.3	16.2	0.0%	35,652.8	19.7	0.1%	35,649.3	23.1	0.1%	35,645.8	26.6	0.1%
ME 4	36 54 17	2002	Below Normal	January	--	30,871.5	30,861.1	10.4	0.0%	30,860.0	11.6	0.0%	30,856.5	15.0	0.0%	30,854.2	17.4	0.1%	30,851.9	19.7	0.1%	30,848.4	23.1	0.1%
ME 4	36 54 17	2002	Below Normal	February	--	24,673.6	24,664.4	9.3	0.0%	24,663.2	10.4	0.0%	24,660.9	12.7	0.1%	24,658.6	15.0	0.1%	24,655.1	18.5	0.1%	24,652.8	20.8	0.1%
ME 4	36 54 17	2002	Below Normal	March	--	17,776.6	17,767.4	9.3	0.1%	17,766.2	10.4	0.1%	17,763.9	12.7	0.1%	17,761.6	15.0	0.1%	17,759.3	17.4	0.1%	17,756.9	19.7	0.1%
ME 4	36 54 17	2002	Below Normal	April	--	9,924.1	9,908.7	15.4	0.2%	9,906.4	17.7	0.2%	9,902.0	22.1	0.2%	9,897.7	26.4	0.3%	9,893.3	30.8	0.3%	9,888.8	35.3	0.4%
ME 4	36 54 17	2002	Below Normal	May	--	3,319.1	3,300.9	18.2	0.5%	3,298.3	20.8	0.6%	3,293.1	26.0	0.8%	3,288.0	31.1	0.9%	3,282.6	36.5	1.1%	3,277.4	41.7	1.3%
ME 4	36 54 17	2002	Below Normal	June	--	853.7	833.2	20.5	2.4%	830.3	23.4	2.7%	824.5	29.2	3.4%	818.7	35.0	4.1%	812.8	40.9	4.8%	807.1	46.6	5.5%
ME 4	36 54 17	2002	Below Normal	July	--	362.1	341.5	20.6	5.7%	338.6	23.5	6.5%	332.7	29.4	8.1%	326.9	35.2	9.7%	321.0	41.1	11.3%	315.2	46.9	13.0%
ME 4	36 54 17	2002	Below Normal	August	--	226.6	207.4	19.2	8.5%	204.7	22.0	9.7%	199.2	27.4	12.1%	193.7	32.9	14.5%	188.2	38.4	16.9%	182.8	43.9	19.4%
ME 4	36 54 17	2002	Below Normal	September	Used in Summary Table Analysis	163.4	145.4	18.0	11.0%	142.8	20.6	12.6%	137.7	25.8	15.8%	132.5	30.9	18.9%	127.3	36.1	22.1%	122.2	41.2	25.2%
ME 4	36 54 17	2003	Wet	October	Used in Summary Table Analysis	128.4	113.8	14.6	11.4%	111.7	16.7	13.0%	107.5	20.9	16.3%	103.3	25.1	19.5%	99.1	29.3	22.8%	94.9	33.5	26.1%
ME 4	36 54 17	2003	Wet	November	Used in Summary Table Analysis	895.6	884.0	11.6	1.3%	882.3	13.3	1.5%	879.0	16.6	1.9%	875.6	20.0	2.2%	872.3	23.3	2.6%	868.9	26.7	3.0%
ME 4	36 54 17	2003	Wet	December	--	56,792.8	56,782.4	10.4	0.0%	56,781.3	11.6	0.0%	56,777.8	15.0	0.0%	56,775.5	17.4	0.0%	56,772.0	20.8	0.0%	56,769.7	23.1	0.0%
ME 4	36 54 17	2003	Wet	January	--	31,526.6	31,517.4	9.3	0.0%	31,516.2	10.4	0.0%	31,512.7	13.9	0.0%	31,510.4	16.2	0.1%	31,508.1	18.5	0.1%	31,504.6	22.0	0.1%
ME 4	36 54 17	2003	Wet	February	--	20,351.9	20,342.6	9.3	0.0%	20,341.4	10.4	0.1%	20,339.1	12.7	0.1%	20,336.8	15.0	0.1%	20,334.5	17.4	0.1%	20,332.2	19.7	0.1%
ME 4	36 54 17	2003	Wet	March	--	24,030.1	24,022.0	8.1	0.0%	24,020.8	9.3	0.0%	24,018.5	11.6	0.0%	24,016.2	13.9	0.1%	24,013.9	16.2	0.1%	24,011.6	18.5	0.1%
ME 4	36 54 17	2003	Wet	April	--	42,902.8	42,894.7	8.1	0.0%	42,893.5	9.3	0.0%	42,891.2	11.6	0.0%	42,890.0	12.7	0.0%	42,887.7	15.0	0.0%	42,885.4	17.4	0.0%
ME 4	36 54 17	2003	Wet	May	--	12,223.4	12,208.3	15.0	0.1%	12,206.0	17.4	0.1%	12,201.4	22.0	0.2%	12,196.8	26.6	0.2%	12,192.1	31.3	0.3%	12,187.5	35.9	0.3%
ME 4	36 54 17	2003	Wet	June	--	3,166.4	3,146.6	19.8	0.6%	3,143.9	22.6	0.7%	3,138.3	28.1	0.9%	3,132.8	33.7	1.1%	3,127.3	39.1	1.2%	3,121.8	44.7	1.4%
ME 4	36 54 17	2003	Wet	July	--	1,473.7	1,453.2	20.5	1.4%	1,450.3	23.4	1.6%	1,444.6	29.2	2.0%	1,438.8	35.0	2.4%	1,433.0	40.7	2.8%	1,427.2	46.5	3.2%
ME 4	36 54 17	2003	Wet	August	--	759.6	740.0	19.7	2.6%	737.1	22.5	3.0%	731.5	28.1	3.7%	725.9	33.7	4.4%	720.3	39.4	5.2%	714.5	45.1	5.9%
ME 4	36 54 17	2003	Wet	September	Used in Summary Table Analysis	457.5	440.8	16.7	3.6%	438.4	19.1	4.2%	433.7	23.8	5.2%	428.9	28.6	6.2%	424.2	33.3	7.3%	419.4	38.1	8.3%
ME 4	36 54 17	2004	Wet	October	Used in Summary Table Analysis	324.4	310.7	13.6	4.2%	308.8	15.6	4.8%	304.9	19.5	6.0%	301.0	23.4	7.2%	297.0	27.3	8.4%	293.1	31.3	9.6%
ME 4	36 54 17	2004	Wet	November	Used in Summary Table Analysis	5,801.2	5,790.3	10.9	0.2%	5,788.7	12.5	0.2%	5,785.5	15.6	0.3%	5,782.3	18.9	0.3%	5,779.2	22.0	0.4%	5,775.9	25.2	0.4%
ME 4	36 54 17	2004	Wet	December	--	36,304.4	36,295.1	9.3	0.0%	36,294.0	10.4	0.0%	36,290.5	13.9	0.0%	36,288.2	16.2	0.0%	36,284.7	19.7	0.1%	36,282.4	22.0	0.1%
ME 4	36 54 17	2004	Wet	January	--	31,469.9	31,461.8	8.1	0.0%	31,460.6	9.3	0.0%	31,458.3	11.6	0.0%	31,456.0	13.9	0.0%	31,453.7	16.2	0.1%	31,450.2	19.7	0.1%
ME 4	36 54 17	2004	Wet	February	--	38,232.6	38,224.5	8.1	0.0%	38,223.4	9.3	0.0%	38,221.1	11.6	0.0%	38,218.8	13.9	0.0%	38,216.4	16.2	0.0%	38,214.1	18.5	0.0%
ME 4	36 54 17	2004	Wet	March	--	16,524.3	16,516.2	8.1	0.0%	16,515.0	9.3	0.1%	16,513.9	10.4	0.1%	16,511.6	12.7	0.1%	16,509.3	15.0	0.1%	16,506.9	17.4	0.1%
ME 4	36 54 17	2004	Wet	April	--	9,450.0	9,443.1	6.9	0.1%	9,442.0	8.0	0.1%	9,439.9	10.1	0.1%	9,438.0	12.0	0.1%	9,435.8	14.2	0.2%	9,433.8	16.2	0.2%
ME 4	36 54 17	2004	Wet	May	--	3,419.6	3,404.5	15.0	0.4%	3,402.3	17.2	0.5%	3,398.0	21.5	0.6%	3,393.8	25.8	0.8%	3,389.4	30.2	0.9%	3,385.1	34.5	1.0%
ME 4	36 54 17	2004	Wet	June	--	691.7	672.9	18.9	2.7%	670.2	21.6	3.1%	664.8	26.9	3.9%	659.4	32.3	4.7%	654.1	37.6	5.4%	648.7	43.0	6.2%
ME 4	36 54 17	2004	Wet	July	--	355.8	335.7	20.0	5.6%	332.9	22.9	6.4%	327.2	28.6	8.0%	321.4	34.3	9.6%	315.7	40.0	11.3%	310.0	45.7	12.9%
ME 4	36 54 17	2004	Wet	August	--	224.7	206.0	18.8	8.4%	203.3	21.5	9.5%	197.9	26.8	11.9%	192.6	32.2	14.3%	187.2	37.5	16.7%	181.9	42.9	19.1%
ME 4	36 54 17	2004	Wet	September	Used in Summary Table Analysis	161.8	144.1	17.7	11.0%	141.6	20.3	12.5%	136.5	25.3	15.7%	131.4	30.4	18.8%	126.3	35.5	21.9%	121.2	40.6	25.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 54 17	2005	Above Normal	October	Used in Summary Table Analysis	7,680.2	7,666.4	13.8	0.2%	7,664.4	15.9	0.2%	7,660.4	19.8	0.3%	7,656.4	23.8	0.3%	7,652.4	27.8	0.4%	7,648.4	31.8	0.4%
ME 4	36 54 17	2005	Above Normal	November	Used in Summary Table Analysis	2,256.6	2,245.7	10.9	0.5%	2,244.1	12.5	0.6%	2,241.0	15.6	0.7%	2,237.8	18.8	0.8%	2,234.7	21.9	1.0%	2,231.6	25.0	1.1%
ME 4	36 54 17	2005	Above Normal	December	--	21,022.0	21,012.7	9.3	0.0%	21,011.6	10.4	0.0%	21,009.3	12.7	0.1%	21,005.8	16.2	0.1%	21,003.5	18.5	0.1%	21,000.0	22.0	0.1%
ME 4	36 54 17	2005	Above Normal	January	--	22,381.9	22,373.8	8.1	0.0%	22,372.7	9.3	0.0%	22,369.2	12.7	0.1%	22,366.9	15.0	0.1%	22,364.6	17.4	0.1%	22,362.3	19.7	0.1%
ME 4	36 54 17	2005	Above Normal	February	--	14,011.6	14,003.5	8.1	0.1%	14,002.3	9.3	0.1%	14,000.0	11.6	0.1%	13,997.7	13.9	0.1%	13,995.4	16.2	0.1%	13,993.1	18.5	0.1%
ME 4	36 54 17	2005	Above Normal	March	--	28,564.8	28,557.9	6.9	0.0%	28,556.7	8.1	0.0%	28,554.4	10.4	0.0%	28,552.1	12.7	0.0%	28,549.8	15.0	0.1%	28,547.5	17.4	0.1%
ME 4	36 54 17	2005	Above Normal	April	--	21,444.4	21,437.5	6.9	0.0%	21,436.3	8.1	0.0%	21,434.0	10.4	0.0%	21,431.7	12.7	0.1%	21,429.4	15.0	0.1%	21,428.2	16.2	0.1%
ME 4	36 54 17	2005	Above Normal	May	--	19,568.3	19,553.2	15.0	0.1%	19,550.9	17.4	0.1%	19,546.3	22.0	0.1%	19,541.7	26.6	0.1%	19,537.0	31.3	0.2%	19,533.6	34.7	0.2%
ME 4	36 54 17	2005	Above Normal	June	--	15,870.4	15,847.2	23.1	0.1%	15,843.8	26.6	0.2%	15,836.8	33.6	0.2%	15,831.0	39.4	0.2%	15,824.1	46.3	0.3%	15,818.3	52.1	0.3%
ME 4	36 54 17	2005	Above Normal	July	--	2,864.2	2,843.4	20.8	0.7%	2,840.5	23.7	0.8%	2,834.6	29.6	1.0%	2,828.6	35.6	1.2%	2,822.8	41.4	1.4%	2,816.9	47.3	1.7%
ME 4	36 54 17	2005	Above Normal	August	--	982.5	963.8	18.7	1.9%	961.1	21.4	2.2%	955.8	26.7	2.7%	950.5	32.0	3.3%	945.2	37.4	3.8%	939.8	42.7	4.3%
ME 4	36 54 17	2005	Above Normal	September	Used in Summary Table Analysis	524.0	507.6	16.4	3.1%	505.2	18.8	3.6%	500.5	23.5	4.5%	495.8	28.1	5.4%	491.2	32.8	6.3%	486.5	37.5	7.2%
ME 4	36 54 17	2006	Wet	October	Used in Summary Table Analysis	633.7	620.5	13.2	2.1%	618.6	15.1	2.4%	614.8	18.9	3.0%	611.0	22.7	3.6%	607.3	26.4	4.2%	603.5	30.2	4.8%
ME 4	36 54 17	2006	Wet	November	Used in Summary Table Analysis	9,303.7	9,293.3	10.4	0.1%	9,291.8	11.9	0.1%	9,288.8	14.9	0.2%	9,285.8	17.9	0.2%	9,282.9	20.8	0.2%	9,279.7	24.0	0.3%
ME 4	36 54 17	2006	Wet	December	--	43,491.9	43,482.6	9.3	0.0%	43,481.5	10.4	0.0%	43,478.0	13.9	0.0%	43,475.7	16.2	0.0%	43,473.4	18.5	0.0%	43,469.9	22.0	0.1%
ME 4	36 54 17	2006	Wet	January	--	46,294.0	46,284.7	9.3	0.0%	46,283.6	10.4	0.0%	46,281.3	12.7	0.0%	46,278.9	15.0	0.0%	46,276.6	17.4	0.0%	46,274.3	19.7	0.0%
ME 4	36 54 17	2006	Wet	February	--	26,618.1	26,610.0	8.1	0.0%	26,608.8	9.3	0.0%	26,606.5	11.6	0.0%	26,604.2	13.9	0.1%	26,601.9	16.2	0.1%	26,600.7	17.4	0.1%
ME 4	36 54 17	2006	Wet	March	--	47,155.1	47,148.1	6.9	0.0%	47,147.0	8.1	0.0%	47,144.7	10.4	0.0%	47,142.4	12.7	0.0%	47,140.0	15.0	0.0%	47,137.7	17.4	0.0%
ME 4	36 54 17	2006	Wet	April	--	30,428.2	30,421.3	6.9	0.0%	30,420.1	8.1	0.0%	30,417.8	10.4	0.0%	30,415.5	12.7	0.0%	30,414.4	13.9	0.0%	30,412.0	16.2	0.1%
ME 4	36 54 17	2006	Wet	May	--	14,207.2	14,197.9	9.3	0.1%	14,196.8	10.4	0.1%	14,194.4	12.7	0.1%	14,191.0	16.2	0.1%	14,188.7	18.5	0.1%	14,186.3	20.8	0.1%
ME 4	36 54 17	2006	Wet	June	--	3,547.7	3,528.8	18.9	0.5%	3,526.0	21.6	0.6%	3,520.7	27.0	0.8%	3,515.4	32.3	0.9%	3,510.1	37.6	1.1%	3,504.7	42.9	1.2%
ME 4	36 54 17	2006	Wet	July	--	1,278.8	1,258.9	19.9	1.6%	1,256.1	22.7	1.8%	1,250.5	28.4	2.2%	1,244.9	33.9	2.7%	1,239.2	39.6	3.1%	1,233.7	45.1	3.5%
ME 4	36 54 17	2006	Wet	August	--	664.7	645.6	19.2	2.9%	642.9	21.9	3.3%	637.4	27.3	4.1%	632.0	32.7	4.9%	626.6	38.2	5.7%	621.2	43.6	6.6%
ME 4	36 54 17	2006	Wet	September	Used in Summary Table Analysis	425.7	409.0	16.6	3.9%	406.7	19.0	4.5%	401.9	23.7	5.6%	397.2	28.4	6.7%	392.5	33.2	7.8%	387.7	37.9	8.9%
ME 4	36 54 17	2007	Above Normal	October	Used in Summary Table Analysis	273.9	260.6	13.4	4.9%	258.7	15.3	5.6%	254.8	19.1	7.0%	251.0	23.0	8.4%	247.1	26.8	9.8%	243.2	30.7	11.2%
ME 4	36 54 17	2007	Above Normal	November	Used in Summary Table Analysis	8,664.6	8,653.8	10.8	0.1%	8,652.3	12.3	0.1%	8,649.2	15.4	0.2%	8,646.1	18.5	0.2%	8,642.9	21.6	0.2%	8,639.8	24.8	0.3%
ME 4	36 54 17	2007	Above Normal	December	--	20,407.4	20,398.1	9.3	0.0%	20,395.8	11.6	0.1%	20,393.5	13.9	0.1%	20,390.0	17.4	0.1%	20,387.7	19.7	0.1%	20,385.4	22.0	0.1%
ME 4	36 54 17	2007	Above Normal	January	--	10,251.0	10,242.6	8.4	0.1%	10,241.3	9.7	0.1%	10,238.9	12.2	0.1%	10,236.5	14.6	0.1%	10,234.0	17.0	0.2%	10,231.5	19.6	0.2%
ME 4	36 54 17	2007	Above Normal	February	--	30,568.3	30,560.2	8.1	0.0%	30,559.0	9.3	0.0%	30,556.7	11.6	0.0%	30,554.4	13.9	0.0%	30,552.1	16.2	0.1%	30,549.8	18.5	0.1%
ME 4	36 54 17	2007	Above Normal	March	--	13,101.9	13,093.8	8.1	0.1%	13,092.6	9.3	0.1%	13,090.3	11.6	0.1%	13,089.1	12.7	0.1%	13,086.8	15.0	0.1%	13,084.5	17.4	0.1%
ME 4	36 54 17	2007	Above Normal	April	--	11,534.3	11,519.4	14.8	0.1%	11,517.4	16.9	0.1%	11,513.1	21.2	0.2%	11,508.9	25.3	0.2%	11,504.6	29.6	0.3%	11,500.3	33.9	0.3%
ME 4	36 54 17	2007	Above Normal	May	--	4,139.7	4,122.2	17.5	0.4%	4,119.7	20.0	0.5%	4,114.7	25.0	0.6%	4,109.6	30.1	0.7%	4,104.5	35.2	0.8%	4,099.5	40.2	1.0%
ME 4	36 54 17	2007	Above Normal	June	--	1,498.4	1,477.3	21.1	1.4%	1,474.3	24.1	1.6%	1,468.3	30.1	2.0%	1,462.4	36.0	2.4%	1,456.4	42.0	2.8%	1,450.5	47.9	3.2%
ME 4	36 54 17	2007	Above Normal	July	--	495.9	474.8	21.0	4.2%	471.8	24.0	4.8%	465.9	30.0	6.0%	459.9	35.9	7.2%	454.0	41.9	8.4%	448.0	47.8	9.6%
ME 4	36 54 17	2007	Above Normal	August	--	222.7	203.8	18.8	8.5%	201.2	21.5	9.7%	195.8	26.8	12.1%	190.5	32.2	14.5%	185.1	37.5	16.9%	179.8	42.9	19.3%
ME 4	36 54 17	2007	Above Normal	September	Used in Summary Table Analysis	150.3	132.6	17.7	11.8%	130.1	20.2	13.5%	125.0	25.3	16.8%	120.0	30.3	20.2%	114.9	35.3	23.5%	109.9	40.4	26.9%
ME 4	36 54 17	2008	Dry	October	Used in Summary Table Analysis	3,432.9	3,418.6	14.2	0.4%	3,416.6	16.3	0.5%	3,412.5	20.4	0.6%	3,408.4	24.4	0.7%	3,404.3	28.6	0.8%	3,400.2	32.6	1.0%
ME 4	36 54 17	2008	Dry	November	Used in Summary Table Analysis	3,274.2	3,263.2	11.0	0.3%	3,261.7	12.5	0.4%	3,258.6	15.6	0.5%	3,255.3	18.9	0.6%	3,252.2	22.0	0.7%	3,249.1	25.1	0.8%
ME 4	36 54 17	2008	Dry	December	--	23,122.7	23,112.3	10.4	0.0%	23,111.1	11.6	0.1%	23,108.8	13.9	0.1%	23,105.3	17.4	0.1%	23,103.0	19.7	0.1%	23,099.5	23.1	0.1%
ME 4	36 54 17	2008	Dry	January	--	37,527.8	37,518.5	9.3	0.0%	37,517.4	10.4	0.0%	37,515.0	12.7	0.0%	37,511.6	16.2	0.0%	37,509.3	18.5	0.0%	37,506.9	20.8	0.1%
ME 4	36 54 17	2008	Dry	February	--	26,270.8	26,262.7	8.1	0.0%	26,261.6	9.3	0.0%	26,260.4	10.4	0.0%	26,258.1	12.7	0.0%	26,255.8	15.0	0.1%	26,253.5	17.4	0.1%
ME 4	36 54 17	2008	Dry	March	--	11,795.1	11,787.0	8.1	0.1%	11,787.0	8.1	0.1%	11,784.7	10.4	0.1%	11,782.4	12.7	0.1%	11,780.1	15.0	0.1%	11,777.8	17.4	0.1%
ME 4	36 54 17	2008	Dry	April	--	9,016.7	9,001.6	15.0	0.2%	8,999.5	17.1	0.2%	8,995.3	21.4	0.2%	8,990.9	25.8	0.3%	8,986.6	30.1	0.3%	8,982.3	34.4	0.4%
ME 4	36 54 17	2008	Dry	May	--	1,360.0	1,344.0	16.0	1.2%	1,341.7	18.3	1.3%	1,337.0	22.9	1.7%	1,332.5	27.4	2.0%	1,328.1	31.8	2.3%	1,323.7	36.2	2.7%
ME 4	36 54 17	2008	Dry	June	--	437.7	414.8	22.9	5.2%	411.5	26.2	6.0%	405.0	32.6	7.5%	398.6	39.1	8.9%	392.1	45.6	10.4%	385.7	52.0	11.9%
ME 4	36 54 17	2008	Dry	July	--	255.8	233.4	22.4	8.7%	230.2	25.5	10.0%	223.8	31.9	12.5%	217.5	38.3	15.0%	211.1	44.6	17.4%	204.8	50.9	19.9%
ME 4	36 54 17	2008	Dry	August	--	179.1	157.5	21.6	12.1%	154.4	24.7	13.8%	148.3	30.8	17.2%	142.2	37.0	20.6%	136.0	43.1	24.1%	129.9	49.2	27.5%
ME 4	36 54 17	2008	Dry	September	Used in Summary Table Analysis	140.8	120.1	20.6	14.7%	117.2	23.6	16.8%	111.3	29.5	20.9%	105.4	35.3	25.1%	99.5	41.2	29.3%	93.7	47.1	33.5%
ME 4	36 54 17	2009	Critical	October	Used in Summary Table Analysis	923.7	907.6	16.1	1.7%	905.3	18.4	2.0%	900.7	23.0	2.5%	896.0	27.7	3.0%	891.6	32.1	3.5%	886.9	36.8	4.0%
ME 4	36 54 17	2009	Critical	November	Used in Summary Table Analysis	5,510.5	5,498.1	12.4	0.2%	5,496.3	14.2	0.3%	5,492.7	17.8	0.3%	5,489.1	21.4	0.4%	5,485.5	25.0	0.5%	5,481.9	28.6	0.5%
ME 4	36 54 17	2009	Critical	December	--	12,164.4	12,153.9	10.4	0.1%	12,151.6	12.7	0.1%	12,148.1	16.2	0.1%	12,145.8	18.5	0.2%	12,142.4	22.0	0.2%	12,138.9	25.5	0.2%
ME 4	36 54 17	2009	Critical	January	--	8,796.3	8,786.5	9.8	0.1%	8,785.1	11.2	0.1%	8,782.2	14.1	0.2%	8,779.4	16.9	0.2%	8,776.5	19.8	0.2%	8,773.6	22.7	0.3%
ME 4	36 54 17	2009	Critical	February	--	22,613.4	22,605.3	8.1	0.0%	22,604.2	9.3	0.0%	22,601.9	11.6	0.1%	22,599.5	13.9	0.1%	22,596.1	17.4	0.1%	22,593.8	19.7	0.1%
ME 4	36 54 17	2009	Critical	March	--	21,121.5	21,113.4	8.1	0.0%	21,112.3	9.3	0.0%	21,110.0	11.6	0.1%	21,107.6	13.9	0.1%	21,105.3	16.2	0.1%	21,103.0	18.5	0.1%
ME 4	36 54 17	2009	Critical	April	--	10,097.3	10,081.8	15.5	0.2%	10,079.6	17.7	0.2%	10,075.1	22.2	0.2%	10,070.6	26.7	0.3%	10,066.2	31.1	0.3%	10,061.7	35.6	0.4%
ME 4	36 54 17	2009	Critical	May	--	15,583.3	15,564.8	18.5	0.1%	15,562.5	20.8	0.1%	15,556.7	26.6	0.2%	15,550.9	32.4	0.2%	15,545.1	38.2	0.2%	15,540.5	42.8	0.3%
ME 4	36 54 17	2009	Critical	June	--	3,160.5	3,136.1	24.4	0.8%	3,132.8	27.8	0.9%	3,125.7	34.8	1.1%	3,118.8	41.8	1.3%	3,111.8	48.7	1.5%	3,104.9	55.7	1.8%
ME 4	36 54 17	2009	Critical	July	--	1,262.7	1,240.0	22.7	1.8%	1,236.8	25.9	2.1%	1,230.3	32.4	2.6%	1,224.0	38.8	3.1%	1,217.6	45.1	3.6%	1,211.2	51.5	4.1%
ME 4	36 54 17	2009	Critical	August	--	668.5	646.8	21.7	3.3%	643.7	24.8	3.7%	637.5	31.0	4.6%	631.3	37.2	5.6%	625.1	43.4	6.5%	618.9	49.6	7.4%
ME 4	36 54 17	2009	Critical	September	Used in Summary Table Analysis	389.7	370.4	19.2	4.9%	367.7	22.0	5.6%	362.2	27.5	7.1%	356.7	33.0	8.5%	351.2	38.5	9.9%	345.7	44.0	11.3%
ME 4	36 54 17	2010	Below Normal	October	Used in Summary Table Analysis	6,088.1	6,071.9	16.2	0.3%	6,069.6	18.5	0.3%	6,064.8	23.3	0.4%	6,060.2	27.9	0.5%	6,055.7	32.4	0.5%	6,051.0	37.0	0.6%
ME 4	36 54 17	2010	Below Normal	November	Used in Summary Table Analysis	8,290.2	8,277.3	12.8	0.2%	8,275.5	14.7	0.2%	8,271.8	18.4	0.2%	8,268.1	22.1	0.3%	8,264.4	25.8	0.3%	8,260.6	29.5	0.4%
ME 4	36 54 17	2010	Below Normal	December	--	12,355.3	12,344.9	10.4	0.1%	12,342.6	12.7	0.1%	12,340.3	15.0	0.1%	12,336.8	18.5	0.1%	12,333.3	22.0	0.2%	12,329.9	25.5	0.2%
ME 4	36 54 17	2010	Below Normal	January	--	36,238.4	36,228.0	10.4	0.0%	36,226.9	11.6	0.0%	36,223.4	15.0	0.0%	36,221.1	17.4	0.0%	36,217.6	20.8	0.1%	36,215.3	23.1	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 54 17	2010	Below Normal	February	--	27,247.7	27,238.4	9.3	0.0%	27,237.3	10.4	0.0%	27,235.0	12.7	0.0%	27,231.5	16.2	0.1%	27,229.2	18.5	0.1%	27,226.9	20.8	0.1%
ME 4	36 54 17	2010	Below Normal	March	--	28,839.1	28,831.0	8.1	0.0%	28,829.9	9.3	0.0%	28,827.5	11.6	0.0%	28,825.2	13.9	0.0%	28,821.8	17.4	0.1%	28,819.4	19.7	0.1%
ME 4	36 54 17	2010	Below Normal	April	--	40,017.4	40,009.3	8.1	0.0%	40,008.1	9.3	0.0%	40,005.8	11.6	0.0%	40,003.5	13.9	0.0%	40,001.2	16.2	0.0%	39,998.8	18.5	0.0%
ME 4	36 54 17	2010	Below Normal	May	--	20,272.0	20,255.8	16.2	0.1%	20,253.5	18.5	0.1%	20,248.8	23.1	0.1%	20,244.2	27.8	0.1%	20,239.6	32.4	0.2%	20,235.0	37.0	0.2%
ME 4	36 54 17	2010	Below Normal	June	--	9,352.8	9,329.4	23.4	0.2%	9,326.0	26.7	0.3%	9,319.4	33.3	0.4%	9,312.8	39.9	0.4%	9,306.3	46.5	0.5%	9,299.7	53.1	0.6%
ME 4	36 54 17	2010	Below Normal	July	--	1,454.7	1,433.7	21.1	1.4%	1,430.7	24.1	1.7%	1,424.5	30.2	2.1%	1,418.5	36.2	2.5%	1,412.5	42.2	2.9%	1,406.7	48.0	3.3%
ME 4	36 54 17	2010	Below Normal	August	--	568.6	549.3	19.2	3.4%	546.6	21.9	3.9%	541.1	27.4	4.8%	535.7	32.9	5.8%	530.2	38.3	6.7%	524.8	43.8	7.7%
ME 4	36 54 17	2010	Below Normal	September	Used in Summary Table Analysis	650.6	632.4	18.2	2.8%	629.8	20.8	3.2%	624.6	26.0	4.0%	619.4	31.1	4.8%	614.2	36.4	5.6%	609.0	41.6	6.4%
ME 4	36 54 17	2011	Wet	October	Used in Summary Table Analysis	9,635.8	9,622.1	13.7	0.1%	9,620.3	15.5	0.2%	9,616.3	19.4	0.2%	9,612.4	23.4	0.2%	9,608.4	27.3	0.3%	9,604.5	31.3	0.3%
ME 4	36 54 17	2011	Wet	November	Used in Summary Table Analysis	14,223.4	14,213.0	10.4	0.1%	14,210.6	12.7	0.1%	14,208.3	15.0	0.1%	14,204.9	18.5	0.1%	14,201.4	22.0	0.2%	14,197.9	25.5	0.2%
ME 4	36 54 17	2011	Wet	December	--	33,715.3	33,706.0	9.3	0.0%	33,703.7	11.6	0.0%	33,701.4	13.9	0.0%	33,699.1	16.2	0.0%	33,695.6	19.7	0.1%	33,693.3	22.0	0.1%
ME 4	36 54 17	2011	Wet	January	--	14,159.7	14,151.6	8.1	0.1%	14,150.5	9.3	0.1%	14,147.0	12.7	0.1%	14,144.7	15.0	0.1%	14,142.4	17.4	0.1%	14,140.0	19.7	0.1%
ME 4	36 54 17	2011	Wet	February	--	20,770.8	20,762.7	8.1	0.0%	20,761.6	9.3	0.0%	20,759.3	11.6	0.1%	20,756.9	13.9	0.1%	20,754.6	16.2	0.1%	20,752.3	18.5	0.1%
ME 4	36 54 17	2011	Wet	March	--	52,016.2	52,008.1	8.1	0.0%	52,006.9	9.3	0.0%	52,004.6	11.6	0.0%	52,003.5	12.7	0.0%	52,001.2	15.0	0.0%	51,998.8	17.4	0.0%
ME 4	36 54 17	2011	Wet	April	--	24,804.4	24,797.5	6.9	0.0%	24,796.3	8.1	0.0%	24,794.0	10.4	0.0%	24,791.7	12.7	0.1%	24,789.4	15.0	0.1%	24,787.0	17.4	0.1%
ME 4	36 54 17	2011	Wet	May	--	11,385.0	11,369.7	15.3	0.1%	11,367.5	17.5	0.2%	11,363.1	21.9	0.2%	11,358.6	26.4	0.2%	11,354.2	30.8	0.3%	11,349.9	35.1	0.3%
ME 4	36 54 17	2011	Wet	June	--	7,058.4	7,035.6	22.8	0.3%	7,032.4	26.0	0.4%	7,025.9	32.5	0.5%	7,019.4	39.0	0.6%	7,013.0	45.5	0.6%	7,006.5	52.0	0.7%
ME 4	36 54 17	2011	Wet	July	--	1,828.8	1,806.4	22.5	1.2%	1,803.1	25.7	1.4%	1,796.8	32.1	1.8%	1,790.4	38.4	2.1%	1,783.9	44.9	2.5%	1,777.5	51.3	2.8%
ME 4	36 54 17	2011	Wet	August	--	776.6	757.5	19.0	2.4%	754.8	21.7	2.8%	749.4	27.1	3.5%	744.0	32.5	4.2%	738.6	38.0	4.9%	733.2	43.3	5.6%
ME 4	36 54 17	2011	Wet	September	Used in Summary Table Analysis	433.1	415.9	17.2	4.0%	413.4	19.6	4.5%	408.6	24.5	5.7%	403.7	29.4	6.8%	398.8	34.2	7.9%	393.9	39.1	9.0%
ME 4	36 54 17	2012	Below Normal	October	Used in Summary Table Analysis	4,542.7	4,528.8	13.9	0.3%	4,526.9	15.9	0.3%	4,522.8	19.9	0.4%	4,518.9	23.8	0.5%	4,514.8	27.9	0.6%	4,510.9	31.8	0.7%
ME 4	36 54 17	2012	Below Normal	November	Used in Summary Table Analysis	8,241.0	8,230.0	11.0	0.1%	8,228.4	12.6	0.2%	8,225.2	15.7	0.2%	8,222.0	19.0	0.2%	8,218.8	22.2	0.3%	8,215.6	25.3	0.3%
ME 4	36 54 17	2012	Below Normal	December	--	5,184.8	5,175.3	9.5	0.2%	5,174.0	10.9	0.2%	5,171.2	13.7	0.3%	5,168.4	16.4	0.3%	5,165.6	19.2	0.4%	5,162.8	22.0	0.4%
ME 4	36 54 17	2012	Below Normal	January	--	20,125.0	20,115.7	9.3	0.0%	20,114.6	10.4	0.1%	20,112.3	12.7	0.1%	20,110.0	15.0	0.1%	20,107.6	17.4	0.1%	20,105.3	19.7	0.1%
ME 4	36 54 17	2012	Below Normal	February	--	18,216.4	18,208.3	8.1	0.0%	18,207.2	9.3	0.1%	18,204.9	11.6	0.1%	18,202.5	13.9	0.1%	18,200.2	16.2	0.1%	18,197.9	18.5	0.1%
ME 4	36 54 17	2012	Below Normal	March	--	45,436.3	45,428.2	8.1	0.0%	45,427.1	9.3	0.0%	45,424.8	11.6	0.0%	45,422.5	13.9	0.0%	45,420.1	16.2	0.0%	45,417.8	18.5	0.0%
ME 4	36 54 17	2012	Below Normal	April	--	26,864.6	26,857.6	6.9	0.0%	26,856.5	8.1	0.0%	26,854.2	10.4	0.0%	26,851.9	12.7	0.0%	26,849.5	15.0	0.1%	26,847.2	17.4	0.1%
ME 4	36 54 17	2012	Below Normal	May	--	7,484.6	7,469.3	15.3	0.2%	7,467.2	17.4	0.2%	7,462.7	21.9	0.3%	7,458.3	26.3	0.4%	7,453.9	30.7	0.4%	7,449.7	35.0	0.5%
ME 4	36 54 17	2012	Below Normal	June	--	5,517.5	5,494.2	23.3	0.4%	5,490.9	26.6	0.5%	5,484.3	33.2	0.6%	5,477.8	39.7	0.7%	5,471.2	46.3	0.8%	5,464.5	53.0	1.0%
ME 4	36 54 17	2012	Below Normal	July	--	2,224.9	2,203.1	21.8	1.0%	2,200.0	24.9	1.1%	2,193.9	31.0	1.4%	2,187.6	37.3	1.7%	2,181.5	43.4	2.0%	2,175.2	49.7	2.2%
ME 4	36 54 17	2012	Below Normal	August	--	388.2	370.8	17.4	4.5%	368.4	19.8	5.1%	363.4	24.8	6.4%	358.5	29.7	7.7%	353.5	34.7	8.9%	348.6	39.6	10.2%
ME 4	36 54 17	2012	Below Normal	September	Used in Summary Table Analysis	248.7	233.3	15.4	6.2%	231.1	17.6	7.1%	226.7	22.0	8.8%	222.3	26.4	10.6%	218.0	30.7	12.4%	213.6	35.1	14.1%
ME 4	36 54 17	2013	Below Normal	October	Used in Summary Table Analysis	1,912.6	1,899.2	13.4	0.7%	1,897.3	15.3	0.8%	1,893.5	19.1	1.0%	1,889.7	22.9	1.2%	1,885.9	26.7	1.4%	1,882.1	30.6	1.6%
ME 4	36 54 17	2013	Below Normal	November	Used in Summary Table Analysis	14,691.0	14,680.6	10.4	0.1%	14,679.4	11.6	0.1%	14,675.9	15.0	0.1%	14,672.5	18.5	0.1%	14,670.1	20.8	0.1%	14,666.7	24.3	0.2%
ME 4	36 54 17	2013	Below Normal	December	--	60,004.6	59,995.4	9.3	0.0%	59,994.2	10.4	0.0%	59,990.7	13.9	0.0%	59,988.4	16.2	0.0%	59,985.0	19.7	0.0%	59,982.6	22.0	0.0%
ME 4	36 54 17	2013	Below Normal	January	--	22,206.0	22,197.9	8.1	0.0%	22,196.8	9.3	0.0%	22,194.4	11.6	0.1%	22,192.1	13.9	0.1%	22,189.8	16.2	0.1%	22,187.5	18.5	0.1%
ME 4	36 54 17	2013	Below Normal	February	--	8,847.8	8,839.9	7.9	0.1%	8,838.9	8.9	0.1%	8,836.6	11.2	0.1%	8,834.3	13.5	0.2%	8,831.9	15.9	0.2%	8,829.6	18.2	0.2%
ME 4	36 54 17	2013	Below Normal	March	--	10,333.0	10,325.3	7.6	0.1%	10,324.3	8.7	0.1%	10,322.0	11.0	0.1%	10,319.8	13.2	0.1%	10,317.6	15.4	0.1%	10,315.3	17.7	0.2%
ME 4	36 54 17	2013	Below Normal	April	--	8,291.9	8,277.4	14.5	0.2%	8,275.3	16.6	0.2%	8,271.2	20.7	0.2%	8,267.1	24.8	0.3%	8,263.0	28.9	0.3%	8,258.8	33.1	0.4%
ME 4	36 54 17	2013	Below Normal	May	--	4,431.9	4,414.4	17.6	0.4%	4,411.9	20.0	0.5%	4,406.8	25.1	0.6%	4,401.9	30.1	0.7%	4,396.8	35.2	0.8%	4,391.8	40.2	0.9%
ME 4	36 54 17	2013	Below Normal	June	--	2,110.6	2,089.7	20.9	1.0%	2,086.7	24.0	1.1%	2,080.7	30.0	1.4%	2,074.8	35.9	1.7%	2,068.8	41.9	2.0%	2,062.8	47.8	2.3%
ME 4	36 54 17	2013	Below Normal	July	--	718.1	698.0	20.1	2.8%	695.2	23.0	3.2%	689.4	28.7	4.0%	683.7	34.4	4.8%	678.0	40.1	5.6%	672.4	45.8	6.4%
ME 4	36 54 17	2013	Below Normal	August	--	339.9	321.2	18.8	5.5%	318.5	21.4	6.3%	313.2	26.8	7.9%	307.8	32.1	9.5%	302.5	37.5	11.0%	297.1	42.8	12.6%
ME 4	36 54 17	2013	Below Normal	September	Used in Summary Table Analysis	4,787.4	4,768.1	19.3	0.4%	4,765.3	22.1	0.5%	4,759.7	27.7	0.6%	4,754.3	33.1	0.7%	4,748.7	38.7	0.8%	4,743.2	44.2	0.9%
ME 4	36 54 17	2014	Critical	October	Used in Summary Table Analysis	281.0	267.0	14.0	5.0%	265.0	16.0	5.7%	261.0	20.0	7.1%	257.0	24.0	8.5%	253.0	28.0	10.0%	248.9	32.1	11.4%
ME 4	36 54 17	2014	Critical	November	Used in Summary Table Analysis	1,538.7	1,527.4	11.2	0.7%	1,525.8	12.8	0.8%	1,522.6	16.1	1.0%	1,519.3	19.3	1.3%	1,516.1	22.6	1.5%	1,512.8	25.8	1.7%
ME 4	36 54 17	2014	Critical	December	--	1,590.0	1,580.2	9.8	0.6%	1,578.8	11.2	0.7%	1,575.9	14.1	0.9%	1,573.1	16.9	1.1%	1,570.3	19.8	1.2%	1,567.4	22.7	1.4%
ME 4	36 54 17	2014	Critical	January	--	2,822.0	2,813.2	8.8	0.3%	2,812.0	10.0	0.4%	2,809.5	12.5	0.4%	2,806.8	15.2	0.5%	2,804.3	17.7	0.6%	2,801.7	20.3	0.7%
ME 4	36 54 17	2014	Critical	February	--	15,754.6	15,746.5	8.1	0.1%	15,745.4	9.3	0.1%	15,743.1	11.6	0.1%	15,740.7	13.9	0.1%	15,738.4	16.2	0.1%	15,736.1	18.5	0.1%
ME 4	36 54 17	2014	Critical	March	--	31,489.6	31,481.5	8.1	0.0%	31,480.3	9.3	0.0%	31,478.0	11.6	0.0%	31,475.7	13.9	0.0%	31,473.4	16.2	0.1%	31,471.1	18.5	0.1%
ME 4	36 54 17	2014	Critical	April	--	12,991.9	12,975.7	16.2	0.1%	12,973.4	18.5	0.1%	12,969.9	22.0	0.2%	12,965.3	26.6	0.2%	12,960.6	31.3	0.2%	12,956.0	35.9	0.3%
ME 4	36 54 17	2014	Critical	May	--	5,188.9	5,170.5	18.4	0.4%	5,167.8	21.1	0.4%	5,162.5	26.4	0.5%	5,157.2	31.7	0.6%	5,151.9	37.0	0.7%	5,146.6	42.2	0.8%
ME 4	36 54 17	2014	Critical	June	--	1,198.1	1,172.9	25.2	2.1%	1,169.4	28.7	2.4%	1,162.3	35.9	3.0%	1,155.2	43.0	3.6%	1,148.1	50.1	4.2%	1,141.0	57.1	4.8%
ME 4	36 54 17	2014	Critical	July	--	545.9	523.0	23.0	4.2%	519.7	26.3	4.8%	513.1	32.8	6.0%	506.6	39.3	7.2%	500.1	45.8	8.4%	493.6	52.4	9.6%
ME 4	36 54 17	2014	Critical	August	--	347.9	326.0	21.8	6.3%	322.9	24.9	7.2%	316.7	31.1	9.0%	310.5	37.4	10.7%	304.3	43.6	12.5%	298.1	49.8	14.3%
ME 4	36 54 17	2014	Critical	September	Used in Summary Table Analysis	2,573.8	2,552.7	21.2	0.8%	2,549.7	24.2	0.9%	2,543.6	30.2	1.2%	2,537.6	36.2	1.4%	2,531.5	42.4	1.6%	2,525.5	48.4	1.9%
ME 4	36 54 17	2015	Dry	October	Used in Summary Table Analysis	11,364.8	11,348.1	16.7	0.1%	11,345.8	19.0	0.2%	11,341.3	23.5	0.2%	11,336.6	28.2	0.2%	11,331.9	32.9	0.3%	11,327.2	37.6	0.3%
ME 4	36 54 17	2015	Dry	November	Used in Summary Table Analysis	9,042.7	9,030.4	12.3	0.1%	9,028.6	14.1	0.2%	9,025.1	17.6	0.2%	9,021.5	21.2	0.2%	9,018.1	24.7	0.3%	9,014.5	28.2	0.3%
ME 4	36 54 17	2015	Dry	December	--	32,631.9	32,621.5	10.4	0.0%	32,620.4	11.6	0.0%	32,616.9	15.0	0.0%	32,613.4	18.5	0.1%	32,611.1	20.8	0.1%	32,607.6	24.3	0.1%
ME 4	36 54 17	2015	Dry	January	--	14,581.0	14,570.6	10.4	0.1%	14,569.4	11.6	0.1%	14,567.1	13.9	0.1%	14,563.7	17.4	0.1%	14,561.3	19.7	0.1%	14,559.0	22.0	0.2%
ME 4	36 54 17	2015	Dry	February	--	27,239.6	27,231.5	8.1	0.0%	27,230.3	9.3	0.0%	27,228.0	11.6	0.0%	27,225.7	13.9	0.1%	27,223.4	16.2	0.1%	27,219.9	19.7	0.1%
ME 4	36 54 17	2015	Dry	March	--	11,572.7	11,565.0	7.6	0.1%	11,563.9	8.8	0.1%	11,561.7	11.0	0.1%	11,559.5	13.2	0.1%	11,557.3	15.4	0.1%	11,555.1	17.6	0.2%
ME 4	36 54 17	2015	Dry	April	--	8,390.5	8,375.2	15.3	0.2%	8,373.0	17.5	0.2%	8,368.5	22.0	0.3%	8,364.1	26.4	0.3%	8,359.7	30.8	0.4%	8,355.3	35.2	0.4%
ME 4	36 54 17	2015	Dry	May	--	1,509.3	1,491.1	18.2	1.2%	1,488.4	20.8	1.4%	1,483.3	25.9	1.7%	1,478.1	31.1	2.1%	1,472.9	36.3	2.4%	1,467.7	41.6	2.8%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 54 17	2015	Dry	June	--	652.6	629.3	23.3	3.6%	626.0	26.6	4.1%	619.4	33.2	5.1%	612.9	39.7	6.1%	606.4	46.3	7.1%	599.9	52.7	8.1%
ME 4	36 54 17	2015	Dry	July	--	268.6	246.0	22.5	8.4%	242.8	25.7	9.6%	236.4	32.2	12.0%	230.0	38.6	14.4%	223.6	45.0	16.8%	217.2	51.4	19.1%
ME 4	36 54 17	2015	Dry	August	--	166.2	144.6	21.7	13.0%	141.5	24.8	14.9%	135.3	30.9	18.6%	129.1	37.2	22.4%	122.9	43.3	26.1%	116.7	49.5	29.8%
ME 4	36 54 17	2015	Dry	September	Used in Summary Table Analysis	120.5	101.2	19.3	16.0%	98.4	22.0	18.3%	92.4	28.1	23.3%	86.6	33.9	28.1%	80.6	39.9	33.1%	74.7	45.8	38.0%
ME 4	36 54 17	2016	Above Normal	October	Used in Summary Table Analysis	85.8	68.8	17.1	19.9%	66.2	19.6	22.9%	61.4	24.4	28.5%	56.5	29.3	34.1%	51.8	34.0	39.7%	47.3	38.6	44.9%
ME 4	36 54 17	2016	Above Normal	November	Used in Summary Table Analysis	3,868.8	3,856.4	12.4	0.3%	3,854.4	14.4	0.4%	3,850.7	18.1	0.5%	3,847.0	21.8	0.6%	3,843.2	25.6	0.7%	3,839.5	29.3	0.8%
ME 4	36 54 17	2016	Above Normal	December	--	36,636.6	36,625.0	11.6	0.0%	36,623.8	12.7	0.0%	36,620.4	16.2	0.0%	36,616.9	19.7	0.1%	36,613.4	23.1	0.1%	36,610.0	26.6	0.1%
ME 4	36 54 17	2016	Above Normal	January	--	57,335.6	57,325.2	10.4	0.0%	57,324.1	11.6	0.0%	57,320.6	15.0	0.0%	57,318.3	17.4	0.0%	57,314.8	20.8	0.0%	57,311.3	24.3	0.0%
ME 4	36 54 17	2016	Above Normal	February	--	24,273.1	24,263.9	9.3	0.0%	24,262.7	10.4	0.0%	24,260.4	12.7	0.1%	24,258.1	15.0	0.1%	24,255.8	17.4	0.1%	24,253.5	19.7	0.1%
ME 4	36 54 17	2016	Above Normal	March	--	41,785.9	41,777.8	8.1	0.0%	41,776.6	9.3	0.0%	41,774.3	11.6	0.0%	41,772.0	13.9	0.0%	41,769.7	16.2	0.0%	41,766.2	19.7	0.0%
ME 4	36 54 17	2016	Above Normal	April	--	18,540.5	18,533.6	6.9	0.0%	18,532.4	8.1	0.0%	18,530.1	10.4	0.1%	18,527.8	12.7	0.1%	18,525.5	15.0	0.1%	18,523.1	17.4	0.1%
ME 4	36 54 17	2016	Above Normal	May	--	5,216.6	5,207.3	9.3	0.2%	5,205.8	10.8	0.2%	5,203.1	13.4	0.3%	5,200.5	16.1	0.3%	5,197.6	19.0	0.4%	5,194.9	21.6	0.4%
ME 4	36 54 17	2016	Above Normal	June	--	1,509.6	1,491.4	18.2	1.2%	1,488.8	20.8	1.4%	1,483.7	25.9	1.7%	1,478.5	31.1	2.1%	1,473.3	36.3	2.4%	1,468.2	41.4	2.7%
ME 4	36 54 17	2016	Above Normal	July	--	822.9	803.0	19.9	2.4%	800.2	22.8	2.8%	794.5	28.4	3.5%	788.8	34.1	4.1%	783.2	39.7	4.8%	777.5	45.4	5.5%
ME 4	36 54 17	2016	Above Normal	August	--	491.4	472.2	19.3	3.9%	469.4	22.1	4.5%	463.9	27.5	5.6%	458.4	33.0	6.7%	452.8	38.6	7.8%	447.3	44.1	9.0%
ME 4	36 54 17	2016	Above Normal	September	Used in Summary Table Analysis	327.7	310.7	17.0	5.2%	307.7	20.1	6.1%	302.6	25.2	7.7%	297.3	30.4	9.3%	292.2	35.6	10.9%	287.0	40.8	12.4%
ME 4	36 54 17	2017	Wet	October	Used in Summary Table Analysis	18,289.4	18,275.5	13.9	0.1%	18,274.3	15.0	0.1%	18,269.7	19.7	0.1%	18,266.2	23.1	0.1%	18,261.6	27.8	0.2%	18,258.1	31.3	0.2%
ME 4	36 54 17	2017	Wet	November	Used in Summary Table Analysis	18,831.0	18,819.4	11.6	0.1%	18,818.3	12.7	0.1%	18,814.8	16.2	0.1%	18,812.5	18.5	0.1%	18,809.0	22.0	0.1%	18,805.6	25.5	0.1%
ME 4	36 54 17	2017	Wet	December	--	24,121.5	24,112.3	9.3	0.0%	24,111.1	10.4	0.0%	24,108.8	12.7	0.1%	24,105.3	16.2	0.1%	24,103.0	18.5	0.1%	24,100.7	20.8	0.1%
ME 4	36 54 17	2017	Wet	January	--	106,928.2	106,920.1	8.1	0.0%	106,919.0	9.3	0.0%	106,915.5	12.7	0.0%	106,913.2	15.0	0.0%	106,910.9	17.4	0.0%	106,908.6	19.7	0.0%
ME 4	36 54 17	2017	Wet	February	--	81,856.5	81,848.4	8.1	0.0%	81,847.2	9.3	0.0%	81,844.9	11.6	0.0%	81,842.6	13.9	0.0%	81,839.1	17.4	0.0%	81,836.8	19.7	0.0%
ME 4	36 54 17	2017	Wet	March	--	27,281.3	27,274.3	6.9	0.0%	27,273.1	8.1	0.0%	27,270.8	10.4	0.0%	27,268.5	12.7	0.0%	27,266.2	15.0	0.1%	27,263.9	17.4	0.1%
ME 4	36 54 17	2017	Wet	April	--	22,942.1	22,935.2	6.9	0.0%	22,934.0	8.1	0.0%	22,932.9	9.3	0.0%	22,930.6	11.6	0.1%	22,928.2	13.9	0.1%	22,925.9	16.2	0.1%
ME 4	36 54 17	2017	Wet	May	--	6,273.8	6,264.4	9.5	0.2%	6,263.0	10.9	0.2%	6,260.3	13.5	0.2%	6,257.5	16.3	0.3%	6,254.7	19.1	0.3%	6,252.0	21.9	0.3%
ME 4	36 54 17	2017	Wet	June	--	2,116.9	2,098.4	18.5	0.9%	2,095.6	21.3	1.0%	2,090.4	26.5	1.3%	2,085.1	31.8	1.5%	2,079.9	37.0	1.7%	2,074.5	42.4	2.0%
ME 4	36 54 17	2017	Wet	July	--	934.2	914.1	20.1	2.1%	911.3	22.9	2.5%	905.6	28.6	3.1%	899.9	34.3	3.7%	894.2	40.0	4.3%	888.5	45.7	4.9%
ME 4	36 54 17	2017	Wet	August	--	506.3	486.9	19.3	3.8%	484.2	22.1	4.4%	478.7	27.6	5.4%	473.2	33.1	6.5%	467.7	38.5	7.6%	462.2	44.0	8.7%
ME 4	36 54 17	2017	Wet	September	Used in Summary Table Analysis	322.4	304.7	17.7	5.5%	302.1	20.3	6.3%	297.1	25.3	7.8%	292.0	30.4	9.4%	287.0	35.4	11.0%	281.9	40.5	12.6%
ME 4	36 54 17	2018	Above Normal	October	Used in Summary Table Analysis	275.1	261.2	13.9	5.1%	259.2	15.9	5.8%	255.2	19.9	7.2%	251.2	23.9	8.7%	247.2	27.9	10.1%	243.2	31.9	11.6%
ME 4	36 54 17	2018	Above Normal	November	Used in Summary Table Analysis	10,794.3	10,783.6	10.8	0.1%	10,782.1	12.3	0.1%	10,778.9	15.4	0.1%	10,775.7	18.6	0.2%	10,772.6	21.8	0.2%	10,769.4	24.9	0.2%
ME 4	36 54 17	2018	Above Normal	December	--	5,446.6	5,437.5	9.1	0.2%	5,436.1	10.5	0.2%	5,433.4	13.2	0.2%	5,430.8	15.9	0.3%	5,428.1	18.5	0.3%	5,425.5	21.2	0.4%
ME 4	36 54 17	2018	Above Normal	January	--	17,785.9	17,777.8	8.1	0.0%	17,776.6	9.3	0.1%	17,774.3	11.6	0.1%	17,772.0	13.9	0.1%	17,769.7	16.2	0.1%	17,766.2	19.7	0.1%
ME 4	36 54 17	2018	Above Normal	February	--	7,598.4	7,591.0	7.4	0.1%	7,589.8	8.6	0.1%	7,587.6	10.8	0.1%	7,585.4	13.0	0.2%	7,583.2	15.2	0.2%	7,581.0	17.4	0.2%
ME 4	36 54 17	2018	Above Normal	March	--	20,703.7	20,696.8	6.9	0.0%	20,695.6	8.1	0.0%	20,693.3	10.4	0.1%	20,691.0	12.7	0.1%	20,688.7	15.0	0.1%	20,686.3	17.4	0.1%
ME 4	36 54 17	2018	Above Normal	April	--	32,206.0	32,199.1	6.9	0.0%	32,197.9	8.1	0.0%	32,196.8	9.3	0.0%	32,194.4	11.6	0.0%	32,192.1	13.9	0.0%	32,189.8	16.2	0.1%
ME 4	36 54 17	2018	Above Normal	May	--	6,989.6	6,975.0	14.6	0.2%	6,972.9	16.7	0.2%	6,968.8	20.8	0.3%	6,964.6	25.0	0.4%	6,960.4	29.2	0.4%	6,956.6	33.0	0.5%
ME 4	36 54 17	2018	Above Normal	June	--	1,914.1	1,895.4	18.8	1.0%	1,892.7	21.4	1.1%	1,887.4	26.7	1.4%	1,882.1	32.1	1.7%	1,876.7	37.4	2.0%	1,871.4	42.7	2.2%
ME 4	36 54 17	2018	Above Normal	July	--	781.2	761.1	20.1	2.6%	758.3	22.9	2.9%	752.6	28.6	3.7%	746.9	34.4	4.4%	741.1	40.1	5.1%	735.5	45.8	5.9%
ME 4	36 54 17	2018	Above Normal	August	--	442.3	423.8	18.6	4.2%	421.1	21.2	4.8%	415.8	26.5	6.0%	410.6	31.8	7.2%	405.2	37.1	8.4%	400.0	42.4	9.6%
ME 4	36 54 17	2018	Above Normal	September	Used in Summary Table Analysis	299.7	282.0	17.7	5.9%	279.5	20.3	6.8%	274.4	25.3	8.4%	269.4	30.4	10.1%	264.3	35.5	11.8%	259.2	40.5	13.5%
ME 4	36 54 17	2019	Below Normal	October	Used in Summary Table Analysis	207.6	194.0	13.7	6.6%	192.0	15.6	7.5%	188.1	19.5	9.4%	184.1	23.5	11.3%	180.3	27.3	13.2%	176.4	31.3	15.1%
ME 4	36 54 17	2019	Below Normal	November	Used in Summary Table Analysis	6,625.3	6,614.5	10.9	0.2%	6,612.8	12.5	0.2%	6,609.7	15.6	0.2%	6,606.6	18.8	0.3%	6,603.5	21.9	0.3%	6,600.2	25.1	0.4%
ME 4	36 54 17	2019	Below Normal	December	--	14,669.0	14,659.7	9.3	0.1%	14,658.6	10.4	0.1%	14,656.3	12.7	0.1%	14,652.8	16.2	0.1%	14,650.5	18.5	0.1%	14,648.1	20.8	0.1%
ME 4	36 54 17	2019	Below Normal	January	--	35,226.9	35,218.8	8.1	0.0%	35,217.6	9.3	0.0%	35,215.3	11.6	0.0%	35,213.0	13.9	0.0%	35,210.6	16.2	0.0%	35,208.3	18.5	0.1%
ME 4	36 54 17	2019	Below Normal	February	--	141,932.9	141,921.3	11.6	0.0%	141,921.3	11.6	0.0%	141,921.3	11.6	0.0%	141,921.3	11.6	0.0%	141,909.7	23.1	0.0%	141,909.7	23.1	0.0%
ME 4	36 54 17	2019	Below Normal	March	--	42,327.5	42,320.6	6.9	0.0%	42,319.4	8.1	0.0%	42,317.1	10.4	0.0%	42,314.8	12.7	0.0%	42,313.7	13.9	0.0%	42,311.3	16.2	0.0%
ME 4	36 54 17	2019	Below Normal	April	--	15,275.5	15,268.5	6.9	0.0%	15,267.4	8.1	0.1%	15,265.0	10.4	0.1%	15,263.9	11.6	0.1%	15,261.6	13.9	0.1%	15,259.3	16.2	0.1%
ME 4	36 54 17	2019	Below Normal	May	--	16,946.8	16,931.7	15.0	0.1%	16,929.4	17.4	0.1%	16,924.8	22.0	0.1%	16,920.1	26.6	0.2%	16,915.5	31.3	0.2%	16,910.9	35.9	0.2%
ME 4	36 54 17	2019	Below Normal	June	--	4,243.8	4,223.4	20.4	0.5%	4,220.5	23.3	0.5%	4,214.8	28.9	0.7%	4,209.4	34.4	0.8%	4,203.9	39.8	0.9%	4,198.5	45.3	1.1%
ME 4	36 54 17	2019	Below Normal	July	--	1,361.1	1,341.0	20.1	1.5%	1,338.1	23.0	1.7%	1,332.3	28.8	2.1%	1,326.6	34.5	2.5%	1,320.8	40.3	3.0%	1,315.2	45.9	3.4%
ME 4	36 54 17	2019	Below Normal	August	--	596.2	577.1	19.1	3.2%	574.3	21.9	3.7%	568.9	27.3	4.6%	563.5	32.7	5.5%	558.1	38.1	6.4%	552.6	43.5	7.3%
ME 4	36 54 17	2019	Below Normal	September	Used in Summary Table Analysis	462.4	444.7	17.6	3.8%	442.2	20.2	4.4%	437.1	25.2	5.5%	432.1	30.3	6.5%	427.0	35.3	7.6%	422.0	40.4	8.7%
ME 4	36 54 17	2020	Dry	October	Used in Summary Table Analysis	355.6	342.5	13.1	3.7%	340.6	15.0	4.2%	336.8	18.8	5.3%	333.0	22.6	6.4%	329.2	26.4	7.4%	325.4	30.2	8.5%
ME 4	36 54 17	2020	Dry	November	Used in Summary Table Analysis	319.1	308.8	10.2	3.2%	307.4	11.7	3.7%	304.4	14.7	4.6%	301.4	17.7	5.5%	298.4	20.6	6.5%	295.4	23.6	7.4%
ME 4	36 54 17	2020	Dry	December	--	13,289.4	13,280.1	9.3	0.1%	13,278.9	10.4	0.1%	13,276.6	12.7	0.1%	13,273.1	16.2	0.1%	13,270.8	18.5	0.1%	13,268.5	20.8	0.2%
ME 4	36 54 17	2020	Dry	January	--	22,334.5	22,325.2	9.3	0.0%	22,324.1	10.4	0.0%	22,321.8	12.7	0.1%	22,319.4	15.0	0.1%	22,317.1	17.4	0.1%	22,314.8	19.7	0.1%
ME 4	36 54 17	2020	Dry	February	--	7,415.5	7,407.9	7.6	0.1%	7,406.8	8.7	0.1%	7,404.5	11.0	0.1%	7,402.2	13.3	0.2%	7,400.0	15.5	0.2%	7,397.8	17.7	0.2%
ME 4	36 54 17	2020	Dry	March	--	7,244.8	7,237.6	7.2	0.1%	7,236.6	8.2	0.1%	7,234.5	10.3	0.1%	7,232.3	12.5	0.2%	7,230.1	14.7	0.2%	7,228.0	16.8	0.2%
ME 4	36 54 17	2020	Dry	April	--	5,483.6	5,468.3	15.3	0.3%	5,466.1	17.5	0.3%	5,461.7	21.9	0.4%	5,457.3	26.3	0.5%	5,452.9	30.7	0.6%	5,448.5	35.1	0.6%
ME 4	36 54 17	2020	Dry	May	--	7,377.5	7,359.3	18.3	0.2%	7,356.6	20.9	0.3%	7,351.4	26.2	0.4%	7,346.1	31.5	0.4%	7,340.7	36.8	0.5%	7,335.5	42.0	0.6%
ME 4	36 54 17	2020	Dry	June	--	2,104.7	2,080.7	24.1	1.1%	2,077.3	27.4	1.3%	2,070.8	33.9	1.6%	2,064.4	40.4	1.9%	2,057.9	46.9	2.2%	2,051.3	53.5	2.5%
ME 4	36 54 17	2020	Dry	July	--	796.3	772.9	23.4	2.9%	769.6	26.7	3.4%	762.9	33.4	4.2%	756.2	40.0	5.0%	749.6	46.7	5.9%	742.9	53.4	6.7%
ME 4	36 54 17	2020	Dry	August	--	398.9	375.9	22.9	5.7%	372.7	26.2	6.6%	366.1	32.7	8.2%	359.6	39.3	9.8%	353.1	45.8	11.5%	346.6	52.3	13.1%
ME 4	36 54 17	2020	Dry	September	Used in Summary Table Analysis	248.3	227.9	20.3	8.2%	225.0	23.3	9.4%	218.4	29.9	12.0%	212.3	36.0	14.5%	205.9	42.3	17.0%	199.7	48.6	19.6%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 53 18	2000	Above Normal	October	Used in Summary Table Analysis	816.4	802.7	13.8	1.7%	800.7	15.8	1.9%	796.8	19.7	2.4%	792.8	23.7	2.9%	788.8	27.7	3.4%	784.8	31.6	3.9%
ME 4	36 53 18	2000	Above Normal	November	Used in Summary Table Analysis	12,135.4	12,125.0	10.4	0.1%	12,122.7	12.7	0.1%	12,120.4	15.0	0.1%	12,116.9	18.5	0.2%	12,113.4	22.0	0.2%	12,110.0	25.5	0.2%
ME 4	36 53 18	2000	Above Normal	December	--	10,819.6	10,810.3	9.3	0.1%	10,808.9	10.6	0.1%	10,806.1	13.4	0.1%	10,803.5	16.1	0.1%	10,800.7	18.9	0.2%	10,797.9	21.6	0.2%
ME 4	36 53 18	2000	Above Normal	January	--	28,605.3	28,597.2	8.1	0.0%	28,594.9	10.4	0.0%	28,592.6	12.7	0.0%	28,590.3	15.0	0.1%	28,588.0	17.4	0.1%	28,585.6	19.7	0.1%
ME 4	36 53 18	2000	Above Normal	February	--	37,060.2	37,052.1	8.1	0.0%	37,050.9	9.3	0.0%	37,048.6	11.6	0.0%	37,046.3	13.9	0.0%	37,044.0	16.2	0.0%	37,041.7	18.5	0.0%
ME 4	36 53 18	2000	Above Normal	March	--	18,321.8	18,314.8	6.9	0.0%	18,313.7	8.1	0.0%	18,311.3	10.4	0.1%	18,309.0	12.7	0.1%	18,306.7	15.0	0.1%	18,305.6	16.2	0.1%
ME 4	36 53 18	2000	Above Normal	April	--	12,318.3	12,311.3	6.9	0.1%	12,310.2	8.1	0.1%	12,307.9	10.4	0.1%	12,306.7	11.6	0.1%	12,304.4	13.9	0.1%	12,302.1	16.2	0.1%
ME 4	36 53 18	2000	Above Normal	May	--	7,097.8	7,082.9	14.9	0.2%	7,080.7	17.1	0.2%	7,076.4	21.4	0.3%	7,072.0	25.8	0.4%	7,067.7	30.1	0.4%	7,063.3	34.5	0.5%
ME 4	36 53 18	2000	Above Normal	June	--	2,612.2	2,589.8	22.3	0.9%	2,586.6	25.6	1.0%	2,580.2	31.9	1.2%	2,573.8	38.3	1.5%	2,567.5	44.7	1.7%	2,561.1	51.0	2.0%
ME 4	36 53 18	2000	Above Normal	July	--	991.7	971.6	20.1	2.0%	968.7	23.0	2.3%	963.0	28.8	2.9%	957.3	34.4	3.5%	951.6	40.1	4.0%	945.9	45.8	4.6%
ME 4	36 53 18	2000	Above Normal	August	--	521.8	503.0	18.8	3.6%	500.3	21.5	4.1%	495.0	26.9	5.2%	489.6	32.2	6.2%	484.3	37.6	7.2%	478.9	42.9	8.2%
ME 4	36 53 18	2000	Above Normal	September	Used in Summary Table Analysis	295.2	278.5	16.6	5.6%	276.2	19.0	6.4%	271.4	23.7	8.0%	266.7	28.5	9.6%	262.0	33.2	11.2%	257.2	37.9	12.8%
ME 4	36 53 18	2001	Dry	October	Used in Summary Table Analysis	3,818.6	3,805.1	13.5	0.4%	3,803.1	15.5	0.4%	3,799.2	19.4	0.5%	3,795.3	23.4	0.6%	3,791.4	27.2	0.7%	3,787.5	31.1	0.8%
ME 4	36 53 18	2001	Dry	November	Used in Summary Table Analysis	6,130.3	6,119.3	11.0	0.2%	6,117.8	12.5	0.2%	6,114.7	15.6	0.3%	6,111.5	18.9	0.3%	6,108.3	22.0	0.4%	6,105.2	25.1	0.4%
ME 4	36 53 18	2001	Dry	December	--	8,844.7	8,835.2	9.5	0.1%	8,833.8	10.9	0.1%	8,831.1	13.5	0.2%	8,828.4	16.3	0.2%	8,825.6	19.1	0.2%	8,822.8	21.9	0.2%
ME 4	36 53 18	2001	Dry	January	--	12,803.2	12,795.1	8.1	0.1%	12,794.0	9.3	0.1%	12,791.7	11.6	0.1%	12,788.2	15.0	0.1%	12,785.9	17.4	0.1%	12,783.6	19.7	0.2%
ME 4	36 53 18	2001	Dry	February	--	17,479.2	17,471.1	8.1	0.0%	17,469.9	9.3	0.1%	17,467.6	11.6	0.1%	17,465.3	13.9	0.1%	17,463.0	16.2	0.1%	17,460.6	18.5	0.1%
ME 4	36 53 18	2001	Dry	March	--	12,299.8	12,292.8	6.9	0.1%	12,291.7	8.1	0.1%	12,289.4	10.4	0.1%	12,288.2	11.6	0.1%	12,285.9	13.9	0.1%	12,283.6	16.2	0.1%
ME 4	36 53 18	2001	Dry	April	--	10,975.6	10,960.1	15.5	0.1%	10,957.9	17.7	0.2%	10,953.5	22.1	0.2%	10,949.0	26.6	0.2%	10,944.4	31.1	0.3%	10,940.0	35.5	0.3%
ME 4	36 53 18	2001	Dry	May	--	2,636.5	2,618.2	18.3	0.7%	2,615.5	20.9	0.8%	2,610.3	26.2	1.0%	2,605.0	31.5	1.2%	2,599.8	36.7	1.4%	2,594.6	41.9	1.6%
ME 4	36 53 18	2001	Dry	June	--	2,650.2	2,625.3	24.9	0.9%	2,621.9	28.4	1.1%	2,614.8	35.4	1.3%	2,607.8	42.5	1.6%	2,600.8	49.4	1.9%	2,593.9	56.4	2.1%
ME 4	36 53 18	2001	Dry	July	--	718.2	695.0	23.1	3.2%	691.7	26.4	3.7%	685.2	33.0	4.6%	678.6	39.5	5.5%	672.1	46.0	6.4%	665.5	52.6	7.3%
ME 4	36 53 18	2001	Dry	August	--	172.3	149.9	22.5	13.0%	146.7	25.7	14.9%	140.3	32.0	18.6%	133.9	38.4	22.3%	127.5	44.8	26.0%	121.2	51.2	29.7%
ME 4	36 53 18	2001	Dry	September	Used in Summary Table Analysis	95.3	75.3	19.9	20.9%	72.5	22.8	23.9%	66.8	28.4	29.9%	61.2	34.1	35.8%	55.5	39.8	41.8%	49.8	45.5	47.7%
ME 4	36 53 18	2002	Below Normal	October	Used in Summary Table Analysis	265.0	248.4	16.6	6.3%	246.1	18.9	7.1%	241.3	23.7	8.9%	236.5	28.4	10.7%	231.8	33.1	12.5%	227.0	37.9	14.3%
ME 4	36 53 18	2002	Below Normal	November	Used in Summary Table Analysis	12,033.6	12,020.8	12.7	0.1%	12,019.7	13.9	0.1%	12,015.0	18.5	0.2%	12,011.6	22.0	0.2%	12,008.1	25.5	0.2%	12,004.6	28.9	0.2%
ME 4	36 53 18	2002	Below Normal	December	--	35,708.3	35,696.8	11.6	0.0%	35,695.6	12.7	0.0%	35,692.1	16.2	0.0%	35,688.7	19.7	0.1%	35,685.2	23.1	0.1%	35,681.7	26.6	0.1%
ME 4	36 53 18	2002	Below Normal	January	--	30,893.5	30,883.1	10.4	0.0%	30,881.9	11.6	0.0%	30,878.5	15.0	0.0%	30,876.2	17.4	0.1%	30,872.7	20.8	0.1%	30,870.4	23.1	0.1%
ME 4	36 53 18	2002	Below Normal	February	--	24,686.3	24,677.1	9.3	0.0%	24,675.9	10.4	0.0%	24,673.6	12.7	0.1%	24,670.1	16.2	0.1%	24,667.8	18.5	0.1%	24,665.5	20.8	0.1%
ME 4	36 53 18	2002	Below Normal	March	--	17,785.9	17,777.8	8.1	0.0%	17,776.6	9.3	0.1%	17,773.1	12.7	0.1%	17,770.8	15.0	0.1%	17,768.5	17.4	0.1%	17,766.2	19.7	0.1%
ME 4	36 53 18	2002	Below Normal	April	--	9,927.1	9,911.5	15.6	0.2%	9,909.3	17.8	0.2%	9,904.9	22.2	0.2%	9,900.5	26.6	0.3%	9,895.9	31.1	0.3%	9,891.6	35.5	0.4%
ME 4	36 53 18	2002	Below Normal	May	--	3,319.7	3,301.4	18.3	0.6%	3,298.7	20.9	0.6%	3,293.5	26.2	0.8%	3,288.3	31.4	0.9%	3,283.0	36.7	1.1%	3,277.8	41.9	1.3%
ME 4	36 53 18	2002	Below Normal	June	--	853.7	833.0	20.6	2.4%	830.1	23.6	2.8%	824.2	29.4	3.4%	818.4	35.3	4.1%	812.5	41.2	4.8%	806.7	47.0	5.5%
ME 4	36 53 18	2002	Below Normal	July	--	362.3	341.5	20.8	5.7%	338.5	23.7	6.6%	332.6	29.7	8.2%	326.7	35.6	9.8%	320.8	41.5	11.5%	314.8	47.4	13.1%
ME 4	36 53 18	2002	Below Normal	August	--	227.0	207.6	19.4	8.6%	204.8	22.2	9.8%	199.3	27.8	12.2%	193.7	33.3	14.7%	188.2	38.9	17.1%	182.7	44.4	19.6%
ME 4	36 53 18	2002	Below Normal	September	Used in Summary Table Analysis	163.8	145.6	18.3	11.2%	142.9	20.9	12.8%	137.7	26.1	15.9%	132.5	31.3	19.1%	127.3	36.6	22.3%	122.0	41.8	25.5%
ME 4	36 53 18	2003	Wet	October	Used in Summary Table Analysis	128.8	114.0	14.8	11.5%	111.9	17.0	13.2%	107.6	21.2	16.5%	103.3	25.5	19.8%	99.0	29.8	23.1%	94.7	34.1	26.5%
ME 4	36 53 18	2003	Wet	November	Used in Summary Table Analysis	896.3	884.5	11.8	1.3%	882.8	13.5	1.5%	879.4	17.0	1.9%	875.9	20.4	2.3%	872.5	23.8	2.7%	869.1	27.2	3.0%
ME 4	36 53 18	2003	Wet	December	--	56,880.8	56,870.4	10.4	0.0%	56,869.2	11.6	0.0%	56,866.9	13.9	0.0%	56,863.4	17.4	0.0%	56,860.0	20.8	0.0%	56,857.6	23.1	0.0%
ME 4	36 53 18	2003	Wet	January	--	31,542.8	31,533.6	9.3	0.0%	31,532.4	10.4	0.0%	31,528.9	13.9	0.0%	31,526.6	16.2	0.1%	31,524.3	18.5	0.1%	31,520.8	22.0	0.1%
ME 4	36 53 18	2003	Wet	February	--	20,358.8	20,350.7	8.1	0.0%	20,349.5	9.3	0.0%	20,347.2	11.6	0.1%	20,344.9	13.9	0.1%	20,342.6	16.2	0.1%	20,340.3	18.5	0.1%
ME 4	36 53 18	2003	Wet	March	--	24,042.8	24,034.7	8.1	0.0%	24,033.6	9.3	0.0%	24,031.3	11.6	0.0%	24,028.9	13.9	0.1%	24,026.6	16.2	0.1%	24,024.3	18.5	0.1%
ME 4	36 53 18	2003	Wet	April	--	42,937.5	42,930.6	6.9	0.0%	42,929.4	8.1	0.0%	42,927.1	10.4	0.0%	42,924.8	12.7	0.0%	42,922.5	15.0	0.0%	42,920.1	17.4	0.0%
ME 4	36 53 18	2003	Wet	May	--	12,226.9	12,210.6	16.2	0.1%	12,208.3	18.5	0.2%	12,204.9	22.0	0.2%	12,200.2	26.6	0.2%	12,195.6	31.3	0.3%	12,191.0	35.9	0.3%
ME 4	36 53 18	2003	Wet	June	--	3,166.6	3,146.6	19.9	0.6%	3,143.8	22.8	0.7%	3,138.2	28.4	0.9%	3,132.6	33.9	1.1%	3,127.1	39.5	1.2%	3,121.5	45.0	1.4%
ME 4	36 53 18	2003	Wet	July	--	1,474.2	1,453.6	20.6	1.4%	1,450.7	23.5	1.6%	1,444.8	29.4	2.0%	1,438.9	35.3	2.4%	1,433.1	41.1	2.8%	1,427.2	47.0	3.2%
ME 4	36 53 18	2003	Wet	August	--	760.2	740.3	19.9	2.6%	737.4	22.8	3.0%	731.7	28.4	3.7%	726.1	34.1	4.5%	720.4	39.8	5.2%	714.6	45.6	6.0%
ME 4	36 53 18	2003	Wet	September	Used in Summary Table Analysis	458.0	441.1	16.9	3.7%	438.7	19.3	4.2%	433.8	24.1	5.3%	429.0	29.0	6.3%	424.2	33.8	7.4%	419.4	38.6	8.4%
ME 4	36 53 18	2004	Wet	October	Used in Summary Table Analysis	324.9	311.0	13.9	4.3%	309.0	15.8	4.9%	305.1	19.8	6.1%	301.1	23.8	7.3%	297.1	27.8	8.6%	293.1	31.8	9.8%
ME 4	36 53 18	2004	Wet	November	Used in Summary Table Analysis	5,810.8	5,799.7	11.1	0.2%	5,798.0	12.7	0.2%	5,794.8	16.0	0.3%	5,791.6	19.2	0.3%	5,788.3	22.5	0.4%	5,785.1	25.7	0.4%
ME 4	36 53 18	2004	Wet	December	--	36,348.4	36,339.1	9.3	0.0%	36,338.0	10.4	0.0%	36,334.5	13.9	0.0%	36,332.2	16.2	0.0%	36,328.7	19.7	0.1%	36,326.4	22.0	0.1%
ME 4	36 53 18	2004	Wet	January	--	31,500.0	31,490.7	9.3	0.0%	31,489.6	10.4	0.0%	31,487.3	12.7	0.0%	31,485.0	15.0	0.0%	31,482.6	17.4	0.1%	31,479.2	20.8	0.1%
ME 4	36 53 18	2004	Wet	February	--	38,260.4	38,252.3	8.1	0.0%	38,251.2	9.3	0.0%	38,248.8	11.6	0.0%	38,246.5	13.9	0.0%	38,244.2	16.2	0.0%	38,241.9	18.5	0.0%
ME 4	36 53 18	2004	Wet	March	--	16,527.8	16,519.7	8.1	0.0%	16,518.5	9.3	0.1%	16,516.2	11.6	0.1%	16,513.9	13.9	0.1%	16,512.7	15.0	0.1%	16,510.4	17.4	0.1%
ME 4	36 53 18	2004	Wet	April	--	9,452.7	9,445.5	7.2	0.1%	9,444.4	8.2	0.1%	9,442.5	10.2	0.1%	9,440.4	12.3	0.1%	9,438.2	14.5	0.2%	9,436.1	16.6	0.2%
ME 4	36 53 18	2004	Wet	May	--	3,421.8	3,406.6	15.2	0.4%	3,404.4	17.4	0.5%	3,400.0	21.8	0.6%	3,395.7	26.0	0.8%	3,391.3	30.4	0.9%	3,386.9	34.8	1.0%
ME 4	36 53 18	2004	Wet	June	--	691.7	672.7	19.0	2.7%	670.0	21.7	3.1%	664.6	27.1	3.9%	659.2	32.5	4.7%	653.8	37.9	5.5%	648.4	43.3	6.3%
ME 4	36 53 18	2004	Wet	July	--	356.1	335.9	20.2	5.7%	333.0	23.1	6.5%	327.3	28.9	8.1%	321.5	34.6	9.7%	315.7	40.4	11.3%	310.0	46.2	13.0%
ME 4	36 53 18	2004	Wet	August	--	225.1	206.2	19.0	8.4%	203.4	21.7	9.6%	198.0	27.1	12.0%	192.6	32.5	14.5%	187.2	37.9	16.9%	181.8	43.4	19.3%
ME 4	36 53 18	2004	Wet	September	Used in Summary Table Analysis	162.2	144.2	18.0	11.1%	141.6	20.5	12.7%	136.5	25.7	15.8%	131.4	30.8	19.0%	126.2	35.9	22.2%	121.1	41.1	25.3%
ME 4	36 53 18	2005	Above Normal	October	Used in Summary Table Analysis	7,692.8	7,678.7	14.1	0.2%	7,676.7	16.1	0.2%	7,672.7	20.1	0.3%	7,668.6	24.2	0.3%	7,664.6	28.2	0.4%	7,660.4	32.4	0.4%
ME 4	36 53 18	2005	Above Normal	November	Used in Summary Table Analysis	2,257.6	2,246.5	11.1	0.5%	2,245.0	12.6	0.6%	2,241.8	15.9	0.7%	2,238.7	19.0	0.8%	2,235.4	22.2	1.0%	2,232.2	25.5	1.1%
ME 4	36 53 18	2005	Above Normal	December	--	21,059.0	21,049.8	9.3	0.0%	21,048.6	10.4	0.0%	21,045.1	13.9	0.1%	21,042.8	16.2	0.1%	21,040.5	18.5	0.1%	21,037.0	22.0	0.1%
ME 4	36 53 18	2005	Above Normal	January	--	22,410.9	22,401.6	9.3	0.0%	22,400.5	10.4	0.0%	22,398.1	12.7	0.1%	22,395.8	15.0	0.1%	22,392.4	18.5	0.1%	22,390.0	20.8	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 53 18	2005	Above Normal	February	--	14,015.0	14,006.9	8.1	0.1%	14,005.8	9.3	0.1%	14,003.5	11.6	0.1%	14,001.2	13.9	0.1%	13,998.8	16.2	0.1%	13,996.5	18.5	0.1%
ME 4	36 53 18	2005	Above Normal	March	--	28,585.6	28,578.7	6.9	0.0%	28,577.5	8.1	0.0%	28,575.2	10.4	0.0%	28,572.9	12.7	0.0%	28,570.6	15.0	0.1%	28,569.4	16.2	0.1%
ME 4	36 53 18	2005	Above Normal	April	--	21,457.2	21,450.2	6.9	0.0%	21,449.1	8.1	0.0%	21,446.8	10.4	0.0%	21,445.6	11.6	0.1%	21,443.3	13.9	0.1%	21,441.0	16.2	0.1%
ME 4	36 53 18	2005	Above Normal	May	--	19,584.5	19,569.4	15.0	0.1%	19,567.1	17.4	0.1%	19,562.5	22.0	0.1%	19,557.9	26.6	0.1%	19,553.2	31.3	0.2%	19,549.8	34.7	0.2%
ME 4	36 53 18	2005	Above Normal	June	--	15,890.0	15,866.9	23.1	0.1%	15,863.4	26.6	0.2%	15,856.5	33.6	0.2%	15,850.7	39.4	0.2%	15,843.8	46.3	0.3%	15,836.8	53.2	0.3%
ME 4	36 53 18	2005	Above Normal	July	--	2,863.4	2,842.5	20.9	0.7%	2,839.5	24.0	0.8%	2,833.6	29.9	1.0%	2,827.5	35.9	1.3%	2,821.6	41.8	1.5%	2,815.6	47.8	1.7%
ME 4	36 53 18	2005	Above Normal	August	--	983.0	964.1	18.9	1.9%	961.4	21.6	2.2%	956.0	27.0	2.7%	950.6	32.4	3.3%	945.2	37.8	3.8%	939.8	43.1	4.4%
ME 4	36 53 18	2005	Above Normal	September	Used in Summary Table Analysis	524.6	507.9	16.6	3.2%	505.5	19.0	3.6%	500.8	23.8	4.5%	496.0	28.5	5.4%	491.3	33.3	6.3%	486.6	38.0	7.2%
ME 4	36 53 18	2006	Wet	October	Used in Summary Table Analysis	634.5	621.1	13.4	2.1%	619.2	15.3	2.4%	615.3	19.2	3.0%	611.5	23.0	3.6%	607.7	26.8	4.2%	603.8	30.7	4.8%
ME 4	36 53 18	2006	Wet	November	Used in Summary Table Analysis	9,320.4	9,309.8	10.5	0.1%	9,308.3	12.0	0.1%	9,305.3	15.0	0.2%	9,302.2	18.2	0.2%	9,299.2	21.2	0.2%	9,296.1	24.3	0.3%
ME 4	36 53 18	2006	Wet	December	--	43,547.5	43,538.2	9.3	0.0%	43,537.0	10.4	0.0%	43,534.7	12.7	0.0%	43,531.3	16.2	0.0%	43,528.9	18.5	0.0%	43,525.5	22.0	0.1%
ME 4	36 53 18	2006	Wet	January	--	46,343.8	46,334.5	9.3	0.0%	46,333.3	10.4	0.0%	46,331.0	12.7	0.0%	46,328.7	15.0	0.0%	46,326.4	17.4	0.0%	46,322.9	20.8	0.0%
ME 4	36 53 18	2006	Wet	February	--	26,637.7	26,629.6	8.1	0.0%	26,628.5	9.3	0.0%	26,627.3	10.4	0.0%	26,625.0	12.7	0.0%	26,622.7	15.0	0.1%	26,620.4	17.4	0.1%
ME 4	36 53 18	2006	Wet	March	--	47,194.4	47,186.3	8.1	0.0%	47,185.2	9.3	0.0%	47,182.9	11.6	0.0%	47,181.7	12.7	0.0%	47,179.4	15.0	0.0%	47,177.1	17.4	0.0%
ME 4	36 53 18	2006	Wet	April	--	30,442.1	30,435.2	6.9	0.0%	30,434.0	8.1	0.0%	30,431.7	10.4	0.0%	30,429.4	12.7	0.0%	30,428.2	13.9	0.0%	30,425.9	16.2	0.1%
ME 4	36 53 18	2006	Wet	May	--	14,215.3	14,206.0	9.3	0.1%	14,203.7	11.6	0.1%	14,201.4	13.9	0.1%	14,199.1	16.2	0.1%	14,195.6	19.7	0.1%	14,193.3	22.0	0.2%
ME 4	36 53 18	2006	Wet	June	--	3,547.6	3,528.6	19.0	0.5%	3,525.9	21.6	0.6%	3,520.5	27.1	0.8%	3,515.2	32.4	0.9%	3,509.8	37.7	1.1%	3,504.5	43.1	1.2%
ME 4	36 53 18	2006	Wet	July	--	1,279.4	1,259.4	20.0	1.6%	1,256.5	22.9	1.8%	1,250.8	28.6	2.2%	1,245.1	34.3	2.7%	1,239.5	39.9	3.1%	1,233.9	45.5	3.6%
ME 4	36 53 18	2006	Wet	August	--	665.5	646.1	19.4	2.9%	643.4	22.1	3.3%	637.9	27.6	4.1%	632.4	33.1	5.0%	626.9	38.6	5.8%	621.4	44.1	6.6%
ME 4	36 53 18	2006	Wet	September	Used in Summary Table Analysis	426.4	409.5	16.9	4.0%	407.1	19.2	4.5%	402.3	24.1	5.6%	397.5	28.8	6.8%	392.7	33.6	7.9%	387.9	38.4	9.0%
ME 4	36 53 18	2007	Above Normal	October	Used in Summary Table Analysis	274.5	260.9	13.6	5.0%	258.9	15.5	5.7%	255.0	19.4	7.1%	251.1	23.3	8.5%	247.2	27.3	9.9%	243.3	31.2	11.4%
ME 4	36 53 18	2007	Above Normal	November	Used in Summary Table Analysis	8,679.3	8,668.3	11.0	0.1%	8,666.8	12.5	0.1%	8,663.5	15.7	0.2%	8,660.4	18.9	0.2%	8,657.2	22.1	0.3%	8,653.9	25.3	0.3%
ME 4	36 53 18	2007	Above Normal	December	--	20,437.5	20,427.1	10.4	0.1%	20,425.9	11.6	0.1%	20,423.6	13.9	0.1%	20,420.1	17.4	0.1%	20,417.8	19.7	0.1%	20,414.4	23.1	0.1%
ME 4	36 53 18	2007	Above Normal	January	--	10,258.0	10,249.4	8.6	0.1%	10,248.1	9.8	0.1%	10,245.7	12.3	0.1%	10,243.2	14.8	0.1%	10,240.7	17.2	0.2%	10,238.2	19.8	0.2%
ME 4	36 53 18	2007	Above Normal	February	--	30,601.9	30,593.8	8.1	0.0%	30,592.6	9.3	0.0%	30,590.3	11.6	0.0%	30,588.0	13.9	0.0%	30,585.6	16.2	0.1%	30,583.3	18.5	0.1%
ME 4	36 53 18	2007	Above Normal	March	--	13,106.5	13,098.4	8.1	0.1%	13,097.2	9.3	0.1%	13,094.9	11.6	0.1%	13,092.6	13.9	0.1%	13,090.3	16.2	0.1%	13,088.0	18.5	0.1%
ME 4	36 53 18	2007	Above Normal	April	--	11,538.7	11,523.7	14.9	0.1%	11,521.6	17.0	0.1%	11,517.4	21.3	0.2%	11,513.1	25.6	0.2%	11,508.8	29.9	0.3%	11,504.5	34.1	0.3%
ME 4	36 53 18	2007	Above Normal	May	--	4,141.2	4,123.6	17.6	0.4%	4,121.1	20.1	0.5%	4,116.0	25.2	0.6%	4,110.9	30.3	0.7%	4,105.8	35.4	0.9%	4,100.7	40.5	1.0%
ME 4	36 53 18	2007	Above Normal	June	--	1,499.3	1,478.1	21.2	1.4%	1,475.1	24.2	1.6%	1,469.1	30.2	2.0%	1,463.1	36.2	2.4%	1,457.1	42.2	2.8%	1,451.2	48.1	3.2%
ME 4	36 53 18	2007	Above Normal	July	--	496.0	474.8	21.2	4.3%	471.7	24.2	4.9%	465.7	30.2	6.1%	459.7	36.3	7.3%	453.7	42.3	8.5%	447.7	48.3	9.7%
ME 4	36 53 18	2007	Above Normal	August	--	223.1	204.1	19.0	8.5%	201.3	21.7	9.7%	195.9	27.2	12.2%	190.5	32.6	14.6%	185.1	38.0	17.0%	179.7	43.4	19.4%
ME 4	36 53 18	2007	Above Normal	September	Used in Summary Table Analysis	150.7	132.8	17.9	11.9%	130.3	20.5	13.6%	125.2	25.6	17.0%	120.1	30.7	20.4%	114.9	35.8	23.7%	109.8	40.9	27.1%
ME 4	36 53 18	2008	Dry	October	Used in Summary Table Analysis	3,437.8	3,423.4	14.5	0.4%	3,421.3	16.6	0.5%	3,417.2	20.6	0.6%	3,413.1	24.8	0.7%	3,408.8	29.1	0.8%	3,404.6	33.2	1.0%
ME 4	36 53 18	2008	Dry	November	Used in Summary Table Analysis	3,278.8	3,267.7	11.1	0.3%	3,266.1	12.7	0.4%	3,262.8	16.0	0.5%	3,259.6	19.2	0.6%	3,256.4	22.5	0.7%	3,253.2	25.6	0.8%
ME 4	36 53 18	2008	Dry	December	--	23,162.0	23,151.6	10.4	0.0%	23,150.5	11.6	0.0%	23,148.1	13.9	0.1%	23,144.7	17.4	0.1%	23,142.4	19.7	0.1%	23,138.9	23.1	0.1%
ME 4	36 53 18	2008	Dry	January	--	37,564.8	37,555.6	9.3	0.0%	37,554.4	10.4	0.0%	37,552.1	12.7	0.0%	37,548.6	16.2	0.0%	37,546.3	18.5	0.0%	37,544.0	20.8	0.1%
ME 4	36 53 18	2008	Dry	February	--	26,278.9	26,270.8	8.1	0.0%	26,269.7	9.3	0.0%	26,267.4	11.6	0.0%	26,265.0	13.9	0.1%	26,262.7	16.2	0.1%	26,260.4	18.5	0.1%
ME 4	36 53 18	2008	Dry	March	--	11,797.5	11,790.5	6.9	0.1%	11,789.4	8.1	0.1%	11,787.0	10.4	0.1%	11,784.7	12.7	0.1%	11,782.4	15.0	0.1%	11,781.3	16.2	0.1%
ME 4	36 53 18	2008	Dry	April	--	9,019.0	9,003.9	15.0	0.2%	9,001.7	17.2	0.2%	8,997.3	21.6	0.2%	8,993.1	25.9	0.3%	8,988.7	30.3	0.3%	8,984.4	34.6	0.4%
ME 4	36 53 18	2008	Dry	May	--	1,358.8	1,342.6	16.2	1.2%	1,340.3	18.5	1.4%	1,335.6	23.1	1.7%	1,331.1	27.7	2.0%	1,326.6	32.2	2.4%	1,322.2	36.6	2.7%
ME 4	36 53 18	2008	Dry	June	--	437.8	414.8	23.1	5.3%	411.5	26.4	6.0%	405.0	32.9	7.5%	398.5	39.4	9.0%	392.0	45.9	10.5%	385.5	52.3	12.0%
ME 4	36 53 18	2008	Dry	July	--	256.0	233.4	22.6	8.8%	230.2	25.8	10.1%	223.7	32.2	12.6%	217.3	38.7	15.1%	210.9	45.1	17.6%	204.5	51.5	20.1%
ME 4	36 53 18	2008	Dry	August	--	179.4	157.6	21.8	12.2%	154.5	25.0	13.9%	148.2	31.2	17.4%	142.0	37.4	20.8%	135.8	43.6	24.3%	129.6	49.8	27.8%
ME 4	36 53 18	2008	Dry	September	Used in Summary Table Analysis	141.1	120.2	20.9	14.8%	117.2	23.9	16.9%	111.2	29.9	21.2%	105.3	35.8	25.4%	99.3	41.8	29.6%	93.3	47.7	33.8%
ME 4	36 53 18	2009	Critical	October	Used in Summary Table Analysis	924.4	908.1	16.4	1.8%	905.7	18.7	2.0%	901.0	23.5	2.5%	896.3	28.2	3.0%	891.7	32.7	3.5%	887.0	37.5	4.1%
ME 4	36 53 18	2009	Critical	November	Used in Summary Table Analysis	5,519.9	5,507.2	12.7	0.2%	5,505.3	14.6	0.3%	5,501.7	18.2	0.3%	5,498.0	21.9	0.4%	5,494.4	25.5	0.5%	5,490.7	29.2	0.5%
ME 4	36 53 18	2009	Critical	December	--	12,184.0	12,173.6	10.4	0.1%	12,171.3	12.7	0.1%	12,167.8	16.2	0.1%	12,165.5	18.5	0.2%	12,162.0	22.0	0.2%	12,158.6	25.5	0.2%
ME 4	36 53 18	2009	Critical	January	--	8,801.3	8,791.3	10.0	0.1%	8,789.8	11.5	0.1%	8,786.9	14.4	0.2%	8,784.0	17.2	0.2%	8,781.1	20.1	0.2%	8,778.1	23.1	0.3%
ME 4	36 53 18	2009	Critical	February	--	22,629.6	22,621.5	8.1	0.0%	22,620.4	9.3	0.0%	22,618.1	11.6	0.1%	22,614.6	15.0	0.1%	22,612.3	17.4	0.1%	22,610.0	19.7	0.1%
ME 4	36 53 18	2009	Critical	March	--	21,133.1	21,125.0	8.1	0.0%	21,123.8	9.3	0.0%	21,121.5	11.6	0.1%	21,119.2	13.9	0.1%	21,116.9	16.2	0.1%	21,114.6	18.5	0.1%
ME 4	36 53 18	2009	Critical	April	--	10,097.6	10,081.9	15.6	0.2%	10,079.7	17.8	0.2%	10,075.1	22.5	0.2%	10,070.6	27.0	0.3%	10,066.2	31.4	0.3%	10,061.7	35.9	0.4%
ME 4	36 53 18	2009	Critical	May	--	15,589.1	15,570.6	18.5	0.1%	15,567.1	22.0	0.1%	15,562.5	26.6	0.2%	15,556.7	32.4	0.2%	15,550.9	38.2	0.2%	15,545.1	44.0	0.3%
ME 4	36 53 18	2009	Critical	June	--	3,160.4	3,136.0	24.4	0.8%	3,132.4	28.0	0.9%	3,125.5	35.0	1.1%	3,118.4	42.0	1.3%	3,111.5	49.0	1.5%	3,104.5	55.9	1.8%
ME 4	36 53 18	2009	Critical	July	--	1,262.8	1,239.9	22.9	1.8%	1,236.7	26.2	2.1%	1,230.2	32.6	2.6%	1,223.7	39.1	3.1%	1,217.2	45.6	3.6%	1,210.9	52.0	4.1%
ME 4	36 53 18	2009	Critical	August	--	668.9	646.9	22.0	3.3%	643.7	25.1	3.8%	637.4	31.4	4.7%	631.2	37.7	5.6%	624.9	43.9	6.6%	618.7	50.2	7.5%
ME 4	36 53 18	2009	Critical	September	Used in Summary Table Analysis	390.0	370.5	19.5	5.0%	367.7	22.3	5.7%	362.1	27.9	7.2%	356.5	33.5	8.6%	350.9	39.1	10.0%	345.4	44.7	11.4%
ME 4	36 53 18	2010	Below Normal	October	Used in Summary Table Analysis	6,088.9	6,072.3	16.6	0.3%	6,070.0	18.9	0.3%	6,065.3	23.6	0.4%	6,060.5	28.4	0.5%	6,055.9	33.0	0.5%	6,051.2	37.7	0.6%
ME 4	36 53 18	2010	Below Normal	November	Used in Summary Table Analysis	8,296.1	8,283.0	13.1	0.2%	8,281.1	14.9	0.2%	8,277.3	18.8	0.2%	8,273.5	22.6	0.3%	8,269.8	26.3	0.3%	8,266.0	30.1	0.4%
ME 4	36 53 18	2010	Below Normal	December	--	12,368.1	12,357.6	10.4	0.1%	12,355.3	12.7	0.1%	12,351.9	16.2	0.1%	12,349.5	18.5	0.1%	12,346.1	22.0	0.2%	12,342.6	25.5	0.2%
ME 4	36 53 18	2010	Below Normal	January	--	36,282.4	36,273.1	9.3	0.0%	36,270.8	11.6	0.0%	36,268.5	13.9	0.0%	36,265.0	17.4	0.0%	36,262.7	19.7	0.1%	36,259.3	23.1	0.1%
ME 4	36 53 18	2010	Below Normal	February	--	27,258.1	27,250.0	8.1	0.0%	27,247.7	10.4	0.0%	27,245.4	12.7	0.0%	27,243.1	15.0	0.1%	27,240.7	17.4	0.1%	27,237.3	20.8	0.1%
ME 4	36 53 18	2010	Below Normal	March	--	28,848.4	28,840.3	8.1	0.0%	28,839.1	9.3	0.0%	28,836.8	11.6	0.0%	28,833.3	15.0	0.1%	28,831.0	17.4	0.1%	28,828.7	19.7	0.1%
ME 4	36 53 18	2010	Below Normal	April	--	40,035.9	40,027.8	8.1	0.0%	40,026.6	9.3	0.0%	40,024.3	11.6	0.0%	40,022.0	13.9	0.0%	40,019.7	16.2	0.0%	40,017.4	18.5	0.0%
ME 4	36 53 18	2010	Below Normal	May	--	20,287.0	20,270.8	16.2	0.1%	20,268.5	18.5	0.1%	20,263.9	23.1	0.1%	20,259.3	27.8	0.1%	20,254.6	32.4	0.2%	20,250.0	37.0	0.2%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 53 18	2010	Below Normal	June	--	9,364.5	9,340.9	23.6	0.3%	9,337.5	27.0	0.3%	9,330.8	33.7	0.4%	9,324.2	40.3	0.4%	9,317.6	46.9	0.5%	9,311.0	53.5	0.6%
ME 4	36 53 18	2010	Below Normal	July	--	1,454.6	1,433.3	21.3	1.5%	1,430.3	24.3	1.7%	1,424.2	30.4	2.1%	1,418.2	36.5	2.5%	1,412.0	42.6	2.9%	1,406.3	48.4	3.3%
ME 4	36 53 18	2010	Below Normal	August	--	569.1	549.7	19.4	3.4%	546.9	22.2	3.9%	541.3	27.8	4.9%	535.9	33.2	5.8%	530.3	38.8	6.8%	524.8	44.3	7.8%
ME 4	36 53 18	2010	Below Normal	September	Used in Summary Table Analysis	651.3	632.8	18.4	2.8%	630.2	21.1	3.2%	624.9	26.3	4.0%	619.7	31.6	4.8%	614.4	36.8	5.7%	609.2	42.1	6.5%
ME 4	36 53 18	2011	Wet	October	Used in Summary Table Analysis	9,645.1	9,631.3	13.9	0.1%	9,629.3	15.9	0.2%	9,625.3	19.8	0.2%	9,621.4	23.7	0.2%	9,617.4	27.8	0.3%	9,613.3	31.8	0.3%
ME 4	36 53 18	2011	Wet	November	Used in Summary Table Analysis	14,233.8	14,222.2	11.6	0.1%	14,221.1	12.7	0.1%	14,217.6	16.2	0.1%	14,215.3	18.5	0.1%	14,211.8	22.0	0.2%	14,208.3	25.5	0.2%
ME 4	36 53 18	2011	Wet	December	--	33,760.4	33,751.2	9.3	0.0%	33,750.0	10.4	0.0%	33,746.5	13.9	0.0%	33,744.2	16.2	0.0%	33,740.7	19.7	0.1%	33,738.4	22.0	0.1%
ME 4	36 53 18	2011	Wet	January	--	14,166.7	14,158.6	8.1	0.1%	14,157.4	9.3	0.1%	14,155.1	11.6	0.1%	14,151.6	15.0	0.1%	14,149.3	17.4	0.1%	14,147.0	19.7	0.1%
ME 4	36 53 18	2011	Wet	February	--	20,777.8	20,769.7	8.1	0.0%	20,768.5	9.3	0.0%	20,766.2	11.6	0.1%	20,763.9	13.9	0.1%	20,761.6	16.2	0.1%	20,759.3	18.5	0.1%
ME 4	36 53 18	2011	Wet	March	--	52,045.1	52,037.0	8.1	0.0%	52,035.9	9.3	0.0%	52,033.6	11.6	0.0%	52,031.3	13.9	0.0%	52,028.9	16.2	0.0%	52,026.6	18.5	0.0%
ME 4	36 53 18	2011	Wet	April	--	24,812.5	24,805.6	6.9	0.0%	24,804.4	8.1	0.0%	24,802.1	10.4	0.0%	24,799.8	12.7	0.1%	24,798.6	13.9	0.1%	24,796.3	16.2	0.1%
ME 4	36 53 18	2011	Wet	May	--	11,388.5	11,373.3	15.3	0.1%	11,371.1	17.5	0.2%	11,366.6	22.0	0.2%	11,362.0	26.5	0.2%	11,357.6	30.9	0.3%	11,353.2	35.3	0.3%
ME 4	36 53 18	2011	Wet	June	--	7,062.4	7,039.4	23.0	0.3%	7,036.1	26.3	0.4%	7,029.6	32.8	0.5%	7,023.1	39.2	0.6%	7,016.7	45.7	0.6%	7,010.2	52.2	0.7%
ME 4	36 53 18	2011	Wet	July	--	1,828.5	1,805.8	22.7	1.2%	1,802.5	25.9	1.4%	1,796.2	32.3	1.8%	1,789.7	38.8	2.1%	1,783.2	45.3	2.5%	1,776.9	51.6	2.8%
ME 4	36 53 18	2011	Wet	August	--	776.9	757.7	19.2	2.5%	754.9	22.0	2.8%	749.5	27.4	3.5%	744.0	32.9	4.2%	738.5	38.4	4.9%	733.1	43.8	5.6%
ME 4	36 53 18	2011	Wet	September	Used in Summary Table Analysis	433.5	416.1	17.4	4.0%	413.6	19.8	4.6%	408.7	24.8	5.7%	403.8	29.7	6.9%	398.8	34.7	8.0%	393.9	39.6	9.1%
ME 4	36 53 18	2012	Below Normal	October	Used in Summary Table Analysis	4,547.2	4,533.2	14.0	0.3%	4,531.1	16.1	0.4%	4,527.1	20.1	0.4%	4,523.0	24.2	0.5%	4,519.0	28.2	0.6%	4,514.9	32.3	0.7%
ME 4	36 53 18	2012	Below Normal	November	Used in Summary Table Analysis	8,250.8	8,239.6	11.2	0.1%	8,238.0	12.8	0.2%	8,234.7	16.1	0.2%	8,231.5	19.3	0.2%	8,228.1	22.7	0.3%	8,224.9	25.9	0.3%
ME 4	36 53 18	2012	Below Normal	December	--	5,188.5	5,178.9	9.6	0.2%	5,177.5	11.0	0.2%	5,174.8	13.8	0.3%	5,171.9	16.7	0.3%	5,169.1	19.4	0.4%	5,166.2	22.3	0.4%
ME 4	36 53 18	2012	Below Normal	January	--	20,153.9	20,145.8	8.1	0.0%	20,144.7	9.3	0.0%	20,142.4	11.6	0.1%	20,138.9	15.0	0.1%	20,136.6	17.4	0.1%	20,134.3	19.7	0.1%
ME 4	36 53 18	2012	Below Normal	February	--	18,223.4	18,215.3	8.1	0.0%	18,214.1	9.3	0.1%	18,211.8	11.6	0.1%	18,209.5	13.9	0.1%	18,207.2	16.2	0.1%	18,204.9	18.5	0.1%
ME 4	36 53 18	2012	Below Normal	March	--	45,471.1	45,463.0	8.1	0.0%	45,461.8	9.3	0.0%	45,459.5	11.6	0.0%	45,457.2	13.9	0.0%	45,454.9	16.2	0.0%	45,452.5	18.5	0.0%
ME 4	36 53 18	2012	Below Normal	April	--	26,875.0	26,868.1	6.9	0.0%	26,866.9	8.1	0.0%	26,864.6	10.4	0.0%	26,862.3	12.7	0.0%	26,861.1	13.9	0.1%	26,858.8	16.2	0.1%
ME 4	36 53 18	2012	Below Normal	May	--	7,486.3	7,471.1	15.3	0.2%	7,468.9	17.5	0.2%	7,464.4	22.0	0.3%	7,460.0	26.4	0.4%	7,455.6	30.8	0.4%	7,451.2	35.2	0.5%
ME 4	36 53 18	2012	Below Normal	June	--	5,521.4	5,498.0	23.4	0.4%	5,494.7	26.7	0.5%	5,488.1	33.3	0.6%	5,481.5	39.9	0.7%	5,474.9	46.5	0.8%	5,468.3	53.1	1.0%
ME 4	36 53 18	2012	Below Normal	July	--	2,227.1	2,205.2	21.9	1.0%	2,202.1	25.0	1.1%	2,195.8	31.3	1.4%	2,189.6	37.5	1.7%	2,183.3	43.8	2.0%	2,177.1	50.0	2.2%
ME 4	36 53 18	2012	Below Normal	August	--	388.3	370.7	17.6	4.5%	368.2	20.1	5.2%	363.2	25.1	6.5%	358.2	30.1	7.7%	353.2	35.1	9.0%	348.2	40.1	10.3%
ME 4	36 53 18	2012	Below Normal	September	Used in Summary Table Analysis	249.1	233.5	15.6	6.3%	231.3	17.8	7.2%	226.8	22.3	8.9%	222.4	26.7	10.7%	218.0	31.1	12.5%	213.6	35.6	14.3%
ME 4	36 53 18	2013	Below Normal	October	Used in Summary Table Analysis	1,915.5	1,902.0	13.5	0.7%	1,900.0	15.5	0.8%	1,896.1	19.4	1.0%	1,892.2	23.3	1.2%	1,888.3	27.2	1.4%	1,884.5	31.0	1.6%
ME 4	36 53 18	2013	Below Normal	November	Used in Summary Table Analysis	14,709.5	14,699.1	10.4	0.1%	14,697.9	11.6	0.1%	14,694.4	15.0	0.1%	14,691.0	18.5	0.1%	14,687.5	22.0	0.1%	14,685.2	24.3	0.2%
ME 4	36 53 18	2013	Below Normal	December	--	60,046.3	60,037.0	9.3	0.0%	60,034.7	11.6	0.0%	60,032.4	13.9	0.0%	60,028.9	17.4	0.0%	60,026.6	19.7	0.0%	60,023.1	23.1	0.0%
ME 4	36 53 18	2013	Below Normal	January	--	22,216.4	22,208.3	8.1	0.0%	22,207.2	9.3	0.0%	22,204.9	11.6	0.1%	22,202.5	13.9	0.1%	22,200.2	16.2	0.1%	22,197.9	18.5	0.1%
ME 4	36 53 18	2013	Below Normal	February	--	8,852.4	8,844.6	7.9	0.1%	8,843.4	9.0	0.1%	8,841.1	11.3	0.1%	8,838.8	13.7	0.2%	8,836.3	16.1	0.2%	8,834.0	18.4	0.2%
ME 4	36 53 18	2013	Below Normal	March	--	10,340.9	10,333.2	7.6	0.1%	10,332.1	8.8	0.1%	10,329.9	11.0	0.1%	10,327.5	13.3	0.1%	10,325.3	15.5	0.1%	10,323.0	17.8	0.2%
ME 4	36 53 18	2013	Below Normal	April	--	8,293.5	8,278.9	14.6	0.2%	8,276.9	16.7	0.2%	8,272.7	20.8	0.3%	8,268.5	25.0	0.3%	8,264.4	29.2	0.4%	8,260.2	33.3	0.4%
ME 4	36 53 18	2013	Below Normal	May	--	4,434.6	4,416.9	17.7	0.4%	4,414.4	20.3	0.5%	4,409.4	25.2	0.6%	4,404.3	30.3	0.7%	4,399.2	35.4	0.8%	4,394.2	40.4	0.9%
ME 4	36 53 18	2013	Below Normal	June	--	2,111.0	2,089.9	21.1	1.0%	2,086.9	24.1	1.1%	2,080.9	30.1	1.4%	2,075.0	36.0	1.7%	2,069.0	42.0	2.0%	2,063.0	48.0	2.3%
ME 4	36 53 18	2013	Below Normal	July	--	718.0	697.7	20.3	2.8%	694.8	23.2	3.2%	689.1	29.0	4.0%	683.3	34.7	4.8%	677.6	40.5	5.6%	671.9	46.2	6.4%
ME 4	36 53 18	2013	Below Normal	August	--	340.2	321.3	19.0	5.6%	318.6	21.7	6.4%	313.1	27.1	8.0%	307.7	32.5	9.5%	302.3	37.9	11.1%	296.9	43.3	12.7%
ME 4	36 53 18	2013	Below Normal	September	Used in Summary Table Analysis	4,792.1	4,772.5	19.7	0.4%	4,769.7	22.5	0.5%	4,764.1	28.0	0.6%	4,758.6	33.6	0.7%	4,753.0	39.1	0.8%	4,747.3	44.8	0.9%
ME 4	36 53 18	2014	Critical	October	Used in Summary Table Analysis	280.5	266.3	14.2	5.1%	264.3	16.2	5.8%	260.2	20.3	7.2%	256.1	24.4	8.7%	252.0	28.5	10.1%	248.0	32.6	11.6%
ME 4	36 53 18	2014	Critical	November	Used in Summary Table Analysis	1,541.0	1,529.5	11.5	0.7%	1,527.9	13.1	0.8%	1,524.7	16.3	1.1%	1,521.3	19.7	1.3%	1,518.1	22.9	1.5%	1,514.7	26.3	1.7%
ME 4	36 53 18	2014	Critical	December	--	1,591.2	1,581.1	10.1	0.6%	1,579.7	11.5	0.7%	1,576.9	14.4	0.9%	1,574.0	17.2	1.1%	1,571.1	20.1	1.3%	1,568.2	23.0	1.4%
ME 4	36 53 18	2014	Critical	January	--	2,824.4	2,815.4	9.0	0.3%	2,814.1	10.3	0.4%	2,811.6	12.8	0.5%	2,809.0	15.4	0.5%	2,806.4	18.1	0.6%	2,803.7	20.7	0.7%
ME 4	36 53 18	2014	Critical	February	--	15,762.7	15,754.6	8.1	0.1%	15,753.5	9.3	0.1%	15,751.2	11.6	0.1%	15,748.8	13.9	0.1%	15,746.5	16.2	0.1%	15,744.2	18.5	0.1%
ME 4	36 53 18	2014	Critical	March	--	31,498.8	31,490.7	8.1	0.0%	31,489.6	9.3	0.0%	31,487.3	11.6	0.0%	31,485.0	13.9	0.0%	31,482.6	16.2	0.1%	31,480.3	18.5	0.1%
ME 4	36 53 18	2014	Critical	April	--	12,994.2	12,978.0	16.2	0.1%	12,975.7	18.5	0.1%	12,972.2	22.0	0.2%	12,967.6	26.6	0.2%	12,963.0	31.3	0.2%	12,958.3	35.9	0.3%
ME 4	36 53 18	2014	Critical	May	--	5,190.3	5,171.8	18.5	0.4%	5,169.1	21.2	0.4%	5,163.8	26.5	0.5%	5,158.4	31.8	0.6%	5,153.1	37.2	0.7%	5,147.8	42.5	0.8%
ME 4	36 53 18	2014	Critical	June	--	1,198.4	1,173.0	25.3	2.1%	1,169.4	28.9	2.4%	1,162.3	36.1	3.0%	1,155.1	43.3	3.6%	1,148.0	50.4	4.2%	1,140.9	57.5	4.8%
ME 4	36 53 18	2014	Critical	July	--	546.0	522.8	23.2	4.3%	519.5	26.5	4.9%	512.9	33.1	6.1%	506.3	39.7	7.3%	499.7	46.3	8.5%	493.1	52.9	9.7%
ME 4	36 53 18	2014	Critical	August	--	348.2	326.1	22.1	6.3%	323.0	25.2	7.2%	316.7	31.5	9.0%	310.4	37.8	10.9%	304.1	44.1	12.7%	297.8	50.3	14.5%
ME 4	36 53 18	2014	Critical	September	Used in Summary Table Analysis	2,575.9	2,554.4	21.5	0.8%	2,551.4	24.5	1.0%	2,545.3	30.7	1.2%	2,539.1	36.8	1.4%	2,533.0	42.9	1.7%	2,526.9	49.1	1.9%
ME 4	36 53 18	2015	Dry	October	Used in Summary Table Analysis	11,373.6	11,356.8	16.8	0.1%	11,354.4	19.2	0.2%	11,349.8	23.8	0.2%	11,345.0	28.6	0.3%	11,340.4	33.2	0.3%	11,335.4	38.2	0.3%
ME 4	36 53 18	2015	Dry	November	Used in Summary Table Analysis	9,051.9	9,039.4	12.5	0.1%	9,037.5	14.4	0.2%	9,033.9	17.9	0.2%	9,030.3	21.5	0.2%	9,026.7	25.1	0.3%	9,023.1	28.7	0.3%
ME 4	36 53 18	2015	Dry	December	--	32,669.0	32,658.6	10.4	0.0%	32,656.3	12.7	0.0%	32,653.9	15.0	0.0%	32,650.5	18.5	0.1%	32,647.0	22.0	0.1%	32,643.5	25.5	0.1%
ME 4	36 53 18	2015	Dry	January	--	14,584.5	14,575.2	9.3	0.1%	14,574.1	10.4	0.1%	14,570.6	13.9	0.1%	14,568.3	16.2	0.1%	14,564.8	19.7	0.1%	14,562.5	22.0	0.2%
ME 4	36 53 18	2015	Dry	February	--	27,253.5	27,245.4	8.1	0.0%	27,243.1	10.4	0.0%	27,240.7	12.7	0.0%	27,238.4	15.0	0.1%	27,236.1	17.4	0.1%	27,233.8	19.7	0.1%
ME 4	36 53 18	2015	Dry	March	--	11,575.2	11,567.0	8.2	0.1%	11,565.9	9.4	0.1%	11,563.7	11.6	0.1%	11,561.3	13.9	0.1%	11,559.1	16.1	0.1%	11,556.9	18.3	0.2%
ME 4	36 53 18	2015	Dry	April	--	8,399.3	8,383.8	15.5	0.2%	8,381.6	17.7	0.2%	8,377.1	22.2	0.3%	8,372.7	26.6	0.3%	8,368.3	31.0	0.4%	8,363.8	35.5	0.4%
ME 4	36 53 18	2015	Dry	May	--	1,508.6	1,490.3	18.3	1.2%	1,487.7	20.8	1.4%	1,482.5	26.0	1.7%	1,477.2	31.4	2.1%	1,472.0	36.6	2.4%	1,466.8	41.8	2.8%
ME 4	36 53 18	2015	Dry	June	--	652.5	629.0	23.5	3.6%	625.7	26.8	4.1%	619.1	33.4	5.1%	612.5	40.0	6.1%	605.9	46.6	7.1%	599.4	53.1	8.1%
ME 4	36 53 18	2015	Dry	July	--	268.6	245.8	22.8	8.5%	242.6	26.0	9.7%	236.1	32.5	12.1%	229.6	39.0	14.5%	223.1	45.5	16.9%	216.7	51.9	19.3%
ME 4	36 53 18	2015	Dry	August	--	166.5	144.6	21.9	13.2%	141.5	25.1	15.0%	135.2	31.3	18.8%	128.9	37.6	22.6%	122.7	43.9	26.3%	116.4	50.1	30.1%
ME 4	36 53 18	2015	Dry	September	Used in Summary Table Analysis	120.7	101.2	19.5	16.2%	98.3	22.4	18.5%	92.2	28.5	23.6%	86.3	34.4	28.5%	80.2	40.5	33.5%	74.2	46.5	38.5%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 53 18	2016	Above Normal	October	Used in Summary Table Analysis	86.0	68.7	17.3	20.1%	66.1	19.9	23.2%	61.2	24.8	28.8%	56.2	29.8	34.6%	51.4	34.6	40.2%	46.8	39.2	45.6%
ME 4	36 53 18	2016	Above Normal	November	Used in Summary Table Analysis	3,877.1	3,864.5	12.6	0.3%	3,862.5	14.6	0.4%	3,858.7	18.4	0.5%	3,854.9	22.2	0.6%	3,851.0	26.0	0.7%	3,847.2	29.9	0.8%
ME 4	36 53 18	2016	Above Normal	December	--	36,679.4	36,669.0	10.4	0.0%	36,666.7	12.7	0.0%	36,663.2	16.2	0.0%	36,659.7	19.7	0.1%	36,656.3	23.1	0.1%	36,653.9	25.5	0.1%
ME 4	36 53 18	2016	Above Normal	January	--	57,379.6	57,370.4	9.3	0.0%	57,368.1	11.6	0.0%	57,365.7	13.9	0.0%	57,362.3	17.4	0.0%	57,358.8	20.8	0.0%	57,356.5	23.1	0.0%
ME 4	36 53 18	2016	Above Normal	February	--	24,277.8	24,269.7	8.1	0.0%	24,268.5	9.3	0.0%	24,266.2	11.6	0.0%	24,263.9	13.9	0.1%	24,260.4	17.4	0.1%	24,258.1	19.7	0.1%
ME 4	36 53 18	2016	Above Normal	March	--	41,805.6	41,797.5	8.1	0.0%	41,796.3	9.3	0.0%	41,794.0	11.6	0.0%	41,791.7	13.9	0.0%	41,788.2	17.4	0.0%	41,785.9	19.7	0.0%
ME 4	36 53 18	2016	Above Normal	April	--	18,545.1	18,537.0	8.1	0.0%	18,535.9	9.3	0.0%	18,534.7	10.4	0.1%	18,532.4	12.7	0.1%	18,530.1	15.0	0.1%	18,527.8	17.4	0.1%
ME 4	36 53 18	2016	Above Normal	May	--	5,217.5	5,208.1	9.4	0.2%	5,206.6	10.9	0.2%	5,203.9	13.5	0.3%	5,201.2	16.3	0.3%	5,198.4	19.1	0.4%	5,195.6	21.9	0.4%
ME 4	36 53 18	2016	Above Normal	June	--	1,509.6	1,491.3	18.3	1.2%	1,488.7	20.9	1.4%	1,483.6	26.0	1.7%	1,478.4	31.3	2.1%	1,473.1	36.5	2.4%	1,467.9	41.7	2.8%
ME 4	36 53 18	2016	Above Normal	July	--	823.2	803.2	20.0	2.4%	800.3	23.0	2.8%	794.6	28.7	3.5%	788.8	34.4	4.2%	783.1	40.1	4.9%	777.4	45.8	5.6%
ME 4	36 53 18	2016	Above Normal	August	--	491.9	472.4	19.5	4.0%	469.6	22.3	4.5%	464.0	27.9	5.7%	458.4	33.4	6.8%	452.9	39.0	7.9%	447.3	44.6	9.1%
ME 4	36 53 18	2016	Above Normal	September	Used in Summary Table Analysis	328.2	311.0	17.2	5.3%	307.8	20.4	6.2%	302.7	25.5	7.8%	297.4	30.8	9.4%	292.2	36.0	11.0%	286.9	41.3	12.6%
ME 4	36 53 18	2017	Wet	October	Used in Summary Table Analysis	18,306.7	18,292.8	13.9	0.1%	18,290.5	16.2	0.1%	18,285.9	20.8	0.1%	18,282.4	24.3	0.1%	18,277.8	28.9	0.2%	18,274.3	32.4	0.2%
ME 4	36 53 18	2017	Wet	November	Used in Summary Table Analysis	18,848.4	18,838.0	10.4	0.1%	18,835.6	12.7	0.1%	18,833.3	15.0	0.1%	18,829.9	18.5	0.1%	18,826.4	22.0	0.1%	18,822.9	25.5	0.1%
ME 4	36 53 18	2017	Wet	December	--	24,150.5	24,141.2	9.3	0.0%	24,140.0	10.4	0.0%	24,137.7	12.7	0.1%	24,134.3	16.2	0.1%	24,131.9	18.5	0.1%	24,128.5	22.0	0.1%
ME 4	36 53 18	2017	Wet	January	--	107,015.0	107,005.8	9.3	0.0%	107,004.6	10.4	0.0%	107,002.3	12.7	0.0%	107,000.0	15.0	0.0%	106,996.5	18.5	0.0%	106,994.2	20.8	0.0%
ME 4	36 53 18	2017	Wet	February	--	81,905.1	81,895.8	9.3	0.0%	81,894.7	10.4	0.0%	81,892.4	12.7	0.0%	81,890.0	15.0	0.0%	81,887.7	17.4	0.0%	81,885.4	19.7	0.0%
ME 4	36 53 18	2017	Wet	March	--	27,295.1	27,287.0	8.1	0.0%	27,285.9	9.3	0.0%	27,284.7	10.4	0.0%	27,282.4	12.7	0.0%	27,280.1	15.0	0.1%	27,277.8	17.4	0.1%
ME 4	36 53 18	2017	Wet	April	--	22,958.3	22,951.4	6.9	0.0%	22,950.2	8.1	0.0%	22,947.9	10.4	0.0%	22,945.6	12.7	0.1%	22,943.3	15.0	0.1%	22,942.1	16.2	0.1%
ME 4	36 53 18	2017	Wet	May	--	6,273.0	6,263.4	9.6	0.2%	6,262.0	11.0	0.2%	6,259.4	13.7	0.2%	6,256.6	16.4	0.3%	6,253.8	19.2	0.3%	6,250.9	22.1	0.4%
ME 4	36 53 18	2017	Wet	June	--	2,118.3	2,099.5	18.8	0.9%	2,096.9	21.4	1.0%	2,091.6	26.7	1.3%	2,086.2	32.1	1.5%	2,081.0	37.3	1.8%	2,075.7	42.6	2.0%
ME 4	36 53 18	2017	Wet	July	--	934.8	914.6	20.3	2.2%	911.7	23.1	2.5%	906.0	28.9	3.1%	900.2	34.6	3.7%	894.5	40.3	4.3%	888.8	46.1	4.9%
ME 4	36 53 18	2017	Wet	August	--	507.0	487.5	19.5	3.9%	484.7	22.3	4.4%	479.2	27.9	5.5%	473.6	33.4	6.6%	468.1	39.0	7.7%	462.5	44.5	8.8%
ME 4	36 53 18	2017	Wet	September	Used in Summary Table Analysis	323.0	305.1	17.9	5.6%	302.5	20.5	6.3%	297.4	25.6	7.9%	292.3	30.8	9.5%	287.1	35.9	11.1%	282.0	41.0	12.7%
ME 4	36 53 18	2018	Above Normal	October	Used in Summary Table Analysis	275.8	261.6	14.1	5.1%	259.6	16.2	5.9%	255.6	20.2	7.3%	251.5	24.3	8.8%	247.4	28.3	10.3%	243.4	32.4	11.7%
ME 4	36 53 18	2018	Above Normal	November	Used in Summary Table Analysis	10,813.9	10,802.9	11.0	0.1%	10,801.3	12.6	0.1%	10,798.1	15.7	0.1%	10,794.9	19.0	0.2%	10,791.7	22.2	0.2%	10,788.5	25.3	0.2%
ME 4	36 53 18	2018	Above Normal	December	--	5,447.6	5,438.2	9.4	0.2%	5,436.9	10.6	0.2%	5,434.3	13.3	0.2%	5,431.5	16.1	0.3%	5,428.7	18.9	0.3%	5,425.9	21.6	0.4%
ME 4	36 53 18	2018	Above Normal	January	--	17,819.4	17,811.3	8.1	0.0%	17,810.2	9.3	0.1%	17,807.9	11.6	0.1%	17,805.6	13.9	0.1%	17,803.2	16.2	0.1%	17,799.8	19.7	0.1%
ME 4	36 53 18	2018	Above Normal	February	--	7,598.8	7,591.3	7.5	0.1%	7,590.2	8.7	0.1%	7,588.0	10.9	0.1%	7,585.6	13.2	0.2%	7,583.4	15.4	0.2%	7,581.1	17.7	0.2%
ME 4	36 53 18	2018	Above Normal	March	--	20,724.5	20,717.6	6.9	0.0%	20,716.4	8.1	0.0%	20,714.1	10.4	0.1%	20,711.8	12.7	0.1%	20,709.5	15.0	0.1%	20,707.2	17.4	0.1%
ME 4	36 53 18	2018	Above Normal	April	--	32,230.3	32,223.4	6.9	0.0%	32,222.2	8.1	0.0%	32,221.1	9.3	0.0%	32,218.8	11.6	0.0%	32,216.4	13.9	0.0%	32,214.1	16.2	0.1%
ME 4	36 53 18	2018	Above Normal	May	--	6,989.1	6,974.4	14.7	0.2%	6,972.3	16.8	0.2%	6,968.2	20.9	0.3%	6,964.0	25.1	0.4%	6,959.8	29.3	0.4%	6,955.9	33.2	0.5%
ME 4	36 53 18	2018	Above Normal	June	--	1,914.2	1,895.4	18.9	1.0%	1,892.7	21.5	1.1%	1,887.4	26.9	1.4%	1,881.9	32.3	1.7%	1,876.6	37.6	2.0%	1,871.3	42.9	2.2%
ME 4	36 53 18	2018	Above Normal	July	--	781.7	761.4	20.3	2.6%	758.5	23.1	3.0%	752.8	28.9	3.7%	747.0	34.7	4.4%	741.3	40.4	5.2%	735.5	46.2	5.9%
ME 4	36 53 18	2018	Above Normal	August	--	442.9	424.1	18.8	4.2%	421.5	21.5	4.8%	416.1	26.8	6.1%	410.8	32.2	7.3%	405.4	37.5	8.5%	400.0	42.9	9.7%
ME 4	36 53 18	2018	Above Normal	September	Used in Summary Table Analysis	300.3	282.3	17.9	6.0%	279.8	20.5	6.8%	274.6	25.6	8.5%	269.5	30.8	10.2%	264.4	35.9	12.0%	259.2	41.0	13.7%
ME 4	36 53 18	2019	Below Normal	October	Used in Summary Table Analysis	208.0	194.1	13.9	6.7%	192.1	15.8	7.6%	188.1	19.8	9.5%	184.1	23.9	11.5%	180.2	27.8	13.4%	176.2	31.7	15.3%
ME 4	36 53 18	2019	Below Normal	November	Used in Summary Table Analysis	6,638.0	6,627.0	11.0	0.2%	6,625.3	12.6	0.2%	6,622.1	15.9	0.2%	6,619.0	19.0	0.3%	6,615.7	22.2	0.3%	6,612.5	25.5	0.4%
ME 4	36 53 18	2019	Below Normal	December	--	14,691.0	14,681.7	9.3	0.1%	14,679.4	11.6	0.1%	14,677.1	13.9	0.1%	14,674.8	16.2	0.1%	14,671.3	19.7	0.1%	14,669.0	22.0	0.1%
ME 4	36 53 18	2019	Below Normal	January	--	35,272.0	35,262.7	9.3	0.0%	35,261.6	10.4	0.0%	35,259.3	12.7	0.0%	35,256.9	15.0	0.0%	35,254.6	17.4	0.0%	35,251.2	20.8	0.1%
ME 4	36 53 18	2019	Below Normal	February	--	141,979.2	141,967.6	11.6	0.0%	141,967.6	11.6	0.0%	141,967.6	11.6	0.0%	141,956.0	23.1	0.0%	141,956.0	23.1	0.0%	141,956.0	23.1	0.0%
ME 4	36 53 18	2019	Below Normal	March	--	42,349.5	42,342.6	6.9	0.0%	42,341.4	8.1	0.0%	42,339.1	10.4	0.0%	42,336.8	12.7	0.0%	42,335.6	13.9	0.0%	42,333.3	16.2	0.0%
ME 4	36 53 18	2019	Below Normal	April	--	15,280.1	15,273.1	6.9	0.0%	15,272.0	8.1	0.1%	15,270.8	9.3	0.1%	15,268.5	11.6	0.1%	15,266.2	13.9	0.1%	15,263.9	16.2	0.1%
ME 4	36 53 18	2019	Below Normal	May	--	16,980.3	16,964.1	16.2	0.1%	16,963.0	17.4	0.1%	16,958.3	22.0	0.1%	16,953.7	26.6	0.2%	16,949.1	31.3	0.2%	16,944.4	35.9	0.2%
ME 4	36 53 18	2019	Below Normal	June	--	4,242.6	4,222.1	20.5	0.5%	4,219.2	23.4	0.6%	4,213.5	29.1	0.7%	4,208.0	34.6	0.8%	4,202.5	40.0	0.9%	4,197.1	45.5	1.1%
ME 4	36 53 18	2019	Below Normal	July	--	1,361.7	1,341.3	20.4	1.5%	1,338.4	23.3	1.7%	1,332.6	29.1	2.1%	1,326.9	34.8	2.6%	1,321.1	40.6	3.0%	1,315.3	46.4	3.4%
ME 4	36 53 18	2019	Below Normal	August	--	596.9	577.5	19.3	3.2%	574.8	22.1	3.7%	569.3	27.6	4.6%	563.8	33.0	5.5%	558.3	38.5	6.5%	552.8	44.0	7.4%
ME 4	36 53 18	2019	Below Normal	September	Used in Summary Table Analysis	462.9	445.1	17.9	3.9%	442.5	20.4	4.4%	437.4	25.6	5.5%	432.3	30.6	6.6%	427.2	35.8	7.7%	422.0	40.9	8.8%
ME 4	36 53 18	2020	Dry	October	Used in Summary Table Analysis	355.9	342.6	13.3	3.7%	340.6	15.3	4.3%	336.8	19.1	5.4%	332.9	23.0	6.4%	329.1	26.8	7.5%	325.2	30.7	8.6%
ME 4	36 53 18	2020	Dry	November	Used in Summary Table Analysis	320.3	309.9	10.4	3.3%	308.4	11.9	3.7%	305.3	15.0	4.7%	302.3	18.0	5.6%	299.3	21.0	6.6%	296.2	24.1	7.5%
ME 4	36 53 18	2020	Dry	December	--	13,321.8	13,312.5	9.3	0.1%	13,311.3	10.4	0.1%	13,307.9	13.9	0.1%	13,305.6	16.2	0.1%	13,303.2	18.5	0.1%	13,299.8	22.0	0.2%
ME 4	36 53 18	2020	Dry	January	--	22,358.8	22,349.5	9.3	0.0%	22,348.4	10.4	0.0%	22,346.1	12.7	0.1%	22,343.8	15.0	0.1%	22,341.4	17.4	0.1%	22,338.0	20.8	0.1%
ME 4	36 53 18	2020	Dry	February	--	7,415.4	7,407.6	7.8	0.1%	7,406.5	8.9	0.1%	7,404.2	11.2	0.2%	7,401.9	13.5	0.2%	7,399.5	15.9	0.2%	7,397.3	18.1	0.2%
ME 4	36 53 18	2020	Dry	March	--	7,248.6	7,241.2	7.4	0.1%	7,240.2	8.4	0.1%	7,238.1	10.5	0.1%	7,235.9	12.7	0.2%	7,233.7	14.9	0.2%	7,231.5	17.1	0.2%
ME 4	36 53 18	2020	Dry	April	--	5,487.8	5,472.6	15.3	0.3%	5,470.3	17.6	0.3%	5,465.9	22.0	0.4%	5,461.5	26.4	0.5%	5,456.9	30.9	0.6%	5,452.5	35.3	0.6%
ME 4	36 53 18	2020	Dry	May	--	7,383.3	7,364.9	18.4	0.2%	7,362.3	21.1	0.3%	7,356.9	26.4	0.4%	7,351.6	31.7	0.4%	7,346.3	37.0	0.5%	7,341.0	42.4	0.6%
ME 4	36 53 18	2020	Dry	June	--	2,104.2	2,079.9	24.3	1.2%	2,076.5	27.7	1.3%	2,070.0	34.1	1.6%	2,063.4	40.7	1.9%	2,056.8	47.3	2.2%	2,050.3	53.8	2.6%
ME 4	36 53 18	2020	Dry	July	--	796.5	772.9	23.6	3.0%	769.5	27.0	3.4%	762.8	33.7	4.2%	756.0	40.4	5.1%	749.3	47.2	5.9%	742.6	53.9	6.8%
ME 4	36 53 18	2020	Dry	August	--	399.2	376.1	23.2	5.8%	372.7	26.5	6.6%	366.1	33.1	8.3%	359.5	39.7	9.9%	352.9	46.3	11.6%	346.3	52.9	13.3%
ME 4	36 53 18	2020	Dry	September	Used in Summary Table Analysis	248.6	228.0	20.6	8.3%	225.1	23.6	9.5%	218.3	30.3	12.2%	212.2	36.5	14.7%	205.8	42.9	17.2%	199.5	49.2	19.8%
ME 4	35 53 19	2000	Above Normal	October	Used in Summary Table Analysis	817.3	803.1	14.2	1.7%	801.0	16.2	2.0%	797.0	20.2	2.5%	792.9	24.3	3.0%	788.8	28.4	3.5%	784.7	32.5	4.0%
ME 4	35 53 19	2000	Above Normal	November	Used in Summary Table Analysis	12,153.9	12,142.4	11.6	0.1%	12,140.0	13.9	0.1%	12,137.7	16.2	0.1%	12,134.3	19.7	0.2%	12,130.8	23.1	0.2%	12,127.3	26.6	0.2%
ME 4	35 53 19	2000	Above Normal	December	--	10,829.3	10,819.7	9.6	0.1%	10,818.3	11.0	0.1%	10,815.4	13.9	0.1%	10,812.6	16.7	0.2%	10,809.7	19.6	0.2%	10,806.9	22.3	0.2%
ME 4	35 53 19	2000	Above Normal	January	--	28,635.4	28,626.2	9.3	0.0%	28,625.0	10.4	0.0%	28,622.7	12.7	0.0%	28,620.4	15.0	0.1%	28,618.1	17.4	0.1%	28,614.6	20.8	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	35 53 19	2000	Above Normal	February	--	37,079.9	37,071.8	8.1	0.0%	37,070.6	9.3	0.0%	37,068.3	11.6	0.0%	37,066.0	13.9	0.0%	37,063.7	16.2	0.0%	37,061.3	18.5	0.0%
ME 4	35 53 19	2000	Above Normal	March	--	18,328.7	18,320.6	8.1	0.0%	18,319.4	9.3	0.1%	18,318.3	10.4	0.1%	18,316.0	12.7	0.1%	18,313.7	15.0	0.1%	18,311.3	17.4	0.1%
ME 4	35 53 19	2000	Above Normal	April	--	12,322.9	12,316.0	6.9	0.1%	12,314.8	8.1	0.1%	12,313.7	9.3	0.1%	12,311.3	11.6	0.1%	12,309.0	13.9	0.1%	12,306.7	16.2	0.1%
ME 4	35 53 19	2000	Above Normal	May	--	7,102.0	7,086.8	15.2	0.2%	7,084.6	17.4	0.2%	7,080.2	21.8	0.3%	7,075.9	26.0	0.4%	7,071.5	30.4	0.4%	7,067.1	34.8	0.5%
ME 4	35 53 19	2000	Above Normal	June	--	2,613.8	2,591.2	22.6	0.9%	2,588.0	25.8	1.0%	2,581.5	32.3	1.2%	2,575.1	38.7	1.5%	2,568.8	45.0	1.7%	2,562.3	51.5	2.0%
ME 4	35 53 19	2000	Above Normal	July	--	992.4	971.9	20.4	2.1%	969.0	23.4	2.4%	963.2	29.2	2.9%	957.4	35.0	3.5%	951.7	40.7	4.1%	945.9	46.5	4.7%
ME 4	35 53 19	2000	Above Normal	August	--	522.5	503.3	19.2	3.7%	500.5	21.9	4.2%	495.1	27.4	5.2%	489.6	32.8	6.3%	484.2	38.3	7.3%	478.7	43.7	8.4%
ME 4	35 53 19	2000	Above Normal	September	Used in Summary Table Analysis	295.6	278.6	17.0	5.7%	276.2	19.4	6.6%	271.3	24.3	8.2%	266.5	29.1	9.8%	261.7	33.9	11.5%	256.8	38.8	13.1%
ME 4	35 53 19	2001	Dry	October	Used in Summary Table Analysis	3,822.6	3,808.6	14.0	0.4%	3,806.6	16.0	0.4%	3,802.5	20.0	0.5%	3,798.6	24.0	0.6%	3,794.6	28.0	0.7%	3,790.5	32.1	0.8%
ME 4	35 53 19	2001	Dry	November	Used in Summary Table Analysis	6,136.9	6,125.7	11.2	0.2%	6,124.1	12.8	0.2%	6,120.8	16.1	0.3%	6,117.6	19.3	0.3%	6,114.4	22.6	0.4%	6,111.0	25.9	0.4%
ME 4	35 53 19	2001	Dry	December	--	8,851.4	8,841.7	9.7	0.1%	8,840.3	11.1	0.1%	8,837.4	14.0	0.2%	8,834.6	16.8	0.2%	8,831.8	19.6	0.2%	8,828.9	22.5	0.3%
ME 4	35 53 19	2001	Dry	January	--	12,816.0	12,807.9	8.1	0.1%	12,806.7	9.3	0.1%	12,804.4	11.6	0.1%	12,800.9	15.0	0.1%	12,798.6	17.4	0.1%	12,796.3	19.7	0.2%
ME 4	35 53 19	2001	Dry	February	--	17,487.3	17,479.2	8.1	0.0%	17,478.0	9.3	0.1%	17,475.7	11.6	0.1%	17,473.4	13.9	0.1%	17,471.1	16.2	0.1%	17,468.8	18.5	0.1%
ME 4	35 53 19	2001	Dry	March	--	12,304.4	12,297.5	6.9	0.1%	12,296.3	8.1	0.1%	12,294.0	10.4	0.1%	12,291.7	12.7	0.1%	12,289.4	15.0	0.1%	12,287.0	17.4	0.1%
ME 4	35 53 19	2001	Dry	April	--	10,980.1	10,964.5	15.6	0.1%	10,962.3	17.8	0.2%	10,957.8	22.3	0.2%	10,953.2	26.9	0.2%	10,948.7	31.4	0.3%	10,944.3	35.8	0.3%
ME 4	35 53 19	2001	Dry	May	--	2,636.6	2,618.2	18.4	0.7%	2,615.5	21.1	0.8%	2,610.2	26.4	1.0%	2,604.9	31.7	1.2%	2,599.7	36.9	1.4%	2,594.3	42.2	1.6%
ME 4	35 53 19	2001	Dry	June	--	2,653.0	2,627.9	25.1	0.9%	2,624.3	28.7	1.1%	2,617.1	35.9	1.4%	2,610.1	42.9	1.6%	2,603.0	50.0	1.9%	2,595.9	57.1	2.2%
ME 4	35 53 19	2001	Dry	July	--	718.3	694.8	23.5	3.3%	691.5	26.9	3.7%	684.8	33.5	4.7%	678.1	40.2	5.6%	671.5	46.8	6.5%	664.8	53.5	7.4%
ME 4	35 53 19	2001	Dry	August	--	172.7	149.8	22.9	13.3%	146.5	26.2	15.2%	140.0	32.7	18.9%	133.5	39.2	22.7%	127.0	45.7	26.5%	120.5	52.2	30.2%
ME 4	35 53 19	2001	Dry	September	Used in Summary Table Analysis	95.6	75.2	20.4	21.4%	72.2	23.3	24.4%	66.4	29.1	30.5%	60.6	34.9	36.6%	54.8	40.8	42.6%	49.0	46.6	48.7%
ME 4	35 53 19	2002	Below Normal	October	Used in Summary Table Analysis	265.3	248.3	17.1	6.4%	245.9	19.5	7.3%	241.0	24.4	9.2%	236.1	29.3	11.0%	231.2	34.1	12.9%	226.3	39.1	14.7%
ME 4	35 53 19	2002	Below Normal	November	Used in Summary Table Analysis	12,042.8	12,028.9	13.9	0.1%	12,027.8	15.0	0.1%	12,023.1	19.7	0.2%	12,019.7	23.1	0.2%	12,016.2	26.6	0.2%	12,011.6	31.3	0.3%
ME 4	35 53 19	2002	Below Normal	December	--	35,736.1	35,724.5	11.6	0.0%	35,722.2	13.9	0.0%	35,718.8	17.4	0.0%	35,715.3	20.8	0.1%	35,711.8	24.3	0.1%	35,708.3	27.8	0.1%
ME 4	35 53 19	2002	Below Normal	January	--	30,910.9	30,900.5	10.4	0.0%	30,899.3	11.6	0.0%	30,895.8	15.0	0.0%	30,893.5	17.4	0.1%	30,890.0	20.8	0.1%	30,886.6	24.3	0.1%
ME 4	35 53 19	2002	Below Normal	February	--	24,696.8	24,687.5	9.3	0.0%	24,686.3	10.4	0.0%	24,684.0	12.7	0.1%	24,680.6	16.2	0.1%	24,678.2	18.5	0.1%	24,674.8	22.0	0.1%
ME 4	35 53 19	2002	Below Normal	March	--	17,794.0	17,785.9	8.1	0.0%	17,784.7	9.3	0.1%	17,781.3	12.7	0.1%	17,778.9	15.0	0.1%	17,776.6	17.4	0.1%	17,774.3	19.7	0.1%
ME 4	35 53 19	2002	Below Normal	April	--	9,930.3	9,914.7	15.6	0.2%	9,912.4	17.9	0.2%	9,907.9	22.5	0.2%	9,903.5	26.9	0.3%	9,899.0	31.4	0.3%	9,894.4	35.9	0.4%
ME 4	35 53 19	2002	Below Normal	May	--	3,320.8	3,302.4	18.4	0.6%	3,299.8	21.1	0.6%	3,294.4	26.4	0.8%	3,289.1	31.7	1.0%	3,283.8	37.0	1.1%	3,278.5	42.4	1.3%
ME 4	35 53 19	2002	Below Normal	June	--	854.2	833.3	20.9	2.4%	830.3	23.9	2.8%	824.4	29.8	3.5%	818.4	35.7	4.2%	812.5	41.7	4.9%	806.6	47.6	5.6%
ME 4	35 53 19	2002	Below Normal	July	--	362.7	341.5	21.1	5.8%	338.5	24.1	6.7%	332.5	30.2	8.3%	326.5	36.2	10.0%	320.5	42.2	11.6%	314.4	48.2	13.3%
ME 4	35 53 19	2002	Below Normal	August	--	227.5	207.6	19.8	8.7%	204.8	22.7	10.0%	199.1	28.4	12.5%	193.5	34.0	15.0%	187.8	39.7	17.4%	182.2	45.3	19.9%
ME 4	35 53 19	2002	Below Normal	September	Used in Summary Table Analysis	164.2	145.5	18.7	11.4%	142.8	21.4	13.0%	137.4	26.7	16.3%	132.1	32.1	19.5%	126.7	37.4	22.8%	121.4	42.8	26.1%
ME 4	35 53 19	2003	Wet	October	Used in Summary Table Analysis	129.1	113.8	15.3	11.8%	111.6	17.5	13.5%	107.3	21.9	16.9%	102.9	26.3	20.3%	98.4	30.7	23.8%	94.0	35.1	27.2%
ME 4	35 53 19	2003	Wet	November	Used in Summary Table Analysis	896.8	884.6	12.2	1.4%	882.8	14.0	1.6%	879.3	17.5	2.0%	875.7	21.1	2.4%	872.2	24.6	2.7%	868.7	28.1	3.1%
ME 4	35 53 19	2003	Wet	December	--	56,945.6	56,934.0	11.6	0.0%	56,932.9	12.7	0.0%	56,929.4	16.2	0.0%	56,927.1	18.5	0.0%	56,923.6	22.0	0.0%	56,920.1	25.5	0.0%
ME 4	35 53 19	2003	Wet	January	--	31,555.6	31,546.3	9.3	0.0%	31,545.1	10.4	0.0%	31,541.7	13.9	0.0%	31,539.4	16.2	0.1%	31,535.9	19.7	0.1%	31,533.6	22.0	0.1%
ME 4	35 53 19	2003	Wet	February	--	20,366.9	20,357.6	9.3	0.0%	20,356.5	10.4	0.1%	20,354.2	12.7	0.1%	20,351.9	15.0	0.1%	20,349.5	17.4	0.1%	20,346.1	20.8	0.1%
ME 4	35 53 19	2003	Wet	March	--	24,054.4	24,046.3	8.1	0.0%	24,045.1	9.3	0.0%	24,042.8	11.6	0.0%	24,040.5	13.9	0.1%	24,037.0	17.4	0.1%	24,034.7	19.7	0.1%
ME 4	35 53 19	2003	Wet	April	--	42,965.3	42,957.2	8.1	0.0%	42,956.0	9.3	0.0%	42,953.7	11.6	0.0%	42,951.4	13.9	0.0%	42,949.1	16.2	0.0%	42,946.8	18.5	0.0%
ME 4	35 53 19	2003	Wet	May	--	12,230.3	12,215.3	15.0	0.1%	12,213.0	17.4	0.1%	12,208.3	22.0	0.2%	12,203.7	26.6	0.2%	12,199.1	31.3	0.3%	12,194.4	35.9	0.3%
ME 4	35 53 19	2003	Wet	June	--	3,167.6	3,147.5	20.1	0.6%	3,144.6	23.0	0.7%	3,139.0	28.6	0.9%	3,133.3	34.3	1.1%	3,127.8	39.8	1.3%	3,122.1	45.5	1.4%
ME 4	35 53 19	2003	Wet	July	--	1,475.1	1,454.2	20.9	1.4%	1,451.2	24.0	1.6%	1,445.3	29.9	2.0%	1,439.2	35.9	2.4%	1,433.3	41.8	2.8%	1,427.3	47.8	3.2%
ME 4	35 53 19	2003	Wet	August	--	760.9	740.6	20.3	2.7%	737.7	23.2	3.1%	731.9	29.0	3.8%	726.1	34.8	4.6%	720.3	40.6	5.3%	714.4	46.5	6.1%
ME 4	35 53 19	2003	Wet	September	Used in Summary Table Analysis	458.5	441.2	17.3	3.8%	438.8	19.8	4.3%	433.8	24.7	5.4%	428.9	29.7	6.5%	424.0	34.6	7.5%	419.0	39.5	8.6%
ME 4	35 53 19	2004	Wet	October	Used in Summary Table Analysis	325.4	311.1	14.2	4.4%	309.1	16.3	5.0%	305.0	20.4	6.3%	300.9	24.5	7.5%	296.8	28.6	8.8%	292.7	32.7	10.1%
ME 4	35 53 19	2004	Wet	November	Used in Summary Table Analysis	5,817.7	5,806.3	11.5	0.2%	5,804.6	13.1	0.2%	5,801.3	16.4	0.3%	5,797.9	19.8	0.3%	5,794.6	23.1	0.4%	5,791.2	26.5	0.5%
ME 4	35 53 19	2004	Wet	December	--	36,380.8	36,370.4	10.4	0.0%	36,369.2	11.6	0.0%	36,366.9	13.9	0.0%	36,363.4	17.4	0.0%	36,361.1	19.7	0.1%	36,357.6	23.1	0.1%
ME 4	35 53 19	2004	Wet	January	--	31,522.0	31,512.7	9.3	0.0%	31,511.6	10.4	0.0%	31,509.3	12.7	0.0%	31,506.9	15.0	0.0%	31,504.6	17.4	0.1%	31,501.2	20.8	0.1%
ME 4	35 53 19	2004	Wet	February	--	38,282.4	38,274.3	8.1	0.0%	38,273.1	9.3	0.0%	38,270.8	11.6	0.0%	38,268.5	13.9	0.0%	38,265.0	17.4	0.0%	38,262.7	19.7	0.1%
ME 4	35 53 19	2004	Wet	March	--	16,531.3	16,524.3	6.9	0.0%	16,523.1	8.1	0.0%	16,520.8	10.4	0.1%	16,518.5	12.7	0.1%	16,516.2	15.0	0.1%	16,513.9	17.4	0.1%
ME 4	35 53 19	2004	Wet	April	--	9,455.7	9,448.4	7.3	0.1%	9,447.3	8.3	0.1%	9,445.3	10.4	0.1%	9,443.2	12.5	0.1%	9,441.0	14.7	0.2%	9,438.8	16.9	0.2%
ME 4	35 53 19	2004	Wet	May	--	3,424.1	3,408.8	15.3	0.4%	3,406.6	17.5	0.5%	3,402.2	21.9	0.6%	3,397.8	26.3	0.8%	3,393.4	30.7	0.9%	3,389.0	35.1	1.0%
ME 4	35 53 19	2004	Wet	June	--	692.1	673.0	19.2	2.8%	670.2	21.9	3.2%	664.8	27.4	4.0%	659.3	32.8	4.7%	653.9	38.3	5.5%	648.4	43.7	6.3%
ME 4	35 53 19	2004	Wet	July	--	356.7	336.1	20.5	5.8%	333.2	23.5	6.6%	327.3	29.3	8.2%	321.5	35.2	9.9%	315.6	41.0	11.5%	309.8	46.9	13.1%
ME 4	35 53 19	2004	Wet	August	--	225.6	206.2	19.4	8.6%	203.4	22.1	9.8%	197.9	27.6	12.3%	192.4	33.2	14.7%	186.9	38.7	17.1%	181.4	44.2	19.6%
ME 4	35 53 19	2004	Wet	September	Used in Summary Table Analysis	162.5	144.1	18.3	11.3%	141.5	21.0	12.9%	136.2	26.2	16.1%	131.0	31.5	19.4%	125.7	36.7	22.6%	120.5	42.0	25.9%
ME 4	35 53 19	2005	Above Normal	October	Used in Summary Table Analysis	7,702.0	7,687.5	14.5	0.2%	7,685.4	16.6	0.2%	7,681.3	20.7	0.3%	7,677.1	24.9	0.3%	7,672.9	29.1	0.4%	7,668.6	33.3	0.4%
ME 4	35 53 19	2005	Above Normal	November	Used in Summary Table Analysis	2,258.8	2,247.5	11.3	0.5%	2,245.8	13.0	0.6%	2,242.5	16.3	0.7%	2,239.2	19.6	0.9%	2,236.0	22.8	1.0%	2,232.6	26.2	1.2%
ME 4	35 53 19	2005	Above Normal	December	--	21,086.8	21,076.4	10.4	0.0%	21,075.2	11.6	0.1%	21,071.8	15.0	0.1%	21,069.4	17.4	0.1%	21,066.0	20.8	0.1%	21,063.7	23.1	0.1%
ME 4	35 53 19	2005	Above Normal	January	--	22,431.7	22,422.5	9.3	0.0%	22,421.3	10.4	0.0%	22,419.0	12.7	0.1%	22,416.7	15.0	0.1%	22,414.4	17.4	0.1%	22,410.9	20.8	0.1%
ME 4	35 53 19	2005	Above Normal	February	--	14,018.5	14,011.6	6.9	0.0%	14,010.4	8.1	0.1%	14,006.9	11.6	0.1%	14,004.6	13.9	0.1%	14,003.5	15.0	0.1%	14,000.0	18.5	0.1%
ME 4	35 53 19	2005	Above Normal	March	--	28,603.0	28,594.9	8.1	0.0%	28,593.8	9.3	0.0%	28,591.4	11.6	0.0%	28,589.1	13.9	0.0%	28,586.8	16.2	0.1%	28,584.5	18.5	0.1%
ME 4	35 53 19	2005	Above Normal	April	--	21,468.8	21,460.6	8.1	0.0%	21,460.6	8.1	0.0%	21,458.3	10.4	0.0%	21,456.0	12.7	0.1%	21,453.7	15.0	0.1%	21,451.4	17.4	0.1%
ME 4	35 53 19	2005	Above Normal	May	--	19,598.4	19,582.2	16.2	0.1%	19,579.9	18.5	0.1%	19,575.2	23.1	0.1%	19,570.6	27.8	0.1%	19,566.0	32.4	0.2%	19,562.5	35.9	0.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
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Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	35 53 19	2005	Above Normal	June	--	15,905.1	15,881.9	23.1	0.1%	15,878.5	26.6	0.2%	15,871.5	33.6	0.2%	15,865.7	39.4	0.2%	15,858.8	46.3	0.3%	15,851.9	53.2	0.3%
ME 4	35 53 19	2005	Above Normal	July	--	2,863.9	2,842.6	21.3	0.7%	2,839.6	24.3	0.8%	2,833.4	30.4	1.1%	2,827.4	36.5	1.3%	2,821.4	42.5	1.5%	2,815.4	48.5	1.7%
ME 4	35 53 19	2005	Above Normal	August	--	983.9	964.6	19.3	2.0%	961.9	22.0	2.2%	956.4	27.5	2.8%	950.9	33.0	3.4%	945.4	38.5	3.9%	939.9	43.9	4.5%
ME 4	35 53 19	2005	Above Normal	September	Used in Summary Table Analysis	525.3	508.3	17.0	3.2%	505.8	19.4	3.7%	501.0	24.3	4.6%	496.1	29.2	5.6%	491.3	34.0	6.5%	486.4	38.8	7.4%
ME 4	35 53 19	2006	Wet	October	Used in Summary Table Analysis	635.2	621.5	13.8	2.2%	619.5	15.7	2.5%	615.6	19.7	3.1%	611.6	23.6	3.7%	607.7	27.6	4.3%	603.7	31.6	5.0%
ME 4	35 53 19	2006	Wet	November	Used in Summary Table Analysis	9,332.6	9,321.8	10.9	0.1%	9,320.1	12.5	0.1%	9,317.0	15.6	0.2%	9,313.9	18.8	0.2%	9,310.8	21.9	0.2%	9,307.6	25.0	0.3%
ME 4	35 53 19	2006	Wet	December	--	43,589.1	43,579.9	9.3	0.0%	43,577.5	11.6	0.0%	43,575.2	13.9	0.0%	43,572.9	16.2	0.0%	43,569.4	19.7	0.0%	43,567.1	22.0	0.1%
ME 4	35 53 19	2006	Wet	January	--	46,380.8	46,371.5	9.3	0.0%	46,370.4	10.4	0.0%	46,368.1	12.7	0.0%	46,365.7	15.0	0.0%	46,362.3	18.5	0.0%	46,360.0	20.8	0.0%
ME 4	35 53 19	2006	Wet	February	--	26,653.9	26,645.8	8.1	0.0%	26,644.7	9.3	0.0%	26,642.4	11.6	0.0%	26,640.0	13.9	0.1%	26,638.9	15.0	0.1%	26,636.6	17.4	0.1%
ME 4	35 53 19	2006	Wet	March	--	47,223.4	47,216.4	6.9	0.0%	47,215.3	8.1	0.0%	47,213.0	10.4	0.0%	47,210.6	12.7	0.0%	47,208.3	15.0	0.0%	47,206.0	17.4	0.0%
ME 4	35 53 19	2006	Wet	April	--	30,453.7	30,446.8	6.9	0.0%	30,445.6	8.1	0.0%	30,444.4	9.3	0.0%	30,442.1	11.6	0.0%	30,439.8	13.9	0.0%	30,437.5	16.2	0.1%
ME 4	35 53 19	2006	Wet	May	--	14,222.2	14,213.0	9.3	0.1%	14,211.8	10.4	0.1%	14,208.3	13.9	0.1%	14,206.0	16.2	0.1%	14,203.7	18.5	0.1%	14,200.2	22.0	0.2%
ME 4	35 53 19	2006	Wet	June	--	3,548.6	3,529.5	19.1	0.5%	3,526.7	21.9	0.6%	3,521.3	27.3	0.8%	3,516.0	32.6	0.9%	3,510.5	38.1	1.1%	3,505.2	43.4	1.2%
ME 4	35 53 19	2006	Wet	July	--	1,280.4	1,260.2	20.3	1.6%	1,257.3	23.1	1.8%	1,251.5	28.9	2.3%	1,245.8	34.6	2.7%	1,240.0	40.4	3.2%	1,234.4	46.1	3.6%
ME 4	35 53 19	2006	Wet	August	--	666.4	646.7	19.7	3.0%	643.9	22.5	3.4%	638.3	28.1	4.2%	632.7	33.7	5.1%	627.1	39.3	5.9%	621.6	44.9	6.7%
ME 4	35 53 19	2006	Wet	September	Used in Summary Table Analysis	427.1	409.9	17.2	4.0%	407.4	19.7	4.6%	402.5	24.6	5.8%	397.6	29.5	6.9%	392.7	34.4	8.1%	387.8	39.3	9.2%
ME 4	35 53 19	2007	Above Normal	October	Used in Summary Table Analysis	275.0	261.0	14.0	5.1%	259.1	16.0	5.8%	255.0	20.0	7.3%	251.0	24.0	8.7%	247.0	28.0	10.2%	242.9	32.1	11.7%
ME 4	35 53 19	2007	Above Normal	November	Used in Summary Table Analysis	8,689.9	8,678.7	11.2	0.1%	8,677.1	12.8	0.1%	8,673.7	16.2	0.2%	8,670.5	19.4	0.2%	8,667.2	22.7	0.3%	8,663.9	26.0	0.3%
ME 4	35 53 19	2007	Above Normal	December	--	20,459.5	20,449.1	10.4	0.1%	20,447.9	11.6	0.1%	20,445.6	13.9	0.1%	20,442.1	17.4	0.1%	20,438.7	20.8	0.1%	20,436.3	23.1	0.1%
ME 4	35 53 19	2007	Above Normal	January	--	10,264.0	10,255.2	8.8	0.1%	10,253.9	10.1	0.1%	10,251.5	12.5	0.1%	10,248.8	15.2	0.1%	10,246.3	17.7	0.2%	10,243.8	20.3	0.2%
ME 4	35 53 19	2007	Above Normal	February	--	30,627.3	30,618.1	9.3	0.0%	30,616.9	10.4	0.0%	30,614.6	12.7	0.0%	30,612.3	15.0	0.0%	30,610.0	17.4	0.1%	30,607.6	19.7	0.1%
ME 4	35 53 19	2007	Above Normal	March	--	13,111.1	13,103.0	8.1	0.1%	13,101.9	9.3	0.1%	13,099.5	11.6	0.1%	13,097.2	13.9	0.1%	13,094.9	16.2	0.1%	13,092.6	18.5	0.1%
ME 4	35 53 19	2007	Above Normal	April	--	11,542.8	11,527.9	14.9	0.1%	11,525.7	17.1	0.1%	11,521.4	21.4	0.2%	11,517.1	25.7	0.2%	11,512.7	30.1	0.3%	11,508.4	34.4	0.3%
ME 4	35 53 19	2007	Above Normal	May	--	4,143.2	4,125.3	17.8	0.4%	4,122.8	20.4	0.5%	4,117.7	25.5	0.6%	4,112.6	30.6	0.7%	4,107.4	35.8	0.9%	4,102.3	40.9	1.0%
ME 4	35 53 19	2007	Above Normal	June	--	1,500.6	1,479.2	21.4	1.4%	1,476.2	24.4	1.6%	1,470.0	30.6	2.0%	1,464.0	36.6	2.4%	1,457.9	42.7	2.8%	1,451.9	48.7	3.2%
ME 4	35 53 19	2007	Above Normal	July	--	496.4	474.8	21.6	4.3%	471.8	24.6	5.0%	465.7	30.7	6.2%	459.6	36.8	7.4%	453.5	42.9	8.6%	447.4	49.0	9.9%
ME 4	35 53 19	2007	Above Normal	August	--	223.6	204.2	19.4	8.7%	201.4	22.2	9.9%	195.9	27.7	12.4%	190.4	33.2	14.8%	184.8	38.7	17.3%	179.3	44.2	19.8%
ME 4	35 53 19	2007	Above Normal	September	Used in Summary Table Analysis	151.2	132.8	18.3	12.1%	130.2	20.9	13.9%	125.0	26.2	17.3%	119.8	31.4	20.8%	114.5	36.6	24.2%	109.3	41.8	27.7%
ME 4	35 53 19	2008	Dry	October	Used in Summary Table Analysis	3,441.6	3,426.6	14.9	0.4%	3,424.5	17.0	0.5%	3,420.3	21.3	0.6%	3,416.0	25.6	0.7%	3,411.7	29.9	0.9%	3,407.4	34.1	1.0%
ME 4	35 53 19	2008	Dry	November	Used in Summary Table Analysis	3,282.4	3,270.9	11.5	0.3%	3,269.2	13.2	0.4%	3,266.0	16.4	0.5%	3,262.6	19.8	0.6%	3,259.3	23.1	0.7%	3,256.0	26.4	0.8%
ME 4	35 53 19	2008	Dry	December	--	23,191.0	23,180.6	10.4	0.0%	23,179.4	11.6	0.0%	23,175.9	15.0	0.1%	23,173.6	17.4	0.1%	23,170.1	20.8	0.1%	23,167.8	23.1	0.1%
ME 4	35 53 19	2008	Dry	January	--	37,593.8	37,583.3	10.4	0.0%	37,582.2	11.6	0.0%	37,579.9	13.9	0.0%	37,576.4	17.4	0.0%	37,574.1	19.7	0.1%	37,571.8	22.0	0.1%
ME 4	35 53 19	2008	Dry	February	--	26,285.9	26,277.8	8.1	0.0%	26,276.6	9.3	0.0%	26,274.3	11.6	0.0%	26,272.0	13.9	0.1%	26,269.7	16.2	0.1%	26,267.4	18.5	0.1%
ME 4	35 53 19	2008	Dry	March	--	11,800.9	11,794.0	6.9	0.1%	11,792.8	8.1	0.1%	11,790.5	10.4	0.1%	11,788.2	12.7	0.1%	11,785.9	15.0	0.1%	11,783.6	17.4	0.1%
ME 4	35 53 19	2008	Dry	April	--	9,021.6	9,006.4	15.3	0.2%	9,004.2	17.5	0.2%	8,999.8	21.9	0.2%	8,995.5	26.2	0.3%	8,991.1	30.6	0.3%	8,986.7	35.0	0.4%
ME 4	35 53 19	2008	Dry	May	--	1,358.7	1,342.4	16.3	1.2%	1,339.9	18.8	1.4%	1,335.3	23.4	1.7%	1,330.7	28.0	2.1%	1,326.2	32.5	2.4%	1,321.8	36.9	2.7%
ME 4	35 53 19	2008	Dry	June	--	438.3	415.0	23.3	5.3%	411.7	26.7	6.1%	405.1	33.3	7.6%	398.5	39.8	9.1%	391.9	46.4	10.6%	385.3	53.0	12.1%
ME 4	35 53 19	2008	Dry	July	--	256.3	233.3	23.0	9.0%	230.0	26.3	10.2%	223.5	32.8	12.8%	216.9	39.4	15.4%	210.4	45.9	17.9%	203.9	52.4	20.4%
ME 4	35 53 19	2008	Dry	August	--	179.7	157.4	22.3	12.4%	154.2	25.5	14.2%	147.9	31.9	17.7%	141.5	38.2	21.3%	135.2	44.5	24.8%	128.8	50.9	28.3%
ME 4	35 53 19	2008	Dry	September	Used in Summary Table Analysis	141.3	119.9	21.4	15.2%	116.8	24.5	17.3%	110.7	30.6	21.7%	104.6	36.7	26.0%	98.5	42.8	30.3%	92.4	48.9	34.6%
ME 4	35 53 19	2009	Critical	October	Used in Summary Table Analysis	924.9	908.1	16.9	1.8%	905.6	19.3	2.1%	900.8	24.2	2.6%	895.9	29.1	3.1%	891.2	33.7	3.6%	886.3	38.6	4.2%
ME 4	35 53 19	2009	Critical	November	Used in Summary Table Analysis	5,526.6	5,513.5	13.1	0.2%	5,511.7	14.9	0.3%	5,507.9	18.8	0.3%	5,504.2	22.5	0.4%	5,500.3	26.3	0.5%	5,496.5	30.1	0.5%
ME 4	35 53 19	2009	Critical	December	--	12,199.1	12,187.5	11.6	0.1%	12,186.3	12.7	0.1%	12,182.9	16.2	0.1%	12,179.4	19.7	0.2%	12,175.9	23.1	0.2%	12,172.5	26.6	0.2%
ME 4	35 53 19	2009	Critical	January	--	8,805.6	8,795.4	10.2	0.1%	8,793.9	11.7	0.1%	8,790.9	14.7	0.2%	8,787.8	17.7	0.2%	8,784.8	20.7	0.2%	8,781.8	23.7	0.3%
ME 4	35 53 19	2009	Critical	February	--	22,642.4	22,634.3	8.1	0.0%	22,631.9	10.4	0.0%	22,629.6	12.7	0.1%	22,627.3	15.0	0.1%	22,625.0	17.4	0.1%	22,621.5	20.8	0.1%
ME 4	35 53 19	2009	Critical	March	--	21,142.4	21,134.3	8.1	0.0%	21,133.1	9.3	0.0%	21,130.8	11.6	0.1%	21,128.5	13.9	0.1%	21,126.2	16.2	0.1%	21,123.8	18.5	0.1%
ME 4	35 53 19	2009	Critical	April	--	10,099.0	10,083.1	15.9	0.2%	10,080.9	18.1	0.2%	10,076.3	22.7	0.2%	10,071.8	27.2	0.3%	10,067.1	31.8	0.3%	10,062.6	36.3	0.4%
ME 4	35 53 19	2009	Critical	May	--	15,593.8	15,575.2	18.5	0.1%	15,571.8	22.0	0.1%	15,567.1	26.6	0.2%	15,561.3	32.4	0.2%	15,555.6	38.2	0.2%	15,549.8	44.0	0.3%
ME 4	35 53 19	2009	Critical	June	--	3,161.2	3,136.5	24.8	0.8%	3,133.0	28.2	0.9%	3,125.8	35.4	1.1%	3,118.8	42.5	1.3%	3,111.7	49.5	1.6%	3,104.6	56.6	1.8%
ME 4	35 53 19	2009	Critical	July	--	1,263.5	1,240.2	23.4	1.9%	1,236.8	26.7	2.1%	1,230.2	33.3	2.6%	1,223.6	39.9	3.2%	1,217.0	46.5	3.7%	1,210.5	53.0	4.2%
ME 4	35 53 19	2009	Critical	August	--	669.4	646.9	22.5	3.4%	643.7	25.7	3.8%	637.3	32.1	4.8%	630.9	38.5	5.7%	624.5	44.9	6.7%	618.1	51.3	7.7%
ME 4	35 53 19	2009	Critical	September	Used in Summary Table Analysis	390.4	370.4	20.0	5.1%	367.5	22.9	5.9%	361.7	28.7	7.3%	356.0	34.4	8.8%	350.3	40.1	10.3%	344.6	45.8	11.7%
ME 4	35 53 19	2010	Below Normal	October	Used in Summary Table Analysis	6,089.8	6,072.7	17.1	0.3%	6,070.3	19.6	0.3%	6,065.3	24.5	0.4%	6,060.4	29.4	0.5%	6,055.7	34.1	0.6%	6,050.8	39.0	0.6%
ME 4	35 53 19	2010	Below Normal	November	Used in Summary Table Analysis	8,300.7	8,287.3	13.4	0.2%	8,285.3	15.4	0.2%	8,281.4	19.3	0.2%	8,277.4	23.3	0.3%	8,273.5	27.2	0.3%	8,269.6	31.1	0.4%
ME 4	35 53 19	2010	Below Normal	December	--	12,378.5	12,366.9	11.6	0.1%	12,364.6	13.9	0.1%	12,361.1	17.4	0.1%	12,357.6	20.8	0.2%	12,354.2	24.3	0.2%	12,351.9	26.6	0.2%
ME 4	35 53 19	2010	Below Normal	January	--	36,316.0	36,305.6	10.4	0.0%	36,304.4	11.6	0.0%	36,300.9	15.0	0.0%	36,297.5	18.5	0.1%	36,295.1	20.8	0.1%	36,291.7	24.3	0.1%
ME 4	35 53 19	2010	Below Normal	February	--	27,268.5	27,259.3	9.3	0.0%	27,256.9	11.6	0.0%	27,254.6	13.9	0.1%	27,252.3	16.2	0.1%	27,250.0	18.5	0.1%	27,246.5	22.0	0.1%
ME 4	35 53 19	2010	Below Normal	March	--	28,856.5	28,848.4	8.1	0.0%	28,847.2	9.3	0.0%	28,844.9	11.6	0.0%	28,841.4	15.0	0.1%	28,839.1	17.4	0.1%	28,836.8	19.7	0.1%
ME 4	35 53 19	2010	Below Normal	April	--	40,052.1	40,042.8	9.3	0.0%	40,041.7	10.4	0.0%	40,039.4	12.7	0.0%	40,037.0	15.0	0.0%	40,034.7	17.4	0.0%	40,032.4	19.7	0.0%
ME 4	35 53 19	2010	Below Normal	May	--	20,298.6	20,282.4	16.2	0.1%	20,280.1	18.5	0.1%	20,275.5	23.1	0.1%	20,270.8	27.8	0.1%	20,266.2	32.4	0.2%	20,261.6	37.0	0.2%
ME 4	35 53 19	2010	Below Normal	June	--	9,373.8	9,350.1	23.7	0.3%	9,346.6	27.2	0.3%	9,339.9	33.9	0.4%	9,333.2	40.6	0.4%	9,326.5	47.3	0.5%	9,319.8	54.1	0.6%
ME 4	35 53 19	2010	Below Normal	July	--	1,455.4	1,433.8	21.6	1.5%	1,430.7	24.8	1.7%	1,424.4	31.0	2.1%	1,418.3	37.2	2.6%	1,412.0	43.4	3.0%	1,406.1	49.3	3.4%
ME 4	35 53 19	2010	Below Normal	August	--	569.9	550.1	19.8	3.5%	547.3	22.6	4.0%	541.6	28.3	5.0%	536.1	33.9	5.9%	530.4	39.5	6.9%	524.8	45.2	7.9%
ME 4	35 53 19	2010	Below Normal	September	Used in Summary Table Analysis	652.0	633.2	18.8	2.9%	630.5	21.5	3.3%	625.1	26.9	4.1%	619.8	32.2	4.9%	614.4	37.6	5.8%	609.0	43.0	6.6%

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							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	35 53 19	2011	Wet	October	Used in Summary Table Analysis	9,652.2	9,638.0	14.2	0.1%	9,635.9	16.3	0.2%	9,631.8	20.4	0.2%	9,627.8	24.4	0.3%	9,623.6	28.6	0.3%	9,619.6	32.6	0.3%
ME 4	35 53 19	2011	Wet	November	Used in Summary Table Analysis	14,241.9	14,230.3	11.6	0.1%	14,229.2	12.7	0.1%	14,225.7	16.2	0.1%	14,222.2	19.7	0.1%	14,218.8	23.1	0.2%	14,215.3	26.6	0.2%
ME 4	35 53 19	2011	Wet	December	--	33,794.0	33,783.6	10.4	0.0%	33,782.4	11.6	0.0%	33,780.1	13.9	0.0%	33,776.6	17.4	0.1%	33,774.3	19.7	0.1%	33,770.8	23.1	0.1%
ME 4	35 53 19	2011	Wet	January	--	14,173.6	14,164.4	9.3	0.1%	14,163.2	10.4	0.1%	14,160.9	12.7	0.1%	14,158.6	15.0	0.1%	14,156.3	17.4	0.1%	14,152.8	20.8	0.1%
ME 4	35 53 19	2011	Wet	February	--	20,784.7	20,776.6	8.1	0.0%	20,774.3	10.4	0.1%	20,772.0	12.7	0.1%	20,769.7	15.0	0.1%	20,767.4	17.4	0.1%	20,765.0	19.7	0.1%
ME 4	35 53 19	2011	Wet	March	--	52,067.1	52,059.0	8.1	0.0%	52,057.9	9.3	0.0%	52,055.6	11.6	0.0%	52,053.2	13.9	0.0%	52,052.1	15.0	0.0%	52,049.8	17.4	0.0%
ME 4	35 53 19	2011	Wet	April	--	24,821.8	24,813.7	8.1	0.0%	24,812.5	9.3	0.0%	24,810.2	11.6	0.0%	24,807.9	13.9	0.1%	24,805.6	16.2	0.1%	24,803.2	18.5	0.1%
ME 4	35 53 19	2011	Wet	May	--	11,392.6	11,377.1	15.5	0.1%	11,374.9	17.7	0.2%	11,370.4	22.2	0.2%	11,365.9	26.7	0.2%	11,361.5	31.1	0.3%	11,356.9	35.6	0.3%
ME 4	35 53 19	2011	Wet	June	--	7,066.1	7,042.9	23.1	0.3%	7,039.7	26.4	0.4%	7,033.1	33.0	0.5%	7,026.6	39.5	0.6%	7,020.0	46.1	0.7%	7,013.4	52.7	0.7%
ME 4	35 53 19	2011	Wet	July	--	1,828.9	1,806.0	22.9	1.3%	1,802.7	26.3	1.4%	1,796.2	32.8	1.8%	1,789.6	39.4	2.2%	1,783.1	45.8	2.5%	1,776.5	52.4	2.9%
ME 4	35 53 19	2011	Wet	August	--	777.5	758.0	19.6	2.5%	755.2	22.3	2.9%	749.6	27.9	3.6%	744.1	33.5	4.3%	738.5	39.1	5.0%	733.0	44.6	5.7%
ME 4	35 53 19	2011	Wet	September	Used in Summary Table Analysis	434.1	416.3	17.8	4.1%	413.8	20.3	4.7%	408.7	25.3	5.8%	403.7	30.4	7.0%	398.6	35.4	8.2%	393.6	40.5	9.3%
ME 4	35 53 19	2012	Below Normal	October	Used in Summary Table Analysis	4,550.8	4,536.3	14.5	0.3%	4,534.3	16.6	0.4%	4,530.1	20.7	0.5%	4,525.9	24.9	0.5%	4,521.8	29.1	0.6%	4,517.6	33.2	0.7%
ME 4	35 53 19	2012	Below Normal	November	Used in Summary Table Analysis	8,258.2	8,246.6	11.6	0.1%	8,245.0	13.2	0.2%	8,241.7	16.6	0.2%	8,238.3	19.9	0.2%	8,235.0	23.3	0.3%	8,231.6	26.6	0.3%
ME 4	35 53 19	2012	Below Normal	December	--	5,191.9	5,181.9	10.0	0.2%	5,180.6	11.3	0.2%	5,177.7	14.2	0.3%	5,174.8	17.1	0.3%	5,171.9	20.0	0.4%	5,169.0	22.9	0.4%
ME 4	35 53 19	2012	Below Normal	January	--	20,175.9	20,166.7	9.3	0.0%	20,165.5	10.4	0.1%	20,163.2	12.7	0.1%	20,160.9	15.0	0.1%	20,157.4	18.5	0.1%	20,155.1	20.8	0.1%
ME 4	35 53 19	2012	Below Normal	February	--	18,230.3	18,222.2	8.1	0.0%	18,221.1	9.3	0.1%	18,217.6	12.7	0.1%	18,215.3	15.0	0.1%	18,213.0	17.4	0.1%	18,210.6	19.7	0.1%
ME 4	35 53 19	2012	Below Normal	March	--	45,496.5	45,488.4	8.1	0.0%	45,487.3	9.3	0.0%	45,485.0	11.6	0.0%	45,482.6	13.9	0.0%	45,480.3	16.2	0.0%	45,478.0	18.5	0.0%
ME 4	35 53 19	2012	Below Normal	April	--	26,885.4	26,877.3	8.1	0.0%	26,877.3	8.1	0.0%	26,875.0	10.4	0.0%	26,872.7	12.7	0.0%	26,870.4	15.0	0.1%	26,868.1	17.4	0.1%
ME 4	35 53 19	2012	Below Normal	May	--	7,488.9	7,473.5	15.4	0.2%	7,471.3	17.6	0.2%	7,466.8	22.1	0.3%	7,462.4	26.5	0.4%	7,458.0	30.9	0.4%	7,453.5	35.4	0.5%
ME 4	35 53 19	2012	Below Normal	June	--	5,525.1	5,501.5	23.6	0.4%	5,498.1	27.0	0.5%	5,491.6	33.6	0.6%	5,484.8	40.3	0.7%	5,478.1	47.0	0.9%	5,471.5	53.6	1.0%
ME 4	35 53 19	2012	Below Normal	July	--	2,229.3	2,207.1	22.2	1.0%	2,203.9	25.3	1.1%	2,197.7	31.6	1.4%	2,191.3	38.0	1.7%	2,185.0	44.3	2.0%	2,178.6	50.7	2.3%
ME 4	35 53 19	2012	Below Normal	August	--	388.8	370.8	17.9	4.6%	368.3	20.4	5.3%	363.2	25.5	6.6%	358.1	30.6	7.9%	353.0	35.7	9.2%	347.9	40.8	10.5%
ME 4	35 53 19	2012	Below Normal	September	Used in Summary Table Analysis	249.6	233.6	16.0	6.4%	231.4	18.2	7.3%	226.8	22.8	9.1%	222.3	27.3	10.9%	217.8	31.8	12.7%	213.3	36.4	14.6%
ME 4	35 53 19	2013	Below Normal	October	Used in Summary Table Analysis	1,917.7	1,903.8	13.9	0.7%	1,901.9	15.9	0.8%	1,897.8	19.9	1.0%	1,893.9	23.8	1.2%	1,889.9	27.8	1.4%	1,885.9	31.8	1.7%
ME 4	35 53 19	2013	Below Normal	November	Used in Summary Table Analysis	14,723.4	14,711.8	11.6	0.1%	14,710.6	12.7	0.1%	14,707.2	16.2	0.1%	14,704.9	18.5	0.1%	14,701.4	22.0	0.1%	14,697.9	25.5	0.2%
ME 4	35 53 19	2013	Below Normal	December	--	60,077.5	60,068.3	9.3	0.0%	60,066.0	11.6	0.0%	60,063.7	13.9	0.0%	60,060.2	17.4	0.0%	60,057.9	19.7	0.0%	60,054.4	23.1	0.0%
ME 4	35 53 19	2013	Below Normal	January	--	22,226.9	22,217.6	9.3	0.0%	22,216.4	10.4	0.0%	22,214.1	12.7	0.1%	22,211.8	15.0	0.1%	22,209.5	17.4	0.1%	22,207.2	19.7	0.1%
ME 4	35 53 19	2013	Below Normal	February	--	8,856.9	8,848.8	8.1	0.1%	8,847.7	9.3	0.1%	8,845.3	11.7	0.1%	8,842.9	14.0	0.2%	8,840.5	16.4	0.2%	8,838.2	18.8	0.2%
ME 4	35 53 19	2013	Below Normal	March	--	10,347.5	10,339.7	7.8	0.1%	10,338.5	8.9	0.1%	10,336.2	11.2	0.1%	10,334.0	13.4	0.1%	10,331.7	15.7	0.2%	10,329.4	18.1	0.2%
ME 4	35 53 19	2013	Below Normal	April	--	8,295.6	8,280.9	14.7	0.2%	8,278.8	16.8	0.2%	8,274.7	20.9	0.3%	8,270.5	25.1	0.3%	8,266.2	29.4	0.4%	8,262.0	33.6	0.4%
ME 4	35 53 19	2013	Below Normal	May	--	4,437.2	4,419.4	17.7	0.4%	4,416.9	20.3	0.5%	4,411.7	25.5	0.6%	4,406.6	30.6	0.7%	4,401.5	35.6	0.8%	4,396.4	40.7	0.9%
ME 4	35 53 19	2013	Below Normal	June	--	2,111.9	2,090.6	21.3	1.0%	2,087.5	24.4	1.2%	2,081.5	30.4	1.4%	2,075.3	36.6	1.7%	2,069.3	42.6	2.0%	2,063.3	48.6	2.3%
ME 4	35 53 19	2013	Below Normal	July	--	718.3	697.7	20.6	2.9%	694.8	23.6	3.3%	688.9	29.4	4.1%	683.1	35.3	4.9%	677.2	41.1	5.7%	671.4	46.9	6.5%
ME 4	35 53 19	2013	Below Normal	August	--	340.6	321.3	19.3	5.7%	318.5	22.1	6.5%	313.0	27.6	8.1%	307.5	33.1	9.7%	302.0	38.6	11.3%	296.5	44.1	13.0%
ME 4	35 53 19	2013	Below Normal	September	Used in Summary Table Analysis	4,795.7	4,775.7	20.0	0.4%	4,772.8	22.9	0.5%	4,767.1	28.6	0.6%	4,761.5	34.3	0.7%	4,755.8	39.9	0.8%	4,750.0	45.7	1.0%
ME 4	35 53 19	2014	Critical	October	Used in Summary Table Analysis	280.5	265.9	14.5	5.2%	263.8	16.6	5.9%	259.6	20.8	7.4%	255.5	25.0	8.9%	251.3	29.2	10.4%	247.0	33.4	11.9%
ME 4	35 53 19	2014	Critical	November	Used in Summary Table Analysis	1,542.7	1,531.0	11.7	0.8%	1,529.3	13.4	0.9%	1,525.9	16.8	1.1%	1,522.6	20.1	1.3%	1,519.2	23.5	1.5%	1,515.7	27.0	1.7%
ME 4	35 53 19	2014	Critical	December	--	1,592.1	1,581.9	10.2	0.6%	1,580.4	11.7	0.7%	1,577.4	14.7	0.9%	1,574.4	17.7	1.1%	1,571.5	20.6	1.3%	1,568.5	23.6	1.5%
ME 4	35 53 19	2014	Critical	January	--	2,826.3	2,817.1	9.1	0.3%	2,815.9	10.4	0.4%	2,813.2	13.1	0.5%	2,810.5	15.7	0.6%	2,807.9	18.4	0.7%	2,805.1	21.2	0.7%
ME 4	35 53 19	2014	Critical	February	--	15,768.5	15,760.4	8.1	0.1%	15,759.3	9.3	0.1%	15,756.9	11.6	0.1%	15,754.6	13.9	0.1%	15,752.3	16.2	0.1%	15,750.0	18.5	0.1%
ME 4	35 53 19	2014	Critical	March	--	31,506.9	31,498.8	8.1	0.0%	31,497.7	9.3	0.0%	31,495.4	11.6	0.0%	31,493.1	13.9	0.0%	31,490.7	16.2	0.1%	31,488.4	18.5	0.1%
ME 4	35 53 19	2014	Critical	April	--	12,997.7	12,981.5	16.2	0.1%	12,979.2	18.5	0.1%	12,974.5	23.1	0.2%	12,969.9	27.8	0.2%	12,965.3	32.4	0.2%	12,960.6	37.0	0.3%
ME 4	35 53 19	2014	Critical	May	--	5,192.1	5,173.4	18.8	0.4%	5,170.7	21.4	0.4%	5,165.3	26.9	0.5%	5,160.0	32.2	0.6%	5,154.5	37.6	0.7%	5,149.2	42.9	0.8%
ME 4	35 53 19	2014	Critical	June	--	1,199.1	1,173.5	25.6	2.1%	1,169.8	29.3	2.4%	1,162.6	36.5	3.0%	1,155.4	43.7	3.6%	1,148.1	50.9	4.2%	1,141.0	58.1	4.8%
ME 4	35 53 19	2014	Critical	July	--	546.3	522.7	23.6	4.3%	519.3	26.9	4.9%	512.6	33.6	6.2%	505.9	40.3	7.4%	499.2	47.0	8.6%	492.6	53.7	9.8%
ME 4	35 53 19	2014	Critical	August	--	348.5	326.0	22.5	6.5%	322.8	25.7	7.4%	316.4	32.1	9.2%	310.0	38.5	11.1%	303.6	44.9	12.9%	297.2	51.3	14.7%
ME 4	35 53 19	2014	Critical	September	Used in Summary Table Analysis	2,577.5	2,555.6	22.0	0.9%	2,552.4	25.1	1.0%	2,546.2	31.4	1.2%	2,539.9	37.6	1.5%	2,533.6	44.0	1.7%	2,527.3	50.2	1.9%
ME 4	35 53 19	2015	Dry	October	Used in Summary Table Analysis	11,380.4	11,363.1	17.4	0.2%	11,360.6	19.8	0.2%	11,355.9	24.5	0.2%	11,350.9	29.5	0.3%	11,346.2	34.3	0.3%	11,341.1	39.4	0.3%
ME 4	35 53 19	2015	Dry	November	Used in Summary Table Analysis	9,059.1	9,046.2	13.0	0.1%	9,044.3	14.8	0.2%	9,040.6	18.5	0.2%	9,036.9	22.2	0.2%	9,033.1	26.0	0.3%	9,029.4	29.7	0.3%
ME 4	35 53 19	2015	Dry	December	--	32,695.6	32,685.2	10.4	0.0%	32,682.9	12.7	0.0%	32,680.6	15.0	0.0%	32,677.1	18.5	0.1%	32,673.6	22.0	0.1%	32,670.1	25.5	0.1%
ME 4	35 53 19	2015	Dry	January	--	14,589.1	14,579.9	9.3	0.1%	14,577.5	11.6	0.1%	14,575.2	13.9	0.1%	14,571.8	17.4	0.1%	14,569.4	19.7	0.1%	14,566.0	23.1	0.2%
ME 4	35 53 19	2015	Dry	February	--	27,263.9	27,255.8	8.1	0.0%	27,254.6	9.3	0.0%	27,251.2	12.7	0.0%	27,248.8	15.0	0.1%	27,246.5	17.4	0.1%	27,244.2	19.7	0.1%
ME 4	35 53 19	2015	Dry	March	--	11,577.5	11,569.7	7.9	0.1%	11,568.5	9.0	0.1%	11,566.2	11.3	0.1%	11,563.9	13.7	0.1%	11,561.6	16.0	0.1%	11,559.4	18.2	0.2%
ME 4	35 53 19	2015	Dry	April	--	8,406.4	8,390.7	15.6	0.2%	8,388.5	17.8	0.2%	8,384.0	22.3	0.3%	8,379.5	26.9	0.3%	8,375.0	31.4	0.4%	8,370.5	35.9	0.4%
ME 4	35 53 19	2015	Dry	May	--	1,508.8	1,490.3	18.5	1.2%	1,487.7	21.1	1.4%	1,482.4	26.4	1.7%	1,477.1	31.7	2.1%	1,471.9	36.9	2.4%	1,466.6	42.2	2.8%
ME 4	35 53 19	2015	Dry	June	--	652.8	629.0	23.8	3.6%	625.6	27.1	4.2%	618.9	33.8	5.2%	612.3	40.5	6.2%	605.6	47.2	7.2%	599.0	53.8	8.2%
ME 4	35 53 19	2015	Dry	July	--	268.8	245.7	23.2	8.6%	242.4	26.5	9.8%	235.8	33.1	12.3%	229.1	39.7	14.8%	222.5	46.3	17.2%	216.0	52.9	19.7%
ME 4	35 53 19	2015	Dry	August	--	166.8	144.4	22.4	13.4%	141.3	25.6	15.3%	134.8	32.0	19.2%	128.4	38.4	23.0%	122.0	44.8	26.9%	115.7	51.2	30.7%
ME 4	35 53 19	2015	Dry	September	Used in Summary Table Analysis	120.9	100.9	20.0	16.5%	97.9	22.9	19.0%	91.7	29.2	24.1%	85.6	35.3	29.2%	79.4	41.5	34.3%	73.3	47.6	39.4%
ME 4	35 53 19	2016	Above Normal	October	Used in Summary Table Analysis	86.1	68.4	17.7	20.6%	65.7	20.5	23.8%	60.7	25.5	29.6%	55.6	30.6	35.5%	50.6	35.6	41.3%	45.8	40.3	46.8%
ME 4	35 53 19	2016	Above Normal	November	Used in Summary Table Analysis	3,883.2	3,870.1	13.1	0.3%	3,868.1	15.2	0.4%	3,864.2	19.0	0.5%	3,860.2	23.0	0.6%	3,856.3	27.0	0.7%	3,852.3	30.9	0.8%
ME 4	35 53 19	2016	Above Normal	December	--	36,711.8	36,700.2	11.6	0.0%	36,697.9	13.9	0.0%	36,694.4	17.4	0.0%	36,691.0	20.8	0.1%	36,687.5	24.3	0.1%	36,684.0	27.8	0.1%
ME 4	35 53 19	2016	Above Normal	January	--	57,414.4	57,403.9	10.4	0.0%	57,401.6	12.7	0.0%	57,398.1	16.2	0.0%	57,395.8	18.5	0.0%	57,392.4	22.0	0.0%	57,388.9	25.5	0.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	35 53 19	2016	Above Normal	February	--	24,284.7	24,275.5	9.3	0.0%	24,274.3	10.4	0.0%	24,272.0	12.7	0.1%	24,268.5	16.2	0.1%	24,266.2	18.5	0.1%	24,263.9	20.8	0.1%
ME 4	35 53 19	2016	Above Normal	March	--	41,821.8	41,813.7	8.1	0.0%	41,812.5	9.3	0.0%	41,810.2	11.6	0.0%	41,806.7	15.0	0.0%	41,804.4	17.4	0.0%	41,802.1	19.7	0.0%
ME 4	35 53 19	2016	Above Normal	April	--	18,549.8	18,541.7	8.1	0.0%	18,540.5	9.3	0.0%	18,539.4	10.4	0.1%	18,537.0	12.7	0.1%	18,534.7	15.0	0.1%	18,532.4	17.4	0.1%
ME 4	35 53 19	2016	Above Normal	May	--	5,219.3	5,209.7	9.6	0.2%	5,208.3	11.0	0.2%	5,205.6	13.8	0.3%	5,202.8	16.6	0.3%	5,199.9	19.4	0.4%	5,197.0	22.3	0.4%
ME 4	35 53 19	2016	Above Normal	June	--	1,510.3	1,491.9	18.4	1.2%	1,489.2	21.1	1.4%	1,484.0	26.3	1.7%	1,478.8	31.5	2.1%	1,473.5	36.8	2.4%	1,468.3	42.0	2.8%
ME 4	35 53 19	2016	Above Normal	July	--	823.9	803.6	20.3	2.5%	800.6	23.3	2.8%	794.8	29.1	3.5%	789.0	34.9	4.2%	783.2	40.7	4.9%	777.4	46.5	5.6%
ME 4	35 53 19	2016	Above Normal	August	--	492.5	472.6	19.9	4.0%	469.7	22.8	4.6%	464.1	28.4	5.8%	458.4	34.1	6.9%	452.7	39.8	8.1%	447.0	45.5	9.2%
ME 4	35 53 19	2016	Above Normal	September	Used in Summary Table Analysis	328.7	311.1	17.7	5.4%	307.9	20.8	6.3%	302.6	26.1	7.9%	297.2	31.5	9.6%	291.8	36.9	11.2%	286.4	42.3	12.9%
ME 4	35 53 19	2017	Wet	October	Used in Summary Table Analysis	18,319.4	18,304.4	15.0	0.1%	18,302.1	17.4	0.1%	18,298.6	20.8	0.1%	18,294.0	25.5	0.1%	18,289.4	30.1	0.2%	18,284.7	34.7	0.2%
ME 4	35 53 19	2017	Wet	November	Used in Summary Table Analysis	18,862.3	18,851.9	10.4	0.1%	18,849.5	12.7	0.1%	18,846.1	16.2	0.1%	18,842.6	19.7	0.1%	18,840.3	22.0	0.1%	18,836.8	25.5	0.1%
ME 4	35 53 19	2017	Wet	December	--	24,172.5	24,163.2	9.3	0.0%	24,160.9	11.6	0.0%	24,158.6	13.9	0.1%	24,155.1	17.4	0.1%	24,152.8	19.7	0.1%	24,149.3	23.1	0.1%
ME 4	35 53 19	2017	Wet	January	--	107,078.7	107,069.4	9.3	0.0%	107,068.3	10.4	0.0%	107,066.0	12.7	0.0%	107,062.5	16.2	0.0%	107,060.2	18.5	0.0%	107,057.9	20.8	0.0%
ME 4	35 53 19	2017	Wet	February	--	81,942.1	81,934.0	8.1	0.0%	81,932.9	9.3	0.0%	81,930.6	11.6	0.0%	81,928.2	13.9	0.0%	81,924.8	17.4	0.0%	81,922.5	19.7	0.0%
ME 4	35 53 19	2017	Wet	March	--	27,307.9	27,299.8	8.1	0.0%	27,298.6	9.3	0.0%	27,296.3	11.6	0.0%	27,294.0	13.9	0.1%	27,291.7	16.2	0.1%	27,289.4	18.5	0.1%
ME 4	35 53 19	2017	Wet	April	--	22,971.1	22,964.1	6.9	0.0%	22,963.0	8.1	0.0%	22,960.6	10.4	0.0%	22,958.3	12.7	0.1%	22,956.0	15.0	0.1%	22,954.9	16.2	0.1%
ME 4	35 53 19	2017	Wet	May	--	6,274.1	6,264.4	9.7	0.2%	6,263.0	11.1	0.2%	6,260.2	13.9	0.2%	6,257.4	16.7	0.3%	6,254.5	19.6	0.3%	6,251.6	22.5	0.4%
ME 4	35 53 19	2017	Wet	June	--	2,120.1	2,101.3	18.9	0.9%	2,098.5	21.6	1.0%	2,093.2	27.0	1.3%	2,087.8	32.3	1.5%	2,082.5	37.6	1.8%	2,077.1	43.1	2.0%
ME 4	35 53 19	2017	Wet	July	--	935.9	915.3	20.5	2.2%	912.4	23.4	2.5%	906.6	29.3	3.1%	900.8	35.1	3.7%	895.0	40.9	4.4%	889.2	46.7	5.0%
ME 4	35 53 19	2017	Wet	August	--	508.0	488.1	19.9	3.9%	485.2	22.7	4.5%	479.6	28.4	5.6%	473.9	34.0	6.7%	468.3	39.7	7.8%	462.6	45.3	8.9%
ME 4	35 53 19	2017	Wet	September	Used in Summary Table Analysis	323.7	305.4	18.3	5.7%	302.7	21.0	6.5%	297.5	26.2	8.1%	292.3	31.4	9.7%	287.0	36.7	11.3%	281.8	41.9	12.9%
ME 4	35 53 19	2018	Above Normal	October	Used in Summary Table Analysis	276.4	261.9	14.5	5.2%	259.8	16.6	6.0%	255.6	20.7	7.5%	251.4	24.9	9.0%	247.3	29.1	10.5%	243.1	33.3	12.0%
ME 4	35 53 19	2018	Above Normal	November	Used in Summary Table Analysis	10,828.1	10,816.8	11.3	0.1%	10,815.0	13.1	0.1%	10,811.8	16.3	0.2%	10,808.4	19.7	0.2%	10,805.2	22.9	0.2%	10,801.9	26.3	0.2%
ME 4	35 53 19	2018	Above Normal	December	--	5,449.1	5,439.5	9.6	0.2%	5,438.1	11.0	0.2%	5,435.3	13.8	0.3%	5,432.4	16.7	0.3%	5,429.6	19.4	0.4%	5,426.7	22.3	0.4%
ME 4	35 53 19	2018	Above Normal	January	--	17,844.9	17,835.6	9.3	0.1%	17,834.5	10.4	0.1%	17,832.2	12.7	0.1%	17,829.9	15.0	0.1%	17,826.4	18.5	0.1%	17,824.1	20.8	0.1%
ME 4	35 53 19	2018	Above Normal	February	--	7,600.2	7,592.5	7.8	0.1%	7,591.3	8.9	0.1%	7,589.0	11.2	0.1%	7,586.7	13.5	0.2%	7,584.5	15.7	0.2%	7,582.1	18.2	0.2%
ME 4	35 53 19	2018	Above Normal	March	--	20,740.7	20,733.8	6.9	0.0%	20,732.6	8.1	0.0%	20,730.3	10.4	0.1%	20,728.0	12.7	0.1%	20,725.7	15.0	0.1%	20,723.4	17.4	0.1%
ME 4	35 53 19	2018	Above Normal	April	--	32,248.8	32,241.9	6.9	0.0%	32,241.9	6.9	0.0%	32,239.6	9.3	0.0%	32,237.3	11.6	0.0%	32,235.0	13.9	0.0%	32,233.8	15.0	0.0%
ME 4	35 53 19	2018	Above Normal	May	--	6,990.2	6,975.5	14.7	0.2%	6,973.3	16.9	0.2%	6,969.1	21.1	0.3%	6,964.8	25.3	0.4%	6,960.6	29.5	0.4%	6,956.7	33.4	0.5%
ME 4	35 53 19	2018	Above Normal	June	--	1,915.0	1,896.1	19.0	1.0%	1,893.3	21.8	1.1%	1,887.8	27.2	1.4%	1,882.5	32.5	1.7%	1,877.1	38.0	2.0%	1,871.6	43.4	2.3%
ME 4	35 53 19	2018	Above Normal	July	--	782.5	761.9	20.6	2.6%	758.9	23.5	3.0%	753.1	29.4	3.8%	747.2	35.2	4.5%	741.4	41.1	5.3%	735.5	46.9	6.0%
ME 4	35 53 19	2018	Above Normal	August	--	443.6	424.4	19.1	4.3%	421.7	21.9	4.9%	416.2	27.3	6.2%	410.8	32.8	7.4%	405.3	38.3	8.6%	399.8	43.7	9.9%
ME 4	35 53 19	2018	Above Normal	September	Used in Summary Table Analysis	300.8	282.4	18.3	6.1%	279.8	21.0	7.0%	274.6	26.2	8.7%	269.3	31.4	10.5%	264.1	36.7	12.2%	258.8	42.0	13.9%
ME 4	35 53 19	2019	Below Normal	October	Used in Summary Table Analysis	208.3	194.0	14.3	6.8%	192.0	16.3	7.8%	187.9	20.4	9.8%	183.7	24.6	11.8%	179.7	28.6	13.7%	175.6	32.7	15.7%
ME 4	35 53 19	2019	Below Normal	November	Used in Summary Table Analysis	6,647.2	6,635.8	11.5	0.2%	6,634.1	13.1	0.2%	6,630.8	16.4	0.2%	6,627.5	19.7	0.3%	6,624.2	23.0	0.3%	6,620.8	26.4	0.4%
ME 4	35 53 19	2019	Below Normal	December	--	14,707.2	14,696.8	10.4	0.1%	14,695.6	11.6	0.1%	14,693.3	13.9	0.1%	14,689.8	17.4	0.1%	14,687.5	19.7	0.1%	14,684.0	23.1	0.2%
ME 4	35 53 19	2019	Below Normal	January	--	35,304.4	35,295.1	9.3	0.0%	35,294.0	10.4	0.0%	35,291.7	12.7	0.0%	35,289.4	15.0	0.0%	35,287.0	17.4	0.0%	35,283.6	20.8	0.1%
ME 4	35 53 19	2019	Below Normal	February	--	142,013.9	142,002.3	11.6	0.0%	142,002.3	11.6	0.0%	142,002.3	11.6	0.0%	141,990.7	23.1	0.0%	141,990.7	23.1	0.0%	141,990.7	23.1	0.0%
ME 4	35 53 19	2019	Below Normal	March	--	42,368.1	42,361.1	6.9	0.0%	42,360.0	8.1	0.0%	42,357.6	10.4	0.0%	42,355.3	12.7	0.0%	42,354.2	13.9	0.0%	42,351.9	16.2	0.0%
ME 4	35 53 19	2019	Below Normal	April	--	15,285.9	15,278.9	6.9	0.0%	15,277.8	8.1	0.1%	15,275.5	10.4	0.1%	15,274.3	11.6	0.1%	15,272.0	13.9	0.1%	15,269.7	16.2	0.1%
ME 4	35 53 19	2019	Below Normal	May	--	17,005.8	16,989.6	16.2	0.1%	16,987.3	18.5	0.1%	16,982.6	23.1	0.1%	16,978.0	27.8	0.2%	16,973.4	32.4	0.2%	16,969.9	35.9	0.2%
ME 4	35 53 19	2019	Below Normal	June	--	4,243.1	4,222.3	20.7	0.5%	4,219.4	23.6	0.6%	4,213.7	29.4	0.7%	4,208.1	35.0	0.8%	4,202.5	40.5	1.0%	4,197.1	45.9	1.1%
ME 4	35 53 19	2019	Below Normal	July	--	1,362.8	1,342.1	20.7	1.5%	1,339.2	23.6	1.7%	1,333.3	29.5	2.2%	1,327.4	35.4	2.6%	1,321.5	41.3	3.0%	1,315.7	47.1	3.5%
ME 4	35 53 19	2019	Below Normal	August	--	597.8	578.1	19.7	3.3%	575.3	22.5	3.8%	569.7	28.1	4.7%	564.1	33.7	5.6%	558.5	39.3	6.6%	552.9	44.9	7.5%
ME 4	35 53 19	2019	Below Normal	September	Used in Summary Table Analysis	463.6	445.3	18.3	3.9%	442.7	20.9	4.5%	437.5	26.1	5.6%	432.2	31.3	6.8%	427.0	36.6	7.9%	421.8	41.8	9.0%
ME 4	35 53 19	2020	Dry	October	Used in Summary Table Analysis	356.3	342.6	13.7	3.8%	340.6	15.7	4.4%	336.6	19.7	5.5%	332.7	23.6	6.6%	328.7	27.6	7.7%	324.7	31.6	8.9%
ME 4	35 53 19	2020	Dry	November	Used in Summary Table Analysis	321.3	310.5	10.8	3.4%	308.9	12.3	3.8%	305.8	15.5	4.8%	302.7	18.6	5.8%	299.5	21.7	6.8%	296.4	24.9	7.7%
ME 4	35 53 19	2020	Dry	December	--	13,344.9	13,335.6	9.3	0.1%	13,333.3	11.6	0.1%	13,331.0	13.9	0.1%	13,328.7	16.2	0.1%	13,325.2	19.7	0.1%	13,322.9	22.0	0.2%
ME 4	35 53 19	2020	Dry	January	--	22,377.3	22,368.1	9.3	0.0%	22,366.9	10.4	0.0%	22,364.6	12.7	0.1%	22,362.3	15.0	0.1%	22,358.8	18.5	0.1%	22,356.5	20.8	0.1%
ME 4	35 53 19	2020	Dry	February	--	7,416.4	7,408.4	8.0	0.1%	7,407.3	9.1	0.1%	7,405.0	11.5	0.2%	7,402.5	13.9	0.2%	7,400.2	16.2	0.2%	7,397.9	18.5	0.2%
ME 4	35 53 19	2020	Dry	March	--	7,252.1	7,244.6	7.5	0.1%	7,243.5	8.6	0.1%	7,241.3	10.8	0.1%	7,239.0	13.1	0.2%	7,236.8	15.3	0.2%	7,234.6	17.5	0.2%
ME 4	35 53 19	2020	Dry	April	--	5,491.7	5,476.2	15.5	0.3%	5,474.0	17.7	0.3%	5,469.4	22.2	0.4%	5,464.9	26.7	0.5%	5,460.4	31.3	0.6%	5,455.9	35.8	0.7%
ME 4	35 53 19	2020	Dry	May	--	7,388.2	7,369.6	18.6	0.3%	7,366.9	21.3	0.3%	7,361.6	26.6	0.4%	7,356.1	32.1	0.4%	7,350.7	37.5	0.5%	7,345.4	42.8	0.6%
ME 4	35 53 19	2020	Dry	June	--	2,104.3	2,079.9	24.4	1.2%	2,076.4	27.9	1.3%	2,069.8	34.5	1.6%	2,063.2	41.1	2.0%	2,056.5	47.8	2.3%	2,049.9	54.4	2.6%
ME 4	35 53 19	2020	Dry	July	--	797.0	773.0	24.0	3.0%	769.5	27.4	3.4%	762.7	34.3	4.3%	755.8	41.1	5.2%	749.0	48.0	6.0%	742.2	54.8	6.9%
ME 4	35 53 19	2020	Dry	August	--	399.7	376.0	23.6	5.9%	372.7	27.0	6.8%	365.9	33.8	8.4%	359.2	40.5	10.1%	352.4	47.2	11.8%	345.7	54.0	13.5%
ME 4	35 53 19	2020	Dry	September	Used in Summary Table Analysis	249.0	227.9	21.1	8.5%	224.8	24.1	9.7%	218.0	31.0	12.5%	211.6	37.3	15.0%	205.1	43.9	17.6%	198.7	50.3	20.2%
ME 5	33 52 21	2000	Above Normal	October	Used in Summary Table Analysis	821.6	806.9	14.7	1.8%	804.8	16.8	2.0%	800.6	20.9	2.5%	796.4	25.2	3.1%	792.1	29.5	3.6%	787.9	33.7	4.1%
ME 5	33 52 21	2000	Above Normal	November	Used in Summary Table Analysis	12,211.8	12,199.1	12.7	0.1%	12,197.9	13.9	0.1%	12,194.4	17.4	0.1%	12,191.0	20.8	0.2%	12,187.5	24.3	0.2%	12,184.0	27.8	0.2%
ME 5	33 52 21	2000	Above Normal	December	--	10,860.0	10,850.0	10.0	0.1%	10,848.6	11.3	0.1%	10,845.7	14.2	0.1%	10,842.7	17.2	0.2%	10,839.7	20.3	0.2%	10,836.8	23.1	0.2%
ME 5	33 52 21	2000	Above Normal	January	--	28,731.5	28,722.2	9.3	0.0%	28,721.1	10.4	0.0%	28,718.8	12.7	0.0%	28,715.3	16.2	0.1%	28,713.0	18.5	0.1%	28,710.6	20.8	0.1%
ME 5	33 52 21	2000	Above Normal	February	--	37,142.4	37,134.3	8.1	0.0%	37,133.1	9.3	0.0%	37,130.8	11.6	0.0%	37,128.5	13.9	0.0%	37,125.0	17.4	0.0%	37,122.7	19.7	0.1%
ME 5	33 52 21	2000	Above Normal	March	--	18,347.2	18,339.1	8.1	0.0%	18,338.0	9.3	0.1%	18,335.6	11.6	0.1%	18,334.5	12.7	0.1%	18,332.2	15.0	0.1%	18,329.9	17.4	0.1%
ME 5	33 52 21	2000	Above Normal	April	--	12,338.0	12,331.0	6.9	0.1%	12,329.9	8.1	0.1%	12,327.5	10.4	0.1%	12,325.2	12.7	0.1%	12,322.9	15.0	0.1%	12,320.6	17.4	0.1%
ME 5	33 52 21	2000	Above Normal	May	--	7,114.4	7,099.1	15.3	0.2%	7,096.9	17.5	0.2%	7,092.5	21.9	0.3%	7,088.1	26.3	0.4%	7,083.6	30.8	0.4%	7,079.2	35.2	0.5%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 52 21	2000	Above Normal	June	--	2,619.0	2,596.2	22.8	0.9%	2,592.9	26.0	1.0%	2,586.5	32.5	1.2%	2,580.0	39.0	1.5%	2,573.5	45.5	1.7%	2,567.0	52.0	2.0%
ME 5	33 52 21	2000	Above Normal	July	--	995.4	974.6	20.8	2.1%	971.6	23.8	2.4%	965.7	29.7	3.0%	959.8	35.6	3.6%	953.9	41.5	4.2%	948.0	47.4	4.8%
ME 5	33 52 21	2000	Above Normal	August	--	525.8	506.1	19.6	3.7%	503.3	22.4	4.3%	497.8	28.0	5.3%	492.2	33.6	6.4%	486.6	39.1	7.4%	481.0	44.7	8.5%
ME 5	33 52 21	2000	Above Normal	September	Used in Summary Table Analysis	298.7	281.2	17.4	5.8%	278.7	19.9	6.7%	273.7	24.9	8.3%	268.8	29.9	10.0%	263.8	34.9	11.7%	258.8	39.8	13.3%
ME 5	33 52 21	2001	Dry	October	Used in Summary Table Analysis	3,836.8	3,822.5	14.4	0.4%	3,820.4	16.4	0.4%	3,816.2	20.6	0.5%	3,812.0	24.8	0.6%	3,807.9	28.9	0.8%	3,803.7	33.1	0.9%
ME 5	33 52 21	2001	Dry	November	Used in Summary Table Analysis	6,159.1	6,147.5	11.7	0.2%	6,145.8	13.3	0.2%	6,142.5	16.7	0.3%	6,139.1	20.0	0.3%	6,135.8	23.4	0.4%	6,132.3	26.9	0.4%
ME 5	33 52 21	2001	Dry	December	--	8,873.6	8,863.5	10.1	0.1%	8,862.2	11.5	0.1%	8,859.1	14.5	0.2%	8,856.3	17.4	0.2%	8,853.4	20.3	0.2%	8,850.3	23.3	0.3%
ME 5	33 52 21	2001	Dry	January	--	12,857.6	12,849.5	8.1	0.1%	12,847.2	10.4	0.1%	12,844.9	12.7	0.1%	12,842.6	15.0	0.1%	12,840.3	17.4	0.1%	12,836.8	20.8	0.2%
ME 5	33 52 21	2001	Dry	February	--	17,513.9	17,505.8	8.1	0.0%	17,504.6	9.3	0.1%	17,502.3	11.6	0.1%	17,500.0	13.9	0.1%	17,497.7	16.2	0.1%	17,495.4	18.5	0.1%
ME 5	33 52 21	2001	Dry	March	--	12,318.3	12,310.2	8.1	0.1%	12,309.0	9.3	0.1%	12,306.7	11.6	0.1%	12,304.4	13.9	0.1%	12,303.2	15.0	0.1%	12,300.9	17.4	0.1%
ME 5	33 52 21	2001	Dry	April	--	10,994.3	10,978.6	15.7	0.1%	10,976.3	18.1	0.2%	10,971.8	22.6	0.2%	10,967.2	27.1	0.2%	10,962.6	31.7	0.3%	10,958.1	36.2	0.3%
ME 5	33 52 21	2001	Dry	May	--	2,637.3	2,618.6	18.6	0.7%	2,616.0	21.3	0.8%	2,610.6	26.6	1.0%	2,605.2	32.1	1.2%	2,599.9	37.4	1.4%	2,594.6	42.7	1.6%
ME 5	33 52 21	2001	Dry	June	--	2,662.6	2,637.2	25.5	1.0%	2,633.6	29.1	1.1%	2,626.4	36.2	1.4%	2,619.2	43.4	1.6%	2,612.0	50.6	1.9%	2,604.9	57.8	2.2%
ME 5	33 52 21	2001	Dry	July	--	720.1	696.1	24.0	3.3%	692.7	27.4	3.8%	685.9	34.2	4.7%	679.1	41.0	5.7%	672.3	47.8	6.6%	665.5	54.6	7.6%
ME 5	33 52 21	2001	Dry	August	--	175.3	151.9	23.4	13.4%	148.6	26.8	15.3%	141.9	33.4	19.1%	135.2	40.1	22.9%	128.6	46.8	26.7%	121.9	53.4	30.5%
ME 5	33 52 21	2001	Dry	September	Used in Summary Table Analysis	98.5	77.5	21.0	21.3%	74.5	24.0	24.4%	68.5	30.0	30.5%	62.5	36.0	36.5%	56.5	42.0	42.6%	50.5	48.0	48.7%
ME 5	33 52 21	2002	Below Normal	October	Used in Summary Table Analysis	268.6	250.9	17.7	6.6%	248.4	20.2	7.5%	243.3	25.3	9.4%	238.2	30.4	11.3%	233.2	35.4	13.2%	228.1	40.5	15.1%
ME 5	33 52 21	2002	Below Normal	November	Used in Summary Table Analysis	12,072.9	12,059.0	13.9	0.1%	12,056.7	16.2	0.1%	12,052.1	20.8	0.2%	12,048.6	24.3	0.2%	12,045.1	27.8	0.2%	12,040.5	32.4	0.3%
ME 5	33 52 21	2002	Below Normal	December	--	35,821.8	35,810.2	11.6	0.0%	35,807.9	13.9	0.0%	35,804.4	17.4	0.0%	35,800.9	20.8	0.1%	35,797.5	24.3	0.1%	35,794.0	27.8	0.1%
ME 5	33 52 21	2002	Below Normal	January	--	30,965.3	30,953.7	11.6	0.0%	30,952.5	12.7	0.0%	30,949.1	16.2	0.1%	30,946.8	18.5	0.1%	30,943.3	22.0	0.1%	30,939.8	25.5	0.1%
ME 5	33 52 21	2002	Below Normal	February	--	24,729.2	24,719.9	9.3	0.0%	24,717.6	11.6	0.0%	24,715.3	13.9	0.1%	24,713.0	16.2	0.1%	24,709.5	19.7	0.1%	24,707.2	22.0	0.1%
ME 5	33 52 21	2002	Below Normal	March	--	17,819.4	17,810.2	9.3	0.1%	17,809.0	10.4	0.1%	17,806.7	12.7	0.1%	17,803.2	16.2	0.1%	17,800.9	18.5	0.1%	17,798.6	20.8	0.1%
ME 5	33 52 21	2002	Below Normal	April	--	9,940.0	9,924.2	15.9	0.2%	9,921.9	18.2	0.2%	9,917.4	22.7	0.2%	9,912.7	27.3	0.3%	9,908.2	31.8	0.3%	9,903.6	36.5	0.4%
ME 5	33 52 21	2002	Below Normal	May	--	3,324.7	3,305.9	18.8	0.6%	3,303.2	21.4	0.6%	3,297.9	26.7	0.8%	3,292.6	32.1	1.0%	3,287.2	37.5	1.1%	3,281.7	42.9	1.3%
ME 5	33 52 21	2002	Below Normal	June	--	856.5	835.3	21.2	2.5%	832.2	24.2	2.8%	826.2	30.3	3.5%	820.2	36.3	4.2%	814.2	42.3	4.9%	808.2	48.3	5.6%
ME 5	33 52 21	2002	Below Normal	July	--	365.3	343.7	21.6	5.9%	340.6	24.7	6.7%	334.5	30.8	8.4%	328.3	37.0	10.1%	322.2	43.1	11.8%	316.0	49.2	13.5%
ME 5	33 52 21	2002	Below Normal	August	--	230.6	210.2	20.3	8.8%	207.3	23.3	10.1%	201.5	29.1	12.6%	195.7	34.9	15.1%	189.9	40.7	17.6%	184.1	46.5	20.2%
ME 5	33 52 21	2002	Below Normal	September	Used in Summary Table Analysis	167.2	148.0	19.3	11.5%	145.2	22.0	13.2%	139.7	27.5	16.5%	134.2	33.1	19.8%	128.7	38.6	23.1%	123.1	44.1	26.4%
ME 5	33 52 21	2003	Wet	October	Used in Summary Table Analysis	132.1	116.3	15.8	12.0%	114.0	18.1	13.7%	109.5	22.6	17.1%	104.9	27.2	20.6%	100.3	31.8	24.1%	95.8	36.4	27.5%
ME 5	33 52 21	2003	Wet	November	Used in Summary Table Analysis	900.6	887.9	12.7	1.4%	886.0	14.5	1.6%	882.3	18.3	2.0%	878.6	22.0	2.4%	874.9	25.6	2.8%	871.3	29.3	3.3%
ME 5	33 52 21	2003	Wet	December	--	57,149.3	57,137.7	11.6	0.0%	57,136.6	12.7	0.0%	57,133.1	16.2	0.0%	57,129.6	19.7	0.0%	57,126.2	23.1	0.0%	57,122.7	26.6	0.0%
ME 5	33 52 21	2003	Wet	January	--	31,596.1	31,586.8	9.3	0.0%	31,584.5	11.6	0.0%	31,582.2	13.9	0.0%	31,578.7	17.4	0.1%	31,576.4	19.7	0.1%	31,572.9	23.1	0.1%
ME 5	33 52 21	2003	Wet	February	--	20,387.7	20,378.5	9.3	0.0%	20,377.3	10.4	0.1%	20,375.0	12.7	0.1%	20,372.7	15.0	0.1%	20,370.4	17.4	0.1%	20,366.9	20.8	0.1%
ME 5	33 52 21	2003	Wet	March	--	24,088.0	24,079.9	8.1	0.0%	24,078.7	9.3	0.0%	24,075.2	12.7	0.1%	24,072.9	15.0	0.1%	24,070.6	17.4	0.1%	24,068.3	19.7	0.1%
ME 5	33 52 21	2003	Wet	April	--	43,048.6	43,040.5	8.1	0.0%	43,039.4	9.3	0.0%	43,037.0	11.6	0.0%	43,034.7	13.9	0.0%	43,032.4	16.2	0.0%	43,030.1	18.5	0.0%
ME 5	33 52 21	2003	Wet	May	--	12,240.7	12,224.5	16.2	0.1%	12,222.2	18.5	0.2%	12,218.8	22.0	0.2%	12,214.1	26.6	0.2%	12,209.5	31.3	0.3%	12,204.9	35.9	0.3%
ME 5	33 52 21	2003	Wet	June	--	3,170.3	3,149.9	20.4	0.6%	3,147.0	23.3	0.7%	3,141.3	28.9	0.9%	3,135.5	34.7	1.1%	3,129.9	40.4	1.3%	3,124.2	46.1	1.5%
ME 5	33 52 21	2003	Wet	July	--	1,478.6	1,457.2	21.4	1.4%	1,454.2	24.4	1.7%	1,448.0	30.6	2.1%	1,442.0	36.6	2.5%	1,435.9	42.7	2.9%	1,429.7	48.8	3.3%
ME 5	33 52 21	2003	Wet	August	--	764.4	743.6	20.8	2.7%	740.6	23.8	3.1%	734.7	29.7	3.9%	728.8	35.6	4.7%	722.8	41.5	5.4%	716.8	47.6	6.2%
ME 5	33 52 21	2003	Wet	September	Used in Summary Table Analysis	461.9	444.1	17.8	3.9%	441.5	20.4	4.4%	436.4	25.5	5.5%	431.3	30.6	6.6%	426.2	35.6	7.7%	421.1	40.7	8.8%
ME 5	33 52 21	2004	Wet	October	Used in Summary Table Analysis	328.7	313.9	14.7	4.5%	311.8	16.9	5.1%	307.6	21.1	6.4%	303.3	25.4	7.7%	299.1	29.6	9.0%	294.8	33.9	10.3%
ME 5	33 52 21	2004	Wet	November	Used in Summary Table Analysis	5,841.8	5,829.9	11.9	0.2%	5,828.1	13.7	0.2%	5,824.7	17.1	0.3%	5,821.2	20.6	0.4%	5,817.7	24.1	0.4%	5,814.1	27.7	0.5%
ME 5	33 52 21	2004	Wet	December	--	36,485.0	36,474.5	10.4	0.0%	36,473.4	11.6	0.0%	36,469.9	15.0	0.0%	36,466.4	18.5	0.1%	36,464.1	20.8	0.1%	36,460.6	24.3	0.1%
ME 5	33 52 21	2004	Wet	January	--	31,591.4	31,582.2	9.3	0.0%	31,581.0	10.4	0.0%	31,577.5	13.9	0.0%	31,575.2	16.2	0.1%	31,572.9	18.5	0.1%	31,569.4	22.0	0.1%
ME 5	33 52 21	2004	Wet	February	--	38,349.5	38,340.3	9.3	0.0%	38,339.1	10.4	0.0%	38,336.8	12.7	0.0%	38,334.5	15.0	0.0%	38,332.2	17.4	0.0%	38,328.7	20.8	0.1%
ME 5	33 52 21	2004	Wet	March	--	16,542.8	16,534.7	8.1	0.0%	16,533.6	9.3	0.1%	16,531.3	11.6	0.1%	16,528.9	13.9	0.1%	16,526.6	16.2	0.1%	16,524.3	18.5	0.1%
ME 5	33 52 21	2004	Wet	April	--	9,464.4	9,457.1	7.3	0.1%	9,455.9	8.4	0.1%	9,453.7	10.6	0.1%	9,451.6	12.7	0.1%	9,449.3	15.0	0.2%	9,447.1	17.2	0.2%
ME 5	33 52 21	2004	Wet	May	--	3,431.4	3,416.0	15.4	0.4%	3,413.7	17.7	0.5%	3,409.3	22.1	0.6%	3,404.9	26.5	0.8%	3,400.3	31.0	0.9%	3,395.9	35.4	1.0%
ME 5	33 52 21	2004	Wet	June	--	694.3	674.9	19.4	2.8%	672.1	22.2	3.2%	666.6	27.7	4.0%	661.1	33.2	4.8%	655.6	38.8	5.6%	650.0	44.3	6.4%
ME 5	33 52 21	2004	Wet	July	--	359.7	338.8	20.9	5.8%	335.8	23.9	6.7%	329.8	29.9	8.3%	323.8	35.9	10.0%	317.9	41.8	11.6%	311.9	47.8	13.3%
ME 5	33 52 21	2004	Wet	August	--	228.6	208.8	19.8	8.7%	205.9	22.7	9.9%	200.3	28.3	12.4%	194.6	34.0	14.9%	188.9	39.6	17.3%	183.3	45.3	19.8%
ME 5	33 52 21	2004	Wet	September	Used in Summary Table Analysis	165.4	146.5	18.8	11.4%	143.8	21.5	13.0%	138.4	26.9	16.3%	133.0	32.3	19.6%	127.6	37.8	22.8%	122.2	43.2	26.1%
ME 5	33 52 21	2005	Above Normal	October	Used in Summary Table Analysis	7,733.0	7,717.9	15.0	0.2%	7,715.9	17.1	0.2%	7,711.5	21.5	0.3%	7,707.2	25.8	0.3%	7,702.8	30.2	0.4%	7,698.5	34.5	0.4%
ME 5	33 52 21	2005	Above Normal	November	Used in Summary Table Analysis	2,263.8	2,252.0	11.8	0.5%	2,250.2	13.5	0.6%	2,246.8	17.0	0.8%	2,243.4	20.4	0.9%	2,239.9	23.8	1.1%	2,236.6	27.2	1.2%
ME 5	33 52 21	2005	Above Normal	December	--	21,173.6	21,163.2	10.4	0.0%	21,162.0	11.6	0.1%	21,158.6	15.0	0.1%	21,156.3	17.4	0.1%	21,152.8	20.8	0.1%	21,149.3	24.3	0.1%
ME 5	33 52 21	2005	Above Normal	January	--	22,500.0	22,490.7	9.3	0.0%	22,488.4	11.6	0.1%	22,486.1	13.9	0.1%	22,483.8	16.2	0.1%	22,481.5	18.5	0.1%	22,478.0	22.0	0.1%
ME 5	33 52 21	2005	Above Normal	February	--	14,031.3	14,023.1	8.1	0.1%	14,022.0	9.3	0.1%	14,019.7	11.6	0.1%	14,016.2	15.0	0.1%	14,013.9	17.4	0.1%	14,011.6	19.7	0.1%
ME 5	33 52 21	2005	Above Normal	March	--	28,653.9	28,645.8	8.1	0.0%	28,644.7	9.3	0.0%	28,643.5	10.4	0.0%	28,641.2	12.7	0.0%	28,638.9	15.0	0.1%	28,636.6	17.4	0.1%
ME 5	33 52 21	2005	Above Normal	April	--	21,502.3	21,494.2	8.1	0.0%	21,493.1	9.3	0.0%	21,490.7	11.6	0.1%	21,488.4	13.9	0.1%	21,487.3	15.0	0.1%	21,485.0	17.4	0.1%
ME 5	33 52 21	2005	Above Normal	May	--	19,637.7	19,622.7	15.0	0.1%	19,620.4	17.4	0.1%	19,615.7	22.0	0.1%	19,611.1	26.6	0.1%	19,606.5	31.3	0.2%	19,601.9	35.9	0.2%
ME 5	33 52 21	2005	Above Normal	June	--	15,952.5	15,929.4	23.1	0.1%	15,925.9	26.6	0.2%	15,919.0	33.6	0.2%	15,912.0	40.5	0.3%	15,906.3	46.3	0.3%	15,899.3	53.2	0.3%
ME 5	33 52 21	2005	Above Normal	July	--	2,864.6	2,842.9	21.6	0.8%	2,839.8	24.8	0.9%	2,833.7	30.9	1.1%	2,827.4	37.2	1.3%	2,821.3	43.3	1.5%	2,815.2	49.4	1.7%
ME 5	33 52 21	2005	Above Normal	August	--	987.2	967.6	19.7	2.0%	964.7	22.5	2.3%	959.1	28.1	2.8%	953.5	33.7	3.4%	947.9	39.3	4.0%	942.3	44.9	4.6%
ME 5	33 52 21	2005	Above Normal	September	Used in Summary Table Analysis	528.8	511.3	17.5	3.3%	508.8	20.0	3.8%	503.8	25.0	4.7%	498.8	30.0	5.7%	493.8	34.9	6.6%	488.8	39.9	7.6%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 52 21	2006	Wet	October	Used in Summary Table Analysis	639.2	625.0	14.2	2.2%	623.0	16.3	2.5%	618.9	20.4	3.2%	614.8	24.4	3.8%	610.7	28.5	4.5%	606.6	32.6	5.1%
ME 5	33 52 21	2006	Wet	November	Used in Summary Table Analysis	9,373.0	9,361.8	11.2	0.1%	9,360.2	12.8	0.1%	9,356.9	16.1	0.2%	9,353.7	19.3	0.2%	9,350.3	22.7	0.2%	9,347.1	25.9	0.3%
ME 5	33 52 21	2006	Wet	December	--	43,719.9	43,709.5	10.4	0.0%	43,708.3	11.6	0.0%	43,704.9	15.0	0.0%	43,702.5	17.4	0.0%	43,699.1	20.8	0.0%	43,695.6	24.3	0.1%
ME 5	33 52 21	2006	Wet	January	--	46,497.7	46,488.4	9.3	0.0%	46,487.3	10.4	0.0%	46,483.8	13.9	0.0%	46,481.5	16.2	0.0%	46,479.2	18.5	0.0%	46,475.7	22.0	0.0%
ME 5	33 52 21	2006	Wet	February	--	26,703.7	26,695.6	8.1	0.0%	26,694.4	9.3	0.0%	26,692.1	11.6	0.0%	26,689.8	13.9	0.1%	26,687.5	16.2	0.1%	26,685.2	18.5	0.1%
ME 5	33 52 21	2006	Wet	March	--	47,316.0	47,307.9	8.1	0.0%	47,306.7	9.3	0.0%	47,305.6	10.4	0.0%	47,303.2	12.7	0.0%	47,300.9	15.0	0.0%	47,298.6	17.4	0.0%
ME 5	33 52 21	2006	Wet	April	--	30,489.6	30,481.5	8.1	0.0%	30,481.5	8.1	0.0%	30,479.2	10.4	0.0%	30,476.9	12.7	0.0%	30,474.5	15.0	0.0%	30,472.2	17.4	0.1%
ME 5	33 52 21	2006	Wet	May	--	14,243.1	14,232.6	10.4	0.1%	14,231.5	11.6	0.1%	14,229.2	13.9	0.1%	14,225.7	17.4	0.1%	14,223.4	19.7	0.1%	14,221.1	22.0	0.2%
ME 5	33 52 21	2006	Wet	June	--	3,550.9	3,531.6	19.3	0.5%	3,528.8	22.1	0.6%	3,523.4	27.5	0.8%	3,517.9	33.0	0.9%	3,512.5	38.4	1.1%	3,507.1	43.9	1.2%
ME 5	33 52 21	2006	Wet	July	--	1,284.1	1,263.5	20.6	1.6%	1,260.6	23.5	1.8%	1,254.7	29.4	2.3%	1,248.8	35.3	2.7%	1,243.1	41.1	3.2%	1,237.3	46.9	3.7%
ME 5	33 52 21	2006	Wet	August	--	670.3	650.1	20.2	3.0%	647.3	23.0	3.4%	641.6	28.8	4.3%	635.8	34.5	5.1%	630.1	40.2	6.0%	624.4	45.9	6.8%
ME 5	33 52 21	2006	Wet	September	Used in Summary Table Analysis	430.8	413.1	17.7	4.1%	410.6	20.3	4.7%	405.5	25.3	5.9%	400.5	30.3	7.0%	395.4	35.4	8.2%	390.3	40.5	9.4%
ME 5	33 52 21	2007	Above Normal	October	Used in Summary Table Analysis	278.3	263.9	14.5	5.2%	261.8	16.5	5.9%	257.7	20.7	7.4%	253.5	24.8	8.9%	249.3	29.0	10.4%	245.1	33.2	11.9%
ME 5	33 52 21	2007	Above Normal	November	Used in Summary Table Analysis	8,725.7	8,713.9	11.8	0.1%	8,712.3	13.4	0.2%	8,708.8	16.9	0.2%	8,705.4	20.3	0.2%	8,702.0	23.7	0.3%	8,698.5	27.2	0.3%
ME 5	33 52 21	2007	Above Normal	December	--	20,531.3	20,520.8	10.4	0.1%	20,518.5	12.7	0.1%	20,516.2	15.0	0.1%	20,512.7	18.5	0.1%	20,509.3	22.0	0.1%	20,506.9	24.3	0.1%
ME 5	33 52 21	2007	Above Normal	January	--	10,282.8	10,273.6	9.1	0.1%	10,272.3	10.4	0.1%	10,269.7	13.1	0.1%	10,267.0	15.7	0.2%	10,264.4	18.4	0.2%	10,261.7	21.1	0.2%
ME 5	33 52 21	2007	Above Normal	February	--	30,706.0	30,697.9	8.1	0.0%	30,696.8	9.3	0.0%	30,694.4	11.6	0.0%	30,692.1	13.9	0.0%	30,688.7	17.4	0.1%	30,686.3	19.7	0.1%
ME 5	33 52 21	2007	Above Normal	March	--	13,123.8	13,115.7	8.1	0.1%	13,114.6	9.3	0.1%	13,112.3	11.6	0.1%	13,110.0	13.9	0.1%	13,107.6	16.2	0.1%	13,105.3	18.5	0.1%
ME 5	33 52 21	2007	Above Normal	April	--	11,555.8	11,540.6	15.2	0.1%	11,538.4	17.4	0.2%	11,534.1	21.6	0.2%	11,529.7	26.0	0.2%	11,525.3	30.4	0.3%	11,520.9	34.8	0.3%
ME 5	33 52 21	2007	Above Normal	May	--	4,149.2	4,131.1	18.1	0.4%	4,128.6	20.6	0.5%	4,123.4	25.8	0.6%	4,118.3	30.9	0.7%	4,113.1	36.1	0.9%	4,107.9	41.3	1.0%
ME 5	33 52 21	2007	Above Normal	June	--	1,505.2	1,483.6	21.6	1.4%	1,480.4	24.8	1.6%	1,474.3	30.9	2.1%	1,468.1	37.2	2.5%	1,461.9	43.3	2.9%	1,455.8	49.4	3.3%
ME 5	33 52 21	2007	Above Normal	July	--	498.9	477.0	22.0	4.4%	473.9	25.1	5.0%	467.6	31.3	6.3%	461.4	37.5	7.5%	455.2	43.7	8.8%	449.0	49.9	10.0%
ME 5	33 52 21	2007	Above Normal	August	--	226.7	206.8	19.8	8.8%	204.0	22.7	10.0%	198.3	28.3	12.5%	192.7	34.0	15.0%	187.0	39.6	17.5%	181.4	45.3	20.0%
ME 5	33 52 21	2007	Above Normal	September	Used in Summary Table Analysis	154.3	135.5	18.8	12.2%	132.8	21.5	13.9%	127.4	26.9	17.4%	122.1	32.2	20.9%	116.7	37.6	24.4%	111.3	43.0	27.9%
ME 5	33 52 21	2008	Dry	October	Used in Summary Table Analysis	3,455.2	3,439.8	15.4	0.4%	3,437.6	17.6	0.5%	3,433.2	22.0	0.6%	3,428.8	26.4	0.8%	3,424.3	30.9	0.9%	3,419.9	35.3	1.0%
ME 5	33 52 21	2008	Dry	November	Used in Summary Table Analysis	3,295.4	3,283.4	11.9	0.4%	3,281.7	13.7	0.4%	3,278.2	17.1	0.5%	3,274.8	20.6	0.6%	3,271.3	24.1	0.7%	3,267.8	27.5	0.8%
ME 5	33 52 21	2008	Dry	December	--	23,283.6	23,273.1	10.4	0.0%	23,272.0	11.6	0.0%	23,268.5	15.0	0.1%	23,266.2	17.4	0.1%	23,262.7	20.8	0.1%	23,259.3	24.3	0.1%
ME 5	33 52 21	2008	Dry	January	--	37,681.7	37,671.3	10.4	0.0%	37,670.1	11.6	0.0%	37,667.8	13.9	0.0%	37,664.4	17.4	0.0%	37,662.0	19.7	0.1%	37,658.6	23.1	0.1%
ME 5	33 52 21	2008	Dry	February	--	26,305.6	26,297.5	8.1	0.0%	26,296.3	9.3	0.0%	26,294.0	11.6	0.0%	26,291.7	13.9	0.1%	26,289.4	16.2	0.1%	26,287.0	18.5	0.1%
ME 5	33 52 21	2008	Dry	March	--	11,810.2	11,803.2	6.9	0.1%	11,802.1	8.1	0.1%	11,799.8	10.4	0.1%	11,797.5	12.7	0.1%	11,795.1	15.0	0.1%	11,792.8	17.4	0.1%
ME 5	33 52 21	2008	Dry	April	--	9,029.7	9,014.4	15.4	0.2%	9,012.2	17.6	0.2%	9,007.8	22.0	0.2%	9,003.2	26.5	0.3%	8,998.8	30.9	0.3%	8,994.4	35.3	0.4%
ME 5	33 52 21	2008	Dry	May	--	1,358.4	1,341.9	16.6	1.2%	1,339.5	19.0	1.4%	1,334.7	23.7	1.7%	1,330.1	28.4	2.1%	1,325.6	32.9	2.4%	1,321.1	37.4	2.8%
ME 5	33 52 21	2008	Dry	June	--	440.9	417.3	23.7	5.4%	413.9	27.0	6.1%	407.2	33.7	7.7%	400.5	40.4	9.2%	393.8	47.1	10.7%	387.2	53.8	12.2%
ME 5	33 52 21	2008	Dry	July	--	258.9	235.4	23.5	9.1%	232.1	26.8	10.4%	225.4	33.5	12.9%	218.7	40.2	15.5%	212.0	46.9	18.1%	205.4	53.5	20.7%
ME 5	33 52 21	2008	Dry	August	--	182.5	159.6	22.9	12.5%	156.4	26.2	14.3%	149.8	32.7	17.9%	143.3	39.2	21.5%	136.8	45.7	25.1%	130.3	52.2	28.6%
ME 5	33 52 21	2008	Dry	September	Used in Summary Table Analysis	144.1	122.1	22.1	15.3%	118.9	25.2	17.5%	112.6	31.5	21.9%	106.3	37.8	26.2%	100.0	44.1	30.6%	93.8	50.4	35.0%
ME 5	33 52 21	2009	Critical	October	Used in Summary Table Analysis	928.7	911.2	17.5	1.9%	908.6	20.1	2.2%	903.6	25.1	2.7%	898.5	30.2	3.3%	893.6	35.1	3.8%	888.6	40.2	4.3%
ME 5	33 52 21	2009	Critical	November	Used in Summary Table Analysis	5,550.2	5,536.6	13.7	0.2%	5,534.6	15.6	0.3%	5,530.7	19.6	0.4%	5,526.7	23.5	0.4%	5,522.8	27.4	0.5%	5,518.8	31.5	0.6%
ME 5	33 52 21	2009	Critical	December	--	12,246.5	12,235.0	11.6	0.1%	12,233.8	12.7	0.1%	12,230.3	16.2	0.1%	12,226.9	19.7	0.2%	12,223.4	23.1	0.2%	12,219.9	26.6	0.2%
ME 5	33 52 21	2009	Critical	January	--	8,819.6	8,809.0	10.5	0.1%	8,807.4	12.2	0.1%	8,804.4	15.2	0.2%	8,801.3	18.3	0.2%	8,798.1	21.4	0.2%	8,795.0	24.5	0.3%
ME 5	33 52 21	2009	Critical	February	--	22,682.9	22,673.6	9.3	0.0%	22,672.5	10.4	0.0%	22,669.0	13.9	0.1%	22,666.7	16.2	0.1%	22,664.4	18.5	0.1%	22,660.9	22.0	0.1%
ME 5	33 52 21	2009	Critical	March	--	21,172.5	21,164.4	8.1	0.0%	21,162.0	10.4	0.0%	21,159.7	12.7	0.1%	21,157.4	15.0	0.1%	21,155.1	17.4	0.1%	21,152.8	19.7	0.1%
ME 5	33 52 21	2009	Critical	April	--	10,102.4	10,086.5	16.0	0.2%	10,084.1	18.3	0.2%	10,079.5	22.9	0.2%	10,074.9	27.5	0.3%	10,070.3	32.2	0.3%	10,065.6	36.8	0.4%
ME 5	33 52 21	2009	Critical	May	--	15,610.0	15,590.3	19.7	0.1%	15,586.8	23.1	0.1%	15,582.2	27.8	0.2%	15,576.4	33.6	0.2%	15,570.6	39.4	0.3%	15,564.8	45.1	0.3%
ME 5	33 52 21	2009	Critical	June	--	3,163.8	3,138.7	25.1	0.8%	3,135.1	28.7	0.9%	3,127.8	36.0	1.1%	3,120.6	43.2	1.4%	3,113.4	50.3	1.6%	3,106.3	57.5	1.8%
ME 5	33 52 21	2009	Critical	July	--	1,266.2	1,242.5	23.7	1.9%	1,239.0	27.2	2.1%	1,232.3	33.9	2.7%	1,225.6	40.6	3.2%	1,218.8	47.5	3.7%	1,212.2	54.1	4.3%
ME 5	33 52 21	2009	Critical	August	--	672.5	649.4	23.1	3.4%	646.1	26.3	3.9%	639.5	33.0	4.9%	633.0	39.5	5.9%	626.4	46.1	6.9%	619.8	52.6	7.8%
ME 5	33 52 21	2009	Critical	September	Used in Summary Table Analysis	393.4	372.7	20.7	5.3%	369.7	23.6	6.0%	363.8	29.6	7.5%	357.8	35.5	9.0%	351.9	41.4	10.5%	346.0	47.3	12.0%
ME 5	33 52 21	2010	Below Normal	October	Used in Summary Table Analysis	6,094.2	6,076.5	17.7	0.3%	6,074.0	20.3	0.3%	6,068.8	25.5	0.4%	6,063.7	30.6	0.5%	6,058.8	35.4	0.6%	6,053.7	40.5	0.7%
ME 5	33 52 21	2010	Below Normal	November	Used in Summary Table Analysis	8,316.9	8,302.8	14.1	0.2%	8,300.7	16.2	0.2%	8,296.6	20.3	0.2%	8,292.6	24.3	0.3%	8,288.4	28.5	0.3%	8,284.4	32.5	0.4%
ME 5	33 52 21	2010	Below Normal	December	--	12,409.7	12,398.1	11.6	0.1%	12,395.8	13.9	0.1%	12,392.4	17.4	0.1%	12,388.9	20.8	0.2%	12,385.4	24.3	0.2%	12,381.9	27.8	0.2%
ME 5	33 52 21	2010	Below Normal	January	--	36,421.3	36,409.7	11.6	0.0%	36,408.6	12.7	0.0%	36,405.1	16.2	0.0%	36,401.6	19.7	0.1%	36,399.3	22.0	0.1%	36,395.8	25.5	0.1%
ME 5	33 52 21	2010	Below Normal	February	--	27,297.5	27,287.0	10.4	0.0%	27,285.9	11.6	0.0%	27,283.6	13.9	0.1%	27,280.1	17.4	0.1%	27,277.8	19.7	0.1%	27,275.5	22.0	0.1%
ME 5	33 52 21	2010	Below Normal	March	--	28,881.9	28,873.8	8.1	0.0%	28,871.5	10.4	0.0%	28,869.2	12.7	0.0%	28,866.9	15.0	0.1%	28,864.6	17.4	0.1%	28,861.1	20.8	0.1%
ME 5	33 52 21	2010	Below Normal	April	--	40,098.4	40,090.3	8.1	0.0%	40,089.1	9.3	0.0%	40,086.8	11.6	0.0%	40,084.5	13.9	0.0%	40,081.0	17.4	0.0%	40,078.7	19.7	0.0%
ME 5	33 52 21	2010	Below Normal	May	--	20,334.5	20,318.3	16.2	0.1%	20,316.0	18.5	0.1%	20,311.3	23.1	0.1%	20,306.7	27.8	0.1%	20,302.1	32.4	0.2%	20,296.3	38.2	0.2%
ME 5	33 52 21	2010	Below Normal	June	--	9,402.8	9,378.7	24.1	0.3%	9,375.2	27.5	0.3%	9,368.5	34.3	0.4%	9,361.7	41.1	0.4%	9,355.0	47.8	0.5%	9,348.1	54.6	0.6%
ME 5	33 52 21	2010	Below Normal	July	--	1,457.6	1,435.6	22.0	1.5%	1,432.5	25.1	1.7%	1,426.2	31.5	2.2%	1,419.9	37.7	2.6%	1,413.5	44.1	3.0%	1,407.5	50.1	3.4%
ME 5	33 52 21	2010	Below Normal	August	--	573.4	553.2	20.3	3.5%	550.3	23.1	4.0%	544.5	28.9	5.0%	538.8	34.7	6.0%	533.0	40.5	7.1%	527.2	46.2	8.1%
ME 5	33 52 21	2010	Below Normal	September	Used in Summary Table Analysis	655.8	636.5	19.3	2.9%	633.7	22.1	3.4%	628.2	27.6	4.2%	622.7	33.1	5.0%	617.2	38.6	5.9%	611.6	44.2	6.7%
ME 5	33 52 21	2011	Wet	October	Used in Summary Table Analysis	9,676.0	9,661.3	14.7	0.2%	9,659.3	16.8	0.2%	9,655.1	20.9	0.2%	9,650.8	25.2	0.3%	9,646.5	29.5	0.3%	9,642.4	33.7	0.3%
ME 5	33 52 21	2011	Wet	November	Used in Summary Table Analysis	14,268.5	14,256.9	11.6	0.1%	14,254.6	13.9	0.1%	14,251.2	17.4	0.1%	14,247.7	20.8	0.1%	14,244.2	24.3	0.2%	14,240.7	27.8	0.2%
ME 5	33 52 21	2011	Wet	December	--	33,900.5	33,890.0	10.4	0.0%	33,888.9	11.6	0.0%	33,885.4	15.0	0.0%	33,883.1	17.4	0.1%	33,879.6	20.8	0.1%	33,877.3	23.1	0.1%
ME 5	33 52 21	2011	Wet	January	--	14,193.3	14,184.0	9.3	0.1%	14,182.9	10.4	0.1%	14,180.6	12.7	0.1%	14,177.1	16.2	0.1%	14,174.8	18.5	0.1%	14,172.5	20.8	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 52 21	2011	Wet	February	--	20,804.4	20,795.1	9.3	0.0%	20,794.0	10.4	0.1%	20,791.7	12.7	0.1%	20,789.4	15.0	0.1%	20,787.0	17.4	0.1%	20,784.7	19.7	0.1%
ME 5	33 52 21	2011	Wet	March	--	52,136.6	52,128.5	8.1	0.0%	52,127.3	9.3	0.0%	52,125.0	11.6	0.0%	52,122.7	13.9	0.0%	52,120.4	16.2	0.0%	52,118.1	18.5	0.0%
ME 5	33 52 21	2011	Wet	April	--	24,843.8	24,836.8	6.9	0.0%	24,835.6	8.1	0.0%	24,833.3	10.4	0.0%	24,831.0	12.7	0.1%	24,828.7	15.0	0.1%	24,826.4	17.4	0.1%
ME 5	33 52 21	2011	Wet	May	--	11,403.8	11,388.2	15.6	0.1%	11,385.9	17.9	0.2%	11,381.4	22.5	0.2%	11,376.9	27.0	0.2%	11,372.3	31.5	0.3%	11,367.8	36.0	0.3%
ME 5	33 52 21	2011	Wet	June	--	7,077.7	7,054.3	23.4	0.3%	7,050.9	26.7	0.4%	7,044.3	33.3	0.5%	7,037.7	39.9	0.6%	7,031.0	46.6	0.7%	7,024.4	53.2	0.8%
ME 5	33 52 21	2011	Wet	July	--	1,830.7	1,807.3	23.4	1.3%	1,803.9	26.7	1.5%	1,797.3	33.3	1.8%	1,790.6	40.0	2.2%	1,784.0	46.6	2.5%	1,777.3	53.4	2.9%
ME 5	33 52 21	2011	Wet	August	--	780.6	760.6	20.0	2.6%	757.7	22.8	2.9%	752.0	28.6	3.7%	746.3	34.2	4.4%	740.6	39.9	5.1%	735.0	45.6	5.8%
ME 5	33 52 21	2011	Wet	September	Used in Summary Table Analysis	437.2	419.0	18.2	4.2%	416.4	20.8	4.8%	411.2	26.0	6.0%	406.0	31.2	7.1%	400.8	36.4	8.3%	395.7	41.6	9.5%
ME 5	33 52 21	2012	Below Normal	October	Used in Summary Table Analysis	4,563.5	4,548.6	14.9	0.3%	4,546.4	17.1	0.4%	4,542.1	21.4	0.5%	4,537.8	25.7	0.6%	4,533.6	30.0	0.7%	4,529.3	34.3	0.8%
ME 5	33 52 21	2012	Below Normal	November	Used in Summary Table Analysis	8,283.0	8,271.1	11.9	0.1%	8,269.3	13.7	0.2%	8,265.9	17.1	0.2%	8,262.4	20.6	0.2%	8,258.9	24.1	0.3%	8,255.4	27.5	0.3%
ME 5	33 52 21	2012	Below Normal	December	--	5,203.0	5,192.8	10.2	0.2%	5,191.3	11.7	0.2%	5,188.4	14.6	0.3%	5,185.4	17.6	0.3%	5,182.4	20.6	0.4%	5,179.4	23.6	0.5%
ME 5	33 52 21	2012	Below Normal	January	--	20,245.4	20,236.1	9.3	0.0%	20,235.0	10.4	0.1%	20,232.6	12.7	0.1%	20,229.2	16.2	0.1%	20,226.9	18.5	0.1%	20,224.5	20.8	0.1%
ME 5	33 52 21	2012	Below Normal	February	--	18,250.0	18,240.7	9.3	0.1%	18,239.6	10.4	0.1%	18,237.3	12.7	0.1%	18,235.0	15.0	0.1%	18,232.6	17.4	0.1%	18,230.3	19.7	0.1%
ME 5	33 52 21	2012	Below Normal	March	--	45,577.5	45,569.4	8.1	0.0%	45,568.3	9.3	0.0%	45,566.0	11.6	0.0%	45,563.7	13.9	0.0%	45,560.2	17.4	0.0%	45,557.9	19.7	0.0%
ME 5	33 52 21	2012	Below Normal	April	--	26,914.4	26,906.3	8.1	0.0%	26,905.1	9.3	0.0%	26,902.8	11.6	0.0%	26,900.5	13.9	0.1%	26,898.1	16.2	0.1%	26,895.8	18.5	0.1%
ME 5	33 52 21	2012	Below Normal	May	--	7,495.6	7,480.1	15.5	0.2%	7,477.9	17.7	0.2%	7,473.4	22.2	0.3%	7,468.9	26.7	0.4%	7,464.4	31.3	0.4%	7,459.8	35.8	0.5%
ME 5	33 52 21	2012	Below Normal	June	--	5,536.7	5,513.0	23.7	0.4%	5,509.5	27.2	0.5%	5,502.8	33.9	0.6%	5,496.1	40.6	0.7%	5,489.4	47.3	0.9%	5,482.5	54.2	1.0%
ME 5	33 52 21	2012	Below Normal	July	--	2,236.9	2,214.4	22.6	1.0%	2,211.1	25.8	1.2%	2,204.6	32.3	1.4%	2,198.3	38.7	1.7%	2,191.8	45.1	2.0%	2,185.3	51.6	2.3%
ME 5	33 52 21	2012	Below Normal	August	--	391.2	372.9	18.3	4.7%	370.3	20.9	5.3%	365.1	26.1	6.7%	359.8	31.3	8.0%	354.6	36.6	9.3%	349.4	41.7	10.7%
ME 5	33 52 21	2012	Below Normal	September	Used in Summary Table Analysis	252.7	236.3	16.4	6.5%	234.0	18.7	7.4%	229.3	23.4	9.3%	224.7	28.0	11.1%	220.0	32.7	12.9%	215.4	37.3	14.8%
ME 5	33 52 21	2013	Below Normal	October	Used in Summary Table Analysis	1,926.5	1,912.2	14.4	0.7%	1,910.1	16.4	0.9%	1,906.0	20.5	1.1%	1,901.9	24.7	1.3%	1,897.8	28.7	1.5%	1,893.6	32.9	1.7%
ME 5	33 52 21	2013	Below Normal	November	Used in Summary Table Analysis	14,768.5	14,756.9	11.6	0.1%	14,755.8	12.7	0.1%	14,752.3	16.2	0.1%	14,748.8	19.7	0.1%	14,745.4	23.1	0.2%	14,741.9	26.6	0.2%
ME 5	33 52 21	2013	Below Normal	December	--	60,177.1	60,166.7	10.4	0.0%	60,164.4	12.7	0.0%	60,162.0	15.0	0.0%	60,158.6	18.5	0.0%	60,156.3	20.8	0.0%	60,152.8	24.3	0.0%
ME 5	33 52 21	2013	Below Normal	January	--	22,254.6	22,245.4	9.3	0.0%	22,244.2	10.4	0.0%	22,241.9	12.7	0.1%	22,239.6	15.0	0.1%	22,236.1	18.5	0.1%	22,233.8	20.8	0.1%
ME 5	33 52 21	2013	Below Normal	February	--	8,870.4	8,862.0	8.3	0.1%	8,860.9	9.5	0.1%	8,858.4	11.9	0.1%	8,856.0	14.4	0.2%	8,853.6	16.8	0.2%	8,851.0	19.3	0.2%
ME 5	33 52 21	2013	Below Normal	March	--	10,368.4	10,360.4	8.0	0.1%	10,359.3	9.1	0.1%	10,356.9	11.5	0.1%	10,354.5	13.9	0.1%	10,352.2	16.2	0.2%	10,349.9	18.5	0.2%
ME 5	33 52 21	2013	Below Normal	April	--	8,302.2	8,287.4	14.8	0.2%	8,285.3	16.9	0.2%	8,281.0	21.2	0.3%	8,276.7	25.5	0.3%	8,272.5	29.7	0.4%	8,268.2	34.0	0.4%
ME 5	33 52 21	2013	Below Normal	May	--	4,445.7	4,427.8	17.9	0.4%	4,425.1	20.6	0.5%	4,420.0	25.7	0.6%	4,414.8	30.9	0.7%	4,409.7	36.0	0.8%	4,404.5	41.2	0.9%
ME 5	33 52 21	2013	Below Normal	June	--	2,115.3	2,093.8	21.5	1.0%	2,090.6	24.7	1.2%	2,084.5	30.8	1.5%	2,078.4	36.9	1.7%	2,072.2	43.1	2.0%	2,066.1	49.2	2.3%
ME 5	33 52 21	2013	Below Normal	July	--	720.4	699.4	21.0	2.9%	696.4	24.0	3.3%	690.4	30.0	4.2%	684.5	35.9	5.0%	678.5	41.9	5.8%	672.6	47.8	6.6%
ME 5	33 52 21	2013	Below Normal	August	--	343.4	323.7	19.8	5.8%	320.8	22.6	6.6%	315.2	28.2	8.2%	309.5	33.9	9.9%	303.9	39.5	11.5%	298.3	45.2	13.1%
ME 5	33 52 21	2013	Below Normal	September	Used in Summary Table Analysis	4,808.8	4,788.3	20.5	0.4%	4,785.4	23.4	0.5%	4,779.6	29.2	0.6%	4,773.7	35.1	0.7%	4,767.9	40.9	0.8%	4,762.0	46.8	1.0%
ME 5	33 52 21	2014	Critical	October	Used in Summary Table Analysis	281.7	266.7	15.0	5.3%	264.5	17.2	6.1%	260.2	21.5	7.6%	255.9	25.8	9.2%	251.5	30.2	10.7%	247.2	34.5	12.3%
ME 5	33 52 21	2014	Critical	November	Used in Summary Table Analysis	1,550.2	1,538.1	12.2	0.8%	1,536.3	13.9	0.9%	1,532.9	17.4	1.1%	1,529.4	20.8	1.3%	1,525.8	24.4	1.6%	1,522.3	27.9	1.8%
ME 5	33 52 21	2014	Critical	December	--	1,597.0	1,586.5	10.5	0.7%	1,584.8	12.2	0.8%	1,581.8	15.2	0.9%	1,578.7	18.3	1.1%	1,575.7	21.3	1.3%	1,572.6	24.4	1.5%
ME 5	33 52 21	2014	Critical	January	--	2,833.9	2,824.5	9.4	0.3%	2,823.1	10.8	0.4%	2,820.5	13.4	0.5%	2,817.7	16.2	0.6%	2,814.9	19.0	0.7%	2,812.3	21.6	0.8%
ME 5	33 52 21	2014	Critical	February	--	15,789.4	15,781.3	8.1	0.1%	15,780.1	9.3	0.1%	15,777.8	11.6	0.1%	15,774.3	15.0	0.1%	15,772.0	17.4	0.1%	15,769.7	19.7	0.1%
ME 5	33 52 21	2014	Critical	March	--	31,533.6	31,525.5	8.1	0.0%	31,524.3	9.3	0.0%	31,522.0	11.6	0.0%	31,518.5	15.0	0.0%	31,516.2	17.4	0.1%	31,513.9	19.7	0.1%
ME 5	33 52 21	2014	Critical	April	--	13,005.8	12,989.6	16.2	0.1%	12,987.3	18.5	0.1%	12,982.6	23.1	0.2%	12,978.0	27.8	0.2%	12,973.4	32.4	0.2%	12,968.8	37.0	0.3%
ME 5	33 52 21	2014	Critical	May	--	5,197.9	5,178.9	19.0	0.4%	5,176.3	21.6	0.4%	5,170.8	27.1	0.5%	5,165.4	32.5	0.6%	5,160.0	38.0	0.7%	5,154.5	43.4	0.8%
ME 5	33 52 21	2014	Critical	June	--	1,202.0	1,176.0	25.9	2.2%	1,172.3	29.6	2.5%	1,165.0	36.9	3.1%	1,157.8	44.2	3.7%	1,150.4	51.5	4.3%	1,143.2	58.8	4.9%
ME 5	33 52 21	2014	Critical	July	--	548.6	524.6	24.0	4.4%	521.2	27.5	5.0%	514.3	34.3	6.3%	507.5	41.1	7.5%	500.6	48.0	8.7%	493.8	54.8	10.0%
ME 5	33 52 21	2014	Critical	August	--	351.4	328.4	23.0	6.6%	325.1	26.3	7.5%	318.6	32.9	9.4%	312.0	39.4	11.2%	305.4	46.0	13.1%	298.9	52.5	15.0%
ME 5	33 52 21	2014	Critical	September	Used in Summary Table Analysis	2,584.5	2,561.9	22.6	0.9%	2,558.7	25.8	1.0%	2,552.3	32.2	1.2%	2,545.8	38.7	1.5%	2,539.4	45.1	1.7%	2,532.9	51.6	2.0%
ME 5	33 52 21	2015	Dry	October	Used in Summary Table Analysis	11,403.5	11,385.5	17.9	0.2%	11,383.0	20.5	0.2%	11,378.0	25.5	0.2%	11,372.9	30.6	0.3%	11,368.1	35.4	0.3%	11,362.7	40.7	0.4%
ME 5	33 52 21	2015	Dry	November	Used in Summary Table Analysis	9,082.6	9,069.2	13.4	0.1%	9,067.4	15.3	0.2%	9,063.4	19.2	0.2%	9,059.6	23.0	0.3%	9,055.7	27.0	0.3%	9,051.9	30.8	0.3%
ME 5	33 52 21	2015	Dry	December	--	32,783.6	32,772.0	11.6	0.0%	32,769.7	13.9	0.0%	32,767.4	16.2	0.0%	32,763.9	19.7	0.1%	32,760.4	23.1	0.1%	32,756.9	26.6	0.1%
ME 5	33 52 21	2015	Dry	January	--	14,601.9	14,591.4	10.4	0.1%	14,590.3	11.6	0.1%	14,586.8	15.0	0.1%	14,584.5	17.4	0.1%	14,581.0	20.8	0.1%	14,578.7	23.1	0.2%
ME 5	33 52 21	2015	Dry	February	--	27,298.6	27,289.4	9.3	0.0%	27,288.2	10.4	0.0%	27,285.9	12.7	0.0%	27,282.4	16.2	0.1%	27,280.1	18.5	0.1%	27,277.8	20.8	0.1%
ME 5	33 52 21	2015	Dry	March	--	11,585.6	11,577.5	8.1	0.1%	11,576.4	9.3	0.1%	11,573.7	11.9	0.1%	11,571.3	14.4	0.1%	11,569.0	16.7	0.1%	11,566.7	19.0	0.2%
ME 5	33 52 21	2015	Dry	April	--	8,428.8	8,413.1	15.7	0.2%	8,410.8	18.1	0.2%	8,406.3	22.6	0.3%	8,401.7	27.1	0.3%	8,397.1	31.7	0.4%	8,392.6	36.2	0.4%
ME 5	33 52 21	2015	Dry	May	--	1,509.8	1,491.1	18.8	1.2%	1,488.4	21.4	1.4%	1,483.2	26.6	1.8%	1,477.8	32.1	2.1%	1,472.5	37.4	2.5%	1,467.0	42.8	2.8%
ME 5	33 52 21	2015	Dry	June	--	654.7	630.6	24.1	3.7%	627.2	27.5	4.2%	620.4	34.3	5.2%	613.6	41.1	6.3%	606.9	47.9	7.3%	600.2	54.6	8.3%
ME 5	33 52 21	2015	Dry	July	--	271.1	247.4	23.7	8.7%	244.1	27.0	10.0%	237.3	33.8	12.5%	230.5	40.6	15.0%	223.8	47.3	17.5%	217.1	54.0	19.9%
ME 5	33 52 21	2015	Dry	August	--	169.6	146.7	22.9	13.5%	143.4	26.2	15.5%	136.8	32.8	19.3%	130.2	39.4	23.2%	123.6	46.0	27.1%	117.1	52.5	31.0%
ME 5	33 52 21	2015	Dry	September	Used in Summary Table Analysis	123.4	102.9	20.6	16.7%	99.8	23.6	19.1%	93.4	30.1	24.4%	87.1	36.3	29.4%	80.7	42.8	34.7%	74.3	49.1	39.8%
ME 5	33 52 21	2016	Above Normal	October	Used in Summary Table Analysis	88.6	70.4	18.3	20.6%	67.5	21.2	23.9%	62.3	26.3	29.7%	57.0	31.6	35.7%	51.8	36.8	41.5%	46.9	41.8	47.1%
ME 5	33 52 21	2016	Above Normal	November	Used in Summary Table Analysis	3,904.4	3,890.9	13.5	0.3%	3,888.7	15.7	0.4%	3,884.7	19.7	0.5%	3,880.6	23.8	0.6%	3,876.4	28.0	0.7%	3,872.2	32.2	0.8%
ME 5	33 52 21	2016	Above Normal	December	--	36,814.8	36,802.1	12.7	0.0%	36,800.9	13.9	0.0%	36,797.5	17.4	0.0%	36,792.8	22.0	0.1%	36,789.4	25.5	0.1%	36,785.9	28.9	0.1%
ME 5	33 52 21	2016	Above Normal	January	--	57,519.7	57,508.1	11.6	0.0%	57,506.9	12.7	0.0%	57,503.5	16.2	0.0%	57,500.0	19.7	0.0%	57,496.5	23.1	0.0%	57,493.1	26.6	0.0%
ME 5	33 52 21	2016	Above Normal	February	--	24,299.8	24,291.7	8.1	0.0%	24,289.4	10.4	0.0%	24,287.0	12.7	0.1%	24,284.7	15.0	0.1%	24,281.3	18.5	0.1%	24,278.9	20.8	0.1%
ME 5	33 52 21	2016	Above Normal	March	--	41,870.4	41,862.3	8.1	0.0%	41,861.1	9.3	0.0%	41,858.8	11.6	0.0%	41,855.3	15.0	0.0%	41,853.0	17.4	0.0%	41,850.7	19.7	0.0%
ME 5	33 52 21	2016	Above Normal	April	--	18,562.5	18,554.4	8.1	0.0%	18,553.2	9.3	0.0%	18,550.9	11.6	0.1%	18,548.6	13.9	0.1%	18,546.3	16.2	0.1%	18,544.0	18.5	0.1%
ME 5	33 52 21	2016	Above Normal	May	--	5,224.1	5,214.4	9.7	0.2%	5,212.8	11.2	0.2%	5,210.1	14.0	0.3%	5,207.2	16.9	0.3%	5,204.2	19.9	0.4%	5,201.4	22.7	0.4%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 52 21	2016	Above Normal	June	--	1,512.8	1,494.2	18.6	1.2%	1,491.4	21.4	1.4%	1,486.2	26.6	1.8%	1,480.9	31.9	2.1%	1,475.6	37.3	2.5%	1,470.3	42.6	2.8%
ME 5	33 52 21	2016	Above Normal	July	--	826.9	806.2	20.7	2.5%	803.1	23.7	2.9%	797.3	29.6	3.6%	791.3	35.6	4.3%	785.4	41.5	5.0%	779.5	47.4	5.7%
ME 5	33 52 21	2016	Above Normal	August	--	495.7	475.4	20.3	4.1%	472.4	23.3	4.7%	466.6	29.1	5.9%	460.8	34.9	7.0%	455.0	40.8	8.2%	449.1	46.6	9.4%
ME 5	33 52 21	2016	Above Normal	September	Used in Summary Table Analysis	331.9	313.7	18.2	5.5%	310.5	21.4	6.5%	305.1	26.9	8.1%	299.5	32.4	9.8%	293.9	38.0	11.4%	288.4	43.5	13.1%
ME 5	33 52 21	2017	Wet	October	Used in Summary Table Analysis	18,360.0	18,344.9	15.0	0.1%	18,342.6	17.4	0.1%	18,338.0	22.0	0.1%	18,334.5	25.5	0.1%	18,328.7	31.3	0.2%	18,325.2	34.7	0.2%
ME 5	33 52 21	2017	Wet	November	Used in Summary Table Analysis	18,906.3	18,894.7	11.6	0.1%	18,893.5	12.7	0.1%	18,890.0	16.2	0.1%	18,886.6	19.7	0.1%	18,883.1	23.1	0.1%	18,879.6	26.6	0.1%
ME 5	33 52 21	2017	Wet	December	--	24,240.7	24,231.5	9.3	0.0%	24,229.2	11.6	0.0%	24,226.9	13.9	0.1%	24,223.4	17.4	0.1%	24,219.9	20.8	0.1%	24,217.6	23.1	0.1%
ME 5	33 52 21	2017	Wet	January	--	107,278.9	107,269.7	9.3	0.0%	107,268.5	10.4	0.0%	107,265.0	13.9	0.0%	107,262.7	16.2	0.0%	107,260.4	18.5	0.0%	107,256.9	22.0	0.0%
ME 5	33 52 21	2017	Wet	February	--	82,056.7	82,048.6	8.1	0.0%	82,047.5	9.3	0.0%	82,044.0	12.7	0.0%	82,041.7	15.0	0.0%	82,039.4	17.4	0.0%	82,037.0	19.7	0.0%
ME 5	33 52 21	2017	Wet	March	--	27,342.6	27,334.5	8.1	0.0%	27,333.3	9.3	0.0%	27,331.0	11.6	0.0%	27,328.7	13.9	0.1%	27,326.4	16.2	0.1%	27,324.1	18.5	0.1%
ME 5	33 52 21	2017	Wet	April	--	23,009.3	23,002.3	6.9	0.0%	23,001.2	8.1	0.0%	22,998.8	10.4	0.0%	22,996.5	12.7	0.1%	22,995.4	13.9	0.1%	22,993.1	16.2	0.1%
ME 5	33 52 21	2017	Wet	May	--	6,274.9	6,265.0	9.8	0.2%	6,263.7	11.2	0.2%	6,260.8	14.1	0.2%	6,258.0	16.9	0.3%	6,255.1	19.8	0.3%	6,252.2	22.7	0.4%
ME 5	33 52 21	2017	Wet	June	--	2,125.5	2,106.4	19.1	0.9%	2,103.6	21.9	1.0%	2,098.3	27.2	1.3%	2,092.8	32.6	1.5%	2,087.5	38.0	1.8%	2,082.1	43.4	2.0%
ME 5	33 52 21	2017	Wet	July	--	939.6	918.7	20.9	2.2%	915.8	23.9	2.5%	909.8	29.8	3.2%	903.9	35.7	3.8%	898.0	41.6	4.4%	892.1	47.5	5.1%
ME 5	33 52 21	2017	Wet	August	--	511.8	491.5	20.3	4.0%	488.6	23.2	4.5%	482.8	29.0	5.7%	477.0	34.8	6.8%	471.3	40.6	7.9%	465.5	46.4	9.1%
ME 5	33 52 21	2017	Wet	September	Used in Summary Table Analysis	327.2	308.4	18.8	5.8%	305.7	21.5	6.6%	300.3	26.9	8.2%	294.9	32.3	9.9%	289.5	37.7	11.5%	284.2	43.0	13.2%
ME 5	33 52 21	2018	Above Normal	October	Used in Summary Table Analysis	279.9	264.9	15.0	5.4%	262.8	17.2	6.1%	258.5	21.5	7.7%	254.1	25.8	9.2%	249.8	30.1	10.8%	245.5	34.4	12.3%
ME 5	33 52 21	2018	Above Normal	November	Used in Summary Table Analysis	10,874.8	10,863.1	11.7	0.1%	10,861.3	13.4	0.1%	10,857.9	16.9	0.2%	10,854.4	20.4	0.2%	10,851.0	23.7	0.2%	10,847.6	27.2	0.3%
ME 5	33 52 21	2018	Above Normal	December	--	5,453.8	5,443.9	10.0	0.2%	5,442.5	11.3	0.2%	5,439.6	14.2	0.3%	5,436.6	17.2	0.3%	5,433.7	20.1	0.4%	5,430.7	23.1	0.4%
ME 5	33 52 21	2018	Above Normal	January	--	17,923.6	17,914.4	9.3	0.1%	17,913.2	10.4	0.1%	17,910.9	12.7	0.1%	17,908.6	15.0	0.1%	17,905.1	18.5	0.1%	17,902.8	20.8	0.1%
ME 5	33 52 21	2018	Above Normal	February	--	7,604.1	7,596.1	8.0	0.1%	7,594.9	9.1	0.1%	7,592.6	11.5	0.2%	7,590.2	13.9	0.2%	7,587.8	16.2	0.2%	7,585.4	18.6	0.2%
ME 5	33 52 21	2018	Above Normal	March	--	20,791.7	20,783.6	8.1	0.0%	20,782.4	9.3	0.0%	20,781.3	10.4	0.1%	20,778.9	12.7	0.1%	20,776.6	15.0	0.1%	20,774.3	17.4	0.1%
ME 5	33 52 21	2018	Above Normal	April	--	32,307.9	32,300.9	6.9	0.0%	32,300.9	6.9	0.0%	32,298.6	9.3	0.0%	32,296.3	11.6	0.0%	32,294.0	13.9	0.0%	32,291.7	16.2	0.1%
ME 5	33 52 21	2018	Above Normal	May	--	6,991.9	6,977.0	14.9	0.2%	6,974.8	17.1	0.2%	6,970.6	21.3	0.3%	6,966.3	25.6	0.4%	6,962.0	29.9	0.4%	6,958.1	33.8	0.5%
ME 5	33 52 21	2018	Above Normal	June	--	1,917.8	1,898.5	19.3	1.0%	1,895.7	22.1	1.2%	1,890.3	27.5	1.4%	1,884.8	33.0	1.7%	1,879.3	38.5	2.0%	1,873.8	44.0	2.3%
ME 5	33 52 21	2018	Above Normal	July	--	785.8	764.8	21.0	2.7%	761.8	24.0	3.1%	755.8	29.9	3.8%	749.9	35.9	4.6%	743.9	41.9	5.3%	737.9	47.8	6.1%
ME 5	33 52 21	2018	Above Normal	August	--	447.0	427.4	19.6	4.4%	424.6	22.4	5.0%	419.0	28.0	6.3%	413.4	33.6	7.5%	407.8	39.2	8.8%	402.2	44.8	10.0%
ME 5	33 52 21	2018	Above Normal	September	Used in Summary Table Analysis	304.1	285.3	18.8	6.2%	282.6	21.5	7.1%	277.2	26.9	8.9%	271.8	32.3	10.6%	266.4	37.7	12.4%	261.0	43.1	14.2%
ME 5	33 52 21	2019	Below Normal	October	Used in Summary Table Analysis	211.1	196.4	14.8	7.0%	194.3	16.8	8.0%	190.1	21.1	10.0%	185.7	25.4	12.0%	181.6	29.6	14.0%	177.3	33.8	16.0%
ME 5	33 52 21	2019	Below Normal	November	Used in Summary Table Analysis	6,678.4	6,666.6	11.8	0.2%	6,664.8	13.5	0.2%	6,661.3	17.0	0.3%	6,657.9	20.5	0.3%	6,654.4	24.0	0.4%	6,650.9	27.4	0.4%
ME 5	33 52 21	2019	Below Normal	December	--	14,758.1	14,748.8	9.3	0.1%	14,746.5	11.6	0.1%	14,744.2	13.9	0.1%	14,740.7	17.4	0.1%	14,738.4	19.7	0.1%	14,735.0	23.1	0.2%
ME 5	33 52 21	2019	Below Normal	January	--	35,407.4	35,399.3	8.1	0.0%	35,397.0	10.4	0.0%	35,394.7	12.7	0.0%	35,392.4	15.0	0.0%	35,388.9	18.5	0.1%	35,386.6	20.8	0.1%
ME 5	33 52 21	2019	Below Normal	February	--	142,118.1	142,106.5	11.6	0.0%	142,106.5	11.6	0.0%	142,106.5	11.6	0.0%	142,106.5	11.6	0.0%	142,106.5	11.6	0.0%	142,094.9	23.1	0.0%
ME 5	33 52 21	2019	Below Normal	March	--	42,421.3	42,414.4	6.9	0.0%	42,413.2	8.1	0.0%	42,410.9	10.4	0.0%	42,408.6	12.7	0.0%	42,406.3	15.0	0.0%	42,403.9	17.4	0.0%
ME 5	33 52 21	2019	Below Normal	April	--	15,300.9	15,294.0	6.9	0.0%	15,292.8	8.1	0.1%	15,290.5	10.4	0.1%	15,288.2	12.7	0.1%	15,285.9	15.0	0.1%	15,283.6	17.4	0.1%
ME 5	33 52 21	2019	Below Normal	May	--	17,083.3	17,068.3	15.0	0.1%	17,066.0	17.4	0.1%	17,061.3	22.0	0.1%	17,056.7	26.6	0.2%	17,052.1	31.3	0.2%	17,047.5	35.9	0.2%
ME 5	33 52 21	2019	Below Normal	June	--	4,243.1	4,222.1	20.9	0.5%	4,219.1	24.0	0.6%	4,213.3	29.7	0.7%	4,207.6	35.4	0.8%	4,202.1	41.0	1.0%	4,196.5	46.5	1.1%
ME 5	33 52 21	2019	Below Normal	July	--	1,366.6	1,345.5	21.1	1.5%	1,342.5	24.1	1.8%	1,336.5	30.1	2.2%	1,330.4	36.1	2.6%	1,324.4	42.1	3.1%	1,318.5	48.0	3.5%
ME 5	33 52 21	2019	Below Normal	August	--	601.5	581.4	20.1	3.3%	578.5	23.0	3.8%	572.7	28.8	4.8%	567.0	34.4	5.7%	561.3	40.2	6.7%	555.6	45.9	7.6%
ME 5	33 52 21	2019	Below Normal	September	Used in Summary Table Analysis	467.0	448.2	18.7	4.0%	445.5	21.4	4.6%	440.2	26.8	5.7%	434.8	32.2	6.9%	429.4	37.6	8.0%	424.1	42.9	9.2%
ME 5	33 52 21	2020	Dry	October	Used in Summary Table Analysis	359.1	344.9	14.2	4.0%	342.9	16.3	4.5%	338.8	20.4	5.7%	334.7	24.5	6.8%	330.5	28.6	8.0%	326.4	32.7	9.1%
ME 5	33 52 21	2020	Dry	November	Used in Summary Table Analysis	326.2	315.0	11.2	3.4%	313.3	12.8	3.9%	310.1	16.1	4.9%	306.8	19.4	5.9%	303.5	22.6	6.9%	300.2	25.9	7.9%
ME 5	33 52 21	2020	Dry	December	--	13,420.1	13,410.9	9.3	0.1%	13,408.6	11.6	0.1%	13,406.3	13.9	0.1%	13,402.8	17.4	0.1%	13,400.5	19.7	0.1%	13,397.0	23.1	0.2%
ME 5	33 52 21	2020	Dry	January	--	22,436.3	22,427.1	9.3	0.0%	22,425.9	10.4	0.0%	22,422.5	13.9	0.1%	22,420.1	16.2	0.1%	22,417.8	18.5	0.1%	22,414.4	22.0	0.1%
ME 5	33 52 21	2020	Dry	February	--	7,418.9	7,410.8	8.1	0.1%	7,409.5	9.4	0.1%	7,407.1	11.8	0.2%	7,404.6	14.2	0.2%	7,402.2	16.7	0.2%	7,399.8	19.1	0.3%
ME 5	33 52 21	2020	Dry	March	--	7,263.2	7,255.6	7.6	0.1%	7,254.4	8.8	0.1%	7,252.2	11.0	0.2%	7,249.9	13.3	0.2%	7,247.6	15.6	0.2%	7,245.3	17.9	0.2%
ME 5	33 52 21	2020	Dry	April	--	5,504.1	5,488.3	15.7	0.3%	5,486.1	17.9	0.3%	5,481.6	22.5	0.4%	5,477.0	27.1	0.5%	5,472.5	31.6	0.6%	5,467.9	36.1	0.7%
ME 5	33 52 21	2020	Dry	May	--	7,404.1	7,385.2	18.9	0.3%	7,382.5	21.5	0.3%	7,377.1	27.0	0.4%	7,371.5	32.5	0.4%	7,366.1	38.0	0.5%	7,360.8	43.3	0.6%
ME 5	33 52 21	2020	Dry	June	--	2,105.4	2,080.6	24.9	1.2%	2,077.1	28.4	1.3%	2,070.4	35.1	1.7%	2,063.7	41.8	2.0%	2,056.9	48.5	2.3%	2,050.2	55.2	2.6%
ME 5	33 52 21	2020	Dry	July	--	799.7	775.2	24.5	3.1%	771.7	28.0	3.5%	764.7	35.0	4.4%	757.7	42.0	5.2%	750.7	49.0	6.1%	743.7	55.9	7.0%
ME 5	33 52 21	2020	Dry	August	--	402.6	378.4	24.2	6.0%	375.0	27.7	6.9%	368.1	34.6	8.6%	361.2	41.5	10.3%	354.3	48.4	12.0%	347.4	55.3	13.7%
ME 5	33 52 21	2020	Dry	September	Used in Summary Table Analysis	252.0	230.2	21.7	8.6%	227.1	24.9	9.9%	220.1	31.9	12.7%	213.5	38.4	15.3%	206.8	45.2	17.9%	200.2	51.8	20.6%
ME 5	33 51 22	2000	Above Normal	October	Used in Summary Table Analysis	822.2	807.5	14.7	1.8%	805.4	16.8	2.0%	801.2	21.0	2.6%	797.0	25.3	3.1%	792.7	29.5	3.6%	788.5	33.8	4.1%
ME 5	33 51 22	2000	Above Normal	November	Used in Summary Table Analysis	12,221.1	12,209.5	11.6	0.1%	12,207.2	13.9	0.1%	12,203.7	17.4	0.1%	12,200.2	20.8	0.2%	12,196.8	24.3	0.2%	12,193.3	27.8	0.2%
ME 5	33 51 22	2000	Above Normal	December	--	10,865.6	10,855.6	10.1	0.1%	10,854.2	11.5	0.1%	10,851.3	14.4	0.1%	10,848.3	17.4	0.2%	10,845.3	20.4	0.2%	10,842.4	23.3	0.2%
ME 5	33 51 22	2000	Above Normal	January	--	28,747.7	28,738.4	9.3	0.0%	28,737.3	10.4	0.0%	28,735.0	12.7	0.0%	28,732.6	15.0	0.1%	28,729.2	18.5	0.1%	28,726.9	20.8	0.1%
ME 5	33 51 22	2000	Above Normal	February	--	37,153.9	37,145.8	8.1	0.0%	37,144.7	9.3	0.0%	37,142.4	11.6	0.0%	37,140.0	13.9	0.0%	37,137.7	16.2	0.0%	37,135.4	18.5	0.0%
ME 5	33 51 22	2000	Above Normal	March	--	18,351.9	18,344.9	6.9	0.0%	18,343.8	8.1	0.0%	18,341.4	10.4	0.1%	18,339.1	12.7	0.1%	18,336.8	15.0	0.1%	18,334.5	17.4	0.1%
ME 5	33 51 22	2000	Above Normal	April	--	12,341.4	12,334.5	6.9	0.1%	12,333.3	8.1	0.1%	12,331.0	10.4	0.1%	12,328.7	12.7	0.1%	12,327.5	13.9	0.1%	12,325.2	16.2	0.1%
ME 5	33 51 22	2000	Above Normal	May	--	7,117.4	7,102.1	15.3	0.2%	7,099.9	17.5	0.2%	7,095.5	21.9	0.3%	7,091.0	26.4	0.4%	7,086.6	30.8	0.4%	7,082.2	35.2	0.5%
ME 5	33 51 22	2000	Above Normal	June	--	2,620.5	2,597.7	22.8	0.9%	2,594.4	26.0	1.0%	2,587.8	32.6	1.2%	2,581.4	39.1	1.5%	2,574.9	45.6	1.7%	2,568.4	52.1	2.0%
ME 5	33 51 22	2000	Above Normal	July	--	996.2	975.3	20.8	2.1%	972.4	23.8	2.4%	966.4	29.8	3.0%	960.5	35.7	3.6%	954.6	41.6	4.2%	948.8	47.4	4.8%
ME 5	33 51 22	2000	Above Normal	August	--	526.4	506.8	19.6	3.7%	504.0	22.4	4.3%	498.4	28.0	5.3%	492.8	33.6	6.4%	487.2	39.2	7.4%	481.6	44.8	8.5%
ME 5	33 51 22	2000	Above Normal	September	Used in Summary Table Analysis	299.1	281.7	17.5	5.8%	279.2	20.0	6.7%	274.2	25.0	8.3%	269.2	30.0	10.0%	264.2	35.0	11.7%	259.2	39.9	13.4%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 51 22	2001	Dry	October	Used in Summary Table Analysis	3,839.1	3,824.7	14.5	0.4%	3,822.6	16.6	0.4%	3,818.4	20.7	0.5%	3,814.2	24.9	0.6%	3,810.1	29.1	0.8%	3,805.9	33.2	0.9%
ME 5	33 51 22	2001	Dry	November	Used in Summary Table Analysis	6,162.8	6,151.3	11.6	0.2%	6,149.5	13.3	0.2%	6,146.2	16.7	0.3%	6,142.8	20.0	0.3%	6,139.5	23.4	0.4%	6,136.0	26.9	0.4%
ME 5	33 51 22	2001	Dry	December	--	8,877.5	8,867.5	10.1	0.1%	8,866.0	11.6	0.1%	8,863.1	14.5	0.2%	8,860.2	17.4	0.2%	8,857.2	20.4	0.2%	8,854.2	23.4	0.3%
ME 5	33 51 22	2001	Dry	January	--	12,865.7	12,856.5	9.3	0.1%	12,855.3	10.4	0.1%	12,851.9	13.9	0.1%	12,849.5	16.2	0.1%	12,847.2	18.5	0.1%	12,844.9	20.8	0.2%
ME 5	33 51 22	2001	Dry	February	--	17,518.5	17,510.4	8.1	0.0%	17,509.3	9.3	0.1%	17,506.9	11.6	0.1%	17,504.6	13.9	0.1%	17,502.3	16.2	0.1%	17,500.0	18.5	0.1%
ME 5	33 51 22	2001	Dry	March	--	12,321.8	12,313.7	8.1	0.1%	12,312.5	9.3	0.1%	12,310.2	11.6	0.1%	12,307.9	13.9	0.1%	12,305.6	16.2	0.1%	12,303.2	18.5	0.2%
ME 5	33 51 22	2001	Dry	April	--	10,997.6	10,981.7	15.9	0.1%	10,979.5	18.1	0.2%	10,974.9	22.7	0.2%	10,970.4	27.2	0.2%	10,965.9	31.7	0.3%	10,961.2	36.3	0.3%
ME 5	33 51 22	2001	Dry	May	--	2,638.0	2,619.3	18.6	0.7%	2,616.7	21.3	0.8%	2,611.3	26.6	1.0%	2,605.9	32.1	1.2%	2,600.6	37.4	1.4%	2,595.3	42.7	1.6%
ME 5	33 51 22	2001	Dry	June	--	2,664.5	2,639.0	25.5	1.0%	2,635.4	29.1	1.1%	2,628.1	36.3	1.4%	2,620.9	43.5	1.6%	2,613.8	50.7	1.9%	2,606.6	57.9	2.2%
ME 5	33 51 22	2001	Dry	July	--	720.5	696.5	24.0	3.3%	693.1	27.4	3.8%	686.3	34.2	4.8%	679.4	41.1	5.7%	672.7	47.8	6.6%	665.8	54.7	7.6%
ME 5	33 51 22	2001	Dry	August	--	175.7	152.3	23.5	13.4%	148.9	26.8	15.3%	142.2	33.5	19.1%	135.5	40.2	22.9%	128.9	46.8	26.7%	122.2	53.5	30.5%
ME 5	33 51 22	2001	Dry	September	Used in Summary Table Analysis	98.8	77.7	21.1	21.3%	74.7	24.1	24.4%	68.7	30.1	30.4%	62.7	36.1	36.5%	56.7	42.0	42.6%	50.7	48.1	48.6%
ME 5	33 51 22	2002	Below Normal	October	Used in Summary Table Analysis	268.9	251.1	17.7	6.6%	248.6	20.2	7.5%	243.5	25.4	9.4%	238.4	30.5	11.3%	233.4	35.5	13.2%	228.2	40.6	15.1%
ME 5	33 51 22	2002	Below Normal	November	Used in Summary Table Analysis	12,077.5	12,063.7	13.9	0.1%	12,061.3	16.2	0.1%	12,056.7	20.8	0.2%	12,053.2	24.3	0.2%	12,049.8	27.8	0.2%	12,045.1	32.4	0.3%
ME 5	33 51 22	2002	Below Normal	December	--	35,836.8	35,825.2	11.6	0.0%	35,822.9	13.9	0.0%	35,819.4	17.4	0.0%	35,816.0	20.8	0.1%	35,812.5	24.3	0.1%	35,809.0	27.8	0.1%
ME 5	33 51 22	2002	Below Normal	January	--	30,975.7	30,964.1	11.6	0.0%	30,963.0	12.7	0.0%	30,959.5	16.2	0.1%	30,957.2	18.5	0.1%	30,953.7	22.0	0.1%	30,950.2	25.5	0.1%
ME 5	33 51 22	2002	Below Normal	February	--	24,736.1	24,726.9	9.3	0.0%	24,724.5	11.6	0.0%	24,722.2	13.9	0.1%	24,719.9	16.2	0.1%	24,716.4	19.7	0.1%	24,714.1	22.0	0.1%
ME 5	33 51 22	2002	Below Normal	March	--	17,825.2	17,816.0	9.3	0.1%	17,814.8	10.4	0.1%	17,812.5	12.7	0.1%	17,809.0	16.2	0.1%	17,806.7	18.5	0.1%	17,804.4	20.8	0.1%
ME 5	33 51 22	2002	Below Normal	April	--	9,942.8	9,926.9	16.0	0.2%	9,924.5	18.3	0.2%	9,920.0	22.8	0.2%	9,915.5	27.3	0.3%	9,910.9	31.9	0.3%	9,906.4	36.5	0.4%
ME 5	33 51 22	2002	Below Normal	May	--	3,326.0	3,307.3	18.8	0.6%	3,304.6	21.4	0.6%	3,299.2	26.9	0.8%	3,293.9	32.2	1.0%	3,288.4	37.6	1.1%	3,283.1	42.9	1.3%
ME 5	33 51 22	2002	Below Normal	June	--	857.2	835.9	21.2	2.5%	832.9	24.3	2.8%	826.9	30.3	3.5%	820.9	36.3	4.2%	814.8	42.4	4.9%	808.8	48.4	5.6%
ME 5	33 51 22	2002	Below Normal	July	--	365.8	344.2	21.6	5.9%	341.1	24.7	6.7%	334.9	30.9	8.4%	328.8	37.0	10.1%	322.6	43.2	11.8%	316.4	49.3	13.5%
ME 5	33 51 22	2002	Below Normal	August	--	231.0	210.6	20.4	8.8%	207.7	23.3	10.1%	201.9	29.1	12.6%	196.1	35.0	15.1%	190.2	40.8	17.7%	184.4	46.6	20.2%
ME 5	33 51 22	2002	Below Normal	September	Used in Summary Table Analysis	167.5	148.2	19.3	11.5%	145.5	22.1	13.2%	140.0	27.6	16.5%	134.4	33.1	19.8%	128.9	38.6	23.1%	123.4	44.2	26.4%
ME 5	33 51 22	2003	Wet	October	Used in Summary Table Analysis	132.4	116.5	15.9	12.0%	114.2	18.1	13.7%	109.7	22.7	17.2%	105.1	27.3	20.6%	100.5	31.9	24.1%	95.9	36.5	27.6%
ME 5	33 51 22	2003	Wet	November	Used in Summary Table Analysis	900.9	888.2	12.7	1.4%	886.3	14.6	1.6%	882.6	18.3	2.0%	878.9	22.1	2.4%	875.2	25.7	2.9%	871.5	29.4	3.3%
ME 5	33 51 22	2003	Wet	December	--	57,182.9	57,171.3	11.6	0.0%	57,170.1	12.7	0.0%	57,166.7	16.2	0.0%	57,163.2	19.7	0.0%	57,159.7	23.1	0.0%	57,157.4	25.5	0.0%
ME 5	33 51 22	2003	Wet	January	--	31,605.3	31,594.9	10.4	0.0%	31,593.8	11.6	0.0%	31,591.4	13.9	0.0%	31,588.0	17.4	0.1%	31,584.5	20.8	0.1%	31,582.2	23.1	0.1%
ME 5	33 51 22	2003	Wet	February	--	20,393.5	20,384.3	9.3	0.0%	20,383.1	10.4	0.1%	20,380.8	12.7	0.1%	20,377.3	16.2	0.1%	20,375.0	18.5	0.1%	20,372.7	20.8	0.1%
ME 5	33 51 22	2003	Wet	March	--	24,094.9	24,086.8	8.1	0.0%	24,085.6	9.3	0.0%	24,082.2	12.7	0.1%	24,079.9	15.0	0.1%	24,077.5	17.4	0.1%	24,075.2	19.7	0.1%
ME 5	33 51 22	2003	Wet	April	--	43,063.7	43,055.6	8.1	0.0%	43,054.4	9.3	0.0%	43,052.1	11.6	0.0%	43,049.8	13.9	0.0%	43,047.5	16.2	0.0%	43,045.1	18.5	0.0%
ME 5	33 51 22	2003	Wet	May	--	12,245.4	12,229.2	16.2	0.1%	12,226.9	18.5	0.2%	12,222.2	23.1	0.2%	12,217.6	27.8	0.2%	12,213.0	32.4	0.3%	12,208.3	37.0	0.3%
ME 5	33 51 22	2003	Wet	June	--	3,171.8	3,151.3	20.5	0.6%	3,148.4	23.4	0.7%	3,142.7	29.1	0.9%	3,136.9	34.8	1.1%	3,131.3	40.5	1.3%	3,125.6	46.2	1.5%
ME 5	33 51 22	2003	Wet	July	--	1,479.6	1,458.2	21.4	1.4%	1,455.2	24.4	1.7%	1,449.1	30.6	2.1%	1,442.9	36.7	2.5%	1,436.9	42.7	2.9%	1,430.8	48.8	3.3%
ME 5	33 51 22	2003	Wet	August	--	765.1	744.3	20.8	2.7%	741.3	23.8	3.1%	735.4	29.7	3.9%	729.4	35.7	4.7%	723.5	41.6	5.4%	717.4	47.7	6.2%
ME 5	33 51 22	2003	Wet	September	Used in Summary Table Analysis	462.4	444.6	17.8	3.9%	442.0	20.4	4.4%	436.9	25.5	5.5%	431.8	30.6	6.6%	426.7	35.7	7.7%	421.6	40.8	8.8%
ME 5	33 51 22	2004	Wet	October	Used in Summary Table Analysis	329.1	314.4	14.8	4.5%	312.2	16.9	5.1%	308.0	21.2	6.4%	303.7	25.4	7.7%	299.4	29.7	9.0%	295.1	34.0	10.3%
ME 5	33 51 22	2004	Wet	November	Used in Summary Table Analysis	5,845.7	5,833.7	12.0	0.2%	5,831.9	13.8	0.2%	5,828.5	17.2	0.3%	5,825.0	20.7	0.4%	5,821.4	24.3	0.4%	5,817.9	27.8	0.5%
ME 5	33 51 22	2004	Wet	December	--	36,502.3	36,491.9	10.4	0.0%	36,490.7	11.6	0.0%	36,487.3	15.0	0.0%	36,483.8	18.5	0.1%	36,481.5	20.8	0.1%	36,478.0	24.3	0.1%
ME 5	33 51 22	2004	Wet	January	--	31,604.2	31,594.9	9.3	0.0%	31,593.8	10.4	0.0%	31,591.4	12.7	0.0%	31,588.0	16.2	0.1%	31,585.6	18.5	0.1%	31,583.3	20.8	0.1%
ME 5	33 51 22	2004	Wet	February	--	38,362.3	38,353.0	9.3	0.0%	38,351.9	10.4	0.0%	38,349.5	12.7	0.0%	38,347.2	15.0	0.0%	38,344.9	17.4	0.0%	38,341.4	20.8	0.1%
ME 5	33 51 22	2004	Wet	March	--	16,546.3	16,538.2	8.1	0.0%	16,537.0	9.3	0.1%	16,534.7	11.6	0.1%	16,532.4	13.9	0.1%	16,530.1	16.2	0.1%	16,527.8	18.5	0.1%
ME 5	33 51 22	2004	Wet	April	--	9,467.0	9,459.6	7.4	0.1%	9,458.6	8.4	0.1%	9,456.4	10.6	0.1%	9,454.2	12.8	0.1%	9,452.0	15.0	0.2%	9,449.8	17.2	0.2%
ME 5	33 51 22	2004	Wet	May	--	3,433.3	3,417.9	15.4	0.4%	3,415.6	17.7	0.5%	3,411.2	22.1	0.6%	3,406.8	26.5	0.8%	3,402.3	31.0	0.9%	3,397.8	35.5	1.0%
ME 5	33 51 22	2004	Wet	June	--	695.0	675.6	19.4	2.8%	672.8	22.2	3.2%	667.3	27.8	4.0%	661.7	33.3	4.8%	656.2	38.8	5.6%	650.7	44.3	6.4%
ME 5	33 51 22	2004	Wet	July	--	360.3	339.4	21.0	5.8%	336.4	23.9	6.6%	330.4	29.9	8.3%	324.4	35.9	10.0%	318.4	41.9	11.6%	312.4	47.9	13.3%
ME 5	33 51 22	2004	Wet	August	--	229.0	209.2	19.8	8.7%	206.3	22.7	9.9%	200.6	28.4	12.4%	195.0	34.0	14.9%	189.3	39.7	17.3%	183.6	45.4	19.8%
ME 5	33 51 22	2004	Wet	September	Used in Summary Table Analysis	165.7	146.8	18.9	11.4%	144.1	21.6	13.0%	138.7	27.0	16.3%	133.3	32.4	19.6%	127.8	37.8	22.8%	122.4	43.3	26.1%
ME 5	33 51 22	2005	Above Normal	October	Used in Summary Table Analysis	7,738.0	7,722.9	15.0	0.2%	7,720.8	17.1	0.2%	7,716.4	21.5	0.3%	7,712.2	25.8	0.3%	7,707.8	30.2	0.4%	7,703.4	34.6	0.4%
ME 5	33 51 22	2005	Above Normal	November	Used in Summary Table Analysis	2,264.7	2,252.8	11.9	0.5%	2,251.2	13.5	0.6%	2,247.7	17.0	0.8%	2,244.2	20.5	0.9%	2,240.9	23.8	1.1%	2,237.4	27.3	1.2%
ME 5	33 51 22	2005	Above Normal	December	--	21,188.7	21,178.2	10.4	0.0%	21,175.9	12.7	0.1%	21,173.6	15.0	0.1%	21,170.1	18.5	0.1%	21,166.7	22.0	0.1%	21,164.4	24.3	0.1%
ME 5	33 51 22	2005	Above Normal	January	--	22,511.6	22,502.3	9.3	0.0%	22,501.2	10.4	0.0%	22,498.8	12.7	0.1%	22,495.4	16.2	0.1%	22,493.1	18.5	0.1%	22,490.7	20.8	0.1%
ME 5	33 51 22	2005	Above Normal	February	--	14,034.7	14,025.5	9.3	0.1%	14,024.3	10.4	0.1%	14,022.0	12.7	0.1%	14,019.7	15.0	0.1%	14,017.4	17.4	0.1%	14,015.0	19.7	0.1%
ME 5	33 51 22	2005	Above Normal	March	--	28,663.2	28,656.3	6.9	0.0%	28,655.1	8.1	0.0%	28,652.8	10.4	0.0%	28,650.5	12.7	0.0%	28,648.1	15.0	0.1%	28,645.8	17.4	0.1%
ME 5	33 51 22	2005	Above Normal	April	--	21,509.3	21,501.2	8.1	0.0%	21,500.0	9.3	0.0%	21,497.7	11.6	0.1%	21,495.4	13.9	0.1%	21,494.2	15.0	0.1%	21,491.9	17.4	0.1%
ME 5	33 51 22	2005	Above Normal	May	--	19,645.8	19,630.8	15.0	0.1%	19,628.5	17.4	0.1%	19,623.8	22.0	0.1%	19,619.2	26.6	0.1%	19,614.6	31.3	0.2%	19,610.0	35.9	0.2%
ME 5	33 51 22	2005	Above Normal	June	--	15,961.8	15,938.7	23.1	0.1%	15,935.2	26.6	0.2%	15,928.2	33.6	0.2%	15,921.3	40.5	0.3%	15,914.4	47.5	0.3%	15,908.6	53.2	0.3%
ME 5	33 51 22	2005	Above Normal	July	--	2,865.5	2,843.9	21.6	0.8%	2,840.7	24.8	0.9%	2,834.6	30.9	1.1%	2,828.4	37.2	1.3%	2,822.2	43.3	1.5%	2,816.1	49.4	1.7%
ME 5	33 51 22	2005	Above Normal	August	--	988.1	968.4	19.7	2.0%	965.6	22.5	2.3%	959.9	28.2	2.9%	954.3	33.8	3.4%	948.7	39.4	4.0%	943.1	45.0	4.6%
ME 5	33 51 22	2005	Above Normal	September	Used in Summary Table Analysis	529.4	511.9	17.5	3.3%	509.4	20.0	3.8%	504.4	25.0	4.7%	499.4	30.0	5.7%	494.4	35.0	6.6%	489.4	40.0	7.6%
ME 5	33 51 22	2006	Wet	October	Used in Summary Table Analysis	639.8	625.6	14.3	2.2%	623.5	16.3	2.6%	619.4	20.4	3.2%	615.3	24.5	3.8%	611.3	28.6	4.5%	607.1	32.7	5.1%
ME 5	33 51 22	2006	Wet	November	Used in Summary Table Analysis	9,379.7	9,368.4	11.3	0.1%	9,366.8	13.0	0.1%	9,363.5	16.2	0.2%	9,360.3	19.4	0.2%	9,356.9	22.8	0.2%	9,353.7	26.0	0.3%
ME 5	33 51 22	2006	Wet	December	--	43,741.9	43,731.5	10.4	0.0%	43,730.3	11.6	0.0%	43,726.9	15.0	0.0%	43,724.5	17.4	0.0%	43,721.1	20.8	0.0%	43,717.6	24.3	0.1%
ME 5	33 51 22	2006	Wet	January	--	46,518.5	46,509.3	9.3	0.0%	46,508.1	10.4	0.0%	46,505.8	12.7	0.0%	46,502.3	16.2	0.0%	46,500.0	18.5	0.0%	46,497.7	20.8	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 51 22	2006	Wet	February	--	26,714.1	26,706.0	8.1	0.0%	26,704.9	9.3	0.0%	26,702.5	11.6	0.0%	26,700.2	13.9	0.1%	26,697.9	16.2	0.1%	26,695.6	18.5	0.1%
ME 5	33 51 22	2006	Wet	March	--	47,333.3	47,325.2	8.1	0.0%	47,324.1	9.3	0.0%	47,321.8	11.6	0.0%	47,320.6	12.7	0.0%	47,318.3	15.0	0.0%	47,316.0	17.4	0.0%
ME 5	33 51 22	2006	Wet	April	--	30,497.7	30,490.7	6.9	0.0%	30,489.6	8.1	0.0%	30,487.3	10.4	0.0%	30,485.0	12.7	0.0%	30,482.6	15.0	0.0%	30,481.5	16.2	0.1%
ME 5	33 51 22	2006	Wet	May	--	14,247.7	14,238.4	9.3	0.1%	14,237.3	10.4	0.1%	14,233.8	13.9	0.1%	14,231.5	16.2	0.1%	14,229.2	18.5	0.1%	14,225.7	22.0	0.2%
ME 5	33 51 22	2006	Wet	June	--	3,552.4	3,533.1	19.3	0.5%	3,530.3	22.1	0.6%	3,524.9	27.5	0.8%	3,519.4	33.0	0.9%	3,513.9	38.5	1.1%	3,508.4	44.0	1.2%
ME 5	33 51 22	2006	Wet	July	--	1,285.3	1,264.7	20.6	1.6%	1,261.7	23.6	1.8%	1,255.9	29.4	2.3%	1,250.0	35.3	2.7%	1,244.2	41.1	3.2%	1,238.3	47.0	3.7%
ME 5	33 51 22	2006	Wet	August	--	671.2	651.0	20.2	3.0%	648.1	23.1	3.4%	642.4	28.8	4.3%	636.7	34.5	5.1%	630.9	40.3	6.0%	625.2	46.0	6.9%
ME 5	33 51 22	2006	Wet	September	Used in Summary Table Analysis	431.5	413.8	17.8	4.1%	411.2	20.3	4.7%	406.2	25.3	5.9%	401.1	30.4	7.0%	396.0	35.5	8.2%	390.9	40.6	9.4%
ME 5	33 51 22	2007	Above Normal	October	Used in Summary Table Analysis	278.8	264.4	14.5	5.2%	262.3	16.6	5.9%	258.1	20.7	7.4%	253.9	24.9	8.9%	249.7	29.1	10.4%	245.5	33.3	11.9%
ME 5	33 51 22	2007	Above Normal	November	Used in Summary Table Analysis	8,731.6	8,719.8	11.8	0.1%	8,718.1	13.5	0.2%	8,714.7	16.9	0.2%	8,711.2	20.4	0.2%	8,707.8	23.8	0.3%	8,704.3	27.3	0.3%
ME 5	33 51 22	2007	Above Normal	December	--	20,542.8	20,532.4	10.4	0.1%	20,531.3	11.6	0.1%	20,527.8	15.0	0.1%	20,525.5	17.4	0.1%	20,522.0	20.8	0.1%	20,518.5	24.3	0.1%
ME 5	33 51 22	2007	Above Normal	January	--	10,286.8	10,277.7	9.1	0.1%	10,276.4	10.4	0.1%	10,273.7	13.1	0.1%	10,271.1	15.7	0.2%	10,268.4	18.4	0.2%	10,265.6	21.2	0.2%
ME 5	33 51 22	2007	Above Normal	February	--	30,721.1	30,711.8	9.3	0.0%	30,710.6	10.4	0.0%	30,708.3	12.7	0.0%	30,706.0	15.0	0.0%	30,703.7	17.4	0.1%	30,700.2	20.8	0.1%
ME 5	33 51 22	2007	Above Normal	March	--	13,127.3	13,119.2	8.1	0.1%	13,118.1	9.3	0.1%	13,115.7	11.6	0.1%	13,113.4	13.9	0.1%	13,111.1	16.2	0.1%	13,108.8	18.5	0.1%
ME 5	33 51 22	2007	Above Normal	April	--	11,558.9	11,543.8	15.2	0.1%	11,541.6	17.4	0.2%	11,537.2	21.8	0.2%	11,532.9	26.0	0.2%	11,528.5	30.4	0.3%	11,524.1	34.8	0.3%
ME 5	33 51 22	2007	Above Normal	May	--	4,150.9	4,132.9	18.1	0.4%	4,130.3	20.6	0.5%	4,125.1	25.8	0.6%	4,119.9	31.0	0.7%	4,114.7	36.2	0.9%	4,109.5	41.4	1.0%
ME 5	33 51 22	2007	Above Normal	June	--	1,506.4	1,484.6	21.8	1.4%	1,481.5	24.9	1.7%	1,475.3	31.0	2.1%	1,469.2	37.2	2.5%	1,463.0	43.4	2.9%	1,456.8	49.5	3.3%
ME 5	33 51 22	2007	Above Normal	July	--	499.5	477.5	22.0	4.4%	474.4	25.1	5.0%	468.1	31.3	6.3%	461.9	37.6	7.5%	455.7	43.8	8.8%	449.4	50.0	10.0%
ME 5	33 51 22	2007	Above Normal	August	--	227.1	207.2	19.9	8.8%	204.4	22.7	10.0%	198.7	28.4	12.5%	193.1	34.0	15.0%	187.4	39.7	17.5%	181.8	45.3	20.0%
ME 5	33 51 22	2007	Above Normal	September	Used in Summary Table Analysis	154.7	135.8	18.9	12.2%	133.1	21.6	13.9%	127.7	26.9	17.4%	122.4	32.3	20.9%	117.0	37.7	24.4%	111.6	43.1	27.8%
ME 5	33 51 22	2008	Dry	October	Used in Summary Table Analysis	3,457.3	3,441.8	15.5	0.4%	3,439.6	17.7	0.5%	3,435.2	22.1	0.6%	3,430.8	26.5	0.8%	3,426.3	31.0	0.9%	3,421.9	35.4	1.0%
ME 5	33 51 22	2008	Dry	November	Used in Summary Table Analysis	3,297.5	3,285.5	11.9	0.4%	3,283.8	13.7	0.4%	3,280.3	17.1	0.5%	3,276.9	20.6	0.6%	3,273.4	24.1	0.7%	3,269.9	27.5	0.8%
ME 5	33 51 22	2008	Dry	December	--	23,299.8	23,289.4	10.4	0.0%	23,287.0	12.7	0.1%	23,284.7	15.0	0.1%	23,281.3	18.5	0.1%	23,277.8	22.0	0.1%	23,275.5	24.3	0.1%
ME 5	33 51 22	2008	Dry	January	--	37,696.8	37,687.5	9.3	0.0%	37,686.3	10.4	0.0%	37,682.9	13.9	0.0%	37,680.6	16.2	0.0%	37,677.1	19.7	0.1%	37,674.8	22.0	0.1%
ME 5	33 51 22	2008	Dry	February	--	26,311.3	26,303.2	8.1	0.0%	26,302.1	9.3	0.0%	26,299.8	11.6	0.0%	26,297.5	13.9	0.1%	26,295.1	16.2	0.1%	26,292.8	18.5	0.1%
ME 5	33 51 22	2008	Dry	March	--	11,813.7	11,805.6	8.1	0.1%	11,804.4	9.3	0.1%	11,803.2	10.4	0.1%	11,800.9	12.7	0.1%	11,798.6	15.0	0.1%	11,796.3	17.4	0.1%
ME 5	33 51 22	2008	Dry	April	--	9,031.9	9,016.6	15.4	0.2%	9,014.4	17.6	0.2%	9,009.8	22.1	0.2%	9,005.4	26.5	0.3%	9,001.0	30.9	0.3%	8,996.5	35.4	0.4%
ME 5	33 51 22	2008	Dry	May	--	1,359.0	1,342.5	16.6	1.2%	1,340.0	19.0	1.4%	1,335.3	23.7	1.7%	1,330.7	28.4	2.1%	1,326.0	33.0	2.4%	1,321.5	37.5	2.8%
ME 5	33 51 22	2008	Dry	June	--	441.5	417.8	23.7	5.4%	414.5	27.1	6.1%	407.8	33.8	7.6%	401.1	40.5	9.2%	394.4	47.2	10.7%	387.7	53.8	12.2%
ME 5	33 51 22	2008	Dry	July	--	259.3	235.8	23.5	9.1%	232.5	26.9	10.4%	225.7	33.6	13.0%	219.1	40.3	15.5%	212.4	47.0	18.1%	205.7	53.6	20.7%
ME 5	33 51 22	2008	Dry	August	--	182.9	159.9	23.0	12.6%	156.6	26.2	14.3%	150.1	32.8	17.9%	143.6	39.3	21.5%	137.0	45.8	25.1%	130.5	52.3	28.6%
ME 5	33 51 22	2008	Dry	September	Used in Summary Table Analysis	144.4	122.3	22.1	15.3%	119.1	25.3	17.5%	112.8	31.6	21.9%	106.5	37.9	26.2%	100.2	44.2	30.6%	93.9	50.5	35.0%
ME 5	33 51 22	2009	Critical	October	Used in Summary Table Analysis	929.1	911.5	17.6	1.9%	909.0	20.1	2.2%	903.9	25.2	2.7%	898.8	30.3	3.3%	893.9	35.2	3.8%	888.8	40.3	4.3%
ME 5	33 51 22	2009	Critical	November	Used in Summary Table Analysis	5,553.9	5,540.3	13.7	0.2%	5,538.3	15.6	0.3%	5,534.4	19.6	0.4%	5,530.3	23.6	0.4%	5,526.4	27.5	0.5%	5,522.5	31.5	0.6%
ME 5	33 51 22	2009	Critical	December	--	12,254.6	12,243.1	11.6	0.1%	12,241.9	12.7	0.1%	12,238.4	16.2	0.1%	12,235.0	19.7	0.2%	12,231.5	23.1	0.2%	12,228.0	26.6	0.2%
ME 5	33 51 22	2009	Critical	January	--	8,822.2	8,811.7	10.5	0.1%	8,810.1	12.2	0.1%	8,806.9	15.3	0.2%	8,803.8	18.4	0.2%	8,800.7	21.5	0.2%	8,797.6	24.7	0.3%
ME 5	33 51 22	2009	Critical	February	--	22,689.8	22,680.6	9.3	0.0%	22,679.4	10.4	0.0%	22,677.1	12.7	0.1%	22,673.6	16.2	0.1%	22,671.3	18.5	0.1%	22,669.0	20.8	0.1%
ME 5	33 51 22	2009	Critical	March	--	21,178.2	21,170.1	8.1	0.0%	21,169.0	9.3	0.0%	21,165.5	12.7	0.1%	21,163.2	15.0	0.1%	21,160.9	17.4	0.1%	21,158.6	19.7	0.1%
ME 5	33 51 22	2009	Critical	April	--	10,104.1	10,088.1	16.0	0.2%	10,085.8	18.3	0.2%	10,081.1	22.9	0.2%	10,076.5	27.5	0.3%	10,071.9	32.2	0.3%	10,067.2	36.8	0.4%
ME 5	33 51 22	2009	Critical	May	--	15,613.4	15,593.8	19.7	0.1%	15,590.3	23.1	0.1%	15,584.5	28.9	0.2%	15,579.9	33.6	0.2%	15,574.1	39.4	0.3%	15,568.3	45.1	0.3%
ME 5	33 51 22	2009	Critical	June	--	3,164.9	3,139.7	25.2	0.8%	3,136.1	28.8	0.9%	3,128.9	36.0	1.1%	3,121.6	43.3	1.4%	3,114.5	50.5	1.6%	3,107.4	57.5	1.8%
ME 5	33 51 22	2009	Critical	July	--	1,267.0	1,243.2	23.8	1.9%	1,239.7	27.3	2.2%	1,232.9	34.1	2.7%	1,226.2	40.9	3.2%	1,219.4	47.6	3.8%	1,212.7	54.3	4.3%
ME 5	33 51 22	2009	Critical	August	--	673.0	649.9	23.1	3.4%	646.6	26.4	3.9%	640.0	33.0	4.9%	633.4	39.6	5.9%	626.8	46.2	6.9%	620.2	52.7	7.8%
ME 5	33 51 22	2009	Critical	September	Used in Summary Table Analysis	393.7	373.0	20.7	5.3%	370.0	23.7	6.0%	364.0	29.7	7.5%	358.1	35.6	9.0%	352.2	41.5	10.5%	346.3	47.5	12.1%
ME 5	33 51 22	2010	Below Normal	October	Used in Summary Table Analysis	6,094.8	6,077.0	17.8	0.3%	6,074.4	20.4	0.3%	6,069.3	25.5	0.4%	6,064.1	30.7	0.5%	6,059.3	35.5	0.6%	6,054.2	40.6	0.7%
ME 5	33 51 22	2010	Below Normal	November	Used in Summary Table Analysis	8,319.7	8,305.6	14.1	0.2%	8,303.5	16.2	0.2%	8,299.4	20.3	0.2%	8,295.3	24.4	0.3%	8,291.2	28.5	0.3%	8,287.0	32.6	0.4%
ME 5	33 51 22	2010	Below Normal	December	--	12,415.5	12,402.8	12.7	0.1%	12,401.6	13.9	0.1%	12,398.1	17.4	0.1%	12,394.7	20.8	0.2%	12,391.2	24.3	0.2%	12,387.7	27.8	0.2%
ME 5	33 51 22	2010	Below Normal	January	--	36,438.7	36,428.2	10.4	0.0%	36,427.1	11.6	0.0%	36,423.6	15.0	0.0%	36,420.1	18.5	0.1%	36,416.7	22.0	0.1%	36,413.2	25.5	0.1%
ME 5	33 51 22	2010	Below Normal	February	--	27,303.2	27,294.0	9.3	0.0%	27,292.8	10.4	0.0%	27,289.4	13.9	0.1%	27,287.0	16.2	0.1%	27,284.7	18.5	0.1%	27,281.3	22.0	0.1%
ME 5	33 51 22	2010	Below Normal	March	--	28,887.7	28,878.5	9.3	0.0%	28,877.3	10.4	0.0%	28,875.0	12.7	0.0%	28,872.7	15.0	0.1%	28,869.2	18.5	0.1%	28,866.9	20.8	0.1%
ME 5	33 51 22	2010	Below Normal	April	--	40,107.6	40,099.5	8.1	0.0%	40,098.4	9.3	0.0%	40,096.1	11.6	0.0%	40,093.8	13.9	0.0%	40,090.3	17.4	0.0%	40,088.0	19.7	0.0%
ME 5	33 51 22	2010	Below Normal	May	--	20,342.6	20,326.4	16.2	0.1%	20,324.1	18.5	0.1%	20,319.4	23.1	0.1%	20,313.7	28.9	0.1%	20,309.0	33.6	0.2%	20,304.4	38.2	0.2%
ME 5	33 51 22	2010	Below Normal	June	--	9,408.9	9,384.7	24.2	0.3%	9,381.3	27.7	0.3%	9,374.4	34.5	0.4%	9,367.7	41.2	0.4%	9,360.9	48.0	0.5%	9,354.2	54.7	0.6%
ME 5	33 51 22	2010	Below Normal	July	--	1,458.8	1,436.8	22.0	1.5%	1,433.6	25.2	1.7%	1,427.2	31.6	2.2%	1,420.9	37.8	2.6%	1,414.6	44.2	3.0%	1,408.6	50.2	3.4%
ME 5	33 51 22	2010	Below Normal	August	--	574.3	554.0	20.3	3.5%	551.1	23.2	4.0%	545.3	29.0	5.0%	539.5	34.7	6.0%	533.7	40.5	7.1%	528.0	46.3	8.1%
ME 5	33 51 22	2010	Below Normal	September	Used in Summary Table Analysis	656.4	637.1	19.4	2.9%	634.3	22.1	3.4%	628.8	27.7	4.2%	623.3	33.2	5.1%	617.7	38.7	5.9%	612.2	44.3	6.7%
ME 5	33 51 22	2011	Wet	October	Used in Summary Table Analysis	9,680.0	9,665.3	14.7	0.2%	9,663.2	16.8	0.2%	9,658.9	21.1	0.2%	9,654.7	25.2	0.3%	9,650.5	29.5	0.3%	9,646.2	33.8	0.3%
ME 5	33 51 22	2011	Wet	November	Used in Summary Table Analysis	14,273.1	14,261.6	11.6	0.1%	14,259.3	13.9	0.1%	14,256.9	16.2	0.1%	14,253.5	19.7	0.1%	14,250.0	23.1	0.2%	14,246.5	26.6	0.2%
ME 5	33 51 22	2011	Wet	December	--	33,919.0	33,908.6	10.4	0.0%	33,907.4	11.6	0.0%	33,903.9	15.0	0.0%	33,901.6	17.4	0.1%	33,898.1	20.8	0.1%	33,895.8	23.1	0.1%
ME 5	33 51 22	2011	Wet	January	--	14,197.9	14,188.7	9.3	0.1%	14,187.5	10.4	0.1%	14,185.2	12.7	0.1%	14,181.7	16.2	0.1%	14,179.4	18.5	0.1%	14,177.1	20.8	0.1%
ME 5	33 51 22	2011	Wet	February	--	20,807.9	20,799.8	8.1	0.0%	20,798.6	9.3	0.0%	20,796.3	11.6	0.1%	20,794.0	13.9	0.1%	20,791.7	16.2	0.1%	20,789.4	18.5	0.1%
ME 5	33 51 22	2011	Wet	March	--	52,149.3	52,142.4	6.9	0.0%	52,141.2	8.1	0.0%	52,138.9	10.4	0.0%	52,136.6	12.7	0.0%	52,134.3	15.0	0.0%	52,130.8	18.5	0.0%
ME 5	33 51 22	2011	Wet	April	--	24,850.7	24,842.6	8.1	0.0%	24,841.4	9.3	0.0%	24,839.1	11.6	0.0%	24,836.8	13.9	0.1%	24,834.5	16.2	0.1%	24,832.2	18.5	0.1%
ME 5	33 51 22	2011	Wet	May	--	11,407.1	11,391.4	15.6	0.1%	11,389.2	17.8	0.2%	11,384.6	22.5	0.2%	11,380.1	27.0	0.2%	11,375.6	31.5	0.3%	11,371.1	36.0	0.3%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 51 22	2011	Wet	June	--	7,080.6	7,057.1	23.5	0.3%	7,053.8	26.7	0.4%	7,047.1	33.4	0.5%	7,040.5	40.0	0.6%	7,033.9	46.6	0.7%	7,027.2	53.4	0.8%
ME 5	33 51 22	2011	Wet	July	--	1,831.5	1,808.1	23.4	1.3%	1,804.7	26.7	1.5%	1,798.0	33.4	1.8%	1,791.4	40.0	2.2%	1,784.8	46.6	2.5%	1,778.1	53.4	2.9%
ME 5	33 51 22	2011	Wet	August	--	781.3	761.3	20.0	2.6%	758.4	22.9	2.9%	752.7	28.6	3.7%	747.0	34.3	4.4%	741.3	40.0	5.1%	735.6	45.7	5.8%
ME 5	33 51 22	2011	Wet	September	Used in Summary Table Analysis	437.8	419.5	18.3	4.2%	416.9	20.9	4.8%	411.7	26.1	6.0%	406.5	31.2	7.1%	401.3	36.4	8.3%	396.1	41.6	9.5%
ME 5	33 51 22	2012	Below Normal	October	Used in Summary Table Analysis	4,565.6	4,550.6	15.0	0.3%	4,548.5	17.1	0.4%	4,544.1	21.5	0.5%	4,539.8	25.8	0.6%	4,535.5	30.1	0.7%	4,531.3	34.4	0.8%
ME 5	33 51 22	2012	Below Normal	November	Used in Summary Table Analysis	8,287.2	8,275.2	11.9	0.1%	8,273.5	13.7	0.2%	8,270.0	17.1	0.2%	8,266.6	20.6	0.2%	8,263.1	24.1	0.3%	8,259.6	27.5	0.3%
ME 5	33 51 22	2012	Below Normal	December	--	5,205.2	5,194.9	10.3	0.2%	5,193.5	11.7	0.2%	5,190.5	14.7	0.3%	5,187.5	17.7	0.3%	5,184.5	20.7	0.4%	5,181.5	23.7	0.5%
ME 5	33 51 22	2012	Below Normal	January	--	20,256.9	20,247.7	9.3	0.0%	20,246.5	10.4	0.1%	20,244.2	12.7	0.1%	20,241.9	15.0	0.1%	20,238.4	18.5	0.1%	20,236.1	20.8	0.1%
ME 5	33 51 22	2012	Below Normal	February	--	18,253.5	18,245.4	8.1	0.0%	18,244.2	9.3	0.1%	18,241.9	11.6	0.1%	18,239.6	13.9	0.1%	18,237.3	16.2	0.1%	18,233.8	19.7	0.1%
ME 5	33 51 22	2012	Below Normal	March	--	45,592.6	45,584.5	8.1	0.0%	45,582.2	10.4	0.0%	45,579.9	12.7	0.0%	45,577.5	15.0	0.0%	45,575.2	17.4	0.0%	45,572.9	19.7	0.0%
ME 5	33 51 22	2012	Below Normal	April	--	26,920.1	26,913.2	6.9	0.0%	26,912.0	8.1	0.0%	26,909.7	10.4	0.0%	26,907.4	12.7	0.0%	26,905.1	15.0	0.1%	26,902.8	17.4	0.1%
ME 5	33 51 22	2012	Below Normal	May	--	7,498.3	7,482.6	15.6	0.2%	7,480.4	17.8	0.2%	7,475.9	22.3	0.3%	7,471.4	26.9	0.4%	7,466.9	31.4	0.4%	7,462.4	35.9	0.5%
ME 5	33 51 22	2012	Below Normal	June	--	5,539.4	5,515.5	23.8	0.4%	5,512.2	27.2	0.5%	5,505.4	33.9	0.6%	5,498.6	40.7	0.7%	5,491.9	47.5	0.9%	5,485.1	54.3	1.0%
ME 5	33 51 22	2012	Below Normal	July	--	2,238.5	2,216.0	22.6	1.0%	2,212.7	25.8	1.2%	2,206.3	32.3	1.4%	2,199.9	38.7	1.7%	2,193.4	45.1	2.0%	2,186.9	51.6	2.3%
ME 5	33 51 22	2012	Below Normal	August	--	391.7	373.4	18.4	4.7%	370.8	20.9	5.3%	365.6	26.2	6.7%	360.3	31.4	8.0%	355.1	36.6	9.4%	349.9	41.8	10.7%
ME 5	33 51 22	2012	Below Normal	September	Used in Summary Table Analysis	253.2	236.7	16.4	6.5%	234.4	18.8	7.4%	229.7	23.5	9.3%	225.1	28.1	11.1%	220.4	32.8	12.9%	215.8	37.4	14.8%
ME 5	33 51 22	2013	Below Normal	October	Used in Summary Table Analysis	1,927.8	1,913.4	14.4	0.7%	1,911.3	16.4	0.9%	1,907.2	20.6	1.1%	1,903.1	24.7	1.3%	1,899.0	28.8	1.5%	1,894.9	32.9	1.7%
ME 5	33 51 22	2013	Below Normal	November	Used in Summary Table Analysis	14,775.5	14,763.9	11.6	0.1%	14,762.7	12.7	0.1%	14,759.3	16.2	0.1%	14,755.8	19.7	0.1%	14,752.3	23.1	0.2%	14,748.8	26.6	0.2%
ME 5	33 51 22	2013	Below Normal	December	--	60,194.4	60,182.9	11.6	0.0%	60,181.7	12.7	0.0%	60,178.2	16.2	0.0%	60,175.9	18.5	0.0%	60,172.5	22.0	0.0%	60,170.1	24.3	0.0%
ME 5	33 51 22	2013	Below Normal	January	--	22,260.4	22,252.3	8.1	0.0%	22,251.2	9.3	0.0%	22,248.8	11.6	0.1%	22,245.4	15.0	0.1%	22,243.1	17.4	0.1%	22,240.7	19.7	0.1%
ME 5	33 51 22	2013	Below Normal	February	--	8,873.8	8,865.5	8.3	0.1%	8,864.4	9.5	0.1%	8,861.8	12.0	0.1%	8,859.5	14.4	0.2%	8,856.9	16.9	0.2%	8,854.5	19.3	0.2%
ME 5	33 51 22	2013	Below Normal	March	--	10,372.6	10,364.6	8.0	0.1%	10,363.4	9.1	0.1%	10,361.1	11.5	0.1%	10,358.8	13.8	0.1%	10,356.4	16.2	0.2%	10,354.1	18.5	0.2%
ME 5	33 51 22	2013	Below Normal	April	--	8,304.1	8,289.1	14.9	0.2%	8,287.0	17.0	0.2%	8,282.8	21.3	0.3%	8,278.6	25.5	0.3%	8,274.3	29.7	0.4%	8,270.0	34.0	0.4%
ME 5	33 51 22	2013	Below Normal	May	--	4,447.7	4,429.6	18.1	0.4%	4,427.1	20.6	0.5%	4,421.9	25.8	0.6%	4,416.8	30.9	0.7%	4,411.6	36.1	0.8%	4,406.5	41.2	0.9%
ME 5	33 51 22	2013	Below Normal	June	--	2,116.1	2,094.6	21.5	1.0%	2,091.4	24.7	1.2%	2,085.3	30.8	1.5%	2,079.2	36.9	1.7%	2,073.0	43.1	2.0%	2,066.9	49.2	2.3%
ME 5	33 51 22	2013	Below Normal	July	--	720.8	699.8	21.1	2.9%	696.8	24.1	3.3%	690.8	30.0	4.2%	684.8	36.0	5.0%	678.9	42.0	5.8%	673.0	47.9	6.6%
ME 5	33 51 22	2013	Below Normal	August	--	343.8	324.0	19.8	5.8%	321.2	22.6	6.6%	315.5	28.3	8.2%	309.9	33.9	9.9%	304.2	39.6	11.5%	298.6	45.2	13.2%
ME 5	33 51 22	2013	Below Normal	September	Used in Summary Table Analysis	4,810.9	4,790.3	20.6	0.4%	4,787.4	23.5	0.5%	4,781.5	29.4	0.6%	4,775.7	35.2	0.7%	4,769.8	41.1	0.9%	4,763.9	47.0	1.0%
ME 5	33 51 22	2014	Critical	October	Used in Summary Table Analysis	281.9	266.8	15.1	5.3%	264.7	17.2	6.1%	260.3	21.6	7.6%	256.0	25.9	9.2%	251.7	30.2	10.7%	247.3	34.6	12.3%
ME 5	33 51 22	2014	Critical	November	Used in Summary Table Analysis	1,551.3	1,539.1	12.2	0.8%	1,537.4	13.9	0.9%	1,533.9	17.4	1.1%	1,530.3	20.9	1.4%	1,526.9	24.4	1.6%	1,523.3	28.0	1.8%
ME 5	33 51 22	2014	Critical	December	--	1,597.6	1,587.0	10.5	0.7%	1,585.5	12.0	0.8%	1,582.4	15.2	0.9%	1,579.3	18.3	1.1%	1,576.3	21.3	1.3%	1,573.1	24.4	1.5%
ME 5	33 51 22	2014	Critical	January	--	2,835.1	2,825.7	9.4	0.3%	2,824.3	10.8	0.4%	2,821.5	13.5	0.5%	2,818.8	16.3	0.6%	2,816.0	19.1	0.7%	2,813.3	21.8	0.8%
ME 5	33 51 22	2014	Critical	February	--	15,792.8	15,784.7	8.1	0.1%	15,783.6	9.3	0.1%	15,781.3	11.6	0.1%	15,777.8	15.0	0.1%	15,775.5	17.4	0.1%	15,773.1	19.7	0.1%
ME 5	33 51 22	2014	Critical	March	--	31,538.2	31,530.1	8.1	0.0%	31,528.9	9.3	0.0%	31,526.6	11.6	0.0%	31,524.3	13.9	0.0%	31,522.0	16.2	0.1%	31,519.7	18.5	0.1%
ME 5	33 51 22	2014	Critical	April	--	13,008.1	12,991.9	16.2	0.1%	12,989.6	18.5	0.1%	12,985.0	23.1	0.2%	12,981.5	26.6	0.2%	12,976.9	31.3	0.2%	12,972.2	35.9	0.3%
ME 5	33 51 22	2014	Critical	May	--	5,199.4	5,180.4	19.0	0.4%	5,177.7	21.8	0.4%	5,172.2	27.2	0.5%	5,166.8	32.6	0.6%	5,161.3	38.1	0.7%	5,155.9	43.5	0.8%
ME 5	33 51 22	2014	Critical	June	--	1,202.7	1,176.7	25.9	2.2%	1,173.0	29.6	2.5%	1,165.7	36.9	3.1%	1,158.3	44.3	3.7%	1,151.1	51.6	4.3%	1,143.8	58.9	4.9%
ME 5	33 51 22	2014	Critical	July	--	549.0	524.9	24.1	4.4%	521.4	27.5	5.0%	514.6	34.4	6.3%	507.7	41.2	7.5%	500.9	48.1	8.8%	494.1	54.9	10.0%
ME 5	33 51 22	2014	Critical	August	--	351.7	328.6	23.1	6.6%	325.3	26.4	7.5%	318.8	33.0	9.4%	312.2	39.5	11.2%	305.6	46.1	13.1%	299.1	52.6	15.0%
ME 5	33 51 22	2014	Critical	September	Used in Summary Table Analysis	2,585.3	2,562.7	22.6	0.9%	2,559.5	25.8	1.0%	2,553.1	32.2	1.2%	2,546.6	38.7	1.5%	2,540.2	45.1	1.7%	2,533.7	51.6	2.0%
ME 5	33 51 22	2015	Dry	October	Used in Summary Table Analysis	11,407.2	11,389.2	17.9	0.2%	11,386.7	20.5	0.2%	11,381.7	25.5	0.2%	11,376.6	30.6	0.3%	11,371.6	35.5	0.3%	11,366.4	40.7	0.4%
ME 5	33 51 22	2015	Dry	November	Used in Summary Table Analysis	9,086.8	9,073.4	13.4	0.1%	9,071.4	15.4	0.2%	9,067.6	19.2	0.2%	9,063.8	23.0	0.3%	9,059.8	27.0	0.3%	9,055.9	30.9	0.3%
ME 5	33 51 22	2015	Dry	December	--	32,797.5	32,787.0	10.4	0.0%	32,784.7	12.7	0.0%	32,781.3	16.2	0.0%	32,777.8	19.7	0.1%	32,774.3	23.1	0.1%	32,772.0	25.5	0.1%
ME 5	33 51 22	2015	Dry	January	--	14,605.3	14,594.9	10.4	0.1%	14,593.8	11.6	0.1%	14,590.3	15.0	0.1%	14,588.0	17.4	0.1%	14,584.5	20.8	0.1%	14,582.2	23.1	0.2%
ME 5	33 51 22	2015	Dry	February	--	27,305.6	27,296.3	9.3	0.0%	27,295.1	10.4	0.0%	27,291.7	13.9	0.1%	27,289.4	16.2	0.1%	27,287.0	18.5	0.1%	27,283.6	22.0	0.1%
ME 5	33 51 22	2015	Dry	March	--	11,588.0	11,579.9	8.1	0.1%	11,578.7	9.3	0.1%	11,576.4	11.6	0.1%	11,573.7	14.2	0.1%	11,571.4	16.6	0.1%	11,569.1	18.9	0.2%
ME 5	33 51 22	2015	Dry	April	--	8,433.3	8,417.5	15.9	0.2%	8,415.2	18.2	0.2%	8,410.6	22.7	0.3%	8,406.0	27.3	0.3%	8,401.5	31.8	0.4%	8,397.0	36.3	0.4%
ME 5	33 51 22	2015	Dry	May	--	1,510.4	1,491.7	18.8	1.2%	1,489.0	21.4	1.4%	1,483.7	26.7	1.8%	1,478.4	32.1	2.1%	1,472.9	37.5	2.5%	1,467.6	42.8	2.8%
ME 5	33 51 22	2015	Dry	June	--	655.1	631.0	24.1	3.7%	627.6	27.5	4.2%	620.8	34.4	5.2%	614.0	41.2	6.3%	607.2	47.9	7.3%	600.5	54.7	8.3%
ME 5	33 51 22	2015	Dry	July	--	271.3	247.6	23.7	8.7%	244.2	27.1	10.0%	237.5	33.8	12.5%	230.7	40.6	15.0%	223.9	47.4	17.5%	217.2	54.1	19.9%
ME 5	33 51 22	2015	Dry	August	--	169.8	146.8	23.0	13.5%	143.5	26.3	15.5%	136.9	32.9	19.4%	130.3	39.5	23.2%	123.7	46.1	27.1%	117.2	52.6	31.0%
ME 5	33 51 22	2015	Dry	September	Used in Summary Table Analysis	123.5	102.9	20.6	16.7%	99.8	23.7	19.2%	93.4	30.1	24.4%	87.1	36.4	29.5%	80.6	42.9	34.7%	74.3	49.2	39.8%
ME 5	33 51 22	2016	Above Normal	October	Used in Summary Table Analysis	88.6	70.3	18.3	20.7%	67.4	21.2	23.9%	62.3	26.4	29.8%	56.9	31.7	35.8%	51.7	36.9	41.6%	46.8	41.9	47.2%
ME 5	33 51 22	2016	Above Normal	November	Used in Summary Table Analysis	3,907.5	3,894.0	13.5	0.3%	3,891.8	15.7	0.4%	3,887.7	19.8	0.5%	3,883.6	24.0	0.6%	3,879.4	28.1	0.7%	3,875.2	32.3	0.8%
ME 5	33 51 22	2016	Above Normal	December	--	36,831.0	36,819.4	11.6	0.0%	36,817.1	13.9	0.0%	36,813.7	17.4	0.0%	36,810.2	20.8	0.1%	36,806.7	24.3	0.1%	36,803.2	27.8	0.1%
ME 5	33 51 22	2016	Above Normal	January	--	57,538.2	57,527.8	10.4	0.0%	57,525.5	12.7	0.0%	57,522.0	16.2	0.0%	57,519.7	18.5	0.0%	57,516.2	22.0	0.0%	57,512.7	25.5	0.0%
ME 5	33 51 22	2016	Above Normal	February	--	24,305.6	24,296.3	9.3	0.0%	24,295.1	10.4	0.0%	24,292.8	12.7	0.1%	24,289.4	16.2	0.1%	24,287.0	18.5	0.1%	24,284.7	20.8	0.1%
ME 5	33 51 22	2016	Above Normal	March	--	41,880.8	41,871.5	9.3	0.0%	41,870.4	10.4	0.0%	41,868.1	12.7	0.0%	41,864.6	16.2	0.0%	41,862.3	18.5	0.0%	41,860.0	20.8	0.0%
ME 5	33 51 22	2016	Above Normal	April	--	18,567.1	18,559.0	8.1	0.0%	18,557.9	9.3	0.0%	18,555.6	11.6	0.1%	18,553.2	13.9	0.1%	18,550.9	16.2	0.1%	18,548.6	18.5	0.1%
ME 5	33 51 22	2016	Above Normal	May	--	5,225.8	5,216.1	9.7	0.2%	5,214.6	11.2	0.2%	5,211.8	14.0	0.3%	5,208.9	16.9	0.3%	5,206.0	19.8	0.4%	5,203.1	22.7	0.4%
ME 5	33 51 22	2016	Above Normal	June	--	1,513.7	1,495.0	18.6	1.2%	1,492.4	21.3	1.4%	1,487.0	26.6	1.8%	1,481.7	31.9	2.1%	1,476.4	37.3	2.5%	1,471.1	42.6	2.8%
ME 5	33 51 22	2016	Above Normal	July	--	827.5	806.8	20.7	2.5%	803.7	23.8	2.9%	797.8	29.7	3.6%	791.9	35.6	4.3%	785.9	41.6	5.0%	780.0	47.5	5.7%
ME 5	33 51 22	2016	Above Normal	August	--	496.2	475.8	20.4	4.1%	472.9	23.4	4.7%	467.1	29.2	5.9%	461.2	35.0	7.1%	455.3	40.9	8.2%	449.5	46.7	9.4%
ME 5	33 51 22	2016	Above Normal	September	Used in Summary Table Analysis	332.2	314.0	18.2	5.5%	310.8	21.5	6.5%	305.3	26.9	8.1%	299.7	32.5	9.8%	294.2	38.1	11.5%	288.6	43.6	13.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 51 22	2017	Wet	October	Used in Summary Table Analysis	18,366.9	18,351.9	15.0	0.1%	18,349.5	17.4	0.1%	18,344.9	22.0	0.1%	18,340.3	26.6	0.1%	18,335.6	31.3	0.2%	18,331.0	35.9	0.2%
ME 5	33 51 22	2017	Wet	November	Used in Summary Table Analysis	18,914.4	18,902.8	11.6	0.1%	18,901.6	12.7	0.1%	18,898.1	16.2	0.1%	18,894.7	19.7	0.1%	18,891.2	23.1	0.1%	18,887.7	26.6	0.1%
ME 5	33 51 22	2017	Wet	December	--	24,253.5	24,243.1	10.4	0.0%	24,241.9	11.6	0.0%	24,238.4	15.0	0.1%	24,235.0	18.5	0.1%	24,232.6	20.8	0.1%	24,229.2	24.3	0.1%
ME 5	33 51 22	2017	Wet	January	--	107,313.7	107,304.4	9.3	0.0%	107,303.2	10.4	0.0%	107,300.9	12.7	0.0%	107,297.5	16.2	0.0%	107,295.1	18.5	0.0%	107,291.7	22.0	0.0%
ME 5	33 51 22	2017	Wet	February	--	82,079.9	82,071.8	8.1	0.0%	82,070.6	9.3	0.0%	82,068.3	11.6	0.0%	82,064.8	15.0	0.0%	82,062.5	17.4	0.0%	82,060.2	19.7	0.0%
ME 5	33 51 22	2017	Wet	March	--	27,351.9	27,343.8	8.1	0.0%	27,342.6	9.3	0.0%	27,339.1	12.7	0.0%	27,336.8	15.0	0.1%	27,334.5	17.4	0.1%	27,333.3	18.5	0.1%
ME 5	33 51 22	2017	Wet	April	--	23,018.5	23,010.4	8.1	0.0%	23,009.3	9.3	0.0%	23,008.1	10.4	0.0%	23,005.8	12.7	0.1%	23,003.5	15.0	0.1%	23,001.2	17.4	0.1%
ME 5	33 51 22	2017	Wet	May	--	6,276.6	6,266.7	10.0	0.2%	6,265.3	11.3	0.2%	6,262.5	14.1	0.2%	6,259.6	17.0	0.3%	6,256.7	19.9	0.3%	6,253.8	22.8	0.4%
ME 5	33 51 22	2017	Wet	June	--	2,127.1	2,108.0	19.1	0.9%	2,105.2	21.9	1.0%	2,099.8	27.3	1.3%	2,094.3	32.8	1.5%	2,089.0	38.1	1.8%	2,083.6	43.5	2.0%
ME 5	33 51 22	2017	Wet	July	--	940.5	919.6	20.9	2.2%	916.7	23.9	2.5%	910.7	29.8	3.2%	904.8	35.8	3.8%	898.9	41.7	4.4%	893.0	47.6	5.1%
ME 5	33 51 22	2017	Wet	August	--	512.6	492.2	20.4	4.0%	489.3	23.3	4.5%	483.5	29.1	5.7%	477.7	34.9	6.8%	471.9	40.7	7.9%	466.1	46.4	9.1%
ME 5	33 51 22	2017	Wet	September	Used in Summary Table Analysis	327.7	308.8	18.9	5.8%	306.1	21.6	6.6%	300.7	27.0	8.2%	295.3	32.3	9.9%	290.0	37.7	11.5%	284.6	43.1	13.2%
ME 5	33 51 22	2018	Above Normal	October	Used in Summary Table Analysis	280.3	265.3	15.0	5.4%	263.1	17.2	6.1%	258.8	21.5	7.7%	254.5	25.9	9.2%	250.2	30.2	10.8%	245.8	34.5	12.3%
ME 5	33 51 22	2018	Above Normal	November	Used in Summary Table Analysis	10,882.4	10,870.6	11.8	0.1%	10,868.9	13.5	0.1%	10,865.5	16.9	0.2%	10,862.0	20.4	0.2%	10,858.6	23.8	0.2%	10,855.1	27.3	0.3%
ME 5	33 51 22	2018	Above Normal	December	--	5,455.0	5,444.9	10.1	0.2%	5,443.5	11.5	0.2%	5,440.6	14.4	0.3%	5,437.7	17.2	0.3%	5,434.7	20.3	0.4%	5,431.7	23.3	0.4%
ME 5	33 51 22	2018	Above Normal	January	--	17,937.5	17,928.2	9.3	0.1%	17,927.1	10.4	0.1%	17,923.6	13.9	0.1%	17,921.3	16.2	0.1%	17,919.0	18.5	0.1%	17,916.7	20.8	0.1%
ME 5	33 51 22	2018	Above Normal	February	--	7,605.6	7,597.6	8.0	0.1%	7,596.4	9.1	0.1%	7,594.0	11.6	0.2%	7,591.7	13.9	0.2%	7,589.2	16.3	0.2%	7,586.8	18.8	0.2%
ME 5	33 51 22	2018	Above Normal	March	--	20,800.9	20,792.8	8.1	0.0%	20,791.7	9.3	0.0%	20,789.4	11.6	0.1%	20,787.0	13.9	0.1%	20,784.7	16.2	0.1%	20,782.4	18.5	0.1%
ME 5	33 51 22	2018	Above Normal	April	--	32,319.4	32,312.5	6.9	0.0%	32,311.3	8.1	0.0%	32,309.0	10.4	0.0%	32,307.9	11.6	0.0%	32,305.6	13.9	0.0%	32,303.2	16.2	0.1%
ME 5	33 51 22	2018	Above Normal	May	--	6,993.5	6,978.6	14.9	0.2%	6,976.4	17.1	0.2%	6,972.1	21.4	0.3%	6,967.8	25.7	0.4%	6,963.5	30.0	0.4%	6,959.6	33.9	0.5%
ME 5	33 51 22	2018	Above Normal	June	--	1,918.8	1,899.4	19.3	1.0%	1,896.6	22.1	1.2%	1,891.2	27.5	1.4%	1,885.8	33.0	1.7%	1,880.2	38.5	2.0%	1,874.8	44.0	2.3%
ME 5	33 51 22	2018	Above Normal	July	--	786.4	765.4	21.0	2.7%	762.4	24.0	3.1%	756.5	30.0	3.8%	750.5	36.0	4.6%	744.5	42.0	5.3%	738.5	47.9	6.1%
ME 5	33 51 22	2018	Above Normal	August	--	447.5	427.9	19.6	4.4%	425.1	22.4	5.0%	419.5	28.0	6.3%	413.9	33.6	7.5%	408.3	39.3	8.8%	402.7	44.9	10.0%
ME 5	33 51 22	2018	Above Normal	September	Used in Summary Table Analysis	304.5	285.6	18.9	6.2%	282.9	21.6	7.1%	277.5	27.0	8.9%	272.1	32.4	10.6%	266.7	37.8	12.4%	261.3	43.2	14.2%
ME 5	33 51 22	2019	Below Normal	October	Used in Summary Table Analysis	211.3	196.6	14.8	7.0%	194.5	16.9	8.0%	190.2	21.1	10.0%	185.8	25.5	12.1%	181.7	29.7	14.0%	177.4	33.9	16.0%
ME 5	33 51 22	2019	Below Normal	November	Used in Summary Table Analysis	6,683.2	6,671.4	11.8	0.2%	6,669.7	13.5	0.2%	6,666.2	17.0	0.3%	6,662.7	20.5	0.3%	6,659.3	24.0	0.4%	6,655.8	27.4	0.4%
ME 5	33 51 22	2019	Below Normal	December	--	14,767.4	14,756.9	10.4	0.1%	14,755.8	11.6	0.1%	14,752.3	15.0	0.1%	14,750.0	17.4	0.1%	14,746.5	20.8	0.1%	14,743.1	24.3	0.2%
ME 5	33 51 22	2019	Below Normal	January	--	35,425.9	35,416.7	9.3	0.0%	35,415.5	10.4	0.0%	35,412.0	13.9	0.0%	35,409.7	16.2	0.0%	35,407.4	18.5	0.1%	35,405.1	20.8	0.1%
ME 5	33 51 22	2019	Below Normal	February	--	142,141.2	142,129.6	11.6	0.0%	142,129.6	11.6	0.0%	142,129.6	11.6	0.0%	142,129.6	11.6	0.0%	142,118.1	23.1	0.0%	142,118.1	23.1	0.0%
ME 5	33 51 22	2019	Below Normal	March	--	42,434.0	42,427.1	6.9	0.0%	42,425.9	8.1	0.0%	42,423.6	10.4	0.0%	42,421.3	12.7	0.0%	42,420.1	13.9	0.0%	42,417.8	16.2	0.0%
ME 5	33 51 22	2019	Below Normal	April	--	15,305.6	15,298.6	6.9	0.0%	15,297.5	8.1	0.1%	15,295.1	10.4	0.1%	15,292.8	12.7	0.1%	15,290.5	15.0	0.1%	15,288.2	17.4	0.1%
ME 5	33 51 22	2019	Below Normal	May	--	17,098.4	17,082.2	16.2	0.1%	17,079.9	18.5	0.1%	17,075.2	23.1	0.1%	17,070.6	27.8	0.2%	17,066.0	32.4	0.2%	17,061.3	37.0	0.2%
ME 5	33 51 22	2019	Below Normal	June	--	4,244.1	4,223.3	20.8	0.5%	4,220.3	23.8	0.6%	4,214.5	29.6	0.7%	4,208.8	35.3	0.8%	4,203.1	41.0	1.0%	4,197.6	46.5	1.1%
ME 5	33 51 22	2019	Below Normal	July	--	1,367.6	1,346.5	21.1	1.5%	1,343.5	24.1	1.8%	1,337.5	30.1	2.2%	1,331.5	36.1	2.6%	1,325.5	42.1	3.1%	1,319.6	48.0	3.5%
ME 5	33 51 22	2019	Below Normal	August	--	602.3	582.1	20.2	3.3%	579.2	23.1	3.8%	573.4	28.8	4.8%	567.7	34.5	5.7%	562.0	40.3	6.7%	556.3	46.0	7.6%
ME 5	33 51 22	2019	Below Normal	September	Used in Summary Table Analysis	467.5	448.7	18.8	4.0%	446.0	21.5	4.6%	440.6	26.9	5.7%	435.3	32.2	6.9%	429.9	37.6	8.1%	424.5	43.0	9.2%
ME 5	33 51 22	2020	Dry	October	Used in Summary Table Analysis	359.4	345.2	14.2	4.0%	343.1	16.3	4.5%	339.0	20.4	5.7%	334.9	24.5	6.8%	330.8	28.7	8.0%	326.6	32.8	9.1%
ME 5	33 51 22	2020	Dry	November	Used in Summary Table Analysis	326.7	315.5	11.2	3.4%	313.9	12.9	3.9%	310.6	16.2	4.9%	307.3	19.4	5.9%	304.0	22.7	7.0%	300.7	26.0	8.0%
ME 5	33 51 22	2020	Dry	December	--	13,432.9	13,422.5	10.4	0.1%	13,421.3	11.6	0.1%	13,417.8	15.0	0.1%	13,415.5	17.4	0.1%	13,412.0	20.8	0.2%	13,409.7	23.1	0.2%
ME 5	33 51 22	2020	Dry	January	--	22,446.8	22,437.5	9.3	0.0%	22,436.3	10.4	0.0%	22,432.9	13.9	0.1%	22,430.6	16.2	0.1%	22,428.2	18.5	0.1%	22,424.8	22.0	0.1%
ME 5	33 51 22	2020	Dry	February	--	7,420.4	7,412.2	8.2	0.1%	7,410.9	9.5	0.1%	7,408.4	11.9	0.2%	7,406.0	14.4	0.2%	7,403.6	16.8	0.2%	7,401.2	19.2	0.3%
ME 5	33 51 22	2020	Dry	March	--	7,265.6	7,257.9	7.8	0.1%	7,256.8	8.8	0.1%	7,254.5	11.1	0.2%	7,252.2	13.4	0.2%	7,249.9	15.7	0.2%	7,247.6	18.1	0.2%
ME 5	33 51 22	2020	Dry	April	--	5,506.5	5,490.7	15.7	0.3%	5,488.4	18.1	0.3%	5,483.9	22.6	0.4%	5,479.4	27.1	0.5%	5,474.8	31.7	0.6%	5,470.3	36.2	0.7%
ME 5	33 51 22	2020	Dry	May	--	7,406.9	7,388.0	19.0	0.3%	7,385.3	21.6	0.3%	7,379.9	27.1	0.4%	7,374.3	32.6	0.4%	7,368.9	38.1	0.5%	7,363.5	43.4	0.6%
ME 5	33 51 22	2020	Dry	June	--	2,105.8	2,081.0	24.8	1.2%	2,077.5	28.2	1.3%	2,070.8	35.0	1.7%	2,064.1	41.7	2.0%	2,057.3	48.5	2.3%	2,050.6	55.2	2.6%
ME 5	33 51 22	2020	Dry	July	--	800.1	775.6	24.5	3.1%	772.1	28.0	3.5%	765.1	35.0	4.4%	758.1	42.0	5.3%	751.1	49.0	6.1%	744.1	56.0	7.0%
ME 5	33 51 22	2020	Dry	August	--	403.0	378.7	24.2	6.0%	375.3	27.7	6.9%	368.3	34.6	8.6%	361.4	41.5	10.3%	354.5	48.5	12.0%	347.6	55.4	13.7%
ME 5	33 51 22	2020	Dry	September	Used in Summary Table Analysis	252.2	230.4	21.8	8.6%	227.3	24.9	9.9%	220.2	32.0	12.7%	213.7	38.5	15.3%	206.9	45.3	17.9%	200.3	51.9	20.6%
ME 5	33 50 23	2000	Above Normal	October	Used in Summary Table Analysis	824.4	809.5	14.8	1.8%	807.4	17.0	2.1%	803.2	21.2	2.6%	798.9	25.5	3.1%	794.6	29.8	3.6%	790.3	34.0	4.1%
ME 5	33 50 23	2000	Above Normal	November	Used in Summary Table Analysis	12,250.0	12,237.3	12.7	0.1%	12,236.1	13.9	0.1%	12,232.6	17.4	0.1%	12,229.2	20.8	0.2%	12,225.7	24.3	0.2%	12,222.2	27.8	0.2%
ME 5	33 50 23	2000	Above Normal	December	--	10,880.6	10,870.5	10.1	0.1%	10,869.1	11.5	0.1%	10,866.1	14.5	0.1%	10,863.1	17.5	0.2%	10,860.2	20.4	0.2%	10,857.2	23.4	0.2%
ME 5	33 50 23	2000	Above Normal	January	--	28,795.1	28,785.9	9.3	0.0%	28,784.7	10.4	0.0%	28,782.4	12.7	0.0%	28,778.9	16.2	0.1%	28,776.6	18.5	0.1%	28,774.3	20.8	0.1%
ME 5	33 50 23	2000	Above Normal	February	--	37,184.0	37,175.9	8.1	0.0%	37,174.8	9.3	0.0%	37,172.5	11.6	0.0%	37,170.1	13.9	0.0%	37,167.8	16.2	0.0%	37,165.5	18.5	0.0%
ME 5	33 50 23	2000	Above Normal	March	--	18,360.0	18,353.0	6.9	0.0%	18,351.9	8.1	0.0%	18,349.5	10.4	0.1%	18,347.2	12.7	0.1%	18,344.9	15.0	0.1%	18,342.6	17.4	0.1%
ME 5	33 50 23	2000	Above Normal	April	--	12,348.4	12,341.4	6.9	0.1%	12,340.3	8.1	0.1%	12,338.0	10.4	0.1%	12,335.6	12.7	0.1%	12,333.3	15.0	0.1%	12,331.0	17.4	0.1%
ME 5	33 50 23	2000	Above Normal	May	--	7,123.0	7,107.8	15.3	0.2%	7,105.6	17.5	0.2%	7,101.0	22.0	0.3%	7,096.6	26.4	0.4%	7,092.2	30.8	0.4%	7,087.7	35.3	0.5%
ME 5	33 50 23	2000	Above Normal	June	--	2,622.7	2,599.9	22.8	0.9%	2,596.5	26.2	1.0%	2,590.0	32.6	1.2%	2,583.6	39.1	1.5%	2,577.1	45.6	1.7%	2,570.5	52.2	2.0%
ME 5	33 50 23	2000	Above Normal	July	--	997.4	976.5	20.9	2.1%	973.5	23.9	2.4%	967.5	29.9	3.0%	961.6	35.8	3.6%	955.7	41.7	4.2%	949.8	47.6	4.8%
ME 5	33 50 23	2000	Above Normal	August	--	527.9	508.1	19.7	3.7%	505.3	22.6	4.3%	499.7	28.2	5.3%	494.1	33.8	6.4%	488.5	39.4	7.5%	482.9	45.0	8.5%
ME 5	33 50 23	2000	Above Normal	September	Used in Summary Table Analysis	300.6	283.0	17.6	5.8%	280.5	20.1	6.7%	275.5	25.1	8.4%	270.4	30.1	10.0%	265.4	35.2	11.7%	260.4	40.2	13.4%
ME 5	33 50 23	2001	Dry	October	Used in Summary Table Analysis	3,846.3	3,831.7	14.6	0.4%	3,829.6	16.7	0.4%	3,825.3	20.9	0.5%	3,821.2	25.1	0.7%	3,817.0	29.3	0.8%	3,812.7	33.6	0.9%
ME 5	33 50 23	2001	Dry	November	Used in Summary Table Analysis	6,174.0	6,162.2	11.8	0.2%	6,160.4	13.5	0.2%	6,157.1	16.9	0.3%	6,153.7	20.3	0.3%	6,150.3	23.6	0.4%	6,146.9	27.1	0.4%
ME 5	33 50 23	2001	Dry	December	--	8,888.5	8,878.4	10.2	0.1%	8,876.9	11.7	0.1%	8,874.0	14.6	0.2%	8,870.9	17.6	0.2%	8,868.1	20.5	0.2%	8,865.0	23.5	0.3%
ME 5	33 50 23	2001	Dry	January	--	12,885.4	12,876.2	9.3	0.1%	12,875.0	10.4	0.1%	12,872.7	12.7	0.1%	12,870.4	15.0	0.1%	12,866.9	18.5	0.1%	12,864.6	20.8	0.2%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 50 23	2001	Dry	February	--	17,531.3	17,523.1	8.1	0.0%	17,522.0	9.3	0.1%	17,519.7	11.6	0.1%	17,517.4	13.9	0.1%	17,515.0	16.2	0.1%	17,512.7	18.5	0.1%
ME 5	33 50 23	2001	Dry	March	--	12,327.5	12,319.4	8.1	0.1%	12,319.4	8.1	0.1%	12,317.1	10.4	0.1%	12,314.8	12.7	0.1%	12,312.5	15.0	0.1%	12,310.2	17.4	0.1%
ME 5	33 50 23	2001	Dry	April	--	11,004.3	10,988.4	15.9	0.1%	10,986.2	18.1	0.2%	10,981.7	22.6	0.2%	10,977.1	27.2	0.2%	10,972.6	31.7	0.3%	10,967.9	36.3	0.3%
ME 5	33 50 23	2001	Dry	May	--	2,638.0	2,619.3	18.6	0.7%	2,616.7	21.3	0.8%	2,611.2	26.7	1.0%	2,605.9	32.1	1.2%	2,600.5	37.5	1.4%	2,595.1	42.8	1.6%
ME 5	33 50 23	2001	Dry	June	--	2,669.1	2,643.5	25.6	1.0%	2,639.9	29.2	1.1%	2,632.6	36.5	1.4%	2,625.5	43.6	1.6%	2,618.2	50.9	1.9%	2,611.0	58.1	2.2%
ME 5	33 50 23	2001	Dry	July	--	721.2	697.1	24.1	3.3%	693.6	27.6	3.8%	686.8	34.4	4.8%	680.0	41.3	5.7%	673.1	48.1	6.7%	666.3	54.9	7.6%
ME 5	33 50 23	2001	Dry	August	--	176.9	153.4	23.6	13.3%	150.0	27.0	15.2%	143.3	33.7	19.0%	136.6	40.4	22.8%	129.9	47.1	26.6%	123.1	53.8	30.4%
ME 5	33 50 23	2001	Dry	September	Used in Summary Table Analysis	100.2	79.0	21.2	21.2%	76.0	24.2	24.2%	69.9	30.3	30.2%	63.9	36.3	36.2%	57.9	42.3	42.2%	51.8	48.4	48.3%
ME 5	33 50 23	2002	Below Normal	October	Used in Summary Table Analysis	270.5	252.6	17.9	6.6%	250.1	20.4	7.5%	244.9	25.6	9.4%	239.8	30.7	11.3%	234.7	35.8	13.2%	229.5	40.9	15.1%
ME 5	33 50 23	2002	Below Normal	November	Used in Summary Table Analysis	12,092.6	12,078.7	13.9	0.1%	12,076.4	16.2	0.1%	12,071.8	20.8	0.2%	12,068.3	24.3	0.2%	12,063.7	28.9	0.2%	12,060.2	32.4	0.3%
ME 5	33 50 23	2002	Below Normal	December	--	35,879.6	35,866.9	12.7	0.0%	35,865.7	13.9	0.0%	35,862.3	17.4	0.0%	35,858.8	20.8	0.1%	35,854.2	25.5	0.1%	35,850.7	28.9	0.1%
ME 5	33 50 23	2002	Below Normal	January	--	31,001.2	30,990.7	10.4	0.0%	30,989.6	11.6	0.0%	30,986.1	15.0	0.0%	30,982.6	18.5	0.1%	30,979.2	22.0	0.1%	30,976.9	24.3	0.1%
ME 5	33 50 23	2002	Below Normal	February	--	24,751.2	24,741.9	9.3	0.0%	24,740.7	10.4	0.0%	24,737.3	13.9	0.1%	24,735.0	16.2	0.1%	24,731.5	19.7	0.1%	24,729.2	22.0	0.1%
ME 5	33 50 23	2002	Below Normal	March	--	17,836.8	17,827.5	9.3	0.1%	17,826.4	10.4	0.1%	17,824.1	12.7	0.1%	17,820.6	16.2	0.1%	17,818.3	18.5	0.1%	17,816.0	20.8	0.1%
ME 5	33 50 23	2002	Below Normal	April	--	9,947.1	9,931.1	16.0	0.2%	9,928.8	18.3	0.2%	9,924.3	22.8	0.2%	9,919.7	27.4	0.3%	9,915.2	31.9	0.3%	9,910.5	36.6	0.4%
ME 5	33 50 23	2002	Below Normal	May	--	3,327.5	3,308.7	18.9	0.6%	3,306.0	21.5	0.6%	3,300.6	27.0	0.8%	3,295.3	32.3	1.0%	3,289.8	37.7	1.1%	3,284.4	43.2	1.3%
ME 5	33 50 23	2002	Below Normal	June	--	858.1	836.7	21.3	2.5%	833.7	24.4	2.8%	827.7	30.4	3.5%	821.6	36.4	4.2%	815.5	42.5	5.0%	809.5	48.6	5.7%
ME 5	33 50 23	2002	Below Normal	July	--	366.9	345.2	21.7	5.9%	342.1	24.8	6.8%	335.9	31.0	8.4%	329.7	37.2	10.1%	323.6	43.4	11.8%	317.4	49.5	13.5%
ME 5	33 50 23	2002	Below Normal	August	--	232.5	212.0	20.5	8.8%	209.0	23.4	10.1%	203.2	29.3	12.6%	197.3	35.2	15.1%	191.5	41.0	17.6%	185.6	46.9	20.2%
ME 5	33 50 23	2002	Below Normal	September	Used in Summary Table Analysis	169.0	149.6	19.4	11.5%	146.8	22.2	13.1%	141.3	27.8	16.4%	135.7	33.3	19.7%	130.1	38.9	23.0%	124.6	44.5	26.3%
ME 5	33 50 23	2003	Wet	October	Used in Summary Table Analysis	133.9	117.9	16.0	11.9%	115.6	18.3	13.7%	111.0	22.9	17.1%	106.4	27.5	20.5%	101.8	32.1	24.0%	97.1	36.8	27.5%
ME 5	33 50 23	2003	Wet	November	Used in Summary Table Analysis	903.0	890.1	12.9	1.4%	888.2	14.7	1.6%	884.5	18.5	2.0%	880.7	22.3	2.5%	877.0	26.0	2.9%	873.2	29.7	3.3%
ME 5	33 50 23	2003	Wet	December	--	57,283.6	57,272.0	11.6	0.0%	57,270.8	12.7	0.0%	57,267.4	16.2	0.0%	57,263.9	19.7	0.0%	57,260.4	23.1	0.0%	57,256.9	26.6	0.0%
ME 5	33 50 23	2003	Wet	January	--	31,625.0	31,614.6	10.4	0.0%	31,613.4	11.6	0.0%	31,610.0	15.0	0.0%	31,607.6	17.4	0.1%	31,604.2	20.8	0.1%	31,601.9	23.1	0.1%
ME 5	33 50 23	2003	Wet	February	--	20,402.8	20,394.7	8.1	0.0%	20,392.4	10.4	0.1%	20,390.0	12.7	0.1%	20,387.7	15.0	0.1%	20,385.4	17.4	0.1%	20,381.9	20.8	0.1%
ME 5	33 50 23	2003	Wet	March	--	24,111.1	24,103.0	8.1	0.0%	24,101.9	9.3	0.0%	24,099.5	11.6	0.0%	24,096.1	15.0	0.1%	24,093.8	17.4	0.1%	24,091.4	19.7	0.1%
ME 5	33 50 23	2003	Wet	April	--	43,105.3	43,097.2	8.1	0.0%	43,096.1	9.3	0.0%	43,093.8	11.6	0.0%	43,091.4	13.9	0.0%	43,088.0	17.4	0.0%	43,085.6	19.7	0.0%
ME 5	33 50 23	2003	Wet	May	--	12,248.8	12,232.6	16.2	0.1%	12,230.3	18.5	0.2%	12,225.7	23.1	0.2%	12,221.1	27.8	0.2%	12,216.4	32.4	0.3%	12,211.8	37.0	0.3%
ME 5	33 50 23	2003	Wet	June	--	3,172.5	3,152.0	20.5	0.6%	3,149.1	23.4	0.7%	3,143.3	29.2	0.9%	3,137.6	34.8	1.1%	3,131.8	40.6	1.3%	3,126.2	46.3	1.5%
ME 5	33 50 23	2003	Wet	July	--	1,481.0	1,459.5	21.5	1.5%	1,456.4	24.7	1.7%	1,450.2	30.8	2.1%	1,444.1	36.9	2.5%	1,438.0	43.1	2.9%	1,431.8	49.2	3.3%
ME 5	33 50 23	2003	Wet	August	--	766.6	745.7	20.9	2.7%	742.7	23.9	3.1%	736.7	29.9	3.9%	730.8	35.9	4.7%	724.8	41.8	5.5%	718.7	47.9	6.3%
ME 5	33 50 23	2003	Wet	September	Used in Summary Table Analysis	464.0	446.0	18.0	3.9%	443.4	20.5	4.4%	438.3	25.7	5.5%	433.1	30.8	6.6%	428.0	35.9	7.7%	422.9	41.1	8.9%
ME 5	33 50 23	2004	Wet	October	Used in Summary Table Analysis	330.7	315.8	14.9	4.5%	313.7	17.0	5.2%	309.4	21.3	6.4%	305.1	25.6	7.8%	300.8	29.9	9.1%	296.5	34.3	10.4%
ME 5	33 50 23	2004	Wet	November	Used in Summary Table Analysis	5,857.8	5,845.6	12.2	0.2%	5,843.9	13.9	0.2%	5,840.3	17.5	0.3%	5,836.8	20.9	0.4%	5,833.2	24.5	0.4%	5,829.6	28.1	0.5%
ME 5	33 50 23	2004	Wet	December	--	36,553.2	36,542.8	10.4	0.0%	36,541.7	11.6	0.0%	36,538.2	15.0	0.0%	36,535.9	17.4	0.0%	36,532.4	20.8	0.1%	36,528.9	24.3	0.1%
ME 5	33 50 23	2004	Wet	January	--	31,637.7	31,628.5	9.3	0.0%	31,627.3	10.4	0.0%	31,625.0	12.7	0.0%	31,621.5	16.2	0.1%	31,619.2	18.5	0.1%	31,616.9	20.8	0.1%
ME 5	33 50 23	2004	Wet	February	--	38,394.7	38,385.4	9.3	0.0%	38,384.3	10.4	0.0%	38,381.9	12.7	0.0%	38,379.6	15.0	0.0%	38,377.3	17.4	0.0%	38,373.8	20.8	0.1%
ME 5	33 50 23	2004	Wet	March	--	16,550.9	16,542.8	8.1	0.0%	16,541.7	9.3	0.1%	16,539.4	11.6	0.1%	16,537.0	13.9	0.1%	16,534.7	16.2	0.1%	16,532.4	18.5	0.1%
ME 5	33 50 23	2004	Wet	April	--	9,470.8	9,463.4	7.4	0.1%	9,462.3	8.6	0.1%	9,460.1	10.8	0.1%	9,457.9	13.0	0.1%	9,455.7	15.2	0.2%	9,453.5	17.4	0.2%
ME 5	33 50 23	2004	Wet	May	--	3,436.5	3,421.1	15.4	0.4%	3,418.8	17.7	0.5%	3,414.4	22.1	0.6%	3,409.8	26.6	0.8%	3,405.4	31.0	0.9%	3,400.9	35.5	1.0%
ME 5	33 50 23	2004	Wet	June	--	695.8	676.3	19.5	2.8%	673.5	22.3	3.2%	668.0	27.8	4.0%	662.4	33.4	4.8%	656.9	38.9	5.6%	651.3	44.5	6.4%
ME 5	33 50 23	2004	Wet	July	--	361.6	340.6	21.1	5.8%	337.6	24.1	6.7%	331.6	30.1	8.3%	325.6	36.1	10.0%	319.5	42.1	11.6%	313.5	48.1	13.3%
ME 5	33 50 23	2004	Wet	August	--	230.4	210.5	20.0	8.7%	207.6	22.8	9.9%	201.9	28.5	12.4%	196.2	34.2	14.8%	190.5	39.9	17.3%	184.8	45.6	19.8%
ME 5	33 50 23	2004	Wet	September	Used in Summary Table Analysis	167.1	148.1	19.0	11.4%	145.4	21.7	13.0%	139.9	27.2	16.3%	134.5	32.6	19.5%	129.0	38.1	22.8%	123.6	43.5	26.1%
ME 5	33 50 23	2005	Above Normal	October	Used in Summary Table Analysis	7,753.5	7,738.3	15.2	0.2%	7,736.1	17.4	0.2%	7,731.7	21.8	0.3%	7,727.3	26.2	0.3%	7,722.9	30.6	0.4%	7,718.5	35.0	0.5%
ME 5	33 50 23	2005	Above Normal	November	Used in Summary Table Analysis	2,267.0	2,255.1	11.9	0.5%	2,253.4	13.7	0.6%	2,250.0	17.0	0.8%	2,246.5	20.5	0.9%	2,243.1	24.0	1.1%	2,239.6	27.4	1.2%
ME 5	33 50 23	2005	Above Normal	December	--	21,231.5	21,221.1	10.4	0.0%	21,218.8	12.7	0.1%	21,216.4	15.0	0.1%	21,213.0	18.5	0.1%	21,209.5	22.0	0.1%	21,207.2	24.3	0.1%
ME 5	33 50 23	2005	Above Normal	January	--	22,544.0	22,534.7	9.3	0.0%	22,533.6	10.4	0.0%	22,531.3	12.7	0.1%	22,528.9	15.0	0.1%	22,525.5	18.5	0.1%	22,523.1	20.8	0.1%
ME 5	33 50 23	2005	Above Normal	February	--	14,039.4	14,031.3	8.1	0.1%	14,030.1	9.3	0.1%	14,027.8	11.6	0.1%	14,025.5	13.9	0.1%	14,023.1	16.2	0.1%	14,020.8	18.5	0.1%
ME 5	33 50 23	2005	Above Normal	March	--	28,688.7	28,681.7	6.9	0.0%	28,680.6	8.1	0.0%	28,678.2	10.4	0.0%	28,675.9	12.7	0.0%	28,673.6	15.0	0.1%	28,671.3	17.4	0.1%
ME 5	33 50 23	2005	Above Normal	April	--	21,524.3	21,517.4	6.9	0.0%	21,516.2	8.1	0.0%	21,513.9	10.4	0.0%	21,511.6	12.7	0.1%	21,509.3	15.0	0.1%	21,506.9	17.4	0.1%
ME 5	33 50 23	2005	Above Normal	May	--	19,665.5	19,649.3	16.2	0.1%	19,647.0	18.5	0.1%	19,642.4	23.1	0.1%	19,637.7	27.8	0.1%	19,633.1	32.4	0.2%	19,628.5	37.0	0.2%
ME 5	33 50 23	2005	Above Normal	June	--	15,985.0	15,960.6	24.3	0.2%	15,957.2	27.8	0.2%	15,951.4	33.6	0.2%	15,944.4	40.5	0.3%	15,937.5	47.5	0.3%	15,930.6	54.4	0.3%
ME 5	33 50 23	2005	Above Normal	July	--	2,865.4	2,843.5	21.9	0.8%	2,840.5	24.9	0.9%	2,834.3	31.1	1.1%	2,828.0	37.4	1.3%	2,821.9	43.5	1.5%	2,815.7	49.7	1.7%
ME 5	33 50 23	2005	Above Normal	August	--	989.4	969.6	19.8	2.0%	966.8	22.6	2.3%	961.1	28.3	2.9%	955.5	33.9	3.4%	949.8	39.6	4.0%	944.2	45.2	4.6%
ME 5	33 50 23	2005	Above Normal	September	Used in Summary Table Analysis	531.0	513.4	17.6	3.3%	510.8	20.1	3.8%	505.8	25.2	4.7%	500.8	30.2	5.7%	495.8	35.2	6.6%	490.7	40.3	7.6%
ME 5	33 50 23	2006	Wet	October	Used in Summary Table Analysis	641.8	627.4	14.4	2.2%	625.3	16.4	2.6%	621.2	20.6	3.2%	617.1	24.7	3.8%	613.0	28.8	4.5%	608.8	33.0	5.1%
ME 5	33 50 23	2006	Wet	November	Used in Summary Table Analysis	9,399.8	9,388.4	11.3	0.1%	9,386.7	13.1	0.1%	9,383.4	16.3	0.2%	9,380.1	19.7	0.2%	9,376.9	22.9	0.2%	9,373.5	26.3	0.3%
ME 5	33 50 23	2006	Wet	December	--	43,805.6	43,795.1	10.4	0.0%	43,794.0	11.6	0.0%	43,791.7	13.9	0.0%	43,788.2	17.4	0.0%	43,785.9	19.7	0.0%	43,782.4	23.1	0.1%
ME 5	33 50 23	2006	Wet	January	--	46,575.2	46,566.0	9.3	0.0%	46,564.8	10.4	0.0%	46,561.3	13.9	0.0%	46,559.0	16.2	0.0%	46,556.7	18.5	0.0%	46,553.2	22.0	0.0%
ME 5	33 50 23	2006	Wet	February	--	26,737.3	26,729.2	8.1	0.0%	26,728.0	9.3	0.0%	26,725.7	11.6	0.0%	26,723.4	13.9	0.1%	26,721.1	16.2	0.1%	26,718.8	18.5	0.1%
ME 5	33 50 23	2006	Wet	March	--	47,378.5	47,370.4	8.1	0.0%	47,369.2	9.3	0.0%	47,366.9	11.6	0.0%	47,364.6	13.9	0.0%	47,362.3	16.2	0.0%	47,360.0	18.5	0.0%
ME 5	33 50 23	2006	Wet	April	--	30,513.9	30,506.9	6.9	0.0%	30,505.8	8.1	0.0%	30,503.5	10.4	0.0%	30,501.2	12.7	0.0%	30,500.0	13.9	0.0%	30,497.7	16.2	0.1%
ME 5	33 50 23	2006	Wet	May	--	14,256.9	14,247.7	9.3	0.1%	14,246.5	10.4	0.1%	14,243.1	13.9	0.1%	14,240.7	16.2	0.1%	14,238.4	18.5	0.1%	14,235.0	22.0	0.2%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 50 23	2006	Wet	June	--	3,552.9	3,533.6	19.3	0.5%	3,530.8	22.1	0.6%	3,525.2	27.7	0.8%	3,519.8	33.1	0.9%	3,514.4	38.5	1.1%	3,508.8	44.1	1.2%
ME 5	33 50 23	2006	Wet	July	--	1,286.7	1,266.0	20.7	1.6%	1,263.1	23.6	1.8%	1,257.2	29.5	2.3%	1,251.3	35.4	2.8%	1,245.4	41.3	3.2%	1,239.6	47.1	3.7%
ME 5	33 50 23	2006	Wet	August	--	672.9	652.6	20.3	3.0%	649.7	23.2	3.4%	643.9	28.9	4.3%	638.2	34.7	5.2%	632.4	40.5	6.0%	626.6	46.2	6.9%
ME 5	33 50 23	2006	Wet	September	Used in Summary Table Analysis	433.2	415.3	17.9	4.1%	412.8	20.4	4.7%	407.7	25.5	5.9%	402.6	30.6	7.1%	397.5	35.7	8.2%	392.4	40.8	9.4%
ME 5	33 50 23	2007	Above Normal	October	Used in Summary Table Analysis	280.4	265.8	14.6	5.2%	263.7	16.7	5.9%	259.5	20.9	7.4%	255.3	25.1	8.9%	251.1	29.3	10.5%	246.8	33.6	12.0%
ME 5	33 50 23	2007	Above Normal	November	Used in Summary Table Analysis	8,749.3	8,737.4	11.9	0.1%	8,735.6	13.7	0.2%	8,732.3	17.0	0.2%	8,728.8	20.5	0.2%	8,725.3	24.0	0.3%	8,721.8	27.5	0.3%
ME 5	33 50 23	2007	Above Normal	December	--	20,577.5	20,567.1	10.4	0.1%	20,566.0	11.6	0.1%	20,562.5	15.0	0.1%	20,560.2	17.4	0.1%	20,556.7	20.8	0.1%	20,553.2	24.3	0.1%
ME 5	33 50 23	2007	Above Normal	January	--	10,295.6	10,286.3	9.3	0.1%	10,285.1	10.5	0.1%	10,282.4	13.2	0.1%	10,279.7	15.9	0.2%	10,277.1	18.5	0.2%	10,274.3	21.3	0.2%
ME 5	33 50 23	2007	Above Normal	February	--	30,759.3	30,751.2	8.1	0.0%	30,750.0	9.3	0.0%	30,747.7	11.6	0.0%	30,744.2	15.0	0.0%	30,741.9	17.4	0.1%	30,739.6	19.7	0.1%
ME 5	33 50 23	2007	Above Normal	March	--	13,133.1	13,125.0	8.1	0.1%	13,123.8	9.3	0.1%	13,121.5	11.6	0.1%	13,119.2	13.9	0.1%	13,116.9	16.2	0.1%	13,114.6	18.5	0.1%
ME 5	33 50 23	2007	Above Normal	April	--	11,565.0	11,549.8	15.3	0.1%	11,547.6	17.5	0.2%	11,543.2	21.9	0.2%	11,538.9	26.2	0.2%	11,534.5	30.6	0.3%	11,530.1	35.0	0.3%
ME 5	33 50 23	2007	Above Normal	May	--	4,153.5	4,135.4	18.1	0.4%	4,132.9	20.6	0.5%	4,127.7	25.8	0.6%	4,122.5	31.0	0.7%	4,117.1	36.3	0.9%	4,111.9	41.6	1.0%
ME 5	33 50 23	2007	Above Normal	June	--	1,508.3	1,486.6	21.8	1.4%	1,483.4	24.9	1.6%	1,477.2	31.1	2.1%	1,471.1	37.3	2.5%	1,464.8	43.5	2.9%	1,458.7	49.7	3.3%
ME 5	33 50 23	2007	Above Normal	July	--	500.5	478.5	22.1	4.4%	475.3	25.2	5.0%	469.1	31.5	6.3%	462.8	37.7	7.5%	456.6	44.0	8.8%	450.3	50.2	10.0%
ME 5	33 50 23	2007	Above Normal	August	--	228.5	208.6	20.0	8.7%	205.7	22.8	10.0%	200.0	28.5	12.5%	194.3	34.2	15.0%	188.6	39.9	17.5%	183.0	45.6	19.9%
ME 5	33 50 23	2007	Above Normal	September	Used in Summary Table Analysis	156.2	137.2	19.0	12.2%	134.5	21.7	13.9%	129.1	27.1	17.4%	123.7	32.5	20.8%	118.3	37.9	24.3%	112.9	43.3	27.7%
ME 5	33 50 23	2008	Dry	October	Used in Summary Table Analysis	3,464.1	3,448.6	15.5	0.4%	3,446.4	17.7	0.5%	3,441.9	22.2	0.6%	3,437.5	26.6	0.8%	3,433.0	31.1	0.9%	3,428.5	35.6	1.0%
ME 5	33 50 23	2008	Dry	November	Used in Summary Table Analysis	3,303.9	3,291.8	12.2	0.4%	3,290.0	13.9	0.4%	3,286.6	17.4	0.5%	3,283.1	20.8	0.6%	3,279.6	24.3	0.7%	3,276.2	27.8	0.8%
ME 5	33 50 23	2008	Dry	December	--	23,344.9	23,334.5	10.4	0.0%	23,333.3	11.6	0.0%	23,329.9	15.0	0.1%	23,326.4	18.5	0.1%	23,324.1	20.8	0.1%	23,320.6	24.3	0.1%
ME 5	33 50 23	2008	Dry	January	--	37,740.7	37,730.3	10.4	0.0%	37,729.2	11.6	0.0%	37,725.7	15.0	0.0%	37,723.4	17.4	0.0%	37,719.9	20.8	0.1%	37,717.6	23.1	0.1%
ME 5	33 50 23	2008	Dry	February	--	26,320.6	26,312.5	8.1	0.0%	26,311.3	9.3	0.0%	26,309.0	11.6	0.0%	26,306.7	13.9	0.1%	26,304.4	16.2	0.1%	26,302.1	18.5	0.1%
ME 5	33 50 23	2008	Dry	March	--	11,818.3	11,810.2	8.1	0.1%	11,809.0	9.3	0.1%	11,806.7	11.6	0.1%	11,804.4	13.9	0.1%	11,802.1	16.2	0.1%	11,799.8	18.5	0.2%
ME 5	33 50 23	2008	Dry	April	--	9,035.8	9,020.3	15.5	0.2%	9,018.1	17.7	0.2%	9,013.5	22.2	0.2%	9,009.1	26.6	0.3%	9,004.6	31.1	0.3%	9,000.2	35.5	0.4%
ME 5	33 50 23	2008	Dry	May	--	1,358.4	1,341.9	16.6	1.2%	1,339.5	19.0	1.4%	1,334.7	23.7	1.7%	1,330.0	28.5	2.1%	1,325.5	33.0	2.4%	1,320.9	37.5	2.8%
ME 5	33 50 23	2008	Dry	June	--	442.6	418.8	23.8	5.4%	415.5	27.2	6.1%	408.7	33.9	7.7%	402.0	40.6	9.2%	395.3	47.3	10.7%	388.6	54.0	12.2%
ME 5	33 50 23	2008	Dry	July	--	260.5	236.9	23.6	9.1%	233.5	27.0	10.4%	226.8	33.8	13.0%	220.0	40.5	15.5%	213.3	47.2	18.1%	206.6	53.9	20.7%
ME 5	33 50 23	2008	Dry	August	--	184.2	161.1	23.1	12.5%	157.9	26.4	14.3%	151.3	32.9	17.9%	144.7	39.5	21.4%	138.1	46.1	25.0%	131.6	52.6	28.6%
ME 5	33 50 23	2008	Dry	September	Used in Summary Table Analysis	145.8	123.5	22.3	15.3%	120.4	25.4	17.4%	114.0	31.8	21.8%	107.7	38.1	26.2%	101.3	44.5	30.5%	95.0	50.8	34.9%
ME 5	33 50 23	2009	Critical	October	Used in Summary Table Analysis	931.1	913.3	17.7	1.9%	910.8	20.3	2.2%	905.6	25.4	2.7%	900.5	30.6	3.3%	895.6	35.5	3.8%	890.4	40.6	4.4%
ME 5	33 50 23	2009	Critical	November	Used in Summary Table Analysis	5,565.7	5,552.0	13.8	0.2%	5,549.9	15.9	0.3%	5,545.9	19.8	0.4%	5,541.9	23.8	0.4%	5,538.0	27.8	0.5%	5,533.9	31.8	0.6%
ME 5	33 50 23	2009	Critical	December	--	12,278.9	12,267.4	11.6	0.1%	12,265.0	13.9	0.1%	12,261.6	17.4	0.1%	12,258.1	20.8	0.2%	12,254.6	24.3	0.2%	12,251.2	27.8	0.2%
ME 5	33 50 23	2009	Critical	January	--	8,829.2	8,818.4	10.8	0.1%	8,816.9	12.3	0.1%	8,813.8	15.4	0.2%	8,810.6	18.5	0.2%	8,807.4	21.8	0.2%	8,804.3	24.9	0.3%
ME 5	33 50 23	2009	Critical	February	--	22,710.6	22,700.2	10.4	0.0%	22,699.1	11.6	0.1%	22,696.8	13.9	0.1%	22,693.3	17.4	0.1%	22,691.0	19.7	0.1%	22,688.7	22.0	0.1%
ME 5	33 50 23	2009	Critical	March	--	21,192.1	21,184.0	8.1	0.0%	21,182.9	9.3	0.0%	21,180.6	11.6	0.1%	21,178.2	13.9	0.1%	21,175.9	16.2	0.1%	21,172.5	19.7	0.1%
ME 5	33 50 23	2009	Critical	April	--	10,105.4	10,089.4	16.1	0.2%	10,087.0	18.4	0.2%	10,082.4	23.0	0.2%	10,077.7	27.8	0.3%	10,073.0	32.4	0.3%	10,068.4	37.0	0.4%
ME 5	33 50 23	2009	Critical	May	--	15,620.4	15,600.7	19.7	0.1%	15,598.4	22.0	0.1%	15,592.6	27.8	0.2%	15,586.8	33.6	0.2%	15,581.0	39.4	0.3%	15,575.2	45.1	0.3%
ME 5	33 50 23	2009	Critical	June	--	3,165.7	3,140.5	25.2	0.8%	3,136.9	28.8	0.9%	3,129.6	36.1	1.1%	3,122.3	43.4	1.4%	3,115.2	50.6	1.6%	3,108.0	57.8	1.8%
ME 5	33 50 23	2009	Critical	July	--	1,268.1	1,244.1	24.0	1.9%	1,240.7	27.3	2.2%	1,233.9	34.1	2.7%	1,227.1	41.0	3.2%	1,220.3	47.8	3.8%	1,213.5	54.5	4.3%
ME 5	33 50 23	2009	Critical	August	--	674.4	651.2	23.2	3.4%	647.8	26.6	3.9%	641.2	33.2	4.9%	634.6	39.8	5.9%	628.0	46.4	6.9%	621.3	53.0	7.9%
ME 5	33 50 23	2009	Critical	September	Used in Summary Table Analysis	395.1	374.3	20.9	5.3%	371.3	23.9	6.0%	365.2	29.9	7.6%	359.3	35.8	9.1%	353.3	41.8	10.6%	347.3	47.8	12.1%
ME 5	33 50 23	2010	Below Normal	October	Used in Summary Table Analysis	6,097.3	6,079.4	17.9	0.3%	6,076.7	20.6	0.3%	6,071.6	25.7	0.4%	6,066.4	30.9	0.5%	6,061.5	35.9	0.6%	6,056.3	41.1	0.7%
ME 5	33 50 23	2010	Below Normal	November	Used in Summary Table Analysis	8,327.8	8,313.5	14.2	0.2%	8,311.5	16.3	0.2%	8,307.3	20.5	0.2%	8,303.2	24.5	0.3%	8,299.1	28.7	0.3%	8,294.9	32.9	0.4%
ME 5	33 50 23	2010	Below Normal	December	--	12,430.6	12,419.0	11.6	0.1%	12,416.7	13.9	0.1%	12,413.2	17.4	0.1%	12,409.7	20.8	0.2%	12,406.3	24.3	0.2%	12,402.8	27.8	0.2%
ME 5	33 50 23	2010	Below Normal	January	--	36,490.7	36,479.2	11.6	0.0%	36,478.0	12.7	0.0%	36,474.5	16.2	0.0%	36,471.1	19.7	0.1%	36,467.6	23.1	0.1%	36,464.1	26.6	0.1%
ME 5	33 50 23	2010	Below Normal	February	--	27,317.1	27,307.9	9.3	0.0%	27,306.7	10.4	0.0%	27,303.2	13.9	0.1%	27,300.9	16.2	0.1%	27,297.5	19.7	0.1%	27,295.1	22.0	0.1%
ME 5	33 50 23	2010	Below Normal	March	--	28,900.5	28,891.2	9.3	0.0%	28,890.0	10.4	0.0%	28,887.7	12.7	0.0%	28,884.3	16.2	0.1%	28,881.9	18.5	0.1%	28,879.6	20.8	0.1%
ME 5	33 50 23	2010	Below Normal	April	--	40,130.8	40,122.7	8.1	0.0%	40,121.5	9.3	0.0%	40,119.2	11.6	0.0%	40,116.9	13.9	0.0%	40,113.4	17.4	0.0%	40,111.1	19.7	0.0%
ME 5	33 50 23	2010	Below Normal	May	--	20,360.0	20,342.6	17.4	0.1%	20,340.3	19.7	0.1%	20,335.6	24.3	0.1%	20,331.0	28.9	0.1%	20,326.4	33.6	0.2%	20,321.8	38.2	0.2%
ME 5	33 50 23	2010	Below Normal	June	--	9,422.3	9,398.3	24.1	0.3%	9,394.8	27.5	0.3%	9,387.8	34.5	0.4%	9,381.1	41.2	0.4%	9,374.3	48.0	0.5%	9,367.5	54.9	0.6%
ME 5	33 50 23	2010	Below Normal	July	--	1,459.4	1,437.3	22.1	1.5%	1,434.1	25.2	1.7%	1,427.7	31.7	2.2%	1,421.4	38.0	2.6%	1,415.0	44.3	3.0%	1,408.9	50.5	3.5%
ME 5	33 50 23	2010	Below Normal	August	--	575.7	555.3	20.4	3.5%	552.4	23.3	4.0%	546.5	29.1	5.1%	540.8	34.9	6.1%	535.0	40.7	7.1%	529.1	46.6	8.1%
ME 5	33 50 23	2010	Below Normal	September	Used in Summary Table Analysis	658.2	638.7	19.5	3.0%	635.9	22.2	3.4%	630.3	27.8	4.2%	624.8	33.3	5.1%	619.2	38.9	5.9%	613.7	44.5	6.8%
ME 5	33 50 23	2011	Wet	October	Used in Summary Table Analysis	9,692.0	9,677.2	14.8	0.2%	9,675.0	17.0	0.2%	9,670.8	21.2	0.2%	9,666.6	25.5	0.3%	9,662.3	29.7	0.3%	9,657.9	34.1	0.4%
ME 5	33 50 23	2011	Wet	November	Used in Summary Table Analysis	14,285.9	14,274.3	11.6	0.1%	14,273.1	12.7	0.1%	14,269.7	16.2	0.1%	14,266.2	19.7	0.1%	14,262.7	23.1	0.2%	14,259.3	26.6	0.2%
ME 5	33 50 23	2011	Wet	December	--	33,971.1	33,960.6	10.4	0.0%	33,959.5	11.6	0.0%	33,956.0	15.0	0.0%	33,953.7	17.4	0.1%	33,950.2	20.8	0.1%	33,946.8	24.3	0.1%
ME 5	33 50 23	2011	Wet	January	--	14,207.2	14,197.9	9.3	0.1%	14,196.8	10.4	0.1%	14,193.3	13.9	0.1%	14,191.0	16.2	0.1%	14,188.7	18.5	0.1%	14,185.2	22.0	0.2%
ME 5	33 50 23	2011	Wet	February	--	20,818.3	20,809.0	9.3	0.0%	20,807.9	10.4	0.1%	20,805.6	12.7	0.1%	20,803.2	15.0	0.1%	20,800.9	17.4	0.1%	20,798.6	19.7	0.1%
ME 5	33 50 23	2011	Wet	March	--	52,184.0	52,175.9	8.1	0.0%	52,174.8	9.3	0.0%	52,172.5	11.6	0.0%	52,170.1	13.9	0.0%	52,167.8	16.2	0.0%	52,165.5	18.5	0.0%
ME 5	33 50 23	2011	Wet	April	--	24,861.1	24,853.0	8.1	0.0%	24,851.9	9.3	0.0%	24,849.5	11.6	0.0%	24,847.2	13.9	0.1%	24,844.9	16.2	0.1%	24,842.6	18.5	0.1%
ME 5	33 50 23	2011	Wet	May	--	11,411.9	11,396.3	15.6	0.1%	11,394.0	17.9	0.2%	11,389.5	22.5	0.2%	11,385.0	27.0	0.2%	11,380.3	31.6	0.3%	11,375.8	36.1	0.3%
ME 5	33 50 23	2011	Wet	June	--	7,085.8	7,062.3	23.5	0.3%	7,059.0	26.7	0.4%	7,052.3	33.4	0.5%	7,045.7	40.0	0.6%	7,039.0	46.8	0.7%	7,032.4	53.4	0.8%
ME 5	33 50 23	2011	Wet	July	--	1,831.9	1,808.4	23.5	1.3%	1,805.1	26.9	1.5%	1,798.4	33.6	1.8%	1,791.8	40.2	2.2%	1,785.1	46.9	2.6%	1,778.4	53.6	2.9%
ME 5	33 50 23	2011	Wet	August	--	782.5	762.4	20.1	2.6%	759.5	23.0	2.9%	753.8	28.7	3.7%	748.1	34.5	4.4%	742.3	40.2	5.1%	736.7	45.9	5.9%
ME 5	33 50 23	2011	Wet	September	Used in Summary Table Analysis	439.2	420.8	18.4	4.2%	418.2	21.0	4.8%	413.0	26.2	6.0%	407.8	31.4	7.2%	402.5	36.7	8.3%	397.3	41.9	9.5%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 50 23	2012	Below Normal	October	Used in Summary Table Analysis	4,572.0	4,556.9	15.0	0.3%	4,554.7	17.2	0.4%	4,550.3	21.6	0.5%	4,546.1	25.9	0.6%	4,541.7	30.3	0.7%	4,537.4	34.6	0.8%
ME 5	33 50 23	2012	Below Normal	November	Used in Summary Table Analysis	8,299.4	8,287.4	12.0	0.1%	8,285.6	13.8	0.2%	8,282.2	17.2	0.2%	8,278.7	20.7	0.2%	8,275.2	24.2	0.3%	8,271.6	27.8	0.3%
ME 5	33 50 23	2012	Below Normal	December	--	5,210.5	5,200.2	10.3	0.2%	5,198.8	11.7	0.2%	5,195.8	14.7	0.3%	5,192.8	17.7	0.3%	5,189.8	20.7	0.4%	5,186.7	23.8	0.5%
ME 5	33 50 23	2012	Below Normal	January	--	20,291.7	20,282.4	9.3	0.0%	20,281.3	10.4	0.1%	20,278.9	12.7	0.1%	20,275.5	16.2	0.1%	20,273.1	18.5	0.1%	20,269.7	22.0	0.1%
ME 5	33 50 23	2012	Below Normal	February	--	18,263.9	18,254.6	9.3	0.1%	18,253.5	10.4	0.1%	18,251.2	12.7	0.1%	18,248.8	15.0	0.1%	18,246.5	17.4	0.1%	18,244.2	19.7	0.1%
ME 5	33 50 23	2012	Below Normal	March	--	45,631.9	45,623.8	8.1	0.0%	45,622.7	9.3	0.0%	45,620.4	11.6	0.0%	45,618.1	13.9	0.0%	45,615.7	16.2	0.0%	45,612.3	19.7	0.0%
ME 5	33 50 23	2012	Below Normal	April	--	26,934.0	26,925.9	8.1	0.0%	26,924.8	9.3	0.0%	26,923.6	10.4	0.0%	26,921.3	12.7	0.0%	26,919.0	15.0	0.1%	26,916.7	17.4	0.1%
ME 5	33 50 23	2012	Below Normal	May	--	7,500.8	7,485.2	15.6	0.2%	7,483.0	17.8	0.2%	7,478.4	22.5	0.3%	7,473.8	27.0	0.4%	7,469.3	31.5	0.4%	7,464.8	36.0	0.5%
ME 5	33 50 23	2012	Below Normal	June	--	5,544.7	5,520.8	23.8	0.4%	5,517.5	27.2	0.5%	5,510.6	34.0	0.6%	5,503.9	40.7	0.7%	5,497.1	47.6	0.9%	5,490.4	54.3	1.0%
ME 5	33 50 23	2012	Below Normal	July	--	2,242.0	2,219.2	22.8	1.0%	2,216.1	25.9	1.2%	2,209.6	32.4	1.4%	2,203.1	38.9	1.7%	2,196.6	45.4	2.0%	2,190.2	51.9	2.3%
ME 5	33 50 23	2012	Below Normal	August	--	392.7	374.3	18.4	4.7%	371.7	21.0	5.4%	366.4	26.3	6.7%	361.2	31.6	8.0%	355.9	36.8	9.4%	350.7	42.0	10.7%
ME 5	33 50 23	2012	Below Normal	September	Used in Summary Table Analysis	254.6	238.1	16.5	6.5%	235.7	18.9	7.4%	231.0	23.6	9.3%	226.3	28.3	11.1%	221.6	33.0	12.9%	216.9	37.7	14.8%
ME 5	33 50 23	2013	Below Normal	October	Used in Summary Table Analysis	1,932.2	1,917.7	14.5	0.7%	1,915.6	16.6	0.9%	1,911.5	20.7	1.1%	1,907.3	24.9	1.3%	1,903.1	29.1	1.5%	1,899.1	33.1	1.7%
ME 5	33 50 23	2013	Below Normal	November	Used in Summary Table Analysis	14,798.6	14,787.0	11.6	0.1%	14,784.7	13.9	0.1%	14,781.3	17.4	0.1%	14,778.9	19.7	0.1%	14,775.5	23.1	0.2%	14,772.0	26.6	0.2%
ME 5	33 50 23	2013	Below Normal	December	--	60,243.1	60,232.6	10.4	0.0%	60,231.5	11.6	0.0%	60,228.0	15.0	0.0%	60,224.5	18.5	0.0%	60,222.2	20.8	0.0%	60,218.8	24.3	0.0%
ME 5	33 50 23	2013	Below Normal	January	--	22,273.1	22,265.0	8.1	0.0%	22,263.9	9.3	0.0%	22,260.4	12.7	0.1%	22,258.1	15.0	0.1%	22,255.8	17.4	0.1%	22,253.5	19.7	0.1%
ME 5	33 50 23	2013	Below Normal	February	--	8,879.7	8,871.4	8.3	0.1%	8,870.1	9.6	0.1%	8,867.7	12.0	0.1%	8,865.3	14.5	0.2%	8,862.8	16.9	0.2%	8,860.3	19.4	0.2%
ME 5	33 50 23	2013	Below Normal	March	--	10,382.6	10,374.5	8.1	0.1%	10,373.4	9.3	0.1%	10,371.1	11.6	0.1%	10,368.8	13.9	0.1%	10,366.3	16.3	0.2%	10,363.9	18.8	0.2%
ME 5	33 50 23	2013	Below Normal	April	--	8,307.1	8,292.1	14.9	0.2%	8,290.0	17.0	0.2%	8,285.8	21.3	0.3%	8,281.5	25.6	0.3%	8,277.2	29.9	0.4%	8,272.9	34.1	0.4%
ME 5	33 50 23	2013	Below Normal	May	--	4,451.6	4,433.6	18.1	0.4%	4,431.0	20.6	0.5%	4,425.8	25.8	0.6%	4,420.6	31.0	0.7%	4,415.4	36.2	0.8%	4,410.3	41.3	0.9%
ME 5	33 50 23	2013	Below Normal	June	--	2,117.7	2,095.9	21.8	1.0%	2,092.9	24.8	1.2%	2,086.7	31.0	1.5%	2,080.6	37.2	1.8%	2,074.4	43.3	2.0%	2,068.3	49.4	2.3%
ME 5	33 50 23	2013	Below Normal	July	--	721.7	700.6	21.2	2.9%	697.6	24.2	3.3%	691.6	30.2	4.2%	685.6	36.2	5.0%	679.6	42.2	5.8%	673.6	48.1	6.7%
ME 5	33 50 23	2013	Below Normal	August	--	345.1	325.2	19.9	5.8%	322.4	22.7	6.6%	316.7	28.4	8.2%	311.0	34.1	9.9%	305.3	39.8	11.5%	299.6	45.5	13.2%
ME 5	33 50 23	2013	Below Normal	September	Used in Summary Table Analysis	4,817.5	4,796.9	20.6	0.4%	4,793.9	23.6	0.5%	4,788.0	29.5	0.6%	4,782.2	35.3	0.7%	4,776.3	41.2	0.9%	4,770.4	47.1	1.0%
ME 5	33 50 23	2014	Critical	October	Used in Summary Table Analysis	282.4	267.3	15.2	5.4%	265.1	17.3	6.1%	260.7	21.7	7.7%	256.3	26.1	9.2%	252.0	30.5	10.8%	247.6	34.8	12.3%
ME 5	33 50 23	2014	Critical	November	Used in Summary Table Analysis	1,555.0	1,542.8	12.2	0.8%	1,541.0	14.0	0.9%	1,537.5	17.5	1.1%	1,533.9	21.1	1.4%	1,530.3	24.7	1.6%	1,526.9	28.1	1.8%
ME 5	33 50 23	2014	Critical	December	--	1,600.0	1,589.4	10.6	0.7%	1,587.8	12.2	0.8%	1,584.7	15.3	1.0%	1,581.6	18.4	1.2%	1,578.6	21.4	1.3%	1,575.5	24.5	1.5%
ME 5	33 50 23	2014	Critical	January	--	2,839.0	2,829.5	9.5	0.3%	2,828.1	10.9	0.4%	2,825.3	13.7	0.5%	2,822.6	16.4	0.6%	2,819.8	19.2	0.7%	2,817.0	22.0	0.8%
ME 5	33 50 23	2014	Critical	February	--	15,804.4	15,795.1	9.3	0.1%	15,794.0	10.4	0.1%	15,791.7	12.7	0.1%	15,789.4	15.0	0.1%	15,785.9	18.5	0.1%	15,783.6	20.8	0.1%
ME 5	33 50 23	2014	Critical	March	--	31,550.9	31,542.8	8.1	0.0%	31,541.7	9.3	0.0%	31,539.4	11.6	0.0%	31,537.0	13.9	0.0%	31,534.7	16.2	0.1%	31,532.4	18.5	0.1%
ME 5	33 50 23	2014	Critical	April	--	13,011.6	12,996.5	15.0	0.1%	12,994.2	17.4	0.1%	12,989.6	22.0	0.2%	12,985.0	26.6	0.2%	12,980.3	31.3	0.2%	12,975.7	35.9	0.3%
ME 5	33 50 23	2014	Critical	May	--	5,202.0	5,182.9	19.1	0.4%	5,180.2	21.8	0.4%	5,174.8	27.2	0.5%	5,169.3	32.6	0.6%	5,163.8	38.2	0.7%	5,158.3	43.6	0.8%
ME 5	33 50 23	2014	Critical	June	--	1,203.8	1,177.9	25.9	2.2%	1,174.2	29.6	2.5%	1,166.8	37.0	3.1%	1,159.5	44.3	3.7%	1,152.1	51.7	4.3%	1,144.8	59.0	4.9%
ME 5	33 50 23	2014	Critical	July	--	550.0	525.8	24.2	4.4%	522.4	27.6	5.0%	515.5	34.5	6.3%	508.6	41.4	7.5%	501.7	48.3	8.8%	494.9	55.1	10.0%
ME 5	33 50 23	2014	Critical	August	--	353.1	329.9	23.2	6.6%	326.6	26.5	7.5%	320.0	33.1	9.4%	313.4	39.7	11.2%	306.8	46.3	13.1%	300.2	52.9	15.0%
ME 5	33 50 23	2014	Critical	September	Used in Summary Table Analysis	2,588.9	2,566.2	22.7	0.9%	2,562.8	26.0	1.0%	2,556.5	32.4	1.3%	2,550.0	38.9	1.5%	2,543.4	45.5	1.8%	2,536.9	52.0	2.0%
ME 5	33 50 23	2015	Dry	October	Used in Summary Table Analysis	11,418.9	11,400.8	18.1	0.2%	11,398.3	20.6	0.2%	11,393.3	25.6	0.2%	11,388.1	30.8	0.3%	11,383.1	35.8	0.3%	11,377.8	41.1	0.4%
ME 5	33 50 23	2015	Dry	November	Used in Summary Table Analysis	9,098.4	9,084.8	13.5	0.1%	9,082.9	15.5	0.2%	9,079.1	19.3	0.2%	9,075.1	23.3	0.3%	9,071.2	27.2	0.3%	9,067.2	31.1	0.3%
ME 5	33 50 23	2015	Dry	December	--	32,840.3	32,829.9	10.4	0.0%	32,827.5	12.7	0.0%	32,824.1	16.2	0.0%	32,820.6	19.7	0.1%	32,817.1	23.1	0.1%	32,813.7	26.6	0.1%
ME 5	33 50 23	2015	Dry	January	--	14,611.1	14,600.7	10.4	0.1%	14,599.5	11.6	0.1%	14,596.1	15.0	0.1%	14,593.8	17.4	0.1%	14,590.3	20.8	0.1%	14,586.8	24.3	0.2%
ME 5	33 50 23	2015	Dry	February	--	27,321.8	27,312.5	9.3	0.0%	27,311.3	10.4	0.0%	27,309.0	12.7	0.0%	27,306.7	15.0	0.1%	27,303.2	18.5	0.1%	27,300.9	20.8	0.1%
ME 5	33 50 23	2015	Dry	March	--	11,591.4	11,583.3	8.1	0.1%	11,582.2	9.3	0.1%	11,579.9	11.6	0.1%	11,577.5	13.9	0.1%	11,575.2	16.2	0.1%	11,572.3	19.1	0.2%
ME 5	33 50 23	2015	Dry	April	--	8,444.0	8,428.1	15.9	0.2%	8,425.8	18.2	0.2%	8,421.3	22.7	0.3%	8,416.7	27.3	0.3%	8,412.2	31.8	0.4%	8,407.5	36.5	0.4%
ME 5	33 50 23	2015	Dry	May	--	1,510.6	1,491.8	18.9	1.2%	1,489.1	21.5	1.4%	1,483.8	26.9	1.8%	1,478.5	32.2	2.1%	1,473.0	37.6	2.5%	1,467.7	42.9	2.8%
ME 5	33 50 23	2015	Dry	June	--	655.9	631.7	24.2	3.7%	628.3	27.6	4.2%	621.5	34.4	5.3%	614.6	41.3	6.3%	607.8	48.1	7.3%	601.1	54.8	8.4%
ME 5	33 50 23	2015	Dry	July	--	272.3	248.5	23.8	8.7%	245.1	27.2	10.0%	238.3	34.0	12.5%	231.5	40.8	15.0%	224.7	47.7	17.5%	218.0	54.4	20.0%
ME 5	33 50 23	2015	Dry	August	--	171.1	148.0	23.1	13.5%	144.7	26.4	15.4%	138.1	33.0	19.3%	131.4	39.7	23.2%	124.8	46.3	27.1%	118.2	52.9	30.9%
ME 5	33 50 23	2015	Dry	September	Used in Summary Table Analysis	124.8	104.0	20.7	16.6%	100.9	23.8	19.1%	94.4	30.3	24.3%	88.1	36.7	29.4%	81.6	43.2	34.6%	75.3	49.5	39.7%
ME 5	33 50 23	2016	Above Normal	October	Used in Summary Table Analysis	89.9	71.5	18.4	20.5%	68.5	21.4	23.8%	63.3	26.6	29.6%	58.0	31.9	35.5%	52.7	37.2	41.4%	47.7	42.2	46.9%
ME 5	33 50 23	2016	Above Normal	November	Used in Summary Table Analysis	3,918.2	3,904.5	13.7	0.3%	3,902.2	16.0	0.4%	3,898.1	20.0	0.5%	3,894.0	24.2	0.6%	3,889.7	28.5	0.7%	3,885.5	32.6	0.8%
ME 5	33 50 23	2016	Above Normal	December	--	36,881.9	36,870.4	11.6	0.0%	36,868.1	13.9	0.0%	36,864.6	17.4	0.0%	36,861.1	20.8	0.1%	36,856.5	25.5	0.1%	36,853.0	28.9	0.1%
ME 5	33 50 23	2016	Above Normal	January	--	57,590.3	57,578.7	11.6	0.0%	57,577.5	12.7	0.0%	57,574.1	16.2	0.0%	57,570.6	19.7	0.0%	57,567.1	23.1	0.0%	57,563.7	26.6	0.0%
ME 5	33 50 23	2016	Above Normal	February	--	24,312.5	24,303.2	9.3	0.0%	24,302.1	10.4	0.0%	24,298.6	13.9	0.1%	24,296.3	16.2	0.1%	24,294.0	18.5	0.1%	24,290.5	22.0	0.1%
ME 5	33 50 23	2016	Above Normal	March	--	41,905.1	41,895.8	9.3	0.0%	41,894.7	10.4	0.0%	41,892.4	12.7	0.0%	41,888.9	16.2	0.0%	41,886.6	18.5	0.0%	41,884.3	20.8	0.0%
ME 5	33 50 23	2016	Above Normal	April	--	18,571.8	18,564.8	6.9	0.0%	18,563.7	8.1	0.0%	18,561.3	10.4	0.1%	18,559.0	12.7	0.1%	18,555.6	16.2	0.1%	18,553.2	18.5	0.1%
ME 5	33 50 23	2016	Above Normal	May	--	5,227.5	5,217.8	9.7	0.2%	5,216.3	11.2	0.2%	5,213.4	14.1	0.3%	5,210.5	17.0	0.3%	5,207.6	19.9	0.4%	5,204.7	22.8	0.4%
ME 5	33 50 23	2016	Above Normal	June	--	1,514.6	1,495.8	18.8	1.2%	1,493.1	21.5	1.4%	1,487.8	26.7	1.8%	1,482.5	32.1	2.1%	1,477.1	37.5	2.5%	1,471.8	42.8	2.8%
ME 5	33 50 23	2016	Above Normal	July	--	828.8	807.9	20.8	2.5%	804.9	23.9	2.9%	799.0	29.8	3.6%	793.0	35.8	4.3%	787.0	41.7	5.0%	781.1	47.7	5.8%
ME 5	33 50 23	2016	Above Normal	August	--	497.7	477.2	20.5	4.1%	474.2	23.5	4.7%	468.4	29.3	5.9%	462.5	35.2	7.1%	456.6	41.1	8.3%	450.7	47.0	9.4%
ME 5	33 50 23	2016	Above Normal	September	Used in Summary Table Analysis	333.8	315.4	18.3	5.5%	312.1	21.6	6.5%	306.7	27.1	8.1%	301.1	32.7	9.8%	295.5	38.3	11.5%	289.8	43.9	13.2%
ME 5	33 50 23	2017	Wet	October	Used in Summary Table Analysis	18,386.6	18,371.5	15.0	0.1%	18,369.2	17.4	0.1%	18,365.7	20.8	0.1%	18,361.1	25.5	0.1%	18,355.3	31.3	0.2%	18,351.9	34.7	0.2%
ME 5	33 50 23	2017	Wet	November	Used in Summary Table Analysis	18,936.3	18,924.8	11.6	0.1%	18,922.5	13.9	0.1%	18,919.0	17.4	0.1%	18,915.5	20.8	0.1%	18,912.0	24.3	0.1%	18,908.6	27.8	0.1%
ME 5	33 50 23	2017	Wet	December	--	24,287.0	24,276.6	10.4	0.0%	24,274.3	12.7	0.1%	24,272.0	15.0	0.1%	24,268.5	18.5	0.1%	24,266.2	20.8	0.1%	24,262.7	24.3	0.1%
ME 5	33 50 23	2017	Wet	January	--	107,412.0	107,402.8	9.3	0.0%	107,401.6	10.4	0.0%	107,398.1	13.9	0.0%	107,395.8	16.2	0.0%	107,392.4	19.7	0.0%	107,390.0	22.0	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
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Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 50 23	2017	Wet	February	--	82,135.4	82,126.2	9.3	0.0%	82,125.0	10.4	0.0%	82,122.7	12.7	0.0%	82,120.4	15.0	0.0%	82,118.1	17.4	0.0%	82,114.6	20.8	0.0%
ME 5	33 50 23	2017	Wet	March	--	27,366.9	27,358.8	8.1	0.0%	27,357.6	9.3	0.0%	27,355.3	11.6	0.0%	27,353.0	13.9	0.1%	27,350.7	16.2	0.1%	27,348.4	18.5	0.1%
ME 5	33 50 23	2017	Wet	April	--	23,035.9	23,028.9	6.9	0.0%	23,027.8	8.1	0.0%	23,025.5	10.4	0.0%	23,023.1	12.7	0.1%	23,020.8	15.0	0.1%	23,019.7	16.2	0.1%
ME 5	33 50 23	2017	Wet	May	--	6,276.2	6,266.2	10.0	0.2%	6,264.8	11.3	0.2%	6,261.9	14.2	0.2%	6,259.1	17.0	0.3%	6,256.3	19.9	0.3%	6,253.2	22.9	0.4%
ME 5	33 50 23	2017	Wet	June	--	2,129.2	2,110.0	19.2	0.9%	2,107.3	21.9	1.0%	2,101.9	27.3	1.3%	2,096.4	32.8	1.5%	2,091.0	38.2	1.8%	2,085.5	43.6	2.0%
ME 5	33 50 23	2017	Wet	July	--	942.0	921.0	21.0	2.2%	918.0	24.0	2.5%	912.1	29.9	3.2%	906.1	35.9	3.8%	900.2	41.8	4.4%	894.3	47.8	5.1%
ME 5	33 50 23	2017	Wet	August	--	514.3	493.8	20.5	4.0%	490.9	23.4	4.6%	485.0	29.2	5.7%	479.2	35.0	6.8%	473.4	40.9	7.9%	467.6	46.7	9.1%
ME 5	33 50 23	2017	Wet	September	Used in Summary Table Analysis	329.3	310.3	19.0	5.8%	307.6	21.7	6.6%	302.2	27.1	8.2%	296.7	32.5	9.9%	291.3	38.0	11.5%	285.9	43.4	13.2%
ME 5	33 50 23	2018	Above Normal	October	Used in Summary Table Analysis	282.0	266.9	15.1	5.4%	264.7	17.3	6.1%	260.4	21.7	7.7%	256.0	26.1	9.2%	251.6	30.4	10.8%	247.3	34.8	12.3%
ME 5	33 50 23	2018	Above Normal	November	Used in Summary Table Analysis	10,905.6	10,893.6	11.9	0.1%	10,891.9	13.7	0.1%	10,888.5	17.0	0.2%	10,885.0	20.6	0.2%	10,881.5	24.1	0.2%	10,878.0	27.5	0.3%
ME 5	33 50 23	2018	Above Normal	December	--	5,457.3	5,447.1	10.2	0.2%	5,445.7	11.6	0.2%	5,442.8	14.5	0.3%	5,439.8	17.5	0.3%	5,436.8	20.5	0.4%	5,433.8	23.5	0.4%
ME 5	33 50 23	2018	Above Normal	January	--	17,975.7	17,966.4	9.3	0.1%	17,965.3	10.4	0.1%	17,963.0	12.7	0.1%	17,960.6	15.0	0.1%	17,957.2	18.5	0.1%	17,954.9	20.8	0.1%
ME 5	33 50 23	2018	Above Normal	February	--	7,607.2	7,599.1	8.1	0.1%	7,597.9	9.3	0.1%	7,595.5	11.7	0.2%	7,593.2	14.0	0.2%	7,590.7	16.4	0.2%	7,588.3	18.9	0.2%
ME 5	33 50 23	2018	Above Normal	March	--	20,825.2	20,818.3	6.9	0.0%	20,817.1	8.1	0.0%	20,814.8	10.4	0.1%	20,812.5	12.7	0.1%	20,810.2	15.0	0.1%	20,807.9	17.4	0.1%
ME 5	33 50 23	2018	Above Normal	April	--	32,348.4	32,341.4	6.9	0.0%	32,340.3	8.1	0.0%	32,338.0	10.4	0.0%	32,335.6	12.7	0.0%	32,334.5	13.9	0.0%	32,332.2	16.2	0.1%
ME 5	33 50 23	2018	Above Normal	May	--	6,993.6	6,978.7	14.9	0.2%	6,976.5	17.1	0.2%	6,972.2	21.4	0.3%	6,967.9	25.7	0.4%	6,963.7	30.0	0.4%	6,959.6	34.0	0.5%
ME 5	33 50 23	2018	Above Normal	June	--	1,919.7	1,900.2	19.4	1.0%	1,897.5	22.2	1.2%	1,892.0	27.7	1.4%	1,886.6	33.1	1.7%	1,881.0	38.7	2.0%	1,875.5	44.2	2.3%
ME 5	33 50 23	2018	Above Normal	July	--	787.8	766.7	21.1	2.7%	763.7	24.1	3.1%	757.7	30.1	3.8%	751.7	36.1	4.6%	745.7	42.2	5.4%	739.7	48.1	6.1%
ME 5	33 50 23	2018	Above Normal	August	--	449.1	429.4	19.7	4.4%	426.5	22.6	5.0%	420.9	28.2	6.3%	415.3	33.8	7.5%	409.6	39.5	8.8%	404.0	45.1	10.0%
ME 5	33 50 23	2018	Above Normal	September	Used in Summary Table Analysis	306.1	287.1	19.0	6.2%	284.4	21.7	7.1%	278.9	27.1	8.9%	273.5	32.6	10.6%	268.0	38.0	12.4%	262.6	43.5	14.2%
ME 5	33 50 23	2019	Below Normal	October	Used in Summary Table Analysis	212.8	197.9	14.9	7.0%	195.8	17.0	8.0%	191.5	21.3	10.0%	187.1	25.7	12.1%	182.9	29.9	14.0%	178.6	34.2	16.1%
ME 5	33 50 23	2019	Below Normal	November	Used in Summary Table Analysis	6,698.8	6,686.8	12.0	0.2%	6,685.1	13.8	0.2%	6,681.6	17.2	0.3%	6,678.1	20.7	0.3%	6,674.5	24.3	0.4%	6,671.1	27.8	0.4%
ME 5	33 50 23	2019	Below Normal	December	--	14,792.8	14,782.4	10.4	0.1%	14,781.3	11.6	0.1%	14,777.8	15.0	0.1%	14,775.5	17.4	0.1%	14,772.0	20.8	0.1%	14,768.5	24.3	0.2%
ME 5	33 50 23	2019	Below Normal	January	--	35,476.9	35,467.6	9.3	0.0%	35,465.3	11.6	0.0%	35,463.0	13.9	0.0%	35,460.6	16.2	0.0%	35,457.2	19.7	0.1%	35,454.9	22.0	0.1%
ME 5	33 50 23	2019	Below Normal	February	--	142,199.1	142,187.5	11.6	0.0%	142,187.5	11.6	0.0%	142,187.5	11.6	0.0%	142,175.9	23.1	0.0%	142,175.9	23.1	0.0%	142,175.9	23.1	0.0%
ME 5	33 50 23	2019	Below Normal	March	--	42,459.5	42,451.4	8.1	0.0%	42,450.2	9.3	0.0%	42,447.9	11.6	0.0%	42,445.6	13.9	0.0%	42,444.4	15.0	0.0%	42,442.1	17.4	0.0%
ME 5	33 50 23	2019	Below Normal	April	--	15,311.3	15,304.4	6.9	0.0%	15,303.2	8.1	0.1%	15,300.9	10.4	0.1%	15,298.6	12.7	0.1%	15,296.3	15.0	0.1%	15,295.1	16.2	0.1%
ME 5	33 50 23	2019	Below Normal	May	--	17,135.4	17,119.2	16.2	0.1%	17,116.9	18.5	0.1%	17,113.4	22.0	0.1%	17,108.8	26.6	0.2%	17,104.2	31.3	0.2%	17,099.5	35.9	0.2%
ME 5	33 50 23	2019	Below Normal	June	--	4,243.4	4,222.5	20.9	0.5%	4,219.4	24.0	0.6%	4,213.7	29.7	0.7%	4,208.0	35.4	0.8%	4,202.4	41.0	1.0%	4,196.8	46.6	1.1%
ME 5	33 50 23	2019	Below Normal	July	--	1,369.0	1,347.8	21.2	1.5%	1,344.8	24.2	1.8%	1,338.8	30.2	2.2%	1,332.8	36.2	2.6%	1,326.7	42.2	3.1%	1,320.7	48.3	3.5%
ME 5	33 50 23	2019	Below Normal	August	--	603.8	583.6	20.3	3.4%	580.7	23.2	3.8%	574.9	29.0	4.8%	569.2	34.7	5.7%	563.4	40.5	6.7%	557.6	46.2	7.7%
ME 5	33 50 23	2019	Below Normal	September	Used in Summary Table Analysis	469.1	450.2	18.9	4.0%	447.4	21.6	4.6%	442.0	27.0	5.8%	436.6	32.4	6.9%	431.2	37.9	8.1%	425.8	43.3	9.2%
ME 5	33 50 23	2020	Dry	October	Used in Summary Table Analysis	360.8	346.4	14.4	4.0%	344.4	16.4	4.6%	340.2	20.6	5.7%	336.1	24.7	6.9%	331.9	28.9	8.0%	327.7	33.1	9.2%
ME 5	33 50 23	2020	Dry	November	Used in Summary Table Analysis	329.1	317.8	11.3	3.4%	316.2	13.0	3.9%	312.8	16.3	5.0%	309.5	19.6	6.0%	306.2	22.9	7.0%	302.9	26.3	8.0%
ME 5	33 50 23	2020	Dry	December	--	13,469.9	13,459.5	10.4	0.1%	13,458.3	11.6	0.1%	13,454.9	15.0	0.1%	13,452.5	17.4	0.1%	13,449.1	20.8	0.2%	13,446.8	23.1	0.2%
ME 5	33 50 23	2020	Dry	January	--	22,475.7	22,466.4	9.3	0.0%	22,465.3	10.4	0.0%	22,461.8	13.9	0.1%	22,459.5	16.2	0.1%	22,456.0	19.7	0.1%	22,453.7	22.0	0.1%
ME 5	33 50 23	2020	Dry	February	--	7,421.1	7,412.8	8.2	0.1%	7,411.6	9.5	0.1%	7,409.1	11.9	0.2%	7,406.6	14.5	0.2%	7,404.2	16.9	0.2%	7,401.7	19.3	0.3%
ME 5	33 50 23	2020	Dry	March	--	7,270.9	7,263.2	7.8	0.1%	7,262.0	8.9	0.1%	7,259.7	11.2	0.2%	7,257.4	13.5	0.2%	7,255.1	15.9	0.2%	7,252.8	18.2	0.2%
ME 5	33 50 23	2020	Dry	April	--	5,512.4	5,496.6	15.7	0.3%	5,494.3	18.1	0.3%	5,489.8	22.6	0.4%	5,485.2	27.2	0.5%	5,480.7	31.7	0.6%	5,476.0	36.3	0.7%
ME 5	33 50 23	2020	Dry	May	--	7,414.7	7,395.7	19.0	0.3%	7,393.1	21.6	0.3%	7,387.6	27.1	0.4%	7,382.1	32.6	0.4%	7,376.6	38.1	0.5%	7,371.2	43.5	0.6%
ME 5	33 50 23	2020	Dry	June	--	2,106.1	2,081.3	24.9	1.2%	2,077.8	28.4	1.3%	2,071.1	35.1	1.7%	2,064.2	41.9	2.0%	2,057.5	48.6	2.3%	2,050.7	55.4	2.6%
ME 5	33 50 23	2020	Dry	July	--	801.3	776.7	24.6	3.1%	773.1	28.2	3.5%	766.1	35.2	4.4%	759.1	42.2	5.3%	752.0	49.3	6.1%	745.0	56.3	7.0%
ME 5	33 50 23	2020	Dry	August	--	404.4	380.0	24.4	6.0%	376.5	27.8	6.9%	369.6	34.8	8.6%	362.6	41.8	10.3%	355.6	48.7	12.0%	348.7	55.7	13.8%
ME 5	33 50 23	2020	Dry	September	Used in Summary Table Analysis	253.7	231.7	21.9	8.6%	228.6	25.1	9.9%	221.5	32.2	12.7%	214.9	38.8	15.3%	208.1	45.5	17.9%	201.4	52.2	20.6%
ME 5	32 50 24	2000	Above Normal	October	Used in Summary Table Analysis	825.8	810.6	15.2	1.8%	808.4	17.4	2.1%	804.1	21.7	2.6%	799.7	26.1	3.2%	795.3	30.5	3.7%	790.9	34.9	4.2%
ME 5	32 50 24	2000	Above Normal	November	Used in Summary Table Analysis	12,267.4	12,255.8	11.6	0.1%	12,253.5	13.9	0.1%	12,250.0	17.4	0.1%	12,246.5	20.8	0.2%	12,243.1	24.3	0.2%	12,239.6	27.8	0.2%
ME 5	32 50 24	2000	Above Normal	December	--	10,890.3	10,880.0	10.3	0.1%	10,878.5	11.8	0.1%	10,875.5	14.8	0.1%	10,872.3	17.9	0.2%	10,869.3	20.9	0.2%	10,866.2	24.1	0.2%
ME 5	32 50 24	2000	Above Normal	January	--	28,825.2	28,816.0	9.3	0.0%	28,814.8	10.4	0.0%	28,811.3	13.9	0.0%	28,809.0	16.2	0.1%	28,805.6	19.7	0.1%	28,803.2	22.0	0.1%
ME 5	32 50 24	2000	Above Normal	February	--	37,203.7	37,195.6	8.1	0.0%	37,193.3	10.4	0.0%	37,191.0	12.7	0.0%	37,188.7	15.0	0.0%	37,186.3	17.4	0.0%	37,184.0	19.7	0.1%
ME 5	32 50 24	2000	Above Normal	March	--	18,366.9	18,358.8	8.1	0.0%	18,357.6	9.3	0.1%	18,355.3	11.6	0.1%	18,353.0	13.9	0.1%	18,350.7	16.2	0.1%	18,348.4	18.5	0.1%
ME 5	32 50 24	2000	Above Normal	April	--	12,353.0	12,346.1	6.9	0.1%	12,344.9	8.1	0.1%	12,342.6	10.4	0.1%	12,340.3	12.7	0.1%	12,338.0	15.0	0.1%	12,335.6	17.4	0.1%
ME 5	32 50 24	2000	Above Normal	May	--	7,127.2	7,111.8	15.4	0.2%	7,109.6	17.6	0.2%	7,105.1	22.1	0.3%	7,100.6	26.6	0.4%	7,096.2	31.0	0.4%	7,091.7	35.5	0.5%
ME 5	32 50 24	2000	Above Normal	June	--	2,624.7	2,601.6	23.0	0.9%	2,598.4	26.3	1.0%	2,591.8	32.9	1.3%	2,585.2	39.5	1.5%	2,578.7	45.9	1.8%	2,572.1	52.5	2.0%
ME 5	32 50 24	2000	Above Normal	July	--	998.6	977.4	21.2	2.1%	974.4	24.3	2.4%	968.3	30.3	3.0%	962.3	36.3	3.6%	956.3	42.3	4.2%	950.3	48.3	4.8%
ME 5	32 50 24	2000	Above Normal	August	--	529.1	509.1	20.1	3.8%	506.2	22.9	4.3%	500.5	28.6	5.4%	494.8	34.3	6.5%	489.1	40.0	7.6%	483.4	45.8	8.6%
ME 5	32 50 24	2000	Above Normal	September	Used in Summary Table Analysis	301.7	283.8	17.9	5.9%	281.2	20.5	6.8%	276.1	25.6	8.5%	270.9	30.7	10.2%	265.8	35.9	11.9%	260.7	41.0	13.6%
ME 5	32 50 24	2001	Dry	October	Used in Summary Table Analysis	3,850.7	3,835.8	14.9	0.4%	3,833.6	17.1	0.4%	3,829.3	21.4	0.6%	3,825.0	25.7	0.7%	3,820.7	30.0	0.8%	3,816.3	34.4	0.9%
ME 5	32 50 24	2001	Dry	November	Used in Summary Table Analysis	6,180.8	6,168.8	12.0	0.2%	6,167.0	13.8	0.2%	6,163.5	17.2	0.3%	6,160.1	20.7	0.3%	6,156.6	24.2	0.4%	6,153.0	27.8	0.4%
ME 5	32 50 24	2001	Dry	December	--	8,895.4	8,885.0	10.4	0.1%	8,883.4	11.9	0.1%	8,880.4	14.9	0.2%	8,877.4	17.9	0.2%	8,874.4	20.9	0.2%	8,871.4	24.0	0.3%
ME 5	32 50 24	2001	Dry	January	--	12,898.1	12,888.9	9.3	0.1%	12,887.7	10.4	0.1%	12,885.4	12.7	0.1%	12,883.1	15.0	0.1%	12,879.6	18.5	0.1%	12,877.3	20.8	0.2%
ME 5	32 50 24	2001	Dry	February	--	17,539.4	17,531.3	8.1	0.0%	17,530.1	9.3	0.1%	17,527.8	11.6	0.1%	17,525.5	13.9	0.1%	17,523.1	16.2	0.1%	17,520.8	18.5	0.1%
ME 5	32 50 24	2001	Dry	March	--	12,332.2	12,324.1	8.1	0.1%	12,322.9	9.3	0.1%	12,320.6	11.6	0.1%	12,318.3	13.9	0.1%	12,316.0	16.2	0.1%	12,313.7	18.5	0.2%
ME 5	32 50 24	2001	Dry	April	--	11,008.8	10,992.8	16.0	0.1%	10,990.6	18.2	0.2%	10,986.0	22.8	0.2%	10,981.4	27.4	0.2%	10,976.9	31.9	0.3%	10,972.2	36.6	0.3%
ME 5	32 50 24	2001	Dry	May	--	2,638.5	2,619.7	18.9	0.7%	2,617.0	21.5	0.8%	2,611.6	27.0	1.0%	2,606.1	32.4	1.2%	2,600.8	37.7	1.4%	2,595.4	43.2	1.6%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 50 24	2001	Dry	June	--	2,672.3	2,646.4	25.9	1.0%	2,642.8	29.5	1.1%	2,635.4	36.9	1.4%	2,628.1	44.2	1.7%	2,620.8	51.5	1.9%	2,613.7	58.7	2.2%
ME 5	32 50 24	2001	Dry	July	--	722.0	697.5	24.5	3.4%	694.0	28.0	3.9%	687.0	35.0	4.8%	680.0	41.9	5.8%	673.1	48.8	6.8%	666.1	55.8	7.7%
ME 5	32 50 24	2001	Dry	August	--	178.0	154.0	24.0	13.5%	150.5	27.4	15.4%	143.7	34.3	19.2%	136.9	41.1	23.1%	130.1	47.9	26.9%	123.2	54.7	30.8%
ME 5	32 50 24	2001	Dry	September	Used in Summary Table Analysis	101.3	79.6	21.7	21.4%	76.5	24.8	24.4%	70.3	30.9	30.5%	64.2	37.1	36.6%	58.0	43.2	42.7%	51.8	49.4	48.8%
ME 5	32 50 24	2002	Below Normal	October	Used in Summary Table Analysis	271.6	253.2	18.3	6.8%	250.6	20.9	7.7%	245.3	26.2	9.7%	240.1	31.5	11.6%	234.9	36.7	13.5%	229.5	42.0	15.5%
ME 5	32 50 24	2002	Below Normal	November	Used in Summary Table Analysis	12,100.7	12,086.8	13.9	0.1%	12,084.5	16.2	0.1%	12,079.9	20.8	0.2%	12,076.4	24.3	0.2%	12,071.8	28.9	0.2%	12,068.3	32.4	0.3%
ME 5	32 50 24	2002	Below Normal	December	--	35,906.3	35,893.5	12.7	0.0%	35,892.4	13.9	0.0%	35,887.7	18.5	0.1%	35,884.3	22.0	0.1%	35,880.8	25.5	0.1%	35,877.3	28.9	0.1%
ME 5	32 50 24	2002	Below Normal	January	--	31,018.5	31,006.9	11.6	0.0%	31,005.8	12.7	0.0%	31,002.3	16.2	0.1%	30,998.8	19.7	0.1%	30,996.5	22.0	0.1%	30,993.1	25.5	0.1%
ME 5	32 50 24	2002	Below Normal	February	--	24,761.6	24,751.2	10.4	0.0%	24,750.0	11.6	0.0%	24,747.7	13.9	0.1%	24,744.2	17.4	0.1%	24,741.9	19.7	0.1%	24,738.4	23.1	0.1%
ME 5	32 50 24	2002	Below Normal	March	--	17,844.9	17,835.6	9.3	0.1%	17,834.5	10.4	0.1%	17,831.0	13.9	0.1%	17,828.7	16.2	0.1%	17,826.4	18.5	0.1%	17,822.9	22.0	0.1%
ME 5	32 50 24	2002	Below Normal	April	--	9,950.3	9,934.3	16.1	0.2%	9,931.9	18.4	0.2%	9,927.3	23.0	0.2%	9,922.7	27.7	0.3%	9,918.2	32.2	0.3%	9,913.4	36.9	0.4%
ME 5	32 50 24	2002	Below Normal	May	--	3,329.1	3,310.1	19.0	0.6%	3,307.4	21.6	0.7%	3,301.9	27.2	0.8%	3,296.5	32.5	1.0%	3,291.1	38.0	1.1%	3,285.5	43.5	1.3%
ME 5	32 50 24	2002	Below Normal	June	--	859.1	837.5	21.6	2.5%	834.5	24.6	2.9%	828.3	30.8	3.6%	822.2	36.9	4.3%	816.1	43.0	5.0%	810.0	49.1	5.7%
ME 5	32 50 24	2002	Below Normal	July	--	368.0	345.9	22.0	6.0%	342.8	25.2	6.8%	336.5	31.5	8.6%	330.2	37.8	10.3%	323.9	44.1	12.0%	317.6	50.4	13.7%
ME 5	32 50 24	2002	Below Normal	August	--	233.6	212.7	20.9	8.9%	209.7	23.9	10.2%	203.8	29.8	12.8%	197.8	35.8	15.3%	191.9	41.8	17.9%	185.9	47.7	20.4%
ME 5	32 50 24	2002	Below Normal	September	Used in Summary Table Analysis	170.1	150.3	19.8	11.7%	147.4	22.7	13.3%	141.7	28.4	16.7%	136.1	34.1	20.0%	130.4	39.7	23.4%	124.7	45.4	26.7%
ME 5	32 50 24	2003	Wet	October	Used in Summary Table Analysis	134.9	118.6	16.4	12.1%	116.2	18.8	13.9%	111.5	23.5	17.4%	106.7	28.2	20.9%	102.0	33.0	24.4%	97.2	37.7	28.0%
ME 5	32 50 24	2003	Wet	November	Used in Summary Table Analysis	904.1	890.9	13.2	1.5%	888.9	15.2	1.7%	885.1	19.0	2.1%	881.2	22.9	2.5%	877.3	26.7	3.0%	873.5	30.6	3.4%
ME 5	32 50 24	2003	Wet	December	--	57,346.1	57,334.5	11.6	0.0%	57,332.2	13.9	0.0%	57,328.7	17.4	0.0%	57,325.2	20.8	0.0%	57,321.8	24.3	0.0%	57,318.3	27.8	0.0%
ME 5	32 50 24	2003	Wet	January	--	31,637.7	31,627.3	10.4	0.0%	31,625.0	12.7	0.0%	31,622.7	15.0	0.0%	31,619.2	18.5	0.1%	31,616.9	20.8	0.1%	31,613.4	24.3	0.1%
ME 5	32 50 24	2003	Wet	February	--	20,409.7	20,400.5	9.3	0.0%	20,399.3	10.4	0.1%	20,397.0	12.7	0.1%	20,393.5	16.2	0.1%	20,391.2	18.5	0.1%	20,388.9	20.8	0.1%
ME 5	32 50 24	2003	Wet	March	--	24,121.5	24,113.4	8.1	0.0%	24,112.3	9.3	0.0%	24,108.8	12.7	0.1%	24,106.5	15.0	0.1%	24,104.2	17.4	0.1%	24,101.9	19.7	0.1%
ME 5	32 50 24	2003	Wet	April	--	43,130.8	43,122.7	8.1	0.0%	43,121.5	9.3	0.0%	43,119.2	11.6	0.0%	43,116.9	13.9	0.0%	43,114.6	16.2	0.0%	43,111.1	19.7	0.0%
ME 5	32 50 24	2003	Wet	May	--	12,252.3	12,236.1	16.2	0.1%	12,233.8	18.5	0.2%	12,229.2	23.1	0.2%	12,224.5	27.8	0.2%	12,219.9	32.4	0.3%	12,215.3	37.0	0.3%
ME 5	32 50 24	2003	Wet	June	--	3,173.7	3,153.0	20.7	0.7%	3,150.1	23.6	0.7%	3,144.3	29.4	0.9%	3,138.5	35.2	1.1%	3,132.8	41.0	1.3%	3,127.1	46.6	1.5%
ME 5	32 50 24	2003	Wet	July	--	1,482.4	1,460.5	21.9	1.5%	1,457.4	25.0	1.7%	1,451.3	31.1	2.1%	1,445.0	37.4	2.5%	1,438.8	43.6	2.9%	1,432.5	49.9	3.4%
ME 5	32 50 24	2003	Wet	August	--	768.0	746.7	21.2	2.8%	743.6	24.3	3.2%	737.6	30.4	4.0%	731.5	36.5	4.7%	725.4	42.6	5.5%	719.2	48.8	6.4%
ME 5	32 50 24	2003	Wet	September	Used in Summary Table Analysis	465.2	446.8	18.3	3.9%	444.2	21.0	4.5%	439.0	26.2	5.6%	433.7	31.5	6.8%	428.5	36.7	7.9%	423.2	42.0	9.0%
ME 5	32 50 24	2004	Wet	October	Used in Summary Table Analysis	331.9	316.6	15.3	4.6%	314.4	17.5	5.3%	310.0	21.9	6.6%	305.6	26.3	7.9%	301.2	30.7	9.2%	296.8	35.1	10.6%
ME 5	32 50 24	2004	Wet	November	Used in Summary Table Analysis	5,865.0	5,852.7	12.4	0.2%	5,850.8	14.2	0.2%	5,847.2	17.8	0.3%	5,843.5	21.5	0.4%	5,839.9	25.1	0.4%	5,836.2	28.8	0.5%
ME 5	32 50 24	2004	Wet	December	--	36,585.6	36,574.1	11.6	0.0%	36,572.9	12.7	0.0%	36,569.4	16.2	0.0%	36,567.1	18.5	0.1%	36,563.7	22.0	0.1%	36,560.2	25.5	0.1%
ME 5	32 50 24	2004	Wet	January	--	31,659.7	31,650.5	9.3	0.0%	31,649.3	10.4	0.0%	31,645.8	13.9	0.0%	31,643.5	16.2	0.1%	31,640.0	19.7	0.1%	31,637.7	22.0	0.1%
ME 5	32 50 24	2004	Wet	February	--	38,415.5	38,406.3	9.3	0.0%	38,405.1	10.4	0.0%	38,402.8	12.7	0.0%	38,399.3	16.2	0.0%	38,397.0	18.5	0.0%	38,394.7	20.8	0.1%
ME 5	32 50 24	2004	Wet	March	--	16,554.4	16,546.3	8.1	0.0%	16,545.1	9.3	0.1%	16,542.8	11.6	0.1%	16,540.5	13.9	0.1%	16,538.2	16.2	0.1%	16,535.9	18.5	0.1%
ME 5	32 50 24	2004	Wet	April	--	9,473.8	9,466.2	7.6	0.1%	9,465.2	8.7	0.1%	9,463.0	10.9	0.1%	9,460.6	13.2	0.1%	9,458.3	15.5	0.2%	9,456.1	17.7	0.2%
ME 5	32 50 24	2004	Wet	May	--	3,439.1	3,423.6	15.5	0.5%	3,421.3	17.8	0.5%	3,416.9	22.2	0.6%	3,412.4	26.7	0.8%	3,407.9	31.3	0.9%	3,403.4	35.8	1.0%
ME 5	32 50 24	2004	Wet	June	--	696.8	677.2	19.7	2.8%	674.3	22.5	3.2%	668.7	28.1	4.0%	663.1	33.7	4.8%	657.5	39.3	5.6%	651.9	44.9	6.4%
ME 5	32 50 24	2004	Wet	July	--	362.8	341.5	21.4	5.9%	338.4	24.4	6.7%	332.3	30.5	8.4%	326.2	36.6	10.1%	320.1	42.7	11.8%	314.0	48.8	13.5%
ME 5	32 50 24	2004	Wet	August	--	231.5	211.2	20.3	8.8%	208.3	23.2	10.0%	202.5	29.0	12.5%	196.7	34.8	15.0%	190.9	40.6	17.5%	185.1	46.4	20.0%
ME 5	32 50 24	2004	Wet	September	Used in Summary Table Analysis	168.1	148.8	19.4	11.5%	146.0	22.1	13.2%	140.4	27.7	16.5%	134.8	33.3	19.8%	129.3	38.8	23.1%	123.7	44.4	26.4%
ME 5	32 50 24	2005	Above Normal	October	Used in Summary Table Analysis	7,763.0	7,747.3	15.6	0.2%	7,745.1	17.8	0.2%	7,740.6	22.3	0.3%	7,736.1	26.9	0.3%	7,731.6	31.4	0.4%	7,727.1	35.9	0.5%
ME 5	32 50 24	2005	Above Normal	November	Used in Summary Table Analysis	2,268.6	2,256.5	12.2	0.5%	2,254.6	14.0	0.6%	2,251.2	17.5	0.8%	2,247.6	21.1	0.9%	2,244.0	24.7	1.1%	2,240.4	28.2	1.2%
ME 5	32 50 24	2005	Above Normal	December	--	21,258.1	21,246.5	11.6	0.1%	21,245.4	12.7	0.1%	21,241.9	16.2	0.1%	21,239.6	18.5	0.1%	21,236.1	22.0	0.1%	21,232.6	25.5	0.1%
ME 5	32 50 24	2005	Above Normal	January	--	22,566.0	22,556.7	9.3	0.0%	22,554.4	11.6	0.1%	22,552.1	13.9	0.1%	22,549.8	16.2	0.1%	22,546.3	19.7	0.1%	22,544.0	22.0	0.1%
ME 5	32 50 24	2005	Above Normal	February	--	14,044.0	14,034.7	9.3	0.1%	14,033.6	10.4	0.1%	14,031.3	12.7	0.1%	14,028.9	15.0	0.1%	14,026.6	17.4	0.1%	14,024.3	19.7	0.1%
ME 5	32 50 24	2005	Above Normal	March	--	28,704.9	28,696.8	8.1	0.0%	28,695.6	9.3	0.0%	28,693.3	11.6	0.0%	28,691.0	13.9	0.0%	28,688.7	16.2	0.1%	28,686.3	18.5	0.1%
ME 5	32 50 24	2005	Above Normal	April	--	21,534.7	21,527.8	6.9	0.0%	21,526.6	8.1	0.0%	21,524.3	10.4	0.0%	21,522.0	12.7	0.1%	21,519.7	15.0	0.1%	21,517.4	17.4	0.1%
ME 5	32 50 24	2005	Above Normal	May	--	19,678.2	19,662.0	16.2	0.1%	19,659.7	18.5	0.1%	19,655.1	23.1	0.1%	19,650.5	27.8	0.1%	19,645.8	32.4	0.2%	19,641.2	37.0	0.2%
ME 5	32 50 24	2005	Above Normal	June	--	16,000.0	15,975.7	24.3	0.2%	15,972.2	27.8	0.2%	15,965.3	34.7	0.2%	15,959.5	40.5	0.3%	15,952.5	47.5	0.3%	15,945.6	54.4	0.3%
ME 5	32 50 24	2005	Above Normal	July	--	2,866.1	2,844.0	22.1	0.8%	2,840.9	25.2	0.9%	2,834.6	31.5	1.1%	2,828.2	37.8	1.3%	2,822.0	44.1	1.5%	2,815.7	50.3	1.8%
ME 5	32 50 24	2005	Above Normal	August	--	990.9	970.7	20.1	2.0%	967.9	23.0	2.3%	962.1	28.8	2.9%	956.4	34.5	3.5%	950.6	40.2	4.1%	944.9	46.0	4.6%
ME 5	32 50 24	2005	Above Normal	September	Used in Summary Table Analysis	532.3	514.4	18.0	3.4%	511.8	20.5	3.9%	506.7	25.7	4.8%	501.5	30.8	5.8%	496.4	35.9	6.8%	491.3	41.1	7.7%
ME 5	32 50 24	2006	Wet	October	Used in Summary Table Analysis	643.2	628.5	14.7	2.3%	626.4	16.8	2.6%	622.1	21.0	3.3%	617.9	25.3	3.9%	613.7	29.5	4.6%	609.4	33.8	5.2%
ME 5	32 50 24	2006	Wet	November	Used in Summary Table Analysis	9,412.2	9,400.6	11.6	0.1%	9,398.8	13.3	0.1%	9,395.5	16.7	0.2%	9,392.1	20.0	0.2%	9,388.7	23.5	0.2%	9,385.3	26.9	0.3%
ME 5	32 50 24	2006	Wet	December	--	43,846.1	43,835.6	10.4	0.0%	43,834.5	11.6	0.0%	43,831.0	15.0	0.0%	43,827.5	18.5	0.0%	43,825.2	20.8	0.0%	43,821.8	24.3	0.1%
ME 5	32 50 24	2006	Wet	January	--	46,611.1	46,601.9	9.3	0.0%	46,600.7	10.4	0.0%	46,598.4	12.7	0.0%	46,594.9	16.2	0.0%	46,592.6	18.5	0.0%	46,590.3	20.8	0.0%
ME 5	32 50 24	2006	Wet	February	--	26,752.3	26,744.2	8.1	0.0%	26,743.1	9.3	0.0%	26,740.7	11.6	0.0%	26,738.4	13.9	0.1%	26,736.1	16.2	0.1%	26,733.8	18.5	0.1%
ME 5	32 50 24	2006	Wet	March	--	47,406.3	47,399.3	6.9	0.0%	47,398.1	8.1	0.0%	47,395.8	10.4	0.0%	47,393.5	12.7	0.0%	47,391.2	15.0	0.0%	47,388.9	17.4	0.0%
ME 5	32 50 24	2006	Wet	April	--	30,525.5	30,518.5	6.9	0.0%	30,517.4	8.1	0.0%	30,515.0	10.4	0.0%	30,512.7	12.7	0.0%	30,510.4	15.0	0.0%	30,508.1	17.4	0.1%
ME 5	32 50 24	2006	Wet	May	--	14,263.9	14,254.6	9.3	0.1%	14,253.5	10.4	0.1%	14,250.0	13.9	0.1%	14,247.7	16.2	0.1%	14,244.2	19.7	0.1%	14,241.9	22.0	0.2%
ME 5	32 50 24	2006	Wet	June	--	3,554.1	3,534.6	19.4	0.5%	3,531.8	22.2	0.6%	3,526.3	27.8	0.8%	3,520.7	33.3	0.9%	3,515.2	38.9	1.1%	3,509.7	44.3	1.2%
ME 5	32 50 24	2006	Wet	July	--	1,288.3	1,267.2	21.1	1.6%	1,264.4	24.0	1.9%	1,258.3	30.0	2.3%	1,252.3	36.0	2.8%	1,246.4	41.9	3.3%	1,240.5	47.8	3.7%
ME 5	32 50 24	2006	Wet	August	--	674.4	653.8	20.6	3.1%	650.8	23.6	3.5%	645.0	29.4	4.4%	639.1	35.3	5.2%	633.2	41.2	6.1%	627.4	47.0	7.0%
ME 5	32 50 24	2006	Wet	September	Used in Summary Table Analysis	434.6	416.3	18.2	4.2%	413.8	20.8	4.8%	408.5	26.0	6.0%	403.4	31.2	7.2%	398.1	36.5	8.4%	392.9	41.7	9.6%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 50 24	2007	Above Normal	October	Used in Summary Table Analysis	281.6	266.7	14.9	5.3%	264.5	17.1	6.1%	260.2	21.4	7.6%	255.9	25.7	9.1%	251.6	30.0	10.7%	247.2	34.4	12.2%
ME 5	32 50 24	2007	Above Normal	November	Used in Summary Table Analysis	8,760.2	8,748.0	12.2	0.1%	8,746.3	13.9	0.2%	8,742.7	17.5	0.2%	8,739.2	20.9	0.2%	8,735.6	24.5	0.3%	8,731.9	28.2	0.3%
ME 5	32 50 24	2007	Above Normal	December	--	20,600.7	20,589.1	11.6	0.1%	20,588.0	12.7	0.1%	20,584.5	16.2	0.1%	20,581.0	19.7	0.1%	20,577.5	23.1	0.1%	20,575.2	25.5	0.1%
ME 5	32 50 24	2007	Above Normal	January	--	10,301.5	10,292.2	9.3	0.1%	10,290.9	10.6	0.1%	10,288.2	13.3	0.1%	10,285.4	16.1	0.2%	10,282.6	18.9	0.2%	10,279.9	21.6	0.2%
ME 5	32 50 24	2007	Above Normal	February	--	30,784.7	30,775.5	9.3	0.0%	30,774.3	10.4	0.0%	30,772.0	12.7	0.0%	30,769.7	15.0	0.0%	30,766.2	18.5	0.1%	30,763.9	20.8	0.1%
ME 5	32 50 24	2007	Above Normal	March	--	13,137.7	13,129.6	8.1	0.1%	13,128.5	9.3	0.1%	13,126.2	11.6	0.1%	13,123.8	13.9	0.1%	13,121.5	16.2	0.1%	13,118.1	19.7	0.1%
ME 5	32 50 24	2007	Above Normal	April	--	11,569.2	11,553.8	15.4	0.1%	11,551.6	17.6	0.2%	11,547.2	22.0	0.2%	11,542.8	26.4	0.2%	11,538.3	30.9	0.3%	11,533.9	35.3	0.3%
ME 5	32 50 24	2007	Above Normal	May	--	4,155.7	4,137.5	18.2	0.4%	4,134.8	20.8	0.5%	4,129.6	26.0	0.6%	4,124.4	31.3	0.8%	4,119.1	36.6	0.9%	4,113.8	41.9	1.0%
ME 5	32 50 24	2007	Above Normal	June	--	1,510.2	1,488.1	22.1	1.5%	1,485.0	25.2	1.7%	1,478.7	31.5	2.1%	1,472.5	37.7	2.5%	1,466.2	44.0	2.9%	1,460.0	50.2	3.3%
ME 5	32 50 24	2007	Above Normal	July	--	501.6	479.2	22.4	4.5%	476.0	25.6	5.1%	469.6	31.9	6.4%	463.3	38.3	7.6%	457.0	44.6	8.9%	450.6	50.9	10.2%
ME 5	32 50 24	2007	Above Normal	August	--	229.7	209.4	20.3	8.9%	206.5	23.2	10.1%	200.7	29.0	12.6%	194.9	34.8	15.2%	189.1	40.6	17.7%	183.4	46.4	20.2%
ME 5	32 50 24	2007	Above Normal	September	Used in Summary Table Analysis	157.3	138.0	19.4	12.3%	135.2	22.1	14.1%	129.7	27.6	17.6%	124.2	33.2	21.1%	118.7	38.7	24.6%	113.1	44.2	28.1%
ME 5	32 50 24	2008	Dry	October	Used in Summary Table Analysis	3,468.3	3,452.4	15.9	0.5%	3,450.1	18.2	0.5%	3,445.6	22.7	0.7%	3,441.0	27.3	0.8%	3,436.3	31.9	0.9%	3,431.7	36.6	1.1%
ME 5	32 50 24	2008	Dry	November	Used in Summary Table Analysis	3,307.9	3,295.5	12.4	0.4%	3,293.8	14.1	0.4%	3,290.2	17.7	0.5%	3,286.6	21.3	0.6%	3,283.0	24.9	0.8%	3,279.4	28.5	0.9%
ME 5	32 50 24	2008	Dry	December	--	23,373.8	23,363.4	10.4	0.0%	23,361.1	12.7	0.1%	23,358.8	15.0	0.1%	23,355.3	18.5	0.1%	23,351.9	22.0	0.1%	23,348.4	25.5	0.1%
ME 5	32 50 24	2008	Dry	January	--	37,767.4	37,756.9	10.4	0.0%	37,755.8	11.6	0.0%	37,753.5	13.9	0.0%	37,750.0	17.4	0.0%	37,747.7	19.7	0.1%	37,744.2	23.1	0.1%
ME 5	32 50 24	2008	Dry	February	--	26,327.5	26,319.4	8.1	0.0%	26,317.1	10.4	0.0%	26,314.8	12.7	0.0%	26,312.5	15.0	0.1%	26,310.2	17.4	0.1%	26,307.9	19.7	0.1%
ME 5	32 50 24	2008	Dry	March	--	11,820.6	11,813.7	6.9	0.1%	11,812.5	8.1	0.1%	11,810.2	10.4	0.1%	11,807.9	12.7	0.1%	11,805.6	15.0	0.1%	11,803.2	17.4	0.1%
ME 5	32 50 24	2008	Dry	April	--	9,038.4	9,022.8	15.6	0.2%	9,020.6	17.8	0.2%	9,016.1	22.3	0.2%	9,011.6	26.9	0.3%	9,007.1	31.4	0.3%	9,002.7	35.8	0.4%
ME 5	32 50 24	2008	Dry	May	--	1,358.8	1,342.0	16.8	1.2%	1,339.6	19.2	1.4%	1,334.8	24.0	1.8%	1,330.1	28.7	2.1%	1,325.5	33.3	2.5%	1,320.8	38.0	2.8%
ME 5	32 50 24	2008	Dry	June	--	443.7	419.7	24.1	5.4%	416.2	27.5	6.2%	409.4	34.3	7.7%	402.7	41.1	9.3%	395.8	47.9	10.8%	389.1	54.6	12.3%
ME 5	32 50 24	2008	Dry	July	--	261.5	237.5	24.1	9.2%	234.1	27.5	10.5%	227.2	34.3	13.1%	220.4	41.2	15.7%	213.5	48.0	18.4%	206.7	54.8	21.0%
ME 5	32 50 24	2008	Dry	August	--	185.2	161.7	23.5	12.7%	158.4	26.9	14.5%	151.6	33.6	18.1%	145.0	40.3	21.7%	138.3	47.0	25.4%	131.6	53.7	29.0%
ME 5	32 50 24	2008	Dry	September	Used in Summary Table Analysis	146.8	124.0	22.7	15.5%	120.8	26.0	17.7%	114.3	32.5	22.1%	107.8	39.0	26.6%	101.3	45.5	31.0%	94.8	52.0	35.4%
ME 5	32 50 24	2009	Critical	October	Used in Summary Table Analysis	932.2	914.0	18.2	2.0%	911.4	20.9	2.2%	906.1	26.1	2.8%	900.8	31.4	3.4%	895.7	36.5	3.9%	890.4	41.8	4.5%
ME 5	32 50 24	2009	Critical	November	Used in Summary Table Analysis	5,572.9	5,558.7	14.2	0.3%	5,556.7	16.2	0.3%	5,552.5	20.4	0.4%	5,548.4	24.5	0.4%	5,544.3	28.6	0.5%	5,540.2	32.8	0.6%
ME 5	32 50 24	2009	Critical	December	--	12,294.0	12,281.3	12.7	0.1%	12,280.1	13.9	0.1%	12,275.5	18.5	0.2%	12,272.0	22.0	0.2%	12,268.5	25.5	0.2%	12,265.0	28.9	0.2%
ME 5	32 50 24	2009	Critical	January	--	8,833.6	8,822.7	10.9	0.1%	8,821.1	12.5	0.1%	8,817.8	15.7	0.2%	8,814.6	19.0	0.2%	8,811.3	22.2	0.3%	8,808.2	25.3	0.3%
ME 5	32 50 24	2009	Critical	February	--	22,722.2	22,713.0	9.3	0.0%	22,711.8	10.4	0.0%	22,708.3	13.9	0.1%	22,706.0	16.2	0.1%	22,702.5	19.7	0.1%	22,700.2	22.0	0.1%
ME 5	32 50 24	2009	Critical	March	--	21,201.4	21,193.3	8.1	0.0%	21,192.1	9.3	0.0%	21,189.8	11.6	0.1%	21,186.3	15.0	0.1%	21,184.0	17.4	0.1%	21,181.7	19.7	0.1%
ME 5	32 50 24	2009	Critical	April	--	10,106.6	10,090.4	16.2	0.2%	10,088.1	18.5	0.2%	10,083.3	23.3	0.2%	10,078.7	27.9	0.3%	10,074.0	32.6	0.3%	10,069.3	37.3	0.4%
ME 5	32 50 24	2009	Critical	May	--	15,625.0	15,605.3	19.7	0.1%	15,603.0	22.0	0.1%	15,597.2	27.8	0.2%	15,591.4	33.6	0.2%	15,585.6	39.4	0.3%	15,579.9	45.1	0.3%
ME 5	32 50 24	2009	Critical	June	--	3,166.8	3,141.3	25.5	0.8%	3,137.6	29.2	0.9%	3,130.3	36.5	1.2%	3,123.0	43.8	1.4%	3,115.7	51.0	1.6%	3,108.4	58.3	1.8%
ME 5	32 50 24	2009	Critical	July	--	1,269.2	1,244.9	24.3	1.9%	1,241.4	27.8	2.2%	1,234.4	34.8	2.7%	1,227.5	41.7	3.3%	1,220.6	48.6	3.8%	1,213.8	55.4	4.4%
ME 5	32 50 24	2009	Critical	August	--	675.5	651.9	23.7	3.5%	648.5	27.0	4.0%	641.7	33.9	5.0%	635.0	40.6	6.0%	628.2	47.3	7.0%	621.5	54.1	8.0%
ME 5	32 50 24	2009	Critical	September	Used in Summary Table Analysis	396.2	374.8	21.4	5.4%	371.8	24.4	6.2%	365.6	30.6	7.7%	359.5	36.7	9.3%	353.4	42.8	10.8%	347.3	48.9	12.3%
ME 5	32 50 24	2010	Below Normal	October	Used in Summary Table Analysis	6,098.4	6,080.0	18.4	0.3%	6,077.3	21.1	0.3%	6,072.0	26.4	0.4%	6,066.7	31.7	0.5%	6,061.6	36.8	0.6%	6,056.3	42.1	0.7%
ME 5	32 50 24	2010	Below Normal	November	Used in Summary Table Analysis	8,332.6	8,317.9	14.7	0.2%	8,315.9	16.8	0.2%	8,311.6	21.1	0.3%	8,307.3	25.3	0.3%	8,303.0	29.6	0.4%	8,298.7	33.9	0.4%
ME 5	32 50 24	2010	Below Normal	December	--	12,441.0	12,428.2	12.7	0.1%	12,425.9	15.0	0.1%	12,422.5	18.5	0.1%	12,419.0	22.0	0.2%	12,415.5	25.5	0.2%	12,412.0	28.9	0.2%
ME 5	32 50 24	2010	Below Normal	January	--	36,523.1	36,511.6	11.6	0.0%	36,510.4	12.7	0.0%	36,506.9	16.2	0.0%	36,503.5	19.7	0.1%	36,500.0	23.1	0.1%	36,496.5	26.6	0.1%
ME 5	32 50 24	2010	Below Normal	February	--	27,326.4	27,317.1	9.3	0.0%	27,314.8	11.6	0.0%	27,312.5	13.9	0.1%	27,309.0	17.4	0.1%	27,306.7	19.7	0.1%	27,303.2	23.1	0.1%
ME 5	32 50 24	2010	Below Normal	March	--	28,907.4	28,898.1	9.3	0.0%	28,897.0	10.4	0.0%	28,894.7	12.7	0.0%	28,892.4	15.0	0.1%	28,888.9	18.5	0.1%	28,886.6	20.8	0.1%
ME 5	32 50 24	2010	Below Normal	April	--	40,145.8	40,136.6	9.3	0.0%	40,135.4	10.4	0.0%	40,133.1	12.7	0.0%	40,130.8	15.0	0.0%	40,128.5	17.4	0.0%	40,125.0	20.8	0.1%
ME 5	32 50 24	2010	Below Normal	May	--	20,371.5	20,354.2	17.4	0.1%	20,351.9	19.7	0.1%	20,347.2	24.3	0.1%	20,342.6	28.9	0.1%	20,338.0	33.6	0.2%	20,332.2	39.4	0.2%
ME 5	32 50 24	2010	Below Normal	June	--	9,431.8	9,407.4	24.4	0.3%	9,403.9	27.9	0.3%	9,397.0	34.8	0.4%	9,390.2	41.7	0.4%	9,383.2	48.6	0.5%	9,376.4	55.4	0.6%
ME 5	32 50 24	2010	Below Normal	July	--	1,460.5	1,438.1	22.5	1.5%	1,434.8	25.7	1.8%	1,428.5	32.1	2.2%	1,422.0	38.5	2.6%	1,415.5	45.0	3.1%	1,409.4	51.2	3.5%
ME 5	32 50 24	2010	Below Normal	August	--	577.1	556.4	20.7	3.6%	553.4	23.7	4.1%	547.5	29.6	5.1%	541.6	35.5	6.2%	535.7	41.4	7.2%	529.8	47.3	8.2%
ME 5	32 50 24	2010	Below Normal	September	Used in Summary Table Analysis	659.6	639.8	19.8	3.0%	636.9	22.7	3.4%	631.2	28.4	4.3%	625.6	34.0	5.2%	619.9	39.7	6.0%	614.2	45.4	6.9%
ME 5	32 50 24	2011	Wet	October	Used in Summary Table Analysis	9,699.2	9,684.0	15.2	0.2%	9,681.8	17.4	0.2%	9,677.5	21.6	0.2%	9,673.1	26.0	0.3%	9,668.8	30.4	0.3%	9,664.4	34.8	0.4%
ME 5	32 50 24	2011	Wet	November	Used in Summary Table Analysis	14,294.0	14,282.4	11.6	0.1%	14,280.1	13.9	0.1%	14,276.6	17.4	0.1%	14,273.1	20.8	0.1%	14,269.7	24.3	0.2%	14,266.2	27.8	0.2%
ME 5	32 50 24	2011	Wet	December	--	34,003.5	33,993.1	10.4	0.0%	33,991.9	11.6	0.0%	33,989.6	13.9	0.0%	33,986.1	17.4	0.1%	33,982.6	20.8	0.1%	33,980.3	23.1	0.1%
ME 5	32 50 24	2011	Wet	January	--	14,213.0	14,203.7	9.3	0.1%	14,202.5	10.4	0.1%	14,200.2	12.7	0.1%	14,196.8	16.2	0.1%	14,194.4	18.5	0.1%	14,192.1	20.8	0.1%
ME 5	32 50 24	2011	Wet	February	--	20,824.1	20,816.0	8.1	0.0%	20,814.8	9.3	0.0%	20,811.3	12.7	0.1%	20,809.0	15.0	0.1%	20,806.7	17.4	0.1%	20,804.4	19.7	0.1%
ME 5	32 50 24	2011	Wet	March	--	52,204.9	52,196.8	8.1	0.0%	52,195.6	9.3	0.0%	52,193.3	11.6	0.0%	52,191.0	13.9	0.0%	52,188.7	16.2	0.0%	52,186.3	18.5	0.0%
ME 5	32 50 24	2011	Wet	April	--	24,868.1	24,860.0	8.1	0.0%	24,858.8	9.3	0.0%	24,856.5	11.6	0.0%	24,854.2	13.9	0.1%	24,851.9	16.2	0.1%	24,849.5	18.5	0.1%
ME 5	32 50 24	2011	Wet	May	--	11,415.7	11,399.9	15.9	0.1%	11,397.7	18.1	0.2%	11,393.1	22.7	0.2%	11,388.4	27.3	0.2%	11,383.9	31.8	0.3%	11,379.4	36.3	0.3%
ME 5	32 50 24	2011	Wet	June	--	7,089.6	7,066.0	23.6	0.3%	7,062.6	27.0	0.4%	7,055.9	33.7	0.5%	7,049.2	40.4	0.6%	7,042.5	47.1	0.7%	7,035.8	53.8	0.8%
ME 5	32 50 24	2011	Wet	July	--	1,832.8	1,809.0	23.7	1.3%	1,805.7	27.1	1.5%	1,798.8	33.9	1.9%	1,792.1	40.6	2.2%	1,785.3	47.5	2.6%	1,778.6	54.2	3.0%
ME 5	32 50 24	2011	Wet	August	--	783.8	763.3	20.5	2.6%	760.4	23.4	3.0%	754.6	29.2	3.7%	748.8	35.0	4.5%	742.9	40.8	5.2%	737.1	46.6	5.9%
ME 5	32 50 24	2011	Wet	September	Used in Summary Table Analysis	440.4	421.7	18.7	4.2%	419.0	21.4	4.9%	413.7	26.7	6.1%	408.4	32.0	7.3%	403.0	37.4	8.5%	397.7	42.7	9.7%
ME 5	32 50 24	2012	Below Normal	October	Used in Summary Table Analysis	4,575.9	4,560.5	15.4	0.3%	4,558.3	17.6	0.4%	4,553.8	22.1	0.5%	4,549.4	26.5	0.6%	4,544.9	31.0	0.7%	4,540.5	35.4	0.8%
ME 5	32 50 24	2012	Below Normal	November	Used in Summary Table Analysis	8,307.1	8,294.8	12.3	0.1%	8,292.9	14.1	0.2%	8,289.4	17.7	0.2%	8,285.9	21.2	0.3%	8,282.2	24.9	0.3%	8,278.6	28.5	0.3%
ME 5	32 50 24	2012	Below Normal	December	--	5,214.1	5,203.7	10.4	0.2%	5,202.1	12.0	0.2%	5,199.1	15.0	0.3%	5,196.1	18.1	0.3%	5,192.9	21.2	0.4%	5,189.8	24.3	0.5%
ME 5	32 50 24	2012	Below Normal	January	--	20,313.7	20,304.4	9.3	0.0%	20,302.1	11.6	0.1%	20,299.8	13.9	0.1%	20,297.5	16.2	0.1%	20,294.0	19.7	0.1%	20,291.7	22.0	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 50 24	2012	Below Normal	February	--	18,269.7	18,260.4	9.3	0.1%	18,259.3	10.4	0.1%	18,256.9	12.7	0.1%	18,254.6	15.0	0.1%	18,252.3	17.4	0.1%	18,250.0	19.7	0.1%
ME 5	32 50 24	2012	Below Normal	March	--	45,657.4	45,648.1	9.3	0.0%	45,647.0	10.4	0.0%	45,644.7	12.7	0.0%	45,642.4	15.0	0.0%	45,640.0	17.4	0.0%	45,637.7	19.7	0.0%
ME 5	32 50 24	2012	Below Normal	April	--	26,943.3	26,935.2	8.1	0.0%	26,934.0	9.3	0.0%	26,931.7	11.6	0.0%	26,929.4	13.9	0.1%	26,927.1	16.2	0.1%	26,924.8	18.5	0.1%
ME 5	32 50 24	2012	Below Normal	May	--	7,503.2	7,487.5	15.7	0.2%	7,485.3	17.9	0.2%	7,480.7	22.6	0.3%	7,476.2	27.1	0.4%	7,471.6	31.6	0.4%	7,467.1	36.1	0.5%
ME 5	32 50 24	2012	Below Normal	June	--	5,548.6	5,524.5	24.1	0.4%	5,521.2	27.4	0.5%	5,514.4	34.3	0.6%	5,507.5	41.1	0.7%	5,500.7	47.9	0.9%	5,493.9	54.7	1.0%
ME 5	32 50 24	2012	Below Normal	July	--	2,244.7	2,221.6	23.0	1.0%	2,218.4	26.3	1.2%	2,211.8	32.9	1.5%	2,205.2	39.5	1.8%	2,198.7	45.9	2.0%	2,192.1	52.5	2.3%
ME 5	32 50 24	2012	Below Normal	August	--	393.8	375.0	18.8	4.8%	372.4	21.4	5.4%	367.0	26.7	6.8%	361.7	32.1	8.1%	356.4	37.4	9.5%	351.0	42.7	10.9%
ME 5	32 50 24	2012	Below Normal	September	Used in Summary Table Analysis	255.8	238.9	16.9	6.6%	236.6	19.2	7.5%	231.7	24.0	9.4%	227.0	28.8	11.3%	222.2	33.6	13.1%	217.4	38.4	15.0%
ME 5	32 50 24	2013	Below Normal	October	Used in Summary Table Analysis	1,935.0	1,920.1	14.8	0.8%	1,918.1	16.9	0.9%	1,913.8	21.2	1.1%	1,909.6	25.3	1.3%	1,905.3	29.6	1.5%	1,901.0	33.9	1.8%
ME 5	32 50 24	2013	Below Normal	November	Used in Summary Table Analysis	14,811.3	14,799.8	11.6	0.1%	14,798.6	12.7	0.1%	14,795.1	16.2	0.1%	14,791.7	19.7	0.1%	14,788.2	23.1	0.2%	14,784.7	26.6	0.2%
ME 5	32 50 24	2013	Below Normal	December	--	60,273.1	60,261.6	11.6	0.0%	60,260.4	12.7	0.0%	60,256.9	16.2	0.0%	60,254.6	18.5	0.0%	60,251.2	22.0	0.0%	60,247.7	25.5	0.0%
ME 5	32 50 24	2013	Below Normal	January	--	22,282.4	22,273.1	9.3	0.0%	22,272.0	10.4	0.0%	22,269.7	12.7	0.1%	22,267.4	15.0	0.1%	22,263.9	18.5	0.1%	22,261.6	20.8	0.1%
ME 5	32 50 24	2013	Below Normal	February	--	8,884.1	8,875.7	8.4	0.1%	8,874.5	9.6	0.1%	8,872.0	12.2	0.1%	8,869.6	14.6	0.2%	8,867.0	17.1	0.2%	8,864.5	19.7	0.2%
ME 5	32 50 24	2013	Below Normal	March	--	10,389.2	10,381.1	8.1	0.1%	10,380.0	9.3	0.1%	10,377.5	11.7	0.1%	10,375.2	14.0	0.1%	10,372.8	16.4	0.2%	10,370.4	18.9	0.2%
ME 5	32 50 24	2013	Below Normal	April	--	8,309.3	8,294.2	15.0	0.2%	8,292.1	17.1	0.2%	8,287.8	21.4	0.3%	8,283.4	25.8	0.3%	8,279.2	30.1	0.4%	8,274.9	34.4	0.4%
ME 5	32 50 24	2013	Below Normal	May	--	4,454.5	4,436.3	18.2	0.4%	4,433.7	20.8	0.5%	4,428.5	26.0	0.6%	4,423.3	31.3	0.7%	4,418.1	36.5	0.8%	4,412.8	41.7	0.9%
ME 5	32 50 24	2013	Below Normal	June	--	2,119.0	2,097.1	21.9	1.0%	2,094.0	25.0	1.2%	2,087.7	31.3	1.5%	2,081.5	37.5	1.8%	2,075.2	43.8	2.1%	2,069.0	50.0	2.4%
ME 5	32 50 24	2013	Below Normal	July	--	722.6	701.1	21.5	3.0%	698.1	24.5	3.4%	692.0	30.6	4.2%	685.9	36.7	5.1%	679.8	42.8	5.9%	673.8	48.8	6.8%
ME 5	32 50 24	2013	Below Normal	August	--	346.2	325.9	20.2	5.8%	323.0	23.1	6.7%	317.3	28.9	8.4%	311.5	34.7	10.0%	305.7	40.5	11.7%	299.9	46.2	13.4%
ME 5	32 50 24	2013	Below Normal	September	Used in Summary Table Analysis	4,821.5	4,800.5	21.1	0.4%	4,797.5	24.1	0.5%	4,791.4	30.1	0.6%	4,785.4	36.1	0.7%	4,779.5	42.0	0.9%	4,773.5	48.0	1.0%
ME 5	32 50 24	2014	Critical	October	Used in Summary Table Analysis	282.9	267.4	15.5	5.5%	265.2	17.7	6.3%	260.7	22.2	7.8%	256.3	26.7	9.4%	251.8	31.2	11.0%	247.3	35.6	12.6%
ME 5	32 50 24	2014	Critical	November	Used in Summary Table Analysis	1,557.4	1,544.9	12.5	0.8%	1,543.1	14.4	0.9%	1,539.5	17.9	1.2%	1,535.9	21.5	1.4%	1,532.2	25.2	1.6%	1,528.6	28.8	1.9%
ME 5	32 50 24	2014	Critical	December	--	1,601.6	1,590.7	10.9	0.7%	1,589.1	12.5	0.8%	1,586.0	15.6	1.0%	1,582.8	18.9	1.2%	1,579.6	22.0	1.4%	1,576.4	25.2	1.6%
ME 5	32 50 24	2014	Critical	January	--	2,841.3	2,831.7	9.6	0.3%	2,830.3	11.0	0.4%	2,827.5	13.8	0.5%	2,824.7	16.7	0.6%	2,821.9	19.4	0.7%	2,819.0	22.3	0.8%
ME 5	32 50 24	2014	Critical	February	--	15,810.2	15,800.9	9.3	0.1%	15,799.8	10.4	0.1%	15,797.5	12.7	0.1%	15,794.0	16.2	0.1%	15,791.7	18.5	0.1%	15,789.4	20.8	0.1%
ME 5	32 50 24	2014	Critical	March	--	31,559.0	31,550.9	8.1	0.0%	31,549.8	9.3	0.0%	31,546.3	12.7	0.0%	31,544.0	15.0	0.0%	31,541.7	17.4	0.1%	31,539.4	19.7	0.1%
ME 5	32 50 24	2014	Critical	April	--	13,015.0	12,998.8	16.2	0.1%	12,996.5	18.5	0.1%	12,991.9	23.1	0.2%	12,987.3	27.8	0.2%	12,982.6	32.4	0.2%	12,978.0	37.0	0.3%
ME 5	32 50 24	2014	Critical	May	--	5,204.1	5,184.8	19.2	0.4%	5,182.1	22.0	0.4%	5,176.6	27.4	0.5%	5,171.1	33.0	0.6%	5,165.6	38.4	0.7%	5,160.1	44.0	0.8%
ME 5	32 50 24	2014	Critical	June	--	1,205.1	1,178.8	26.3	2.2%	1,175.0	30.1	2.5%	1,167.6	37.5	3.1%	1,160.2	44.9	3.7%	1,152.8	52.3	4.3%	1,145.4	59.7	5.0%
ME 5	32 50 24	2014	Critical	July	--	550.9	526.4	24.5	4.5%	522.9	28.1	5.1%	515.9	35.0	6.4%	508.9	42.0	7.6%	501.9	49.0	8.9%	495.0	56.0	10.2%
ME 5	32 50 24	2014	Critical	August	--	354.2	330.6	23.6	6.7%	327.2	27.0	7.6%	320.5	33.7	9.5%	313.8	40.4	11.4%	307.0	47.1	13.3%	300.3	53.8	15.2%
ME 5	32 50 24	2014	Critical	September	Used in Summary Table Analysis	2,591.1	2,567.8	23.3	0.9%	2,564.5	26.6	1.0%	2,558.0	33.1	1.3%	2,551.3	39.8	1.5%	2,544.7	46.4	1.8%	2,538.0	53.1	2.1%
ME 5	32 50 24	2015	Dry	October	Used in Summary Table Analysis	11,425.7	11,407.2	18.5	0.2%	11,404.5	21.2	0.2%	11,399.4	26.3	0.2%	11,394.1	31.6	0.3%	11,389.0	36.7	0.3%	11,383.6	42.1	0.4%
ME 5	32 50 24	2015	Dry	November	Used in Summary Table Analysis	9,105.7	9,091.8	13.9	0.2%	9,089.8	15.9	0.2%	9,085.9	19.8	0.2%	9,081.8	23.8	0.3%	9,077.8	27.9	0.3%	9,073.7	31.9	0.4%
ME 5	32 50 24	2015	Dry	December	--	32,868.1	32,855.3	12.7	0.0%	32,854.2	13.9	0.0%	32,850.7	17.4	0.1%	32,847.2	20.8	0.1%	32,843.8	24.3	0.1%	32,840.3	27.8	0.1%
ME 5	32 50 24	2015	Dry	January	--	14,615.7	14,604.2	11.6	0.1%	14,603.0	12.7	0.1%	14,600.7	15.0	0.1%	14,597.2	18.5	0.1%	14,593.8	22.0	0.2%	14,590.3	25.5	0.2%
ME 5	32 50 24	2015	Dry	February	--	27,332.2	27,322.9	9.3	0.0%	27,321.8	10.4	0.0%	27,319.4	12.7	0.0%	27,316.0	16.2	0.1%	27,313.7	18.5	0.1%	27,311.3	20.8	0.1%
ME 5	32 50 24	2015	Dry	March	--	11,593.8	11,585.6	8.1	0.1%	11,584.5	9.3	0.1%	11,582.2	11.6	0.1%	11,579.9	13.9	0.1%	11,577.5	16.2	0.1%	11,574.1	19.7	0.2%
ME 5	32 50 24	2015	Dry	April	--	8,451.3	8,435.2	16.1	0.2%	8,433.0	18.3	0.2%	8,428.4	22.9	0.3%	8,423.7	27.5	0.3%	8,419.1	32.2	0.4%	8,414.5	36.8	0.4%
ME 5	32 50 24	2015	Dry	May	--	1,511.2	1,492.4	18.9	1.2%	1,489.6	21.6	1.4%	1,484.3	27.0	1.8%	1,478.8	32.4	2.1%	1,473.4	37.8	2.5%	1,467.9	43.3	2.9%
ME 5	32 50 24	2015	Dry	June	--	656.8	632.3	24.5	3.7%	628.9	27.9	4.3%	622.0	34.8	5.3%	615.0	41.8	6.4%	608.1	48.7	7.4%	601.3	55.5	8.4%
ME 5	32 50 24	2015	Dry	July	--	273.3	249.1	24.2	8.9%	245.6	27.7	10.1%	238.7	34.6	12.7%	231.7	41.6	15.2%	224.8	48.5	17.7%	217.9	55.3	20.2%
ME 5	32 50 24	2015	Dry	August	--	172.2	148.7	23.5	13.7%	145.3	26.9	15.6%	138.5	33.7	19.6%	131.7	40.5	23.5%	125.0	47.2	27.4%	118.2	53.9	31.3%
ME 5	32 50 24	2015	Dry	September	Used in Summary Table Analysis	125.7	104.6	21.2	16.8%	101.4	24.4	19.4%	94.7	31.0	24.7%	88.2	37.5	29.8%	81.6	44.1	35.1%	75.1	50.6	40.3%
ME 5	32 50 24	2016	Above Normal	October	Used in Summary Table Analysis	90.8	72.0	18.8	20.7%	68.9	21.8	24.1%	63.6	27.2	29.9%	58.1	32.7	36.0%	52.7	38.1	41.9%	47.6	43.2	47.6%
ME 5	32 50 24	2016	Above Normal	November	Used in Summary Table Analysis	3,924.8	3,910.8	14.0	0.4%	3,908.3	16.4	0.4%	3,904.3	20.5	0.5%	3,899.9	24.9	0.6%	3,895.5	29.3	0.7%	3,891.2	33.6	0.9%
ME 5	32 50 24	2016	Above Normal	December	--	36,913.2	36,900.5	12.7	0.0%	36,899.3	13.9	0.0%	36,895.8	17.4	0.0%	36,891.2	22.0	0.1%	36,887.7	25.5	0.1%	36,884.3	28.9	0.1%
ME 5	32 50 24	2016	Above Normal	January	--	57,622.7	57,611.1	11.6	0.0%	57,608.8	13.9	0.0%	57,606.5	16.2	0.0%	57,603.0	19.7	0.0%	57,599.5	23.1	0.0%	57,596.1	26.6	0.0%
ME 5	32 50 24	2016	Above Normal	February	--	24,317.1	24,307.9	9.3	0.0%	24,306.7	10.4	0.0%	24,304.4	12.7	0.1%	24,300.9	16.2	0.1%	24,298.6	18.5	0.1%	24,295.1	22.0	0.1%
ME 5	32 50 24	2016	Above Normal	March	--	41,919.0	41,910.9	8.1	0.0%	41,909.7	9.3	0.0%	41,906.3	12.7	0.0%	41,903.9	15.0	0.0%	41,901.6	17.4	0.0%	41,898.1	20.8	0.0%
ME 5	32 50 24	2016	Above Normal	April	--	18,576.4	18,568.3	8.1	0.0%	18,567.1	9.3	0.0%	18,564.8	11.6	0.1%	18,562.5	13.9	0.1%	18,560.2	16.2	0.1%	18,557.9	18.5	0.1%
ME 5	32 50 24	2016	Above Normal	May	--	5,229.4	5,219.6	9.8	0.2%	5,218.1	11.3	0.2%	5,215.2	14.2	0.3%	5,212.3	17.1	0.3%	5,209.3	20.1	0.4%	5,206.4	23.0	0.4%
ME 5	32 50 24	2016	Above Normal	June	--	1,515.7	1,496.9	18.9	1.2%	1,494.1	21.6	1.4%	1,488.8	27.0	1.8%	1,483.3	32.4	2.1%	1,478.0	37.7	2.5%	1,472.6	43.2	2.8%
ME 5	32 50 24	2016	Above Normal	July	--	830.0	808.9	21.1	2.5%	805.8	24.2	2.9%	799.8	30.2	3.6%	793.7	36.3	4.4%	787.6	42.3	5.1%	781.6	48.4	5.8%
ME 5	32 50 24	2016	Above Normal	August	--	498.9	478.1	20.8	4.2%	475.0	23.9	4.8%	469.1	29.8	6.0%	463.1	35.8	7.2%	457.1	41.8	8.4%	451.1	47.8	9.6%
ME 5	32 50 24	2016	Above Normal	September	Used in Summary Table Analysis	334.9	316.2	18.7	5.6%	312.9	22.1	6.6%	307.3	27.6	8.3%	301.5	33.4	10.0%	295.8	39.1	11.7%	290.1	44.8	13.4%
ME 5	32 50 24	2017	Wet	October	Used in Summary Table Analysis	18,399.3	18,383.1	16.2	0.1%	18,380.8	18.5	0.1%	18,377.3	22.0	0.1%	18,372.7	26.6	0.1%	18,366.9	32.4	0.2%	18,363.4	35.9	0.2%
ME 5	32 50 24	2017	Wet	November	Used in Summary Table Analysis	18,950.2	18,937.5	12.7	0.1%	18,936.3	13.9	0.1%	18,932.9	17.4	0.1%	18,929.4	20.8	0.1%	18,924.8	25.5	0.1%	18,921.3	28.9	0.2%
ME 5	32 50 24	2017	Wet	December	--	24,307.9	24,297.5	10.4	0.0%	24,296.3	11.6	0.0%	24,292.8	15.0	0.1%	24,289.4	18.5	0.1%	24,287.0	20.8	0.1%	24,283.6	24.3	0.1%
ME 5	32 50 24	2017	Wet	January	--	107,474.5	107,464.1	10.4	0.0%	107,463.0	11.6	0.0%	107,460.6	13.9	0.0%	107,457.2	17.4	0.0%	107,453.7	20.8	0.0%	107,451.4	23.1	0.0%
ME 5	32 50 24	2017	Wet	February	--	82,171.3	82,162.0	9.3	0.0%	82,160.9	10.4	0.0%	82,158.6	12.7	0.0%	82,156.3	15.0	0.0%	82,152.8	18.5	0.0%	82,150.5	20.8	0.0%
ME 5	32 50 24	2017	Wet	March	--	27,378.5	27,370.4	8.1	0.0%	27,369.2	9.3	0.0%	27,366.9	11.6	0.0%	27,364.6	13.9	0.1%	27,361.1	17.4	0.1%	27,360.0	18.5	0.1%
ME 5	32 50 24	2017	Wet	April	--	23,048.6	23,041.7	6.9	0.0%	23,040.5	8.1	0.0%	23,038.2	10.4	0.0%	23,035.9	12.7	0.1%	23,033.6	15.0	0.1%	23,031.3	17.4	0.1%
ME 5	32 50 24	2017	Wet	May	--	6,277.0	6,267.0	10.0	0.2%	6,265.5	11.5	0.2%	6,262.6	14.4	0.2%	6,259.7	17.2	0.3%	6,256.8	20.1	0.3%	6,253.9	23.0	0.4%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 50 24	2017	Wet	June	--	2,131.4	2,112.0	19.3	0.9%	2,109.3	22.1	1.0%	2,103.8	27.5	1.3%	2,098.4	33.0	1.5%	2,092.9	38.4	1.8%	2,087.4	44.0	2.1%
ME 5	32 50 24	2017	Wet	July	--	943.6	922.3	21.3	2.3%	919.3	24.3	2.6%	913.3	30.3	3.2%	907.2	36.4	3.9%	901.2	42.4	4.5%	895.2	48.4	5.1%
ME 5	32 50 24	2017	Wet	August	--	515.8	495.0	20.8	4.0%	492.0	23.8	4.6%	486.1	29.7	5.8%	480.2	35.6	6.9%	474.2	41.6	8.1%	468.3	47.5	9.2%
ME 5	32 50 24	2017	Wet	September	Used in Summary Table Analysis	330.6	311.3	19.3	5.8%	308.5	22.1	6.7%	303.0	27.7	8.4%	297.4	33.2	10.0%	291.9	38.7	11.7%	286.4	44.2	13.4%
ME 5	32 50 24	2018	Above Normal	October	Used in Summary Table Analysis	283.3	267.8	15.5	5.5%	265.6	17.7	6.3%	261.1	22.2	7.8%	256.6	26.7	9.4%	252.2	31.1	11.0%	247.7	35.6	12.6%
ME 5	32 50 24	2018	Above Normal	November	Used in Summary Table Analysis	10,919.9	10,907.8	12.2	0.1%	10,905.9	14.0	0.1%	10,902.3	17.6	0.2%	10,898.7	21.2	0.2%	10,895.1	24.8	0.2%	10,891.6	28.4	0.3%
ME 5	32 50 24	2018	Above Normal	December	--	5,458.9	5,448.5	10.4	0.2%	5,447.1	11.8	0.2%	5,444.1	14.8	0.3%	5,441.0	17.9	0.3%	5,438.0	20.9	0.4%	5,434.8	24.1	0.4%
ME 5	32 50 24	2018	Above Normal	January	--	18,001.2	17,991.9	9.3	0.1%	17,989.6	11.6	0.1%	17,987.3	13.9	0.1%	17,985.0	16.2	0.1%	17,981.5	19.7	0.1%	17,979.2	22.0	0.1%
ME 5	32 50 24	2018	Above Normal	February	--	7,608.4	7,600.3	8.1	0.1%	7,599.1	9.4	0.1%	7,596.6	11.8	0.2%	7,594.2	14.2	0.2%	7,591.8	16.7	0.2%	7,589.4	19.1	0.3%
ME 5	32 50 24	2018	Above Normal	March	--	20,841.4	20,833.3	8.1	0.0%	20,832.2	9.3	0.0%	20,829.9	11.6	0.1%	20,827.5	13.9	0.1%	20,825.2	16.2	0.1%	20,822.9	18.5	0.1%
ME 5	32 50 24	2018	Above Normal	April	--	32,366.9	32,360.0	6.9	0.0%	32,358.8	8.1	0.0%	32,356.5	10.4	0.0%	32,354.2	12.7	0.0%	32,351.9	15.0	0.0%	32,349.5	17.4	0.1%
ME 5	32 50 24	2018	Above Normal	May	--	6,994.6	6,979.5	15.0	0.2%	6,977.3	17.2	0.2%	6,973.0	21.5	0.3%	6,968.6	25.9	0.4%	6,964.4	30.2	0.4%	6,960.3	34.3	0.5%
ME 5	32 50 24	2018	Above Normal	June	--	1,920.9	1,901.4	19.6	1.0%	1,898.6	22.3	1.2%	1,893.1	27.9	1.5%	1,887.5	33.4	1.7%	1,881.9	39.0	2.0%	1,876.4	44.6	2.3%
ME 5	32 50 24	2018	Above Normal	July	--	789.2	767.8	21.4	2.7%	764.7	24.5	3.1%	758.6	30.6	3.9%	752.5	36.7	4.6%	746.4	42.8	5.4%	740.3	48.9	6.2%
ME 5	32 50 24	2018	Above Normal	August	--	450.4	430.3	20.1	4.5%	427.5	23.0	5.1%	421.7	28.7	6.4%	416.0	34.4	7.6%	410.2	40.2	8.9%	404.5	45.9	10.2%
ME 5	32 50 24	2018	Above Normal	September	Used in Summary Table Analysis	307.3	287.9	19.4	6.3%	285.2	22.1	7.2%	279.6	27.7	9.0%	274.1	33.2	10.8%	268.5	38.8	12.6%	262.9	44.4	14.4%
ME 5	32 50 24	2019	Below Normal	October	Used in Summary Table Analysis	213.8	198.5	15.3	7.1%	196.4	17.4	8.1%	192.0	21.8	10.2%	187.4	26.4	12.3%	183.2	30.6	14.3%	178.8	35.0	16.4%
ME 5	32 50 24	2019	Below Normal	November	Used in Summary Table Analysis	6,708.3	6,695.9	12.4	0.2%	6,694.2	14.1	0.2%	6,690.6	17.7	0.3%	6,687.0	21.3	0.3%	6,683.4	24.9	0.4%	6,679.7	28.6	0.4%
ME 5	32 50 24	2019	Below Normal	December	--	14,809.0	14,798.6	10.4	0.1%	14,796.3	12.7	0.1%	14,794.0	15.0	0.1%	14,790.5	18.5	0.1%	14,787.0	22.0	0.1%	14,783.6	25.5	0.2%
ME 5	32 50 24	2019	Below Normal	January	--	35,508.1	35,498.8	9.3	0.0%	35,497.7	10.4	0.0%	35,495.4	12.7	0.0%	35,491.9	16.2	0.0%	35,489.6	18.5	0.1%	35,486.1	22.0	0.1%
ME 5	32 50 24	2019	Below Normal	February	--	142,222.2	142,222.2	0.0	0.0%	142,222.2	0.0	0.0%	142,210.6	11.6	0.0%	142,210.6	11.6	0.0%	142,210.6	11.6	0.0%	142,210.6	11.6	0.0%
ME 5	32 50 24	2019	Below Normal	March	--	42,476.9	42,468.8	8.1	0.0%	42,467.6	9.3	0.0%	42,465.3	11.6	0.0%	42,463.0	13.9	0.0%	42,461.8	15.0	0.0%	42,459.5	17.4	0.0%
ME 5	32 50 24	2019	Below Normal	April	--	15,317.1	15,309.0	8.1	0.1%	15,307.9	9.3	0.1%	15,305.6	11.6	0.1%	15,304.4	12.7	0.1%	15,302.1	15.0	0.1%	15,299.8	17.4	0.1%
ME 5	32 50 24	2019	Below Normal	May	--	17,160.9	17,144.7	16.2	0.1%	17,142.4	18.5	0.1%	17,137.7	23.1	0.1%	17,133.1	27.8	0.2%	17,128.5	32.4	0.2%	17,123.8	37.0	0.2%
ME 5	32 50 24	2019	Below Normal	June	--	4,244.0	4,222.8	21.2	0.5%	4,219.8	24.2	0.6%	4,213.9	30.1	0.7%	4,208.2	35.8	0.8%	4,202.5	41.4	1.0%	4,196.9	47.1	1.1%
ME 5	32 50 24	2019	Below Normal	July	--	1,370.6	1,349.2	21.4	1.6%	1,346.1	24.5	1.8%	1,339.9	30.7	2.2%	1,333.8	36.8	2.7%	1,327.7	42.9	3.1%	1,321.5	49.1	3.6%
ME 5	32 50 24	2019	Below Normal	August	--	605.4	584.8	20.6	3.4%	581.8	23.6	3.9%	575.9	29.4	4.9%	570.1	35.3	5.8%	564.2	41.2	6.8%	558.3	47.0	7.8%
ME 5	32 50 24	2019	Below Normal	September	Used in Summary Table Analysis	470.4	451.1	19.2	4.1%	448.3	22.0	4.7%	442.8	27.6	5.9%	437.3	33.1	7.0%	431.7	38.6	8.2%	426.2	44.1	9.4%
ME 5	32 50 24	2020	Dry	October	Used in Summary Table Analysis	361.9	347.2	14.7	4.1%	345.0	16.8	4.6%	340.8	21.1	5.8%	336.5	25.3	7.0%	332.2	29.6	8.2%	328.0	33.9	9.4%
ME 5	32 50 24	2020	Dry	November	Used in Summary Table Analysis	330.8	319.2	11.6	3.5%	317.5	13.3	4.0%	314.0	16.7	5.1%	310.6	20.1	6.1%	307.2	23.6	7.1%	303.8	27.0	8.2%
ME 5	32 50 24	2020	Dry	December	--	13,493.1	13,482.6	10.4	0.1%	13,481.5	11.6	0.1%	13,478.0	15.0	0.1%	13,475.7	17.4	0.1%	13,472.2	20.8	0.2%	13,468.8	24.3	0.2%
ME 5	32 50 24	2020	Dry	January	--	22,494.2	22,483.8	10.4	0.0%	22,482.6	11.6	0.1%	22,480.3	13.9	0.1%	22,476.9	17.4	0.1%	22,474.5	19.7	0.1%	22,471.1	23.1	0.1%
ME 5	32 50 24	2020	Dry	February	--	7,422.1	7,413.7	8.4	0.1%	7,412.4	9.7	0.1%	7,410.0	12.2	0.2%	7,407.4	14.7	0.2%	7,404.9	17.2	0.2%	7,402.4	19.7	0.3%
ME 5	32 50 24	2020	Dry	March	--	7,274.5	7,266.7	7.9	0.1%	7,265.5	9.0	0.1%	7,263.2	11.3	0.2%	7,260.8	13.8	0.2%	7,258.4	16.1	0.2%	7,256.0	18.5	0.3%
ME 5	32 50 24	2020	Dry	April	--	5,516.4	5,500.6	15.9	0.3%	5,498.3	18.2	0.3%	5,493.6	22.8	0.4%	5,489.0	27.4	0.5%	5,484.4	32.1	0.6%	5,479.7	36.7	0.7%
ME 5	32 50 24	2020	Dry	May	--	7,419.7	7,400.6	19.1	0.3%	7,397.8	21.9	0.3%	7,392.4	27.3	0.4%	7,386.8	32.9	0.4%	7,381.3	38.4	0.5%	7,375.8	43.9	0.6%
ME 5	32 50 24	2020	Dry	June	--	2,106.7	2,081.6	25.1	1.2%	2,078.0	28.7	1.4%	2,071.2	35.5	1.7%	2,064.4	42.4	2.0%	2,057.5	49.2	2.3%	2,050.7	56.0	2.7%
ME 5	32 50 24	2020	Dry	July	--	802.4	777.4	25.0	3.1%	773.8	28.6	3.6%	766.6	35.8	4.5%	759.5	42.9	5.3%	752.3	50.0	6.2%	745.2	57.2	7.1%
ME 5	32 50 24	2020	Dry	August	--	405.5	380.7	24.8	6.1%	377.1	28.3	7.0%	370.0	35.4	8.7%	363.0	42.5	10.5%	355.9	49.6	12.2%	348.8	56.7	14.0%
ME 5	32 50 24	2020	Dry	September	Used in Summary Table Analysis	254.7	232.3	22.4	8.8%	229.1	25.6	10.1%	221.9	32.9	12.9%	215.1	39.6	15.5%	208.2	46.5	18.3%	201.4	53.3	20.9%
ME 5	32 49 25	2000	Above Normal	October	Used in Summary Table Analysis	827.4	812.2	15.2	1.8%	810.0	17.4	2.1%	805.7	21.7	2.6%	801.3	26.1	3.2%	796.8	30.6	3.7%	792.5	34.9	4.2%
ME 5	32 49 25	2000	Above Normal	November	Used in Summary Table Analysis	12,281.3	12,268.5	12.7	0.1%	12,267.4	13.9	0.1%	12,263.9	17.4	0.1%	12,260.4	20.8	0.2%	12,256.9	24.3	0.2%	12,253.5	27.8	0.2%
ME 5	32 49 25	2000	Above Normal	December	--	10,898.1	10,887.8	10.3	0.1%	10,886.3	11.8	0.1%	10,883.3	14.8	0.1%	10,880.2	17.9	0.2%	10,877.1	21.1	0.2%	10,874.1	24.1	0.2%
ME 5	32 49 25	2000	Above Normal	January	--	28,847.2	28,838.0	9.3	0.0%	28,836.8	10.4	0.0%	28,834.5	12.7	0.0%	28,831.0	16.2	0.1%	28,828.7	18.5	0.1%	28,826.4	20.8	0.1%
ME 5	32 49 25	2000	Above Normal	February	--	37,218.8	37,210.6	8.1	0.0%	37,209.5	9.3	0.0%	37,207.2	11.6	0.0%	37,204.9	13.9	0.0%	37,202.5	16.2	0.0%	37,199.1	19.7	0.1%
ME 5	32 49 25	2000	Above Normal	March	--	18,372.7	18,364.6	8.1	0.0%	18,363.4	9.3	0.1%	18,361.1	11.6	0.1%	18,358.8	13.9	0.1%	18,356.5	16.2	0.1%	18,354.2	18.5	0.1%
ME 5	32 49 25	2000	Above Normal	April	--	12,357.6	12,350.7	6.9	0.1%	12,349.5	8.1	0.1%	12,347.2	10.4	0.1%	12,344.9	12.7	0.1%	12,342.6	15.0	0.1%	12,340.3	17.4	0.1%
ME 5	32 49 25	2000	Above Normal	May	--	7,131.1	7,115.6	15.5	0.2%	7,113.4	17.7	0.2%	7,109.0	22.1	0.3%	7,104.5	26.6	0.4%	7,100.0	31.1	0.4%	7,095.6	35.5	0.5%
ME 5	32 49 25	2000	Above Normal	June	--	2,626.7	2,603.7	23.0	0.9%	2,600.5	26.3	1.0%	2,593.9	32.9	1.3%	2,587.3	39.5	1.5%	2,580.7	46.1	1.8%	2,574.2	52.5	2.0%
ME 5	32 49 25	2000	Above Normal	July	--	1,000.1	978.9	21.2	2.1%	975.8	24.3	2.4%	969.8	30.3	3.0%	963.7	36.4	3.6%	957.7	42.4	4.2%	951.7	48.4	4.8%
ME 5	32 49 25	2000	Above Normal	August	--	530.6	510.5	20.1	3.8%	507.6	22.9	4.3%	501.9	28.7	5.4%	496.2	34.4	6.5%	490.5	40.1	7.6%	484.7	45.8	8.6%
ME 5	32 49 25	2000	Above Normal	September	Used in Summary Table Analysis	303.0	285.1	17.9	5.9%	282.5	20.5	6.8%	277.4	25.6	8.5%	272.2	30.8	10.2%	267.1	35.9	11.8%	262.0	41.0	13.5%
ME 5	32 49 25	2001	Dry	October	Used in Summary Table Analysis	3,854.5	3,839.6	14.9	0.4%	3,837.4	17.1	0.4%	3,833.1	21.4	0.6%	3,828.8	25.7	0.7%	3,824.5	30.0	0.8%	3,820.1	34.4	0.9%
ME 5	32 49 25	2001	Dry	November	Used in Summary Table Analysis	6,186.6	6,174.5	12.0	0.2%	6,172.8	13.8	0.2%	6,169.2	17.4	0.3%	6,165.7	20.8	0.3%	6,162.3	24.3	0.4%	6,158.8	27.8	0.4%
ME 5	32 49 25	2001	Dry	December	--	8,901.2	8,890.9	10.3	0.1%	8,889.4	11.8	0.1%	8,886.3	14.8	0.2%	8,883.3	17.8	0.2%	8,880.2	20.9	0.2%	8,877.2	24.0	0.3%
ME 5	32 49 25	2001	Dry	January	--	12,908.6	12,899.3	9.3	0.1%	12,898.1	10.4	0.1%	12,895.8	12.7	0.1%	12,892.4	16.2	0.1%	12,890.0	18.5	0.1%	12,887.7	20.8	0.2%
ME 5	32 49 25	2001	Dry	February	--	17,547.5	17,538.2	9.3	0.1%	17,537.0	10.4	0.1%	17,534.7	12.7	0.1%	17,532.4	15.0	0.1%	17,530.1	17.4	0.1%	17,527.8	19.7	0.1%
ME 5	32 49 25	2001	Dry	March	--	12,335.6	12,328.7	6.9	0.1%	12,327.5	8.1	0.1%	12,325.2	10.4	0.1%	12,322.9	12.7	0.1%	12,320.6	15.0	0.1%	12,318.3	17.4	0.1%
ME 5	32 49 25	2001	Dry	April	--	11,013.1	10,997.2	15.9	0.1%	10,994.9	18.2	0.2%	10,990.3	22.8	0.2%	10,985.6	27.4	0.2%	10,981.1	31.9	0.3%	10,976.5	36.6	0.3%
ME 5	32 49 25	2001	Dry	May	--	2,639.6	2,620.7	18.9	0.7%	2,618.1	21.5	0.8%	2,612.6	27.0	1.0%	2,607.2	32.4	1.2%	2,601.9	37.7	1.4%	2,596.4	43.2	1.6%
ME 5	32 49 25	2001	Dry	June	--	2,675.2	2,649.4	25.8	1.0%	2,645.7	29.5	1.1%	2,638.3	36.9	1.4%	2,631.0	44.2	1.7%	2,623.7	51.5	1.9%	2,616.6	58.7	2.2%
ME 5	32 49 25	2001	Dry	July	--	723.1	698.5	24.5	3.4%	695.0	28.0	3.9%	688.1	35.0	4.8%	681.1	41.9	5.8%	674.2	48.9	6.8%	667.2	55.9	7.7%
ME 5	32 49 25	2001	Dry	August	--	179.2	155.2	24.0	13.4%	151.7	27.5	15.3%	144.9	34.3	19.1%	138.1	41.1	23.0%	131.2	47.9	26.8%	124.4	54.8	30.6%
ME 5	32 49 25	2001	Dry	September	Used in Summary Table Analysis	102.5	80.8	21.7	21.2%	77.7	24.8	24.2%	71.5	30.9	30.2%	65.3	37.1	36.2%	59.2	43.3	42.2%	53.0	49.5	48.3%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 49 25	2002	Below Normal	October	Used in Summary Table Analysis	272.8	254.5	18.4	6.7%	251.9	21.0	7.7%	246.6	26.3	9.6%	241.3	31.5	11.6%	236.1	36.7	13.5%	230.7	42.1	15.4%
ME 5	32 49 25	2002	Below Normal	November	Used in Summary Table Analysis	12,108.8	12,093.8	15.0	0.1%	12,091.4	17.4	0.1%	12,088.0	20.8	0.2%	12,083.3	25.5	0.2%	12,079.9	28.9	0.2%	12,075.2	33.6	0.3%
ME 5	32 49 25	2002	Below Normal	December	--	35,927.1	35,914.4	12.7	0.0%	35,912.0	15.0	0.0%	35,908.6	18.5	0.1%	35,905.1	22.0	0.1%	35,901.6	25.5	0.1%	35,897.0	30.1	0.1%
ME 5	32 49 25	2002	Below Normal	January	--	31,032.4	31,020.8	11.6	0.0%	31,019.7	12.7	0.0%	31,016.2	16.2	0.1%	31,012.7	19.7	0.1%	31,009.3	23.1	0.1%	31,006.9	25.5	0.1%
ME 5	32 49 25	2002	Below Normal	February	--	24,770.8	24,760.4	10.4	0.0%	24,759.3	11.6	0.0%	24,755.8	15.0	0.1%	24,753.5	17.4	0.1%	24,750.0	20.8	0.1%	24,747.7	23.1	0.1%
ME 5	32 49 25	2002	Below Normal	March	--	17,851.9	17,842.6	9.3	0.1%	17,841.4	10.4	0.1%	17,839.1	12.7	0.1%	17,835.6	16.2	0.1%	17,833.3	18.5	0.1%	17,829.9	22.0	0.1%
ME 5	32 49 25	2002	Below Normal	April	--	9,953.7	9,937.6	16.1	0.2%	9,935.3	18.4	0.2%	9,930.7	23.0	0.2%	9,926.2	27.5	0.3%	9,921.5	32.2	0.3%	9,916.9	36.8	0.4%
ME 5	32 49 25	2002	Below Normal	May	--	3,330.9	3,311.9	19.0	0.6%	3,309.1	21.8	0.7%	3,303.7	27.2	0.8%	3,298.3	32.6	1.0%	3,292.8	38.1	1.1%	3,287.4	43.5	1.3%
ME 5	32 49 25	2002	Below Normal	June	--	860.4	838.8	21.6	2.5%	835.7	24.7	2.9%	829.6	30.8	3.6%	823.5	36.9	4.3%	817.3	43.1	5.0%	811.2	49.2	5.7%
ME 5	32 49 25	2002	Below Normal	July	--	369.2	347.2	22.1	6.0%	344.0	25.2	6.8%	337.7	31.5	8.5%	331.4	37.8	10.2%	325.1	44.1	11.9%	318.8	50.4	13.7%
ME 5	32 49 25	2002	Below Normal	August	--	234.9	214.0	20.9	8.9%	211.0	23.9	10.2%	205.1	29.8	12.7%	199.1	35.8	15.3%	193.1	41.8	17.8%	187.1	47.8	20.3%
ME 5	32 49 25	2002	Below Normal	September	Used in Summary Table Analysis	171.4	151.5	19.9	11.6%	148.6	22.7	13.3%	143.0	28.4	16.6%	137.3	34.1	19.9%	131.6	39.8	23.2%	125.9	45.5	26.5%
ME 5	32 49 25	2003	Wet	October	Used in Summary Table Analysis	136.2	119.7	16.4	12.1%	117.4	18.8	13.8%	112.6	23.5	17.3%	107.9	28.3	20.8%	103.1	33.0	24.3%	98.4	37.8	27.8%
ME 5	32 49 25	2003	Wet	November	Used in Summary Table Analysis	905.5	892.2	13.2	1.5%	890.3	15.2	1.7%	886.4	19.1	2.1%	882.5	23.0	2.5%	878.7	26.8	3.0%	874.8	30.6	3.4%
ME 5	32 49 25	2003	Wet	December	--	57,392.4	57,380.8	11.6	0.0%	57,378.5	13.9	0.0%	57,375.0	17.4	0.0%	57,372.7	19.7	0.0%	57,368.1	24.3	0.0%	57,364.6	27.8	0.0%
ME 5	32 49 25	2003	Wet	January	--	31,648.1	31,637.7	10.4	0.0%	31,636.6	11.6	0.0%	31,633.1	15.0	0.0%	31,630.8	17.4	0.1%	31,627.3	20.8	0.1%	31,623.8	24.3	0.1%
ME 5	32 49 25	2003	Wet	February	--	20,416.7	20,407.4	9.3	0.0%	20,406.3	10.4	0.1%	20,402.8	13.9	0.1%	20,400.5	16.2	0.1%	20,398.1	18.5	0.1%	20,394.7	22.0	0.1%
ME 5	32 49 25	2003	Wet	March	--	24,130.8	24,122.7	8.1	0.0%	24,120.4	10.4	0.0%	24,118.1	12.7	0.1%	24,115.7	15.0	0.1%	24,113.4	17.4	0.1%	24,111.1	19.7	0.1%
ME 5	32 49 25	2003	Wet	April	--	43,151.6	43,143.5	8.1	0.0%	43,142.4	9.3	0.0%	43,138.9	12.7	0.0%	43,136.6	15.0	0.0%	43,134.3	17.4	0.0%	43,131.9	19.7	0.0%
ME 5	32 49 25	2003	Wet	May	--	12,256.9	12,240.7	16.2	0.1%	12,238.4	18.5	0.2%	12,233.8	23.1	0.2%	12,229.2	27.8	0.2%	12,224.5	32.4	0.3%	12,219.9	37.0	0.3%
ME 5	32 49 25	2003	Wet	June	--	3,175.3	3,154.7	20.6	0.6%	3,151.9	23.5	0.7%	3,145.9	29.4	0.9%	3,140.2	35.2	1.1%	3,134.5	40.9	1.3%	3,128.7	46.6	1.5%
ME 5	32 49 25	2003	Wet	July	--	1,484.0	1,462.2	21.9	1.5%	1,459.0	25.0	1.7%	1,452.8	31.3	2.1%	1,446.6	37.4	2.5%	1,440.4	43.6	2.9%	1,434.1	49.9	3.4%
ME 5	32 49 25	2003	Wet	August	--	769.5	748.2	21.3	2.8%	745.1	24.4	3.2%	739.0	30.4	4.0%	732.9	36.5	4.7%	726.9	42.6	5.5%	720.6	48.8	6.3%
ME 5	32 49 25	2003	Wet	September	Used in Summary Table Analysis	466.6	448.2	18.4	3.9%	445.6	21.0	4.5%	440.3	26.3	5.6%	435.1	31.5	6.8%	429.8	36.8	7.9%	424.5	42.0	9.0%
ME 5	32 49 25	2004	Wet	October	Used in Summary Table Analysis	333.3	318.0	15.3	4.6%	315.8	17.5	5.2%	311.4	21.9	6.6%	306.9	26.3	7.9%	302.5	30.7	9.2%	298.1	35.2	10.6%
ME 5	32 49 25	2004	Wet	November	Used in Summary Table Analysis	5,871.2	5,858.7	12.5	0.2%	5,856.9	14.2	0.2%	5,853.2	17.9	0.3%	5,849.7	21.5	0.4%	5,845.9	25.2	0.4%	5,842.2	28.9	0.5%
ME 5	32 49 25	2004	Wet	December	--	36,610.0	36,598.4	11.6	0.0%	36,597.2	12.7	0.0%	36,593.8	16.2	0.0%	36,591.4	18.5	0.1%	36,588.0	22.0	0.1%	36,584.5	25.5	0.1%
ME 5	32 49 25	2004	Wet	January	--	31,677.1	31,667.8	9.3	0.0%	31,665.5	11.6	0.0%	31,663.2	13.9	0.0%	31,660.9	16.2	0.1%	31,657.4	19.7	0.1%	31,655.1	22.0	0.1%
ME 5	32 49 25	2004	Wet	February	--	38,431.7	38,422.5	9.3	0.0%	38,421.3	10.4	0.0%	38,419.0	12.7	0.0%	38,416.7	15.0	0.0%	38,414.4	17.4	0.0%	38,410.9	20.8	0.1%
ME 5	32 49 25	2004	Wet	March	--	16,559.0	16,550.9	8.1	0.0%	16,549.8	9.3	0.1%	16,547.5	11.6	0.1%	16,545.1	13.9	0.1%	16,542.8	16.2	0.1%	16,540.5	18.5	0.1%
ME 5	32 49 25	2004	Wet	April	--	9,477.0	9,469.4	7.5	0.1%	9,468.3	8.7	0.1%	9,466.1	10.9	0.1%	9,463.9	13.1	0.1%	9,461.6	15.4	0.2%	9,459.3	17.7	0.2%
ME 5	32 49 25	2004	Wet	May	--	3,441.8	3,426.2	15.6	0.5%	3,424.0	17.8	0.5%	3,419.4	22.3	0.6%	3,414.9	26.9	0.8%	3,410.4	31.4	0.9%	3,405.9	35.9	1.0%
ME 5	32 49 25	2004	Wet	June	--	698.1	678.4	19.7	2.8%	675.6	22.5	3.2%	670.0	28.1	4.0%	664.4	33.7	4.8%	658.8	39.4	5.6%	653.1	45.0	6.4%
ME 5	32 49 25	2004	Wet	July	--	364.2	342.8	21.4	5.9%	339.8	24.4	6.7%	333.6	30.6	8.4%	327.5	36.7	10.1%	321.4	42.8	11.7%	315.3	48.9	13.4%
ME 5	32 49 25	2004	Wet	August	--	232.8	212.5	20.3	8.7%	209.6	23.2	10.0%	203.8	29.0	12.5%	198.0	34.8	15.0%	192.2	40.6	17.5%	186.4	46.5	20.0%
ME 5	32 49 25	2004	Wet	September	Used in Summary Table Analysis	169.3	149.9	19.4	11.5%	147.2	22.2	13.1%	141.6	27.7	16.4%	136.0	33.3	19.7%	130.5	38.9	23.0%	124.9	44.5	26.3%
ME 5	32 49 25	2005	Above Normal	October	Used in Summary Table Analysis	7,770.6	7,755.0	15.6	0.2%	7,752.8	17.8	0.2%	7,748.3	22.3	0.3%	7,743.8	26.9	0.3%	7,739.2	31.4	0.4%	7,734.7	35.9	0.5%
ME 5	32 49 25	2005	Above Normal	November	Used in Summary Table Analysis	2,270.5	2,258.2	12.3	0.5%	2,256.5	14.0	0.6%	2,252.9	17.6	0.8%	2,249.4	21.1	0.9%	2,245.8	24.7	1.1%	2,242.2	28.2	1.2%
ME 5	32 49 25	2005	Above Normal	December	--	21,277.8	21,267.4	10.4	0.0%	21,266.2	11.6	0.1%	21,262.7	15.0	0.1%	21,259.3	18.5	0.1%	21,256.9	20.8	0.1%	21,253.5	24.3	0.1%
ME 5	32 49 25	2005	Above Normal	January	--	22,582.2	22,572.9	9.3	0.0%	22,571.8	10.4	0.0%	22,568.3	13.9	0.1%	22,566.0	16.2	0.1%	22,562.5	19.7	0.1%	22,560.2	22.0	0.1%
ME 5	32 49 25	2005	Above Normal	February	--	14,047.5	14,039.4	8.1	0.1%	14,038.2	9.3	0.1%	14,035.9	11.6	0.1%	14,032.4	15.0	0.1%	14,030.1	17.4	0.1%	14,027.8	19.7	0.1%
ME 5	32 49 25	2005	Above Normal	March	--	28,717.6	28,709.5	8.1	0.0%	28,708.3	9.3	0.0%	28,706.0	11.6	0.0%	28,703.7	13.9	0.0%	28,701.4	16.2	0.1%	28,699.1	18.5	0.1%
ME 5	32 49 25	2005	Above Normal	April	--	21,544.0	21,537.0	6.9	0.0%	21,535.9	8.1	0.0%	21,533.6	10.4	0.0%	21,531.3	12.7	0.1%	21,528.9	15.0	0.1%	21,526.6	17.4	0.1%
ME 5	32 49 25	2005	Above Normal	May	--	19,688.7	19,672.5	16.2	0.1%	19,670.1	18.5	0.1%	19,665.5	23.1	0.1%	19,660.9	27.8	0.1%	19,656.3	32.4	0.2%	19,651.6	37.0	0.2%
ME 5	32 49 25	2005	Above Normal	June	--	16,011.6	15,988.4	23.1	0.1%	15,985.0	26.6	0.2%	15,978.0	33.6	0.2%	15,971.1	40.5	0.3%	15,964.1	47.5	0.3%	15,957.2	54.4	0.3%
ME 5	32 49 25	2005	Above Normal	July	--	2,867.2	2,845.1	22.1	0.8%	2,842.0	25.2	0.9%	2,835.8	31.5	1.1%	2,829.4	37.8	1.3%	2,823.1	44.1	1.5%	2,816.9	50.3	1.8%
ME 5	32 49 25	2005	Above Normal	August	--	992.4	972.2	20.2	2.0%	969.4	23.0	2.3%	963.6	28.8	2.9%	957.9	34.5	3.5%	952.1	40.3	4.1%	946.4	46.0	4.6%
ME 5	32 49 25	2005	Above Normal	September	Used in Summary Table Analysis	533.8	515.8	18.0	3.4%	513.2	20.6	3.9%	508.1	25.7	4.8%	502.9	30.8	5.8%	497.8	36.0	6.7%	492.7	41.1	7.7%
ME 5	32 49 25	2006	Wet	October	Used in Summary Table Analysis	644.7	630.0	14.7	2.3%	627.9	16.8	2.6%	623.6	21.1	3.3%	619.4	25.3	3.9%	615.2	29.5	4.6%	610.9	33.8	5.2%
ME 5	32 49 25	2006	Wet	November	Used in Summary Table Analysis	9,422.0	9,410.3	11.7	0.1%	9,408.7	13.3	0.1%	9,405.2	16.8	0.2%	9,401.9	20.1	0.2%	9,398.5	23.5	0.2%	9,395.0	27.0	0.3%
ME 5	32 49 25	2006	Wet	December	--	43,876.2	43,865.7	10.4	0.0%	43,864.6	11.6	0.0%	43,861.1	15.0	0.0%	43,858.8	17.4	0.0%	43,855.3	20.8	0.0%	43,851.9	24.3	0.1%
ME 5	32 49 25	2006	Wet	January	--	46,640.0	46,629.6	10.4	0.0%	46,628.5	11.6	0.0%	46,626.2	13.9	0.0%	46,623.8	16.2	0.0%	46,620.4	19.7	0.0%	46,618.1	22.0	0.0%
ME 5	32 49 25	2006	Wet	February	--	26,766.2	26,756.9	9.3	0.0%	26,755.8	10.4	0.0%	26,753.5	12.7	0.0%	26,751.2	15.0	0.1%	26,748.8	17.4	0.1%	26,746.5	19.7	0.1%
ME 5	32 49 25	2006	Wet	March	--	47,429.4	47,421.3	8.1	0.0%	47,420.1	9.3	0.0%	47,417.8	11.6	0.0%	47,415.5	13.9	0.0%	47,413.2	16.2	0.0%	47,410.9	18.5	0.0%
ME 5	32 49 25	2006	Wet	April	--	30,535.9	30,527.8	8.1	0.0%	30,526.6	9.3	0.0%	30,525.5	10.4	0.0%	30,523.1	12.7	0.0%	30,520.8	15.0	0.0%	30,518.5	17.4	0.1%
ME 5	32 49 25	2006	Wet	May	--	14,269.7	14,260.4	9.3	0.1%	14,259.3	10.4	0.1%	14,255.8	13.9	0.1%	14,253.5	16.2	0.1%	14,251.2	18.5	0.1%	14,247.7	22.0	0.2%
ME 5	32 49 25	2006	Wet	June	--	3,555.8	3,536.2	19.6	0.6%	3,533.4	22.3	0.6%	3,527.9	27.9	0.8%	3,522.3	33.4	0.9%	3,516.9	38.9	1.1%	3,511.3	44.4	1.2%
ME 5	32 49 25	2006	Wet	July	--	1,289.9	1,269.0	20.9	1.6%	1,266.0	24.0	1.9%	1,260.0	30.0	2.3%	1,254.1	35.9	2.8%	1,248.0	41.9	3.2%	1,242.1	47.8	3.7%
ME 5	32 49 25	2006	Wet	August	--	676.0	655.3	20.6	3.1%	652.4	23.6	3.5%	646.6	29.4	4.4%	640.7	35.3	5.2%	634.8	41.2	6.1%	628.9	47.0	7.0%
ME 5	32 49 25	2006	Wet	September	Used in Summary Table Analysis	436.1	417.8	18.3	4.2%	415.2	20.9	4.8%	410.0	26.1	6.0%	404.8	31.3	7.2%	399.6	36.5	8.4%	394.4	41.7	9.6%
ME 5	32 49 25	2007	Above Normal	October	Used in Summary Table Analysis	283.0	268.0	15.0	5.3%	265.9	17.1	6.0%	261.6	21.4	7.6%	257.2	25.7	9.1%	252.9	30.1	10.6%	248.5	34.4	12.2%
ME 5	32 49 25	2007	Above Normal	November	Used in Summary Table Analysis	8,769.0	8,756.7	12.3	0.1%	8,755.0	14.0	0.2%	8,751.4	17.6	0.2%	8,747.9	21.1	0.2%	8,744.3	24.7	0.3%	8,740.7	28.2	0.3%
ME 5	32 49 25	2007	Above Normal	December	--	20,616.9	20,606.5	10.4	0.1%	20,605.3	11.6	0.1%	20,601.9	15.0	0.1%	20,598.4	18.5	0.1%	20,594.9	22.0	0.1%	20,591.4	25.5	0.1%
ME 5	32 49 25	2007	Above Normal	January	--	10,306.9	10,297.6	9.4	0.1%	10,296.2	10.8	0.1%	10,293.5	13.4	0.1%	10,290.7	16.2	0.2%	10,288.0	19.0	0.2%	10,285.2	21.8	0.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 49 25	2007	Above Normal	February	--	30,803.2	30,795.1	8.1	0.0%	30,794.0	9.3	0.0%	30,790.5	12.7	0.0%	30,788.2	15.0	0.0%	30,785.9	17.4	0.1%	30,782.4	20.8	0.1%
ME 5	32 49 25	2007	Above Normal	March	--	13,142.4	13,134.3	8.1	0.1%	13,133.1	9.3	0.1%	13,130.8	11.6	0.1%	13,128.5	13.9	0.1%	13,125.0	17.4	0.1%	13,122.7	19.7	0.1%
ME 5	32 49 25	2007	Above Normal	April	--	11,573.3	11,557.9	15.4	0.1%	11,555.7	17.6	0.2%	11,551.3	22.0	0.2%	11,546.9	26.4	0.2%	11,542.4	30.9	0.3%	11,538.0	35.3	0.3%
ME 5	32 49 25	2007	Above Normal	May	--	4,158.0	4,139.8	18.2	0.4%	4,137.2	20.8	0.5%	4,131.9	26.0	0.6%	4,126.7	31.3	0.8%	4,121.4	36.6	0.9%	4,116.2	41.8	1.0%
ME 5	32 49 25	2007	Above Normal	June	--	1,511.9	1,489.9	22.0	1.5%	1,486.8	25.1	1.7%	1,480.4	31.5	2.1%	1,474.2	37.7	2.5%	1,467.9	44.0	2.9%	1,461.7	50.2	3.3%
ME 5	32 49 25	2007	Above Normal	July	--	502.8	480.4	22.4	4.5%	477.2	25.6	5.1%	470.9	31.9	6.4%	464.5	38.3	7.6%	458.2	44.6	8.9%	451.8	51.0	10.1%
ME 5	32 49 25	2007	Above Normal	August	--	231.0	210.7	20.4	8.8%	207.8	23.3	10.1%	202.0	29.0	12.6%	196.2	34.8	15.1%	190.4	40.6	17.6%	184.6	46.4	20.1%
ME 5	32 49 25	2007	Above Normal	September	Used in Summary Table Analysis	158.6	139.2	19.4	12.2%	136.5	22.1	14.0%	130.9	27.7	17.4%	125.4	33.2	20.9%	119.9	38.7	24.4%	114.4	44.2	27.9%
ME 5	32 49 25	2008	Dry	October	Used in Summary Table Analysis	3,472.0	3,456.0	16.0	0.5%	3,453.8	18.2	0.5%	3,449.2	22.8	0.7%	3,444.6	27.4	0.8%	3,439.9	32.1	0.9%	3,435.4	36.6	1.1%
ME 5	32 49 25	2008	Dry	November	Used in Summary Table Analysis	3,311.5	3,299.1	12.4	0.4%	3,297.3	14.1	0.4%	3,293.8	17.7	0.5%	3,290.2	21.3	0.6%	3,286.6	24.9	0.8%	3,282.9	28.6	0.9%
ME 5	32 49 25	2008	Dry	December	--	23,395.8	23,384.3	11.6	0.0%	23,383.1	12.7	0.1%	23,379.6	16.2	0.1%	23,377.3	18.5	0.1%	23,373.8	22.0	0.1%	23,370.4	25.5	0.1%
ME 5	32 49 25	2008	Dry	January	--	37,788.2	37,778.9	9.3	0.0%	37,776.6	11.6	0.0%	37,774.3	13.9	0.0%	37,770.8	17.4	0.0%	37,768.5	19.7	0.1%	37,765.0	23.1	0.1%
ME 5	32 49 25	2008	Dry	February	--	26,334.5	26,325.2	9.3	0.0%	26,324.1	10.4	0.0%	26,321.8	12.7	0.0%	26,319.4	15.0	0.1%	26,317.1	17.4	0.1%	26,313.7	20.8	0.1%
ME 5	32 49 25	2008	Dry	March	--	11,824.1	11,817.1	6.9	0.1%	11,816.0	8.1	0.1%	11,813.7	10.4	0.1%	11,811.3	12.7	0.1%	11,809.0	15.0	0.1%	11,806.7	17.4	0.1%
ME 5	32 49 25	2008	Dry	April	--	9,041.3	9,025.7	15.6	0.2%	9,023.5	17.8	0.2%	9,019.0	22.3	0.2%	9,014.5	26.9	0.3%	9,010.0	31.4	0.3%	9,005.6	35.8	0.4%
ME 5	32 49 25	2008	Dry	May	--	1,359.6	1,342.8	16.8	1.2%	1,340.5	19.1	1.4%	1,335.6	24.0	1.8%	1,330.9	28.7	2.1%	1,326.3	33.3	2.5%	1,321.6	38.0	2.8%
ME 5	32 49 25	2008	Dry	June	--	445.0	420.9	24.1	5.4%	417.5	27.5	6.2%	410.7	34.3	7.7%	403.9	41.1	9.2%	397.1	47.9	10.8%	390.3	54.7	12.3%
ME 5	32 49 25	2008	Dry	July	--	262.7	238.7	24.1	9.2%	235.3	27.5	10.5%	228.4	34.4	13.1%	221.5	41.2	15.7%	214.7	48.1	18.3%	207.9	54.9	20.9%
ME 5	32 49 25	2008	Dry	August	--	186.4	162.9	23.5	12.6%	159.5	26.9	14.4%	152.8	33.6	18.0%	146.1	40.3	21.6%	139.4	47.0	25.2%	132.7	53.7	28.8%
ME 5	32 49 25	2008	Dry	September	Used in Summary Table Analysis	148.0	125.2	22.8	15.4%	121.9	26.0	17.6%	115.4	32.5	22.0%	108.9	39.0	26.4%	102.4	45.6	30.8%	95.9	52.0	35.2%
ME 5	32 49 25	2009	Critical	October	Used in Summary Table Analysis	933.6	915.4	18.2	2.0%	912.8	20.9	2.2%	907.5	26.2	2.8%	902.2	31.4	3.4%	897.1	36.6	3.9%	891.8	41.9	4.5%
ME 5	32 49 25	2009	Critical	November	Used in Summary Table Analysis	5,578.9	5,564.7	14.2	0.3%	5,562.6	16.3	0.3%	5,558.4	20.5	0.4%	5,554.3	24.7	0.4%	5,550.1	28.8	0.5%	5,546.1	32.9	0.6%
ME 5	32 49 25	2009	Critical	December	--	12,305.6	12,292.8	12.7	0.1%	12,291.7	13.9	0.1%	12,287.0	18.5	0.2%	12,283.6	22.0	0.2%	12,280.1	25.5	0.2%	12,276.6	28.9	0.2%
ME 5	32 49 25	2009	Critical	January	--	8,837.6	8,826.6	11.0	0.1%	8,825.0	12.6	0.1%	8,821.9	15.7	0.2%	8,818.6	19.0	0.2%	8,815.4	22.2	0.3%	8,812.2	25.5	0.3%
ME 5	32 49 25	2009	Critical	February	--	22,732.6	22,723.4	9.3	0.0%	22,721.1	11.6	0.1%	22,718.8	13.9	0.1%	22,715.3	17.4	0.1%	22,713.0	19.7	0.1%	22,710.6	22.0	0.1%
ME 5	32 49 25	2009	Critical	March	--	21,209.5	21,201.4	8.1	0.0%	21,200.2	9.3	0.0%	21,197.9	11.6	0.1%	21,194.4	15.0	0.1%	21,192.1	17.4	0.1%	21,189.8	19.7	0.1%
ME 5	32 49 25	2009	Critical	April	--	10,108.7	10,092.5	16.2	0.2%	10,090.2	18.5	0.2%	10,085.4	23.3	0.2%	10,080.7	28.0	0.3%	10,076.0	32.6	0.3%	10,071.3	37.4	0.4%
ME 5	32 49 25	2009	Critical	May	--	15,629.6	15,610.0	19.7	0.1%	15,607.6	22.0	0.1%	15,601.9	27.8	0.2%	15,596.1	33.6	0.2%	15,590.3	39.4	0.3%	15,584.5	45.1	0.3%
ME 5	32 49 25	2009	Critical	June	--	3,168.4	3,142.8	25.6	0.8%	3,139.2	29.2	0.9%	3,131.8	36.6	1.2%	3,124.5	43.9	1.4%	3,117.2	51.2	1.6%	3,110.0	58.4	1.8%
ME 5	32 49 25	2009	Critical	July	--	1,270.6	1,246.2	24.4	1.9%	1,242.7	27.9	2.2%	1,235.8	34.8	2.7%	1,228.8	41.8	3.3%	1,222.0	48.6	3.8%	1,215.0	55.6	4.4%
ME 5	32 49 25	2009	Critical	August	--	676.9	653.2	23.7	3.5%	649.8	27.1	4.0%	643.0	33.9	5.0%	636.3	40.6	6.0%	629.5	47.4	7.0%	622.7	54.1	8.0%
ME 5	32 49 25	2009	Critical	September	Used in Summary Table Analysis	397.5	376.1	21.4	5.4%	373.0	24.5	6.2%	366.8	30.6	7.7%	360.7	36.7	9.2%	354.6	42.9	10.8%	348.5	49.0	12.3%
ME 5	32 49 25	2010	Below Normal	October	Used in Summary Table Analysis	6,100.1	6,081.7	18.4	0.3%	6,079.1	21.1	0.3%	6,073.7	26.4	0.4%	6,068.4	31.7	0.5%	6,063.2	36.9	0.6%	6,057.9	42.2	0.7%
ME 5	32 49 25	2010	Below Normal	November	Used in Summary Table Analysis	8,337.2	8,322.5	14.7	0.2%	8,320.3	16.9	0.2%	8,316.0	21.2	0.3%	8,311.7	25.5	0.3%	8,307.4	29.7	0.4%	8,303.1	34.0	0.4%
ME 5	32 49 25	2010	Below Normal	December	--	12,449.1	12,436.3	12.7	0.1%	12,434.0	15.0	0.1%	12,430.6	18.5	0.1%	12,427.1	22.0	0.2%	12,423.6	25.5	0.2%	12,420.1	28.9	0.2%
ME 5	32 49 25	2010	Below Normal	January	--	36,547.5	36,535.9	11.6	0.0%	36,534.7	12.7	0.0%	36,531.3	16.2	0.0%	36,527.8	19.7	0.1%	36,524.3	23.1	0.1%	36,520.8	26.6	0.1%
ME 5	32 49 25	2010	Below Normal	February	--	27,334.5	27,325.2	9.3	0.0%	27,322.9	11.6	0.0%	27,320.6	13.9	0.1%	27,317.1	17.4	0.1%	27,314.8	19.7	0.1%	27,311.3	23.1	0.1%
ME 5	32 49 25	2010	Below Normal	March	--	28,915.5	28,906.3	9.3	0.0%	28,905.1	10.4	0.0%	28,901.6	13.9	0.0%	28,899.3	16.2	0.1%	28,897.0	18.5	0.1%	28,893.5	22.0	0.1%
ME 5	32 49 25	2010	Below Normal	April	--	40,157.4	40,149.3	8.1	0.0%	40,148.1	9.3	0.0%	40,145.8	11.6	0.0%	40,142.4	15.0	0.0%	40,140.0	17.4	0.0%	40,137.7	19.7	0.0%
ME 5	32 49 25	2010	Below Normal	May	--	20,380.8	20,364.6	16.2	0.1%	20,362.3	18.5	0.1%	20,356.5	24.3	0.1%	20,351.9	28.9	0.1%	20,347.2	33.6	0.2%	20,342.6	38.2	0.2%
ME 5	32 49 25	2010	Below Normal	June	--	9,439.6	9,415.2	24.4	0.3%	9,411.6	28.0	0.3%	9,404.7	34.8	0.4%	9,397.8	41.8	0.4%	9,391.0	48.6	0.5%	9,384.0	55.6	0.6%
ME 5	32 49 25	2010	Below Normal	July	--	1,462.0	1,439.6	22.5	1.5%	1,436.3	25.7	1.8%	1,429.9	32.2	2.2%	1,423.5	38.5	2.6%	1,417.0	45.0	3.1%	1,410.8	51.3	3.5%
ME 5	32 49 25	2010	Below Normal	August	--	578.6	557.9	20.8	3.6%	554.9	23.7	4.1%	549.0	29.7	5.1%	543.1	35.5	6.1%	537.2	41.5	7.2%	531.3	47.4	8.2%
ME 5	32 49 25	2010	Below Normal	September	Used in Summary Table Analysis	661.1	641.3	19.8	3.0%	638.4	22.7	3.4%	632.7	28.4	4.3%	627.1	34.0	5.1%	621.4	39.7	6.0%	615.7	45.4	6.9%
ME 5	32 49 25	2011	Wet	October	Used in Summary Table Analysis	9,705.3	9,690.2	15.2	0.2%	9,688.0	17.4	0.2%	9,683.6	21.8	0.2%	9,679.3	26.0	0.3%	9,674.8	30.6	0.3%	9,670.4	35.0	0.4%
ME 5	32 49 25	2011	Wet	November	Used in Summary Table Analysis	14,300.9	14,289.4	11.6	0.1%	14,287.0	13.9	0.1%	14,283.6	17.4	0.1%	14,280.1	20.8	0.1%	14,276.6	24.3	0.2%	14,273.1	27.8	0.2%
ME 5	32 49 25	2011	Wet	December	--	34,028.9	34,018.5	10.4	0.0%	34,017.4	11.6	0.0%	34,013.9	15.0	0.0%	34,010.4	18.5	0.1%	34,008.1	20.8	0.1%	34,004.6	24.3	0.1%
ME 5	32 49 25	2011	Wet	January	--	14,218.8	14,209.5	9.3	0.1%	14,208.3	10.4	0.1%	14,206.0	12.7	0.1%	14,202.5	16.2	0.1%	14,200.2	18.5	0.1%	14,197.9	20.8	0.1%
ME 5	32 49 25	2011	Wet	February	--	20,829.9	20,821.8	8.1	0.0%	20,820.6	9.3	0.0%	20,817.1	12.7	0.1%	20,814.8	15.0	0.1%	20,812.5	17.4	0.1%	20,810.2	19.7	0.1%
ME 5	32 49 25	2011	Wet	March	--	52,222.2	52,214.1	8.1	0.0%	52,213.0	9.3	0.0%	52,210.6	11.6	0.0%	52,208.3	13.9	0.0%	52,206.0	16.2	0.0%	52,203.7	18.5	0.0%
ME 5	32 49 25	2011	Wet	April	--	24,875.0	24,866.9	8.1	0.0%	24,865.7	9.3	0.0%	24,863.4	11.6	0.0%	24,861.1	13.9	0.1%	24,858.8	16.2	0.1%	24,856.5	18.5	0.1%
ME 5	32 49 25	2011	Wet	May	--	11,419.6	11,403.8	15.7	0.1%	11,401.5	18.1	0.2%	11,397.0	22.6	0.2%	11,392.4	27.2	0.2%	11,387.7	31.8	0.3%	11,383.2	36.3	0.3%
ME 5	32 49 25	2011	Wet	June	--	7,093.4	7,069.7	23.7	0.3%	7,066.3	27.1	0.4%	7,059.6	33.8	0.5%	7,052.9	40.5	0.6%	7,046.2	47.2	0.7%	7,039.5	53.9	0.8%
ME 5	32 49 25	2011	Wet	July	--	1,834.0	1,810.3	23.7	1.3%	1,806.9	27.1	1.5%	1,800.1	33.9	1.8%	1,793.4	40.6	2.2%	1,786.6	47.5	2.6%	1,779.9	54.2	3.0%
ME 5	32 49 25	2011	Wet	August	--	785.2	764.7	20.5	2.6%	761.8	23.4	3.0%	756.0	29.2	3.7%	750.2	35.0	4.5%	744.3	40.9	5.2%	738.5	46.7	5.9%
ME 5	32 49 25	2011	Wet	September	Used in Summary Table Analysis	441.8	423.0	18.7	4.2%	420.4	21.4	4.8%	415.0	26.7	6.1%	409.7	32.1	7.3%	404.4	37.4	8.5%	399.0	42.7	9.7%
ME 5	32 49 25	2012	Below Normal	October	Used in Summary Table Analysis	4,579.5	4,564.0	15.5	0.3%	4,561.8	17.7	0.4%	4,557.4	22.1	0.5%	4,552.9	26.6	0.6%	4,548.5	31.0	0.7%	4,544.0	35.5	0.8%
ME 5	32 49 25	2012	Below Normal	November	Used in Summary Table Analysis	8,313.4	8,301.2	12.3	0.1%	8,299.3	14.1	0.2%	8,295.7	17.7	0.2%	8,292.2	21.2	0.3%	8,288.5	24.9	0.3%	8,285.0	28.5	0.3%
ME 5	32 49 25	2012	Below Normal	December	--	5,217.5	5,206.9	10.5	0.2%	5,205.4	12.0	0.2%	5,202.4	15.0	0.3%	5,199.4	18.1	0.3%	5,196.3	21.2	0.4%	5,193.2	24.3	0.5%
ME 5	32 49 25	2012	Below Normal	January	--	20,329.9	20,320.6	9.3	0.0%	20,319.4	10.4	0.1%	20,316.0	13.9	0.1%	20,313.7	16.2	0.1%	20,310.2	19.7	0.1%	20,307.9	22.0	0.1%
ME 5	32 49 25	2012	Below Normal	February	--	18,275.5	18,266.2	9.3	0.1%	18,265.0	10.4	0.1%	18,262.7	12.7	0.1%	18,260.4	15.0	0.1%	18,258.1	17.4	0.1%	18,255.8	19.7	0.1%
ME 5	32 49 25	2012	Below Normal	March	--	45,677.1	45,667.8	9.3	0.0%	45,666.7	10.4	0.0%	45,664.4	12.7	0.0%	45,662.0	15.0	0.0%	45,659.7	17.4	0.0%	45,657.4	19.7	0.0%
ME 5	32 49 25	2012	Below Normal	April	--	26,951.4	26,943.3	8.1	0.0%	26,942.1	9.3	0.0%	26,939.8	11.6	0.0%	26,937.5	13.9	0.1%	26,935.2	16.2	0.1%	26,932.9	18.5	0.1%
ME 5	32 49 25	2012	Below Normal	May	--	7,506.0	7,490.4	15.6	0.2%	7,488.2	17.8	0.2%	7,483.6	22.5	0.3%	7,479.1	27.0	0.4%	7,474.5	31.5	0.4%	7,469.9	36.1	0.5%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 49 25	2012	Below Normal	June	--	5,552.2	5,528.1	24.1	0.4%	5,524.7	27.5	0.5%	5,517.8	34.4	0.6%	5,511.1	41.1	0.7%	5,504.3	47.9	0.9%	5,497.3	54.9	1.0%
ME 5	32 49 25	2012	Below Normal	July	--	2,247.1	2,224.2	22.9	1.0%	2,220.8	26.3	1.2%	2,214.4	32.8	1.5%	2,207.8	39.4	1.8%	2,201.2	45.9	2.0%	2,194.6	52.5	2.3%
ME 5	32 49 25	2012	Below Normal	August	--	395.0	376.3	18.8	4.7%	373.6	21.4	5.4%	368.3	26.8	6.8%	362.9	32.1	8.1%	357.6	37.4	9.5%	352.2	42.8	10.8%
ME 5	32 49 25	2012	Below Normal	September	Used in Summary Table Analysis	257.1	240.2	16.9	6.6%	237.8	19.3	7.5%	233.0	24.1	9.4%	228.2	28.8	11.2%	223.5	33.6	13.1%	218.7	38.4	14.9%
ME 5	32 49 25	2013	Below Normal	October	Used in Summary Table Analysis	1,937.5	1,922.7	14.8	0.8%	1,920.6	16.9	0.9%	1,916.3	21.2	1.1%	1,912.2	25.3	1.3%	1,907.9	29.6	1.5%	1,903.6	33.9	1.8%
ME 5	32 49 25	2013	Below Normal	November	Used in Summary Table Analysis	14,822.9	14,811.3	11.6	0.1%	14,809.0	13.9	0.1%	14,805.6	17.4	0.1%	14,802.1	20.8	0.1%	14,798.6	24.3	0.2%	14,795.1	27.8	0.2%
ME 5	32 49 25	2013	Below Normal	December	--	60,296.3	60,284.7	11.6	0.0%	60,283.6	12.7	0.0%	60,280.1	16.2	0.0%	60,277.8	18.5	0.0%	60,274.3	22.0	0.0%	60,270.8	25.5	0.0%
ME 5	32 49 25	2013	Below Normal	January	--	22,290.5	22,281.3	9.3	0.0%	22,280.1	10.4	0.0%	22,277.8	12.7	0.1%	22,275.5	15.0	0.1%	22,272.0	18.5	0.1%	22,269.7	20.8	0.1%
ME 5	32 49 25	2013	Below Normal	February	--	8,888.4	8,880.0	8.4	0.1%	8,878.7	9.7	0.1%	8,876.3	12.2	0.1%	8,873.7	14.7	0.2%	8,871.3	17.1	0.2%	8,868.8	19.7	0.2%
ME 5	32 49 25	2013	Below Normal	March	--	10,395.0	10,386.8	8.2	0.1%	10,385.6	9.4	0.1%	10,383.3	11.7	0.1%	10,380.9	14.1	0.1%	10,378.5	16.6	0.2%	10,376.0	19.0	0.2%
ME 5	32 49 25	2013	Below Normal	April	--	8,311.8	8,296.8	15.0	0.2%	8,294.7	17.1	0.2%	8,290.4	21.4	0.3%	8,286.0	25.8	0.3%	8,281.7	30.1	0.4%	8,277.4	34.4	0.4%
ME 5	32 49 25	2013	Below Normal	May	--	4,457.3	4,439.1	18.2	0.4%	4,436.6	20.7	0.5%	4,431.4	25.9	0.6%	4,426.2	31.1	0.7%	4,420.9	36.3	0.8%	4,415.7	41.6	0.9%
ME 5	32 49 25	2013	Below Normal	June	--	2,120.5	2,098.6	21.9	1.0%	2,095.5	25.0	1.2%	2,089.2	31.3	1.5%	2,083.0	37.5	1.8%	2,076.7	43.8	2.1%	2,070.5	50.0	2.4%
ME 5	32 49 25	2013	Below Normal	July	--	723.8	702.2	21.5	3.0%	699.2	24.5	3.4%	693.1	30.6	4.2%	687.0	36.7	5.1%	680.9	42.8	5.9%	674.9	48.9	6.8%
ME 5	32 49 25	2013	Below Normal	August	--	347.4	327.1	20.3	5.8%	324.2	23.1	6.7%	318.4	28.9	8.3%	312.7	34.7	10.0%	306.9	40.5	11.7%	301.1	46.3	13.3%
ME 5	32 49 25	2013	Below Normal	September	Used in Summary Table Analysis	4,825.1	4,804.1	21.1	0.4%	4,801.0	24.1	0.5%	4,795.0	30.1	0.6%	4,789.0	36.1	0.7%	4,783.0	42.1	0.9%	4,777.0	48.1	1.0%
ME 5	32 49 25	2014	Critical	October	Used in Summary Table Analysis	283.9	268.4	15.5	5.5%	266.1	17.7	6.3%	261.7	22.2	7.8%	257.2	26.7	9.4%	252.7	31.2	11.0%	248.2	35.7	12.6%
ME 5	32 49 25	2014	Critical	November	Used in Summary Table Analysis	1,559.6	1,547.1	12.5	0.8%	1,545.4	14.2	0.9%	1,541.7	17.9	1.2%	1,538.1	21.5	1.4%	1,534.4	25.2	1.6%	1,530.8	28.8	1.8%
ME 5	32 49 25	2014	Critical	December	--	1,603.2	1,592.4	10.9	0.7%	1,590.7	12.5	0.8%	1,587.6	15.6	1.0%	1,584.5	18.8	1.2%	1,581.3	22.0	1.4%	1,578.1	25.1	1.6%
ME 5	32 49 25	2014	Critical	January	--	2,843.8	2,834.0	9.7	0.3%	2,832.6	11.1	0.4%	2,829.9	13.9	0.5%	2,827.0	16.8	0.6%	2,824.1	19.7	0.7%	2,821.3	22.5	0.8%
ME 5	32 49 25	2014	Critical	February	--	15,814.8	15,806.7	8.1	0.1%	15,805.6	9.3	0.1%	15,802.1	12.7	0.1%	15,799.8	15.0	0.1%	15,797.5	17.4	0.1%	15,795.1	19.7	0.1%
ME 5	32 49 25	2014	Critical	March	--	31,566.0	31,557.9	8.1	0.0%	31,556.7	9.3	0.0%	31,554.4	11.6	0.0%	31,550.9	15.0	0.0%	31,548.6	17.4	0.1%	31,546.3	19.7	0.1%
ME 5	32 49 25	2014	Critical	April	--	13,018.5	13,002.3	16.2	0.1%	13,000.0	18.5	0.1%	12,995.4	23.1	0.2%	12,990.7	27.8	0.2%	12,986.1	32.4	0.2%	12,981.5	37.0	0.3%
ME 5	32 49 25	2014	Critical	May	--	5,206.3	5,187.0	19.2	0.4%	5,184.3	22.0	0.4%	5,178.8	27.4	0.5%	5,173.3	33.0	0.6%	5,167.7	38.5	0.7%	5,162.3	44.0	0.8%
ME 5	32 49 25	2014	Critical	June	--	1,206.5	1,180.1	26.4	2.2%	1,176.4	30.1	2.5%	1,169.0	37.5	3.1%	1,161.6	44.9	3.7%	1,154.1	52.4	4.3%	1,146.7	59.7	5.0%
ME 5	32 49 25	2014	Critical	July	--	552.0	527.5	24.6	4.5%	524.0	28.1	5.1%	517.0	35.1	6.4%	510.0	42.1	7.6%	503.0	49.1	8.9%	496.0	56.0	10.1%
ME 5	32 49 25	2014	Critical	August	--	355.3	331.7	23.6	6.6%	328.4	27.0	7.6%	321.6	33.7	9.5%	314.9	40.4	11.4%	308.2	47.2	13.3%	301.5	53.9	15.2%
ME 5	32 49 25	2014	Critical	September	Used in Summary Table Analysis	2,593.2	2,569.9	23.3	0.9%	2,566.6	26.6	1.0%	2,560.1	33.1	1.3%	2,553.4	39.8	1.5%	2,546.6	46.5	1.8%	2,540.0	53.1	2.0%
ME 5	32 49 25	2015	Dry	October	Used in Summary Table Analysis	11,431.7	11,413.1	18.6	0.2%	11,410.4	21.3	0.2%	11,405.3	26.4	0.2%	11,400.1	31.6	0.3%	11,394.9	36.8	0.3%	11,389.5	42.2	0.4%
ME 5	32 49 25	2015	Dry	November	Used in Summary Table Analysis	9,111.8	9,097.9	13.9	0.2%	9,095.9	15.9	0.2%	9,091.9	19.9	0.2%	9,088.0	23.8	0.3%	9,083.9	27.9	0.3%	9,079.9	31.9	0.4%
ME 5	32 49 25	2015	Dry	December	--	32,887.7	32,876.2	11.6	0.0%	32,875.0	12.7	0.0%	32,871.5	16.2	0.0%	32,868.1	19.7	0.1%	32,864.6	23.1	0.1%	32,861.1	26.6	0.1%
ME 5	32 49 25	2015	Dry	January	--	14,619.2	14,608.8	10.4	0.1%	14,607.6	11.6	0.1%	14,604.2	15.0	0.1%	14,601.9	17.4	0.1%	14,598.4	20.8	0.1%	14,594.9	24.3	0.2%
ME 5	32 49 25	2015	Dry	February	--	27,341.4	27,332.2	9.3	0.0%	27,331.0	10.4	0.0%	27,327.5	13.9	0.1%	27,325.2	16.2	0.1%	27,322.9	18.5	0.1%	27,319.4	22.0	0.1%
ME 5	32 49 25	2015	Dry	March	--	11,597.2	11,588.0	9.3	0.1%	11,586.8	10.4	0.1%	11,584.5	12.7	0.1%	11,582.2	15.0	0.1%	11,579.9	17.4	0.1%	11,577.5	19.7	0.2%
ME 5	32 49 25	2015	Dry	April	--	8,457.3	8,441.3	16.0	0.2%	8,439.0	18.3	0.2%	8,434.4	22.9	0.3%	8,429.7	27.5	0.3%	8,425.1	32.2	0.4%	8,420.5	36.8	0.4%
ME 5	32 49 25	2015	Dry	May	--	1,512.3	1,493.4	18.9	1.2%	1,490.6	21.6	1.4%	1,485.3	27.0	1.8%	1,479.9	32.4	2.1%	1,474.4	37.8	2.5%	1,469.0	43.3	2.9%
ME 5	32 49 25	2015	Dry	June	--	657.9	633.4	24.5	3.7%	629.9	28.0	4.2%	623.0	34.9	5.3%	616.1	41.8	6.4%	609.2	48.7	7.4%	602.4	55.5	8.4%
ME 5	32 49 25	2015	Dry	July	--	274.3	250.1	24.2	8.8%	246.6	27.7	10.1%	239.7	34.6	12.6%	232.7	41.6	15.2%	225.8	48.5	17.7%	218.9	55.4	20.2%
ME 5	32 49 25	2015	Dry	August	--	173.3	149.8	23.6	13.6%	146.4	26.9	15.5%	139.6	33.7	19.4%	132.8	40.5	23.4%	126.0	47.3	27.3%	119.3	54.0	31.2%
ME 5	32 49 25	2015	Dry	September	Used in Summary Table Analysis	126.8	105.6	21.2	16.7%	102.4	24.4	19.3%	95.7	31.0	24.5%	89.2	37.5	29.6%	82.6	44.2	34.9%	76.1	50.7	40.0%
ME 5	32 49 25	2016	Above Normal	October	Used in Summary Table Analysis	91.8	73.0	18.8	20.5%	69.9	21.9	23.8%	64.6	27.2	29.6%	59.1	32.7	35.7%	53.7	38.1	41.5%	48.5	43.3	47.2%
ME 5	32 49 25	2016	Above Normal	November	Used in Summary Table Analysis	3,930.0	3,916.0	14.0	0.4%	3,913.5	16.4	0.4%	3,909.5	20.5	0.5%	3,905.1	24.9	0.6%	3,900.7	29.3	0.7%	3,896.4	33.6	0.9%
ME 5	32 49 25	2016	Above Normal	December	--	36,937.5	36,924.8	12.7	0.0%	36,922.5	15.0	0.0%	36,919.0	18.5	0.1%	36,915.5	22.0	0.1%	36,910.9	26.6	0.1%	36,907.4	30.1	0.1%
ME 5	32 49 25	2016	Above Normal	January	--	57,648.1	57,636.6	11.6	0.0%	57,634.3	13.9	0.0%	57,630.8	17.4	0.0%	57,627.3	20.8	0.0%	57,623.8	24.3	0.0%	57,620.4	27.8	0.0%
ME 5	32 49 25	2016	Above Normal	February	--	24,322.9	24,313.7	9.3	0.0%	24,312.5	10.4	0.0%	24,309.0	13.9	0.1%	24,306.7	16.2	0.1%	24,304.4	18.5	0.1%	24,300.9	22.0	0.1%
ME 5	32 49 25	2016	Above Normal	March	--	41,931.7	41,923.6	8.1	0.0%	41,921.3	10.4	0.0%	41,919.0	12.7	0.0%	41,916.7	15.0	0.0%	41,913.2	18.5	0.0%	41,910.9	20.8	0.0%
ME 5	32 49 25	2016	Above Normal	April	--	18,581.0	18,572.9	8.1	0.0%	18,571.8	9.3	0.0%	18,569.4	11.6	0.1%	18,567.1	13.9	0.1%	18,564.8	16.2	0.1%	18,562.5	18.5	0.1%
ME 5	32 49 25	2016	Above Normal	May	--	5,231.6	5,221.8	9.8	0.2%	5,220.3	11.3	0.2%	5,217.4	14.2	0.3%	5,214.5	17.1	0.3%	5,211.5	20.1	0.4%	5,208.6	23.0	0.4%
ME 5	32 49 25	2016	Above Normal	June	--	1,517.1	1,498.3	18.9	1.2%	1,495.5	21.6	1.4%	1,490.2	27.0	1.8%	1,484.7	32.4	2.1%	1,479.3	37.8	2.5%	1,474.0	43.2	2.8%
ME 5	32 49 25	2016	Above Normal	July	--	831.3	810.2	21.1	2.5%	807.1	24.2	2.9%	801.1	30.3	3.6%	795.0	36.3	4.4%	788.9	42.4	5.1%	782.9	48.4	5.8%
ME 5	32 49 25	2016	Above Normal	August	--	500.3	479.4	20.9	4.2%	476.3	23.9	4.8%	470.4	29.9	6.0%	464.4	35.9	7.2%	458.4	41.9	8.4%	452.4	47.9	9.6%
ME 5	32 49 25	2016	Above Normal	September	Used in Summary Table Analysis	336.2	317.5	18.8	5.6%	314.1	22.1	6.6%	308.5	27.7	8.2%	302.8	33.4	9.9%	297.0	39.2	11.6%	291.3	44.9	13.4%
ME 5	32 49 25	2017	Wet	October	Used in Summary Table Analysis	18,409.7	18,393.5	16.2	0.1%	18,391.2	18.5	0.1%	18,386.6	23.1	0.1%	18,381.9	27.8	0.2%	18,377.3	32.4	0.2%	18,372.7	37.0	0.2%
ME 5	32 49 25	2017	Wet	November	Used in Summary Table Analysis	18,960.6	18,949.1	11.6	0.1%	18,946.8	13.9	0.1%	18,943.3	17.4	0.1%	18,939.8	20.8	0.1%	18,936.3	24.3	0.1%	18,932.9	27.8	0.1%
ME 5	32 49 25	2017	Wet	December	--	24,324.1	24,313.7	10.4	0.0%	24,312.5	11.6	0.0%	24,309.0	15.0	0.1%	24,306.7	17.4	0.1%	24,303.2	20.8	0.1%	24,299.8	24.3	0.1%
ME 5	32 49 25	2017	Wet	January	--	107,520.8	107,510.4	10.4	0.0%	107,509.3	11.6	0.0%	107,506.9	13.9	0.0%	107,503.5	17.4	0.0%	107,501.2	19.7	0.0%	107,497.7	23.1	0.0%
ME 5	32 49 25	2017	Wet	February	--	82,200.2	82,191.0	9.3	0.0%	82,189.8	10.4	0.0%	82,187.5	12.7	0.0%	82,185.2	15.0	0.0%	82,181.7	18.5	0.0%	82,179.4	20.8	0.0%
ME 5	32 49 25	2017	Wet	March	--	27,388.9	27,380.8	8.1	0.0%	27,379.6	9.3	0.0%	27,376.2	12.7	0.0%	27,373.8	15.0	0.1%	27,371.5	17.4	0.1%	27,369.2	19.7	0.1%
ME 5	32 49 25	2017	Wet	April	--	23,059.0	23,050.9	8.1	0.0%	23,049.8	9.3	0.0%	23,048.6	10.4	0.0%	23,046.3	12.7	0.1%	23,044.0	15.0	0.1%	23,041.7	17.4	0.1%
ME 5	32 49 25	2017	Wet	May	--	6,278.5	6,268.5	10.0	0.2%	6,267.0	11.5	0.2%	6,264.2	14.2	0.2%	6,261.3	17.1	0.3%	6,258.3	20.1	0.3%	6,255.4	23.0	0.4%
ME 5	32 49 25	2017	Wet	June	--	2,133.4	2,114.2	19.2	0.9%	2,111.5	22.0	1.0%	2,105.9	27.5	1.3%	2,100.5	33.0	1.5%	2,095.0	38.4	1.8%	2,089.5	44.0	2.1%
ME 5	32 49 25	2017	Wet	July	--	945.2	923.9	21.3	2.3%	920.9	24.3	2.6%	914.8	30.3	3.2%	908.8	36.4	3.9%	902.8	42.4	4.5%	896.7	48.5	5.1%
ME 5	32 49 25	2017	Wet	August	--	517.3	496.5	20.8	4.0%	493.5	23.8	4.6%	487.6	29.7	5.7%	481.7	35.7	6.9%	475.7	41.6	8.0%	469.8	47.5	9.2%
ME 5	32 49 25	2017	Wet	September	Used in Summary Table Analysis	332.0	312.7	19.4	5.8%	309.9	22.1	6.7%	304.3	27.7	8.3%	298.8	33.2	10.0%	293.3	38.8	11.7%	287.7	44.3	13.3%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 49 25	2018	Above Normal	October	Used in Summary Table Analysis	284.7	269.2	15.5	5.4%	266.9	17.8	6.2%	262.5	22.2	7.8%	258.0	26.7	9.4%	253.5	31.2	11.0%	249.0	35.6	12.5%
ME 5	32 49 25	2018	Above Normal	November	Used in Summary Table Analysis	10,931.1	10,918.9	12.3	0.1%	10,917.0	14.1	0.1%	10,913.5	17.6	0.2%	10,910.0	21.2	0.2%	10,906.4	24.8	0.2%	10,902.7	28.5	0.3%
ME 5	32 49 25	2018	Above Normal	December	--	5,460.9	5,450.5	10.4	0.2%	5,449.0	11.9	0.2%	5,445.9	14.9	0.3%	5,442.9	17.9	0.3%	5,439.8	21.1	0.4%	5,436.8	24.1	0.4%
ME 5	32 49 25	2018	Above Normal	January	--	18,019.7	18,010.4	9.3	0.1%	18,008.1	11.6	0.1%	18,005.8	13.9	0.1%	18,003.5	16.2	0.1%	18,000.0	19.7	0.1%	17,997.7	22.0	0.1%
ME 5	32 49 25	2018	Above Normal	February	--	7,610.5	7,602.3	8.2	0.1%	7,601.0	9.5	0.1%	7,598.6	11.9	0.2%	7,596.2	14.4	0.2%	7,593.8	16.8	0.2%	7,591.3	19.2	0.3%
ME 5	32 49 25	2018	Above Normal	March	--	20,854.2	20,846.1	8.1	0.0%	20,844.9	9.3	0.0%	20,842.6	11.6	0.1%	20,840.3	13.9	0.1%	20,838.0	16.2	0.1%	20,835.6	18.5	0.1%
ME 5	32 49 25	2018	Above Normal	April	--	32,381.9	32,373.8	8.1	0.0%	32,373.8	8.1	0.0%	32,371.5	10.4	0.0%	32,369.2	12.7	0.0%	32,366.9	15.0	0.0%	32,364.6	17.4	0.1%
ME 5	32 49 25	2018	Above Normal	May	--	6,996.2	6,981.1	15.0	0.2%	6,978.9	17.2	0.2%	6,974.7	21.5	0.3%	6,970.3	25.9	0.4%	6,966.0	30.2	0.4%	6,961.9	34.3	0.5%
ME 5	32 49 25	2018	Above Normal	June	--	1,922.3	1,902.8	19.6	1.0%	1,900.0	22.3	1.2%	1,894.4	27.9	1.5%	1,888.9	33.4	1.7%	1,883.3	39.0	2.0%	1,877.8	44.6	2.3%
ME 5	32 49 25	2018	Above Normal	July	--	790.6	769.2	21.4	2.7%	766.1	24.5	3.1%	760.0	30.6	3.9%	753.9	36.7	4.6%	747.8	42.8	5.4%	741.7	48.9	6.2%
ME 5	32 49 25	2018	Above Normal	August	--	451.8	431.7	20.1	4.4%	428.8	23.0	5.1%	423.1	28.7	6.4%	417.3	34.5	7.6%	411.6	40.2	8.9%	405.8	46.0	10.2%
ME 5	32 49 25	2018	Above Normal	September	Used in Summary Table Analysis	308.6	289.2	19.4	6.3%	286.4	22.2	7.2%	280.9	27.7	9.0%	275.3	33.3	10.8%	269.7	38.8	12.6%	264.2	44.4	14.4%
ME 5	32 49 25	2019	Below Normal	October	Used in Summary Table Analysis	214.9	199.7	15.3	7.1%	197.5	17.4	8.1%	193.1	21.9	10.2%	188.6	26.4	12.3%	184.3	30.7	14.3%	179.9	35.1	16.3%
ME 5	32 49 25	2019	Below Normal	November	Used in Summary Table Analysis	6,716.0	6,703.6	12.4	0.2%	6,701.7	14.2	0.2%	6,698.1	17.8	0.3%	6,694.6	21.4	0.3%	6,691.0	25.0	0.4%	6,687.3	28.7	0.4%
ME 5	32 49 25	2019	Below Normal	December	--	14,820.6	14,810.2	10.4	0.1%	14,809.0	11.6	0.1%	14,805.6	15.0	0.1%	14,803.2	17.4	0.1%	14,799.8	20.8	0.1%	14,796.3	24.3	0.2%
ME 5	32 49 25	2019	Below Normal	January	--	35,532.4	35,523.1	9.3	0.0%	35,522.0	10.4	0.0%	35,519.7	12.7	0.0%	35,516.2	16.2	0.0%	35,513.9	18.5	0.1%	35,510.4	22.0	0.1%
ME 5	32 49 25	2019	Below Normal	February	--	142,256.9	142,245.4	11.6	0.0%	142,245.4	11.6	0.0%	142,245.4	11.6	0.0%	142,233.8	23.1	0.0%	142,233.8	23.1	0.0%	142,233.8	23.1	0.0%
ME 5	32 49 25	2019	Below Normal	March	--	42,491.9	42,483.8	8.1	0.0%	42,482.6	9.3	0.0%	42,480.3	11.6	0.0%	42,478.0	13.9	0.0%	42,476.9	15.0	0.0%	42,474.5	17.4	0.0%
ME 5	32 49 25	2019	Below Normal	April	--	15,321.8	15,314.8	6.9	0.0%	15,313.7	8.1	0.1%	15,311.3	10.4	0.1%	15,309.0	12.7	0.1%	15,306.7	15.0	0.1%	15,304.4	17.4	0.1%
ME 5	32 49 25	2019	Below Normal	May	--	17,179.4	17,163.2	16.2	0.1%	17,160.9	18.5	0.1%	17,156.3	23.1	0.1%	17,151.6	27.8	0.2%	17,147.0	32.4	0.2%	17,142.4	37.0	0.2%
ME 5	32 49 25	2019	Below Normal	June	--	4,245.1	4,224.0	21.2	0.5%	4,220.9	24.2	0.6%	4,215.0	30.1	0.7%	4,209.4	35.8	0.8%	4,203.7	41.4	1.0%	4,197.9	47.2	1.1%
ME 5	32 49 25	2019	Below Normal	July	--	1,372.3	1,350.8	21.5	1.6%	1,347.7	24.7	1.8%	1,341.6	30.8	2.2%	1,335.4	36.9	2.7%	1,329.3	43.1	3.1%	1,323.1	49.2	3.6%
ME 5	32 49 25	2019	Below Normal	August	--	606.9	586.3	20.6	3.4%	583.3	23.6	3.9%	577.4	29.5	4.9%	571.6	35.3	5.8%	565.7	41.2	6.8%	559.8	47.1	7.8%
ME 5	32 49 25	2019	Below Normal	September	Used in Summary Table Analysis	471.7	452.5	19.3	4.1%	449.7	22.1	4.7%	444.1	27.6	5.8%	438.6	33.1	7.0%	433.1	38.7	8.2%	427.5	44.2	9.4%
ME 5	32 49 25	2020	Dry	October	Used in Summary Table Analysis	363.1	348.3	14.7	4.1%	346.2	16.9	4.6%	341.9	21.1	5.8%	337.7	25.4	7.0%	333.4	29.7	8.2%	329.1	33.9	9.4%
ME 5	32 49 25	2020	Dry	November	Used in Summary Table Analysis	332.4	320.8	11.7	3.5%	319.1	13.3	4.0%	315.6	16.8	5.0%	312.2	20.2	6.1%	308.8	23.6	7.1%	305.4	27.0	8.1%
ME 5	32 49 25	2020	Dry	December	--	13,511.6	13,501.2	10.4	0.1%	13,498.8	12.7	0.1%	13,496.5	15.0	0.1%	13,493.1	18.5	0.1%	13,489.6	22.0	0.2%	13,486.1	25.5	0.2%
ME 5	32 49 25	2020	Dry	January	--	22,508.1	22,498.8	9.3	0.0%	22,497.7	10.4	0.0%	22,494.2	13.9	0.1%	22,491.9	16.2	0.1%	22,488.4	19.7	0.1%	22,486.1	22.0	0.1%
ME 5	32 49 25	2020	Dry	February	--	7,423.8	7,415.4	8.4	0.1%	7,414.1	9.7	0.1%	7,411.7	12.2	0.2%	7,409.1	14.7	0.2%	7,406.6	17.2	0.2%	7,404.2	19.7	0.3%
ME 5	32 49 25	2020	Dry	March	--	7,278.0	7,270.1	7.9	0.1%	7,269.0	9.0	0.1%	7,266.6	11.5	0.2%	7,264.2	13.8	0.2%	7,261.8	16.2	0.2%	7,259.5	18.5	0.3%
ME 5	32 49 25	2020	Dry	April	--	5,520.0	5,504.2	15.9	0.3%	5,501.9	18.2	0.3%	5,497.2	22.8	0.4%	5,492.6	27.4	0.5%	5,488.0	32.1	0.6%	5,483.3	36.7	0.7%
ME 5	32 49 25	2020	Dry	May	--	7,424.1	7,405.0	19.1	0.3%	7,402.2	21.9	0.3%	7,396.6	27.4	0.4%	7,391.1	33.0	0.4%	7,385.5	38.5	0.5%	7,380.1	44.0	0.6%
ME 5	32 49 25	2020	Dry	June	--	2,107.8	2,082.6	25.1	1.2%	2,079.1	28.7	1.4%	2,072.2	35.5	1.7%	2,065.4	42.4	2.0%	2,058.6	49.2	2.3%	2,051.6	56.1	2.7%
ME 5	32 49 25	2020	Dry	July	--	803.6	778.6	25.0	3.1%	775.0	28.6	3.6%	767.8	35.8	4.5%	760.7	42.9	5.3%	753.5	50.1	6.2%	746.4	57.2	7.1%
ME 5	32 49 25	2020	Dry	August	--	406.7	381.9	24.8	6.1%	378.3	28.4	7.0%	371.2	35.5	8.7%	364.1	42.5	10.5%	357.0	49.6	12.2%	350.0	56.7	13.9%
ME 5	32 49 25	2020	Dry	September	Used in Summary Table Analysis	255.9	233.4	22.5	8.8%	230.2	25.7	10.0%	223.0	32.9	12.9%	216.3	39.6	15.5%	209.3	46.6	18.2%	202.5	53.4	20.9%
ME 6	32 49 25	2000	Above Normal	October	Used in Summary Table Analysis	827.4	812.2	15.2	1.8%	810.0	17.4	2.1%	805.7	21.7	2.6%	801.3	26.1	3.2%	796.8	30.6	3.7%	792.5	34.9	4.2%
ME 6	32 49 25	2000	Above Normal	November	Used in Summary Table Analysis	12,281.3	12,268.5	12.7	0.1%	12,267.4	13.9	0.1%	12,263.9	17.4	0.1%	12,260.4	20.8	0.2%	12,256.9	24.3	0.2%	12,253.5	27.8	0.2%
ME 6	32 49 25	2000	Above Normal	December	--	10,898.1	10,887.8	10.3	0.1%	10,886.3	11.8	0.1%	10,883.3	14.8	0.1%	10,880.2	17.9	0.2%	10,877.1	21.1	0.2%	10,874.1	24.1	0.2%
ME 6	32 49 25	2000	Above Normal	January	--	28,847.2	28,838.0	9.3	0.0%	28,836.8	10.4	0.0%	28,834.5	12.7	0.0%	28,831.0	16.2	0.1%	28,828.7	18.5	0.1%	28,826.4	20.8	0.1%
ME 6	32 49 25	2000	Above Normal	February	--	37,218.8	37,210.6	8.1	0.0%	37,209.5	9.3	0.0%	37,207.2	11.6	0.0%	37,204.9	13.9	0.0%	37,202.5	16.2	0.0%	37,199.1	19.7	0.1%
ME 6	32 49 25	2000	Above Normal	March	--	18,372.7	18,364.6	8.1	0.0%	18,363.4	9.3	0.1%	18,361.1	11.6	0.1%	18,358.8	13.9	0.1%	18,356.5	16.2	0.1%	18,354.2	18.5	0.1%
ME 6	32 49 25	2000	Above Normal	April	--	12,357.6	12,350.7	6.9	0.1%	12,349.5	8.1	0.1%	12,347.2	10.4	0.1%	12,344.9	12.7	0.1%	12,342.6	15.0	0.1%	12,340.3	17.4	0.1%
ME 6	32 49 25	2000	Above Normal	May	--	7,131.1	7,115.6	15.5	0.2%	7,113.4	17.7	0.2%	7,109.0	22.1	0.3%	7,104.5	26.6	0.4%	7,100.0	31.1	0.4%	7,095.6	35.5	0.5%
ME 6	32 49 25	2000	Above Normal	June	--	2,626.7	2,603.7	23.0	0.9%	2,600.5	26.3	1.0%	2,593.9	32.9	1.3%	2,587.3	39.5	1.5%	2,580.7	46.1	1.8%	2,574.2	52.5	2.0%
ME 6	32 49 25	2000	Above Normal	July	--	1,000.1	978.9	21.2	2.1%	975.8	24.3	2.4%	969.8	30.3	3.0%	963.7	36.4	3.6%	957.7	42.4	4.2%	951.7	48.4	4.8%
ME 6	32 49 25	2000	Above Normal	August	--	530.6	510.5	20.1	3.8%	507.6	22.9	4.3%	501.9	28.7	5.4%	496.2	34.4	6.5%	490.5	40.1	7.6%	484.7	45.8	8.6%
ME 6	32 49 25	2000	Above Normal	September	Used in Summary Table Analysis	303.0	285.1	17.9	5.9%	282.5	20.5	6.8%	277.4	25.6	8.5%	272.2	30.8	10.2%	267.1	35.9	11.8%	262.0	41.0	13.5%
ME 6	32 49 25	2001	Dry	October	Used in Summary Table Analysis	3,854.5	3,839.6	14.9	0.4%	3,837.4	17.1	0.4%	3,833.1	21.4	0.6%	3,828.8	25.7	0.7%	3,824.5	30.0	0.8%	3,820.1	34.4	0.9%
ME 6	32 49 25	2001	Dry	November	Used in Summary Table Analysis	6,186.6	6,174.5	12.0	0.2%	6,172.8	13.8	0.2%	6,169.2	17.4	0.3%	6,165.7	20.8	0.3%	6,162.3	24.3	0.4%	6,158.8	27.8	0.4%
ME 6	32 49 25	2001	Dry	December	--	8,901.2	8,890.9	10.3	0.1%	8,889.4	11.8	0.1%	8,886.3	14.8	0.2%	8,883.3	17.8	0.2%	8,880.2	20.9	0.2%	8,877.2	24.0	0.3%
ME 6	32 49 25	2001	Dry	January	--	12,908.6	12,899.3	9.3	0.1%	12,898.1	10.4	0.1%	12,895.8	12.7	0.1%	12,892.4	16.2	0.1%	12,890.0	18.5	0.1%	12,887.7	20.8	0.2%
ME 6	32 49 25	2001	Dry	February	--	17,547.5	17,538.2	9.3	0.1%	17,537.0	10.4	0.1%	17,534.7	12.7	0.1%	17,532.4	15.0	0.1%	17,530.1	17.4	0.1%	17,527.8	19.7	0.1%
ME 6	32 49 25	2001	Dry	March	--	12,335.6	12,328.7	6.9	0.1%	12,327.5	8.1	0.1%	12,325.2	10.4	0.1%	12,322.9	12.7	0.1%	12,320.6	15.0	0.1%	12,318.3	17.4	0.1%
ME 6	32 49 25	2001	Dry	April	--	11,013.1	10,997.2	15.9	0.1%	10,994.9	18.2	0.2%	10,990.3	22.8	0.2%	10,985.6	27.4	0.2%	10,981.1	31.9	0.3%	10,976.5	36.6	0.3%
ME 6	32 49 25	2001	Dry	May	--	2,639.6	2,620.7	18.9	0.7%	2,618.1	21.5	0.8%	2,612.6	27.0	1.0%	2,607.2	32.4	1.2%	2,601.9	37.7	1.4%	2,596.4	43.2	1.6%
ME 6	32 49 25	2001	Dry	June	--	2,675.2	2,649.4	25.8	1.0%	2,645.7	29.5	1.1%	2,638.3	36.9	1.4%	2,631.0	44.2	1.7%	2,623.7	51.5	1.9%	2,616.6	58.7	2.2%
ME 6	32 49 25	2001	Dry	July	--	723.1	698.5	24.5	3.4%	695.0	28.0	3.9%	688.1	35.0	4.8%	681.1	41.9	5.8%	674.2	48.9	6.8%	667.2	55.9	7.7%
ME 6	32 49 25	2001	Dry	August	--	179.2	155.2	24.0	13.4%	151.7	27.5	15.3%	144.9	34.3	19.1%	138.1	41.1	23.0%	131.2	47.9	26.8%	124.4	54.8	30.6%
ME 6	32 49 25	2001	Dry	September	Used in Summary Table Analysis	102.5	80.8	21.7	21.2%	77.7	24.8	24.2%	71.5	30.9	30.2%	65.3	37.1	36.2%	59.2	43.3	42.2%	53.0	49.5	48.3%
ME 6	32 49 25	2002	Below Normal	October	Used in Summary Table Analysis	272.8	254.5	18.4	6.7%	251.9	21.0	7.7%	246.6	26.3	9.6%	241.3	31.5	11.6%	236.1	36.7	13.5%	230.7	42.1	15.4%
ME 6	32 49 25	2002	Below Normal	November	Used in Summary Table Analysis	12,108.8	12,093.8	15.0	0.1%	12,091.4	17.4	0.1%	12,088.0	20.8	0.2%	12,083.3	25.5	0.2%	12,079.9	28.9	0.2%	12,075.2	33.6	0.3%
ME 6	32 49 25	2002	Below Normal	December	--	35,927.1	35,914.4	12.7	0.0%	35,912.0	15.0	0.0%	35,908.6	18.5	0.1%	35,905.1	22.0	0.1%	35,901.6	25.5	0.1%	35,897.0	30.1	0.1%
ME 6	32 49 25	2002	Below Normal	January	--	31,032.4	31,020.8	11.6	0.0%	31,019.7	12.7	0.0%	31,016.2	16.2	0.1%	31,012.7	19.7	0.1%	31,009.3	23.1	0.1%	31,006.9	25.5	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 49 25	2002	Below Normal	February	--	24,770.8	24,760.4	10.4	0.0%	24,759.3	11.6	0.0%	24,755.8	15.0	0.1%	24,753.5	17.4	0.1%	24,750.0	20.8	0.1%	24,747.7	23.1	0.1%
ME 6	32 49 25	2002	Below Normal	March	--	17,851.9	17,842.6	9.3	0.1%	17,841.4	10.4	0.1%	17,839.1	12.7	0.1%	17,835.6	16.2	0.1%	17,833.3	18.5	0.1%	17,829.9	22.0	0.1%
ME 6	32 49 25	2002	Below Normal	April	--	9,953.7	9,937.6	16.1	0.2%	9,935.3	18.4	0.2%	9,930.7	23.0	0.2%	9,926.2	27.5	0.3%	9,921.5	32.2	0.3%	9,916.9	36.8	0.4%
ME 6	32 49 25	2002	Below Normal	May	--	3,330.9	3,311.9	19.0	0.6%	3,309.1	21.8	0.7%	3,303.7	27.2	0.8%	3,298.3	32.6	1.0%	3,292.8	38.1	1.1%	3,287.4	43.5	1.3%
ME 6	32 49 25	2002	Below Normal	June	--	860.4	838.8	21.6	2.5%	835.7	24.7	2.9%	829.6	30.8	3.6%	823.5	36.9	4.3%	817.3	43.1	5.0%	811.2	49.2	5.7%
ME 6	32 49 25	2002	Below Normal	July	--	369.2	347.2	22.1	6.0%	344.0	25.2	6.8%	337.7	31.5	8.5%	331.4	37.8	10.2%	325.1	44.1	11.9%	318.8	50.4	13.7%
ME 6	32 49 25	2002	Below Normal	August	--	234.9	214.0	20.9	8.9%	211.0	23.9	10.2%	205.1	29.8	12.7%	199.1	35.8	15.3%	193.1	41.8	17.8%	187.1	47.8	20.3%
ME 6	32 49 25	2002	Below Normal	September	Used in Summary Table Analysis	171.4	151.5	19.9	11.6%	148.6	22.7	13.3%	143.0	28.4	16.6%	137.3	34.1	19.9%	131.6	39.8	23.2%	125.9	45.5	26.5%
ME 6	32 49 25	2003	Wet	October	Used in Summary Table Analysis	136.2	119.7	16.4	12.1%	117.4	18.8	13.8%	112.6	23.5	17.3%	107.9	28.3	20.8%	103.1	33.0	24.3%	98.4	37.8	27.8%
ME 6	32 49 25	2003	Wet	November	Used in Summary Table Analysis	905.5	892.2	13.2	1.5%	890.3	15.2	1.7%	886.4	19.1	2.1%	882.5	23.0	2.5%	878.7	26.8	3.0%	874.8	30.6	3.4%
ME 6	32 49 25	2003	Wet	December	--	57,392.4	57,380.8	11.6	0.0%	57,378.5	13.9	0.0%	57,375.0	17.4	0.0%	57,372.7	19.7	0.0%	57,368.1	24.3	0.0%	57,364.6	27.8	0.0%
ME 6	32 49 25	2003	Wet	January	--	31,648.1	31,637.7	10.4	0.0%	31,636.6	11.6	0.0%	31,633.1	15.0	0.0%	31,630.8	17.4	0.1%	31,627.3	20.8	0.1%	31,623.8	24.3	0.1%
ME 6	32 49 25	2003	Wet	February	--	20,416.7	20,407.4	9.3	0.0%	20,406.3	10.4	0.1%	20,402.8	13.9	0.1%	20,400.5	16.2	0.1%	20,398.1	18.5	0.1%	20,394.7	22.0	0.1%
ME 6	32 49 25	2003	Wet	March	--	24,130.8	24,122.7	8.1	0.0%	24,120.4	10.4	0.0%	24,118.1	12.7	0.1%	24,115.7	15.0	0.1%	24,113.4	17.4	0.1%	24,111.1	19.7	0.1%
ME 6	32 49 25	2003	Wet	April	--	43,151.6	43,143.5	8.1	0.0%	43,142.4	9.3	0.0%	43,138.9	12.7	0.0%	43,136.6	15.0	0.0%	43,134.3	17.4	0.0%	43,131.9	19.7	0.0%
ME 6	32 49 25	2003	Wet	May	--	12,256.9	12,240.7	16.2	0.1%	12,238.4	18.5	0.2%	12,233.8	23.1	0.2%	12,229.2	27.8	0.2%	12,224.5	32.4	0.3%	12,219.9	37.0	0.3%
ME 6	32 49 25	2003	Wet	June	--	3,175.3	3,154.7	20.6	0.6%	3,151.9	23.5	0.7%	3,145.9	29.4	0.9%	3,140.2	35.2	1.1%	3,134.5	40.9	1.3%	3,128.7	46.6	1.5%
ME 6	32 49 25	2003	Wet	July	--	1,484.0	1,462.2	21.9	1.5%	1,459.0	25.0	1.7%	1,452.8	31.3	2.1%	1,446.6	37.4	2.5%	1,440.4	43.6	2.9%	1,434.1	49.9	3.4%
ME 6	32 49 25	2003	Wet	August	--	769.5	748.2	21.3	2.8%	745.1	24.4	3.2%	739.0	30.4	4.0%	732.9	36.5	4.7%	726.9	42.6	5.5%	720.6	48.8	6.3%
ME 6	32 49 25	2003	Wet	September	Used in Summary Table Analysis	466.6	448.2	18.4	3.9%	445.6	21.0	4.5%	440.3	26.3	5.6%	435.1	31.5	6.8%	429.8	36.8	7.9%	424.5	42.0	9.0%
ME 6	32 49 25	2004	Wet	October	Used in Summary Table Analysis	333.3	318.0	15.3	4.6%	315.8	17.5	5.2%	311.4	21.9	6.6%	306.9	26.3	7.9%	302.5	30.7	9.2%	298.1	35.2	10.6%
ME 6	32 49 25	2004	Wet	November	Used in Summary Table Analysis	5,871.2	5,858.7	12.5	0.2%	5,856.9	14.2	0.2%	5,853.2	17.9	0.3%	5,849.7	21.5	0.4%	5,845.9	25.2	0.4%	5,842.2	28.9	0.5%
ME 6	32 49 25	2004	Wet	December	--	36,610.0	36,598.4	11.6	0.0%	36,597.2	12.7	0.0%	36,593.8	16.2	0.0%	36,591.4	18.5	0.1%	36,588.0	22.0	0.1%	36,584.5	25.5	0.1%
ME 6	32 49 25	2004	Wet	January	--	31,677.1	31,667.8	9.3	0.0%	31,665.5	11.6	0.0%	31,663.2	13.9	0.0%	31,660.9	16.2	0.1%	31,657.4	19.7	0.1%	31,655.1	22.0	0.1%
ME 6	32 49 25	2004	Wet	February	--	38,431.7	38,422.5	9.3	0.0%	38,421.3	10.4	0.0%	38,419.0	12.7	0.0%	38,416.7	15.0	0.0%	38,414.4	17.4	0.0%	38,410.9	20.8	0.1%
ME 6	32 49 25	2004	Wet	March	--	16,559.0	16,550.9	8.1	0.0%	16,549.8	9.3	0.1%	16,547.5	11.6	0.1%	16,545.1	13.9	0.1%	16,542.8	16.2	0.1%	16,540.5	18.5	0.1%
ME 6	32 49 25	2004	Wet	April	--	9,477.0	9,469.4	7.5	0.1%	9,468.3	8.7	0.1%	9,466.1	10.9	0.1%	9,463.9	13.1	0.1%	9,461.6	15.4	0.2%	9,459.3	17.7	0.2%
ME 6	32 49 25	2004	Wet	May	--	3,441.8	3,426.2	15.6	0.5%	3,424.0	17.8	0.5%	3,419.4	22.3	0.6%	3,414.9	26.9	0.8%	3,410.4	31.4	0.9%	3,405.9	35.9	1.0%
ME 6	32 49 25	2004	Wet	June	--	698.1	678.4	19.7	2.8%	675.6	22.5	3.2%	670.0	28.1	4.0%	664.4	33.7	4.8%	658.8	39.4	5.6%	653.1	45.0	6.4%
ME 6	32 49 25	2004	Wet	July	--	364.2	342.8	21.4	5.9%	339.8	24.4	6.7%	333.6	30.6	8.4%	327.5	36.7	10.1%	321.4	42.8	11.7%	315.3	48.9	13.4%
ME 6	32 49 25	2004	Wet	August	--	232.8	212.5	20.3	8.7%	209.6	23.2	10.0%	203.8	29.0	12.5%	198.0	34.8	15.0%	192.2	40.6	17.5%	186.4	46.5	20.0%
ME 6	32 49 25	2004	Wet	September	Used in Summary Table Analysis	169.3	149.9	19.4	11.5%	147.2	22.2	13.1%	141.6	27.7	16.4%	136.0	33.3	19.7%	130.5	38.9	23.0%	124.9	44.5	26.3%
ME 6	32 49 25	2005	Above Normal	October	Used in Summary Table Analysis	7,770.6	7,755.0	15.6	0.2%	7,752.8	17.8	0.2%	7,748.3	22.3	0.3%	7,743.8	26.9	0.3%	7,739.2	31.4	0.4%	7,734.7	35.9	0.5%
ME 6	32 49 25	2005	Above Normal	November	Used in Summary Table Analysis	2,270.5	2,258.2	12.3	0.5%	2,256.5	14.0	0.6%	2,252.9	17.6	0.8%	2,249.4	21.1	0.9%	2,245.8	24.7	1.1%	2,242.2	28.2	1.2%
ME 6	32 49 25	2005	Above Normal	December	--	21,277.8	21,267.4	10.4	0.0%	21,266.2	11.6	0.1%	21,262.7	15.0	0.1%	21,259.3	18.5	0.1%	21,256.9	20.8	0.1%	21,253.5	24.3	0.1%
ME 6	32 49 25	2005	Above Normal	January	--	22,582.2	22,572.9	9.3	0.0%	22,571.8	10.4	0.0%	22,568.3	13.9	0.1%	22,566.0	16.2	0.1%	22,562.5	19.7	0.1%	22,560.2	22.0	0.1%
ME 6	32 49 25	2005	Above Normal	February	--	14,047.5	14,039.4	8.1	0.1%	14,038.2	9.3	0.1%	14,035.9	11.6	0.1%	14,032.4	15.0	0.1%	14,030.1	17.4	0.1%	14,027.8	19.7	0.1%
ME 6	32 49 25	2005	Above Normal	March	--	28,717.6	28,709.5	8.1	0.0%	28,708.3	9.3	0.0%	28,706.0	11.6	0.0%	28,703.7	13.9	0.0%	28,701.4	16.2	0.1%	28,699.1	18.5	0.1%
ME 6	32 49 25	2005	Above Normal	April	--	21,544.0	21,537.0	6.9	0.0%	21,535.9	8.1	0.0%	21,533.6	10.4	0.0%	21,531.3	12.7	0.1%	21,528.9	15.0	0.1%	21,526.6	17.4	0.1%
ME 6	32 49 25	2005	Above Normal	May	--	19,688.7	19,672.5	16.2	0.1%	19,670.1	18.5	0.1%	19,665.5	23.1	0.1%	19,660.9	27.8	0.1%	19,656.3	32.4	0.2%	19,651.6	37.0	0.2%
ME 6	32 49 25	2005	Above Normal	June	--	16,011.6	15,988.4	23.1	0.1%	15,985.0	26.6	0.2%	15,978.0	33.6	0.2%	15,971.1	40.5	0.3%	15,964.1	47.5	0.3%	15,957.2	54.4	0.3%
ME 6	32 49 25	2005	Above Normal	July	--	2,867.2	2,845.1	22.1	0.8%	2,842.0	25.2	0.9%	2,835.8	31.5	1.1%	2,829.4	37.8	1.3%	2,823.1	44.1	1.5%	2,816.9	50.3	1.8%
ME 6	32 49 25	2005	Above Normal	August	--	992.4	972.2	20.2	2.0%	969.4	23.0	2.3%	963.6	28.8	2.9%	957.9	34.5	3.5%	952.1	40.3	4.1%	946.4	46.0	4.6%
ME 6	32 49 25	2005	Above Normal	September	Used in Summary Table Analysis	533.8	515.8	18.0	3.4%	513.2	20.6	3.9%	508.1	25.7	4.8%	502.9	30.8	5.8%	497.8	36.0	6.7%	492.7	41.1	7.7%
ME 6	32 49 25	2006	Wet	October	Used in Summary Table Analysis	644.7	630.0	14.7	2.3%	627.9	16.8	2.6%	623.6	21.1	3.3%	619.4	25.3	3.9%	615.2	29.5	4.6%	610.9	33.8	5.2%
ME 6	32 49 25	2006	Wet	November	Used in Summary Table Analysis	9,422.0	9,410.3	11.7	0.1%	9,408.7	13.3	0.1%	9,405.2	16.8	0.2%	9,401.9	20.1	0.2%	9,398.5	23.5	0.2%	9,395.0	27.0	0.3%
ME 6	32 49 25	2006	Wet	December	--	43,876.2	43,865.7	10.4	0.0%	43,864.6	11.6	0.0%	43,861.1	15.0	0.0%	43,858.8	17.4	0.0%	43,855.3	20.8	0.0%	43,851.9	24.3	0.1%
ME 6	32 49 25	2006	Wet	January	--	46,640.0	46,629.6	10.4	0.0%	46,628.5	11.6	0.0%	46,626.2	13.9	0.0%	46,623.8	16.2	0.0%	46,620.4	19.7	0.0%	46,618.1	22.0	0.0%
ME 6	32 49 25	2006	Wet	February	--	26,766.2	26,756.9	9.3	0.0%	26,755.8	10.4	0.0%	26,753.5	12.7	0.0%	26,751.2	15.0	0.1%	26,748.8	17.4	0.1%	26,746.5	19.7	0.1%
ME 6	32 49 25	2006	Wet	March	--	47,429.4	47,421.3	8.1	0.0%	47,420.1	9.3	0.0%	47,417.8	11.6	0.0%	47,415.5	13.9	0.0%	47,413.2	16.2	0.0%	47,410.9	18.5	0.0%
ME 6	32 49 25	2006	Wet	April	--	30,535.9	30,527.8	8.1	0.0%	30,526.6	9.3	0.0%	30,525.5	10.4	0.0%	30,523.1	12.7	0.0%	30,520.8	15.0	0.0%	30,518.5	17.4	0.1%
ME 6	32 49 25	2006	Wet	May	--	14,269.7	14,260.4	9.3	0.1%	14,259.3	10.4	0.1%	14,255.8	13.9	0.1%	14,253.5	16.2	0.1%	14,251.2	18.5	0.1%	14,247.7	22.0	0.2%
ME 6	32 49 25	2006	Wet	June	--	3,555.8	3,536.2	19.6	0.6%	3,533.4	22.3	0.6%	3,527.9	27.9	0.8%	3,522.3	33.4	0.9%	3,516.9	38.9	1.1%	3,511.3	44.4	1.2%
ME 6	32 49 25	2006	Wet	July	--	1,289.9	1,269.0	20.9	1.6%	1,266.0	24.0	1.9%	1,260.0	30.0	2.3%	1,254.1	35.9	2.8%	1,248.0	41.9	3.2%	1,242.1	47.8	3.7%
ME 6	32 49 25	2006	Wet	August	--	676.0	655.3	20.6	3.1%	652.4	23.6	3.5%	646.6	29.4	4.4%	640.7	35.3	5.2%	634.8	41.2	6.1%	628.9	47.0	7.0%
ME 6	32 49 25	2006	Wet	September	Used in Summary Table Analysis	436.1	417.8	18.3	4.2%	415.2	20.9	4.8%	410.0	26.1	6.0%	404.8	31.3	7.2%	399.6	36.5	8.4%	394.4	41.7	9.6%
ME 6	32 49 25	2007	Above Normal	October	Used in Summary Table Analysis	283.0	268.0	15.0	5.3%	265.9	17.1	6.0%	261.6	21.4	7.6%	257.2	25.7	9.1%	252.9	30.1	10.6%	248.5	34.4	12.2%
ME 6	32 49 25	2007	Above Normal	November	Used in Summary Table Analysis	8,769.0	8,756.7	12.3	0.1%	8,755.0	14.0	0.2%	8,751.4	17.6	0.2%	8,747.9	21.1	0.2%	8,744.3	24.7	0.3%	8,740.7	28.2	0.3%
ME 6	32 49 25	2007	Above Normal	December	--	20,616.9	20,606.5	10.4	0.1%	20,605.3	11.6	0.1%	20,601.9	15.0	0.1%	20,598.4	18.5	0.1%	20,594.9	22.0	0.1%	20,591.4	25.5	0.1%
ME 6	32 49 25	2007	Above Normal	January	--	10,306.9	10,297.6	9.4	0.1%	10,296.2	10.8	0.1%	10,293.5	13.4	0.1%	10,290.7	16.2	0.2%	10,288.0	19.0	0.2%	10,285.2	21.8	0.2%
ME 6	32 49 25	2007	Above Normal	February	--	30,803.2	30,795.1	8.1	0.0%	30,794.0	9.3	0.0%	30,790.5	12.7	0.0%	30,788.2	15.0	0.0%	30,785.9	17.4	0.1%	30,782.4	20.8	0.1%
ME 6	32 49 25	2007	Above Normal	March	--	13,142.4	13,134.3	8.1	0.1%	13,133.1	9.3	0.1%	13,130.8	11.6	0.1%	13,128.5	13.9	0.1%	13,125.0	17.4	0.1%	13,122.7	19.7	0.1%
ME 6	32 49 25	2007	Above Normal	April	--	11,573.3	11,557.9	15.4	0.1%	11,555.7	17.6	0.2%	11,551.3	22.0	0.2%	11,546.9	26.4	0.2%	11,542.4	30.9	0.3%	11,538.0	35.3	0.3%
ME 6	32 49 25	2007	Above Normal	May	--	4,158.0	4,139.8	18.2	0.4%	4,137.2	20.8	0.5%	4,131.9	26.0	0.6%	4,126.7	31.3	0.8%	4,121.4	36.6	0.9%	4,116.2	41.8	1.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 49 25	2007	Above Normal	June	--	1,511.9	1,489.9	22.0	1.5%	1,486.8	25.1	1.7%	1,480.4	31.5	2.1%	1,474.2	37.7	2.5%	1,467.9	44.0	2.9%	1,461.7	50.2	3.3%
ME 6	32 49 25	2007	Above Normal	July	--	502.8	480.4	22.4	4.5%	477.2	25.6	5.1%	470.9	31.9	6.4%	464.5	38.3	7.6%	458.2	44.6	8.9%	451.8	51.0	10.1%
ME 6	32 49 25	2007	Above Normal	August	--	231.0	210.7	20.4	8.8%	207.8	23.3	10.1%	202.0	29.0	12.6%	196.2	34.8	15.1%	190.4	40.6	17.6%	184.6	46.4	20.1%
ME 6	32 49 25	2007	Above Normal	September	Used in Summary Table Analysis	158.6	139.2	19.4	12.2%	136.5	22.1	14.0%	130.9	27.7	17.4%	125.4	33.2	20.9%	119.9	38.7	24.4%	114.4	44.2	27.9%
ME 6	32 49 25	2008	Dry	October	Used in Summary Table Analysis	3,472.0	3,456.0	16.0	0.5%	3,453.8	18.2	0.5%	3,449.2	22.8	0.7%	3,444.6	27.4	0.8%	3,439.9	32.1	0.9%	3,435.4	36.6	1.1%
ME 6	32 49 25	2008	Dry	November	Used in Summary Table Analysis	3,311.5	3,299.1	12.4	0.4%	3,297.3	14.1	0.4%	3,293.8	17.7	0.5%	3,290.2	21.3	0.6%	3,286.6	24.9	0.8%	3,282.9	28.6	0.9%
ME 6	32 49 25	2008	Dry	December	--	23,395.8	23,384.3	11.6	0.0%	23,383.1	12.7	0.1%	23,379.6	16.2	0.1%	23,377.3	18.5	0.1%	23,373.8	22.0	0.1%	23,370.4	25.5	0.1%
ME 6	32 49 25	2008	Dry	January	--	37,788.2	37,778.9	9.3	0.0%	37,776.6	11.6	0.0%	37,774.3	13.9	0.0%	37,770.8	17.4	0.0%	37,768.5	19.7	0.1%	37,765.0	23.1	0.1%
ME 6	32 49 25	2008	Dry	February	--	26,334.5	26,325.2	9.3	0.0%	26,324.1	10.4	0.0%	26,321.8	12.7	0.0%	26,319.4	15.0	0.1%	26,317.1	17.4	0.1%	26,313.7	20.8	0.1%
ME 6	32 49 25	2008	Dry	March	--	11,824.1	11,817.1	6.9	0.1%	11,816.0	8.1	0.1%	11,813.7	10.4	0.1%	11,811.3	12.7	0.1%	11,809.0	15.0	0.1%	11,806.7	17.4	0.1%
ME 6	32 49 25	2008	Dry	April	--	9,041.3	9,025.7	15.6	0.2%	9,023.5	17.8	0.2%	9,019.0	22.3	0.2%	9,014.5	26.9	0.3%	9,010.0	31.4	0.3%	9,005.6	35.8	0.4%
ME 6	32 49 25	2008	Dry	May	--	1,359.6	1,342.8	16.8	1.2%	1,340.5	19.1	1.4%	1,335.6	24.0	1.8%	1,330.9	28.7	2.1%	1,326.3	33.3	2.5%	1,321.6	38.0	2.8%
ME 6	32 49 25	2008	Dry	June	--	445.0	420.9	24.1	5.4%	417.5	27.5	6.2%	410.7	34.3	7.7%	403.9	41.1	9.2%	397.1	47.9	10.8%	390.3	54.7	12.3%
ME 6	32 49 25	2008	Dry	July	--	262.7	238.7	24.1	9.2%	235.3	27.5	10.5%	228.4	34.4	13.1%	221.5	41.2	15.7%	214.7	48.1	18.3%	207.9	54.9	20.9%
ME 6	32 49 25	2008	Dry	August	--	186.4	162.9	23.5	12.6%	159.5	26.9	14.4%	152.8	33.6	18.0%	146.1	40.3	21.6%	139.4	47.0	25.2%	132.7	53.7	28.8%
ME 6	32 49 25	2008	Dry	September	Used in Summary Table Analysis	148.0	125.2	22.8	15.4%	121.9	26.0	17.6%	115.4	32.5	22.0%	108.9	39.0	26.4%	102.4	45.6	30.8%	95.9	52.0	35.2%
ME 6	32 49 25	2009	Critical	October	Used in Summary Table Analysis	933.6	915.4	18.2	2.0%	912.8	20.9	2.2%	907.5	26.2	2.8%	902.2	31.4	3.4%	897.1	36.6	3.9%	891.8	41.9	4.5%
ME 6	32 49 25	2009	Critical	November	Used in Summary Table Analysis	5,578.9	5,564.7	14.2	0.3%	5,562.6	16.3	0.3%	5,558.4	20.5	0.4%	5,554.3	24.7	0.4%	5,550.1	28.8	0.5%	5,546.1	32.9	0.6%
ME 6	32 49 25	2009	Critical	December	--	12,305.6	12,292.8	12.7	0.1%	12,291.7	13.9	0.1%	12,287.0	18.5	0.2%	12,283.6	22.0	0.2%	12,280.1	25.5	0.2%	12,276.6	28.9	0.2%
ME 6	32 49 25	2009	Critical	January	--	8,837.6	8,826.6	11.0	0.1%	8,825.0	12.6	0.1%	8,821.9	15.7	0.2%	8,818.6	19.0	0.2%	8,815.4	22.2	0.3%	8,812.2	25.5	0.3%
ME 6	32 49 25	2009	Critical	February	--	22,732.6	22,723.4	9.3	0.0%	22,721.1	11.6	0.1%	22,718.8	13.9	0.1%	22,715.3	17.4	0.1%	22,713.0	19.7	0.1%	22,710.6	22.0	0.1%
ME 6	32 49 25	2009	Critical	March	--	21,209.5	21,201.4	8.1	0.0%	21,200.2	9.3	0.0%	21,197.9	11.6	0.1%	21,194.4	15.0	0.1%	21,192.1	17.4	0.1%	21,189.8	19.7	0.1%
ME 6	32 49 25	2009	Critical	April	--	10,108.7	10,092.5	16.2	0.2%	10,090.2	18.5	0.2%	10,085.4	23.3	0.2%	10,080.7	28.0	0.3%	10,076.0	32.6	0.3%	10,071.3	37.4	0.4%
ME 6	32 49 25	2009	Critical	May	--	15,629.6	15,610.0	19.7	0.1%	15,607.6	22.0	0.1%	15,601.9	27.8	0.2%	15,596.1	33.6	0.2%	15,590.3	39.4	0.3%	15,584.5	45.1	0.3%
ME 6	32 49 25	2009	Critical	June	--	3,168.4	3,142.8	25.6	0.8%	3,139.2	29.2	0.9%	3,131.8	36.6	1.2%	3,124.5	43.9	1.4%	3,117.2	51.2	1.6%	3,110.0	58.4	1.8%
ME 6	32 49 25	2009	Critical	July	--	1,270.6	1,246.2	24.4	1.9%	1,242.7	27.9	2.2%	1,235.8	34.8	2.7%	1,228.8	41.8	3.3%	1,222.0	48.6	3.8%	1,215.0	55.6	4.4%
ME 6	32 49 25	2009	Critical	August	--	676.9	653.2	23.7	3.5%	649.8	27.1	4.0%	643.0	33.9	5.0%	636.3	40.6	6.0%	629.5	47.4	7.0%	622.7	54.1	8.0%
ME 6	32 49 25	2009	Critical	September	Used in Summary Table Analysis	397.5	376.1	21.4	5.4%	373.0	24.5	6.2%	366.8	30.6	7.7%	360.7	36.7	9.2%	354.6	42.9	10.8%	348.5	49.0	12.3%
ME 6	32 49 25	2010	Below Normal	October	Used in Summary Table Analysis	6,100.1	6,081.7	18.4	0.3%	6,079.1	21.1	0.3%	6,073.7	26.4	0.4%	6,068.4	31.7	0.5%	6,063.2	36.9	0.6%	6,057.9	42.2	0.7%
ME 6	32 49 25	2010	Below Normal	November	Used in Summary Table Analysis	8,337.2	8,322.5	14.7	0.2%	8,320.3	16.9	0.2%	8,316.0	21.2	0.3%	8,311.7	25.5	0.3%	8,307.4	29.7	0.4%	8,303.1	34.0	0.4%
ME 6	32 49 25	2010	Below Normal	December	--	12,449.1	12,436.3	12.7	0.1%	12,434.0	15.0	0.1%	12,430.6	18.5	0.1%	12,427.1	22.0	0.2%	12,423.6	25.5	0.2%	12,420.1	28.9	0.2%
ME 6	32 49 25	2010	Below Normal	January	--	36,547.5	36,535.9	11.6	0.0%	36,534.7	12.7	0.0%	36,531.3	16.2	0.0%	36,527.8	19.7	0.1%	36,524.3	23.1	0.1%	36,520.8	26.6	0.1%
ME 6	32 49 25	2010	Below Normal	February	--	27,334.5	27,325.2	9.3	0.0%	27,322.9	11.6	0.0%	27,320.6	13.9	0.1%	27,317.1	17.4	0.1%	27,314.8	19.7	0.1%	27,311.3	23.1	0.1%
ME 6	32 49 25	2010	Below Normal	March	--	28,915.5	28,906.3	9.3	0.0%	28,905.1	10.4	0.0%	28,901.6	13.9	0.0%	28,899.3	16.2	0.1%	28,897.0	18.5	0.1%	28,893.5	22.0	0.1%
ME 6	32 49 25	2010	Below Normal	April	--	40,157.4	40,149.3	8.1	0.0%	40,148.1	9.3	0.0%	40,145.8	11.6	0.0%	40,142.4	15.0	0.0%	40,140.0	17.4	0.0%	40,137.7	19.7	0.0%
ME 6	32 49 25	2010	Below Normal	May	--	20,380.8	20,364.6	16.2	0.1%	20,362.3	18.5	0.1%	20,356.5	24.3	0.1%	20,351.9	28.9	0.1%	20,347.2	33.6	0.2%	20,342.6	38.2	0.2%
ME 6	32 49 25	2010	Below Normal	June	--	9,439.6	9,415.2	24.4	0.3%	9,411.6	28.0	0.3%	9,404.7	34.8	0.4%	9,397.8	41.8	0.4%	9,391.0	48.6	0.5%	9,384.0	55.6	0.6%
ME 6	32 49 25	2010	Below Normal	July	--	1,462.0	1,439.6	22.5	1.5%	1,436.3	25.7	1.8%	1,429.9	32.2	2.2%	1,423.5	38.5	2.6%	1,417.0	45.0	3.1%	1,410.8	51.3	3.5%
ME 6	32 49 25	2010	Below Normal	August	--	578.6	557.9	20.8	3.6%	554.9	23.7	4.1%	549.0	29.7	5.1%	543.1	35.5	6.1%	537.2	41.5	7.2%	531.3	47.4	8.2%
ME 6	32 49 25	2010	Below Normal	September	Used in Summary Table Analysis	661.1	641.3	19.8	3.0%	638.4	22.7	3.4%	632.7	28.4	4.3%	627.1	34.0	5.1%	621.4	39.7	6.0%	615.7	45.4	6.9%
ME 6	32 49 25	2011	Wet	October	Used in Summary Table Analysis	9,705.3	9,690.2	15.2	0.2%	9,688.0	17.4	0.2%	9,683.6	21.8	0.2%	9,679.3	26.0	0.3%	9,674.8	30.6	0.3%	9,670.4	35.0	0.4%
ME 6	32 49 25	2011	Wet	November	Used in Summary Table Analysis	14,300.9	14,289.4	11.6	0.1%	14,287.0	13.9	0.1%	14,283.6	17.4	0.1%	14,280.1	20.8	0.1%	14,276.6	24.3	0.2%	14,273.1	27.8	0.2%
ME 6	32 49 25	2011	Wet	December	--	34,028.9	34,018.5	10.4	0.0%	34,017.4	11.6	0.0%	34,013.9	15.0	0.0%	34,010.4	18.5	0.1%	34,008.1	20.8	0.1%	34,004.6	24.3	0.1%
ME 6	32 49 25	2011	Wet	January	--	14,218.8	14,209.5	9.3	0.1%	14,208.3	10.4	0.1%	14,206.0	12.7	0.1%	14,202.5	16.2	0.1%	14,200.2	18.5	0.1%	14,197.9	20.8	0.1%
ME 6	32 49 25	2011	Wet	February	--	20,829.9	20,821.8	8.1	0.0%	20,820.6	9.3	0.0%	20,817.1	12.7	0.1%	20,814.8	15.0	0.1%	20,812.5	17.4	0.1%	20,810.2	19.7	0.1%
ME 6	32 49 25	2011	Wet	March	--	52,222.2	52,214.1	8.1	0.0%	52,213.0	9.3	0.0%	52,210.6	11.6	0.0%	52,208.3	13.9	0.0%	52,206.0	16.2	0.0%	52,203.7	18.5	0.0%
ME 6	32 49 25	2011	Wet	April	--	24,875.0	24,866.9	8.1	0.0%	24,865.7	9.3	0.0%	24,863.4	11.6	0.0%	24,861.1	13.9	0.1%	24,858.8	16.2	0.1%	24,856.5	18.5	0.1%
ME 6	32 49 25	2011	Wet	May	--	11,419.6	11,403.8	15.7	0.1%	11,401.5	18.1	0.2%	11,397.0	22.6	0.2%	11,392.4	27.2	0.2%	11,387.7	31.8	0.3%	11,383.2	36.3	0.3%
ME 6	32 49 25	2011	Wet	June	--	7,093.4	7,069.7	23.7	0.3%	7,066.3	27.1	0.4%	7,059.6	33.8	0.5%	7,052.9	40.5	0.6%	7,046.2	47.2	0.7%	7,039.5	53.9	0.8%
ME 6	32 49 25	2011	Wet	July	--	1,834.0	1,810.3	23.7	1.3%	1,806.9	27.1	1.5%	1,800.1	33.9	1.8%	1,793.4	40.6	2.2%	1,786.6	47.5	2.6%	1,779.9	54.2	3.0%
ME 6	32 49 25	2011	Wet	August	--	785.2	764.7	20.5	2.6%	761.8	23.4	3.0%	756.0	29.2	3.7%	750.2	35.0	4.5%	744.3	40.9	5.2%	738.5	46.7	5.9%
ME 6	32 49 25	2011	Wet	September	Used in Summary Table Analysis	441.8	423.0	18.7	4.2%	420.4	21.4	4.8%	415.0	26.7	6.1%	409.7	32.1	7.3%	404.4	37.4	8.5%	399.0	42.7	9.7%
ME 6	32 49 25	2012	Below Normal	October	Used in Summary Table Analysis	4,579.5	4,564.0	15.5	0.3%	4,561.8	17.7	0.4%	4,557.4	22.1	0.5%	4,552.9	26.6	0.6%	4,548.5	31.0	0.7%	4,544.0	35.5	0.8%
ME 6	32 49 25	2012	Below Normal	November	Used in Summary Table Analysis	8,313.4	8,301.2	12.3	0.1%	8,299.3	14.1	0.2%	8,295.7	17.7	0.2%	8,292.2	21.2	0.3%	8,288.5	24.9	0.3%	8,285.0	28.5	0.3%
ME 6	32 49 25	2012	Below Normal	December	--	5,217.5	5,206.9	10.5	0.2%	5,205.4	12.0	0.2%	5,202.4	15.0	0.3%	5,199.4	18.1	0.3%	5,196.3	21.2	0.4%	5,193.2	24.3	0.5%
ME 6	32 49 25	2012	Below Normal	January	--	20,329.9	20,320.6	9.3	0.0%	20,319.4	10.4	0.1%	20,316.0	13.9	0.1%	20,313.7	16.2	0.1%	20,310.2	19.7	0.1%	20,307.9	22.0	0.1%
ME 6	32 49 25	2012	Below Normal	February	--	18,275.5	18,266.2	9.3	0.1%	18,265.0	10.4	0.1%	18,262.7	12.7	0.1%	18,260.4	15.0	0.1%	18,258.1	17.4	0.1%	18,255.8	19.7	0.1%
ME 6	32 49 25	2012	Below Normal	March	--	45,677.1	45,667.8	9.3	0.0%	45,666.7	10.4	0.0%	45,664.4	12.7	0.0%	45,662.0	15.0	0.0%	45,659.7	17.4	0.0%	45,657.4	19.7	0.0%
ME 6	32 49 25	2012	Below Normal	April	--	26,951.4	26,943.3	8.1	0.0%	26,942.1	9.3	0.0%	26,939.8	11.6	0.0%	26,937.5	13.9	0.1%	26,935.2	16.2	0.1%	26,932.9	18.5	0.1%
ME 6	32 49 25	2012	Below Normal	May	--	7,506.0	7,490.4	15.6	0.2%	7,488.2	17.8	0.2%	7,483.6	22.5	0.3%	7,479.1	27.0	0.4%	7,474.5	31.5	0.4%	7,469.9	36.1	0.5%
ME 6	32 49 25	2012	Below Normal	June	--	5,552.2	5,528.1	24.1	0.4%	5,524.7	27.5	0.5%	5,517.8	34.4	0.6%	5,511.1	41.1	0.7%	5,504.3	47.9	0.9%	5,497.3	54.9	1.0%
ME 6	32 49 25	2012	Below Normal	July	--	2,247.1	2,224.2	22.9	1.0%	2,220.8	26.3	1.2%	2,214.4	32.8	1.5%	2,207.8	39.4	1.8%	2,201.2	45.9	2.0%	2,194.6	52.5	2.3%
ME 6	32 49 25	2012	Below Normal	August	--	395.0	376.3	18.8	4.7%	373.6	21.4	5.4%	368.3	26.8	6.8%	362.9	32.1	8.1%	357.6	37.4	9.5%	352.2	42.8	10.8%
ME 6	32 49 25	2012	Below Normal	September	Used in Summary Table Analysis	257.1	240.2	16.9	6.6%	237.8	19.3	7.5%	233.0	24.1	9.4%	228.2	28.8	11.2%	223.5	33.6	13.1%	218.7	38.4	14.9%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 49 25	2013	Below Normal	October	Used in Summary Table Analysis	1,937.5	1,922.7	14.8	0.8%	1,920.6	16.9	0.9%	1,916.3	21.2	1.1%	1,912.2	25.3	1.3%	1,907.9	29.6	1.5%	1,903.6	33.9	1.8%
ME 6	32 49 25	2013	Below Normal	November	Used in Summary Table Analysis	14,822.9	14,811.3	11.6	0.1%	14,809.0	13.9	0.1%	14,805.6	17.4	0.1%	14,802.1	20.8	0.1%	14,798.6	24.3	0.2%	14,795.1	27.8	0.2%
ME 6	32 49 25	2013	Below Normal	December	--	60,296.3	60,284.7	11.6	0.0%	60,283.6	12.7	0.0%	60,280.1	16.2	0.0%	60,277.8	18.5	0.0%	60,274.3	22.0	0.0%	60,270.8	25.5	0.0%
ME 6	32 49 25	2013	Below Normal	January	--	22,290.5	22,281.3	9.3	0.0%	22,280.1	10.4	0.0%	22,277.8	12.7	0.1%	22,275.5	15.0	0.1%	22,272.0	18.5	0.1%	22,269.7	20.8	0.1%
ME 6	32 49 25	2013	Below Normal	February	--	8,888.4	8,880.0	8.4	0.1%	8,878.7	9.7	0.1%	8,876.3	12.2	0.1%	8,873.7	14.7	0.2%	8,871.3	17.1	0.2%	8,868.8	19.7	0.2%
ME 6	32 49 25	2013	Below Normal	March	--	10,395.0	10,386.8	8.2	0.1%	10,385.6	9.4	0.1%	10,383.3	11.7	0.1%	10,380.9	14.1	0.1%	10,378.5	16.6	0.2%	10,376.0	19.0	0.2%
ME 6	32 49 25	2013	Below Normal	April	--	8,311.8	8,296.8	15.0	0.2%	8,294.7	17.1	0.2%	8,290.4	21.4	0.3%	8,286.0	25.8	0.3%	8,281.7	30.1	0.4%	8,277.4	34.4	0.4%
ME 6	32 49 25	2013	Below Normal	May	--	4,457.3	4,439.1	18.2	0.4%	4,436.6	20.7	0.5%	4,431.4	25.9	0.6%	4,426.2	31.1	0.7%	4,420.9	36.3	0.8%	4,415.7	41.6	0.9%
ME 6	32 49 25	2013	Below Normal	June	--	2,120.5	2,098.6	21.9	1.0%	2,095.5	25.0	1.2%	2,089.2	31.3	1.5%	2,083.0	37.5	1.8%	2,076.7	43.8	2.1%	2,070.5	50.0	2.4%
ME 6	32 49 25	2013	Below Normal	July	--	723.8	702.2	21.5	3.0%	699.2	24.5	3.4%	693.1	30.6	4.2%	687.0	36.7	5.1%	680.9	42.8	5.9%	674.9	48.9	6.8%
ME 6	32 49 25	2013	Below Normal	August	--	347.4	327.1	20.3	5.8%	324.2	23.1	6.7%	318.4	28.9	8.3%	312.7	34.7	10.0%	306.9	40.5	11.7%	301.1	46.3	13.3%
ME 6	32 49 25	2013	Below Normal	September	Used in Summary Table Analysis	4,825.1	4,804.1	21.1	0.4%	4,801.0	24.1	0.5%	4,795.0	30.1	0.6%	4,789.0	36.1	0.7%	4,783.0	42.1	0.9%	4,777.0	48.1	1.0%
ME 6	32 49 25	2014	Critical	October	Used in Summary Table Analysis	283.9	268.4	15.5	5.5%	266.1	17.7	6.3%	261.7	22.2	7.8%	257.2	26.7	9.4%	252.7	31.2	11.0%	248.2	35.7	12.6%
ME 6	32 49 25	2014	Critical	November	Used in Summary Table Analysis	1,559.6	1,547.1	12.5	0.8%	1,545.4	14.2	0.9%	1,541.7	17.9	1.2%	1,538.1	21.5	1.4%	1,534.4	25.2	1.6%	1,530.8	28.8	1.8%
ME 6	32 49 25	2014	Critical	December	--	1,603.2	1,592.4	10.9	0.7%	1,590.7	12.5	0.8%	1,587.6	15.6	1.0%	1,584.5	18.8	1.2%	1,581.3	22.0	1.4%	1,578.1	25.1	1.6%
ME 6	32 49 25	2014	Critical	January	--	2,843.8	2,834.0	9.7	0.3%	2,832.6	11.1	0.4%	2,829.9	13.9	0.5%	2,827.0	16.8	0.6%	2,824.1	19.7	0.7%	2,821.3	22.5	0.8%
ME 6	32 49 25	2014	Critical	February	--	15,814.8	15,806.7	8.1	0.1%	15,805.6	9.3	0.1%	15,802.1	12.7	0.1%	15,799.8	15.0	0.1%	15,797.5	17.4	0.1%	15,795.1	19.7	0.1%
ME 6	32 49 25	2014	Critical	March	--	31,566.0	31,557.9	8.1	0.0%	31,556.7	9.3	0.0%	31,554.4	11.6	0.0%	31,550.9	15.0	0.0%	31,548.6	17.4	0.1%	31,546.3	19.7	0.1%
ME 6	32 49 25	2014	Critical	April	--	13,018.5	13,002.3	16.2	0.1%	13,000.0	18.5	0.1%	12,995.4	23.1	0.2%	12,990.7	27.8	0.2%	12,986.1	32.4	0.2%	12,981.5	37.0	0.3%
ME 6	32 49 25	2014	Critical	May	--	5,206.3	5,187.0	19.2	0.4%	5,184.3	22.0	0.4%	5,178.8	27.4	0.5%	5,173.3	33.0	0.6%	5,167.7	38.5	0.7%	5,162.3	44.0	0.8%
ME 6	32 49 25	2014	Critical	June	--	1,206.5	1,180.1	26.4	2.2%	1,176.4	30.1	2.5%	1,169.0	37.5	3.1%	1,161.6	44.9	3.7%	1,154.1	52.4	4.3%	1,146.7	59.7	5.0%
ME 6	32 49 25	2014	Critical	July	--	552.0	527.5	24.6	4.5%	524.0	28.1	5.1%	517.0	35.1	6.4%	510.0	42.1	7.6%	503.0	49.1	8.9%	496.0	56.0	10.1%
ME 6	32 49 25	2014	Critical	August	--	355.3	331.7	23.6	6.6%	328.4	27.0	7.6%	321.6	33.7	9.5%	314.9	40.4	11.4%	308.2	47.2	13.3%	301.5	53.9	15.2%
ME 6	32 49 25	2014	Critical	September	Used in Summary Table Analysis	2,593.2	2,569.9	23.3	0.9%	2,566.6	26.6	1.0%	2,560.1	33.1	1.3%	2,553.4	39.8	1.5%	2,546.6	46.5	1.8%	2,540.0	53.1	2.0%
ME 6	32 49 25	2015	Dry	October	Used in Summary Table Analysis	11,431.7	11,413.1	18.6	0.2%	11,410.4	21.3	0.2%	11,405.3	26.4	0.2%	11,400.1	31.6	0.3%	11,394.9	36.8	0.3%	11,389.5	42.2	0.4%
ME 6	32 49 25	2015	Dry	November	Used in Summary Table Analysis	9,111.8	9,097.9	13.9	0.2%	9,095.9	15.9	0.2%	9,091.9	19.9	0.2%	9,088.0	23.8	0.3%	9,083.9	27.9	0.3%	9,079.9	31.9	0.4%
ME 6	32 49 25	2015	Dry	December	--	32,887.7	32,876.2	11.6	0.0%	32,875.0	12.7	0.0%	32,871.5	16.2	0.0%	32,868.1	19.7	0.1%	32,864.6	23.1	0.1%	32,861.1	26.6	0.1%
ME 6	32 49 25	2015	Dry	January	--	14,619.2	14,608.8	10.4	0.1%	14,607.6	11.6	0.1%	14,604.2	15.0	0.1%	14,601.9	17.4	0.1%	14,598.4	20.8	0.1%	14,594.9	24.3	0.2%
ME 6	32 49 25	2015	Dry	February	--	27,341.4	27,332.2	9.3	0.0%	27,331.0	10.4	0.0%	27,327.5	13.9	0.1%	27,325.2	16.2	0.1%	27,322.9	18.5	0.1%	27,319.4	22.0	0.1%
ME 6	32 49 25	2015	Dry	March	--	11,597.2	11,588.0	9.3	0.1%	11,586.8	10.4	0.1%	11,584.5	12.7	0.1%	11,582.2	15.0	0.1%	11,579.9	17.4	0.1%	11,577.5	19.7	0.2%
ME 6	32 49 25	2015	Dry	April	--	8,457.3	8,441.3	16.0	0.2%	8,439.0	18.3	0.2%	8,434.4	22.9	0.3%	8,429.7	27.5	0.3%	8,425.1	32.2	0.4%	8,420.5	36.8	0.4%
ME 6	32 49 25	2015	Dry	May	--	1,512.3	1,493.4	18.9	1.2%	1,490.6	21.6	1.4%	1,485.3	27.0	1.8%	1,479.9	32.4	2.1%	1,474.4	37.8	2.5%	1,469.0	43.3	2.9%
ME 6	32 49 25	2015	Dry	June	--	657.9	633.4	24.5	3.7%	629.9	28.0	4.2%	623.0	34.9	5.3%	616.1	41.8	6.4%	609.2	48.7	7.4%	602.4	55.5	8.4%
ME 6	32 49 25	2015	Dry	July	--	274.3	250.1	24.2	8.8%	246.6	27.7	10.1%	239.7	34.6	12.6%	232.7	41.6	15.2%	225.8	48.5	17.7%	218.9	55.4	20.2%
ME 6	32 49 25	2015	Dry	August	--	173.3	149.8	23.6	13.6%	146.4	26.9	15.5%	139.6	33.7	19.4%	132.8	40.5	23.4%	126.0	47.3	27.3%	119.3	54.0	31.2%
ME 6	32 49 25	2015	Dry	September	Used in Summary Table Analysis	126.8	105.6	21.2	16.7%	102.4	24.4	19.3%	95.7	31.0	24.5%	89.2	37.5	29.6%	82.6	44.2	34.9%	76.1	50.7	40.0%
ME 6	32 49 25	2016	Above Normal	October	Used in Summary Table Analysis	91.8	73.0	18.8	20.5%	69.9	21.9	23.8%	64.6	27.2	29.6%	59.1	32.7	35.7%	53.7	38.1	41.5%	48.5	43.3	47.2%
ME 6	32 49 25	2016	Above Normal	November	Used in Summary Table Analysis	3,930.0	3,916.0	14.0	0.4%	3,913.5	16.4	0.4%	3,909.5	20.5	0.5%	3,905.1	24.9	0.6%	3,900.7	29.3	0.7%	3,896.4	33.6	0.9%
ME 6	32 49 25	2016	Above Normal	December	--	36,937.5	36,924.8	12.7	0.0%	36,922.5	15.0	0.0%	36,919.0	18.5	0.1%	36,915.5	22.0	0.1%	36,910.9	26.6	0.1%	36,907.4	30.1	0.1%
ME 6	32 49 25	2016	Above Normal	January	--	57,648.1	57,636.6	11.6	0.0%	57,634.3	13.9	0.0%	57,630.8	17.4	0.0%	57,627.3	20.8	0.0%	57,623.8	24.3	0.0%	57,620.4	27.8	0.0%
ME 6	32 49 25	2016	Above Normal	February	--	24,322.9	24,313.7	9.3	0.0%	24,312.5	10.4	0.0%	24,309.0	13.9	0.1%	24,306.7	16.2	0.1%	24,304.4	18.5	0.1%	24,300.9	22.0	0.1%
ME 6	32 49 25	2016	Above Normal	March	--	41,931.7	41,923.6	8.1	0.0%	41,921.3	10.4	0.0%	41,919.0	12.7	0.0%	41,916.7	15.0	0.0%	41,913.2	18.5	0.0%	41,910.9	20.8	0.0%
ME 6	32 49 25	2016	Above Normal	April	--	18,581.0	18,572.9	8.1	0.0%	18,571.8	9.3	0.0%	18,569.4	11.6	0.1%	18,567.1	13.9	0.1%	18,564.8	16.2	0.1%	18,562.5	18.5	0.1%
ME 6	32 49 25	2016	Above Normal	May	--	5,231.6	5,221.8	9.8	0.2%	5,220.3	11.3	0.2%	5,217.4	14.2	0.3%	5,214.5	17.1	0.3%	5,211.5	20.1	0.4%	5,208.6	23.0	0.4%
ME 6	32 49 25	2016	Above Normal	June	--	1,517.1	1,498.3	18.9	1.2%	1,495.5	21.6	1.4%	1,490.2	27.0	1.8%	1,484.7	32.4	2.1%	1,479.3	37.8	2.5%	1,474.0	43.2	2.8%
ME 6	32 49 25	2016	Above Normal	July	--	831.3	810.2	21.1	2.5%	807.1	24.2	2.9%	801.1	30.3	3.6%	795.0	36.3	4.4%	788.9	42.4	5.1%	782.9	48.4	5.8%
ME 6	32 49 25	2016	Above Normal	August	--	500.3	479.4	20.9	4.2%	476.3	23.9	4.8%	470.4	29.9	6.0%	464.4	35.9	7.2%	458.4	41.9	8.4%	452.4	47.9	9.6%
ME 6	32 49 25	2016	Above Normal	September	Used in Summary Table Analysis	336.2	317.5	18.8	5.6%	314.1	22.1	6.6%	308.5	27.7	8.2%	302.8	33.4	9.9%	297.0	39.2	11.6%	291.3	44.9	13.4%
ME 6	32 49 25	2017	Wet	October	Used in Summary Table Analysis	18,409.7	18,393.5	16.2	0.1%	18,391.2	18.5	0.1%	18,386.6	23.1	0.1%	18,381.9	27.8	0.2%	18,377.3	32.4	0.2%	18,372.7	37.0	0.2%
ME 6	32 49 25	2017	Wet	November	Used in Summary Table Analysis	18,960.6	18,949.1	11.6	0.1%	18,946.8	13.9	0.1%	18,943.3	17.4	0.1%	18,939.8	20.8	0.1%	18,936.3	24.3	0.1%	18,932.9	27.8	0.1%
ME 6	32 49 25	2017	Wet	December	--	24,324.1	24,313.7	10.4	0.0%	24,312.5	11.6	0.0%	24,309.0	15.0	0.1%	24,306.7	17.4	0.1%	24,303.2	20.8	0.1%	24,299.8	24.3	0.1%
ME 6	32 49 25	2017	Wet	January	--	107,520.8	107,510.4	10.4	0.0%	107,509.3	11.6	0.0%	107,506.9	13.9	0.0%	107,503.5	17.4	0.0%	107,501.2	19.7	0.0%	107,497.7	23.1	0.0%
ME 6	32 49 25	2017	Wet	February	--	82,200.2	82,191.0	9.3	0.0%	82,189.8	10.4	0.0%	82,187.5	12.7	0.0%	82,185.2	15.0	0.0%	82,181.7	18.5	0.0%	82,179.4	20.8	0.0%
ME 6	32 49 25	2017	Wet	March	--	27,388.9	27,380.8	8.1	0.0%	27,379.6	9.3	0.0%	27,376.2	12.7	0.0%	27,373.8	15.0	0.1%	27,371.5	17.4	0.1%	27,369.2	19.7	0.1%
ME 6	32 49 25	2017	Wet	April	--	23,059.0	23,050.9	8.1	0.0%	23,049.8	9.3	0.0%	23,048.6	10.4	0.0%	23,046.3	12.7	0.1%	23,044.0	15.0	0.1%	23,041.7	17.4	0.1%
ME 6	32 49 25	2017	Wet	May	--	6,278.5	6,268.5	10.0	0.2%	6,267.0	11.5	0.2%	6,264.2	14.2	0.2%	6,261.3	17.1	0.3%	6,258.3	20.1	0.3%	6,255.4	23.0	0.4%
ME 6	32 49 25	2017	Wet	June	--	2,133.4	2,114.2	19.2	0.9%	2,111.5	22.0	1.0%	2,105.9	27.5	1.3%	2,100.5	33.0	1.5%	2,095.0	38.4	1.8%	2,089.5	44.0	2.1%
ME 6	32 49 25	2017	Wet	July	--	945.2	923.9	21.3	2.3%	920.9	24.3	2.6%	914.8	30.3	3.2%	908.8	36.4	3.9%	902.8	42.4	4.5%	896.7	48.5	5.1%
ME 6	32 49 25	2017	Wet	August	--	517.3	496.5	20.8	4.0%	493.5	23.8	4.6%	487.6	29.7	5.7%	481.7	35.7	6.9%	475.7	41.6	8.0%	469.8	47.5	9.2%
ME 6	32 49 25	2017	Wet	September	Used in Summary Table Analysis	332.0	312.7	19.4	5.8%	309.9	22.1	6.7%	304.3	27.7	8.3%	298.8	33.2	10.0%	293.3	38.8	11.7%	287.7	44.3	13.3%
ME 6	32 49 25	2018	Above Normal	October	Used in Summary Table Analysis	284.7	269.2	15.5	5.4%	266.9	17.8	6.2%	262.5	22.2	7.8%	258.0	26.7	9.4%	253.5	31.2	11.0%	249.0	35.6	12.5%
ME 6	32 49 25	2018	Above Normal	November	Used in Summary Table Analysis	10,931.1	10,918.9	12.3	0.1%	10,917.0	14.1	0.1%	10,913.5	17.6	0.2%	10,910.0	21.2	0.2%	10,906.4	24.8	0.2%	10,902.7	28.5	0.3%
ME 6	32 49 25	2018	Above Normal	December	--	5,460.9	5,450.5	10.4	0.2%	5,449.0	11.9	0.2%	5,445.9	14.9	0.3%	5,442.9	17.9	0.3%	5,439.8	21.1	0.4%	5,436.8	24.1	0.4%
ME 6	32 49 25	2018	Above Normal	January	--	18,019.7	18,010.4	9.3	0.1%	18,008.1	11.6	0.1%	18,005.8	13.9	0.1%	18,003.5	16.2	0.1%	18,000.0	19.7	0.1%	17,997.7	22.0	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 49 25	2018	Above Normal	February	--	7,610.5	7,602.3	8.2	0.1%	7,601.0	9.5	0.1%	7,598.6	11.9	0.2%	7,596.2	14.4	0.2%	7,593.8	16.8	0.2%	7,591.3	19.2	0.3%
ME 6	32 49 25	2018	Above Normal	March	--	20,854.2	20,846.1	8.1	0.0%	20,844.9	9.3	0.0%	20,842.6	11.6	0.1%	20,840.3	13.9	0.1%	20,838.0	16.2	0.1%	20,835.6	18.5	0.1%
ME 6	32 49 25	2018	Above Normal	April	--	32,381.9	32,373.8	8.1	0.0%	32,373.8	8.1	0.0%	32,371.5	10.4	0.0%	32,369.2	12.7	0.0%	32,366.9	15.0	0.0%	32,364.6	17.4	0.1%
ME 6	32 49 25	2018	Above Normal	May	--	6,996.2	6,981.1	15.0	0.2%	6,978.9	17.2	0.2%	6,974.7	21.5	0.3%	6,970.3	25.9	0.4%	6,966.0	30.2	0.4%	6,961.9	34.3	0.5%
ME 6	32 49 25	2018	Above Normal	June	--	1,922.3	1,902.8	19.6	1.0%	1,900.0	22.3	1.2%	1,894.4	27.9	1.5%	1,888.9	33.4	1.7%	1,883.3	39.0	2.0%	1,877.8	44.6	2.3%
ME 6	32 49 25	2018	Above Normal	July	--	790.6	769.2	21.4	2.7%	766.1	24.5	3.1%	760.0	30.6	3.9%	753.9	36.7	4.6%	747.8	42.8	5.4%	741.7	48.9	6.2%
ME 6	32 49 25	2018	Above Normal	August	--	451.8	431.7	20.1	4.4%	428.8	23.0	5.1%	423.1	28.7	6.4%	417.3	34.5	7.6%	411.6	40.2	8.9%	405.8	46.0	10.2%
ME 6	32 49 25	2018	Above Normal	September	Used in Summary Table Analysis	308.6	289.2	19.4	6.3%	286.4	22.2	7.2%	280.9	27.7	9.0%	275.3	33.3	10.8%	269.7	38.8	12.6%	264.2	44.4	14.4%
ME 6	32 49 25	2019	Below Normal	October	Used in Summary Table Analysis	214.9	199.7	15.3	7.1%	197.5	17.4	8.1%	193.1	21.9	10.2%	188.6	26.4	12.3%	184.3	30.7	14.3%	179.9	35.1	16.3%
ME 6	32 49 25	2019	Below Normal	November	Used in Summary Table Analysis	6,716.0	6,703.6	12.4	0.2%	6,701.7	14.2	0.2%	6,698.1	17.8	0.3%	6,694.6	21.4	0.3%	6,691.0	25.0	0.4%	6,687.3	28.7	0.4%
ME 6	32 49 25	2019	Below Normal	December	--	14,820.6	14,810.2	10.4	0.1%	14,809.0	11.6	0.1%	14,805.6	15.0	0.1%	14,803.2	17.4	0.1%	14,799.8	20.8	0.1%	14,796.3	24.3	0.2%
ME 6	32 49 25	2019	Below Normal	January	--	35,532.4	35,523.1	9.3	0.0%	35,522.0	10.4	0.0%	35,519.7	12.7	0.0%	35,516.2	16.2	0.0%	35,513.9	18.5	0.1%	35,510.4	22.0	0.1%
ME 6	32 49 25	2019	Below Normal	February	--	142,256.9	142,245.4	11.6	0.0%	142,245.4	11.6	0.0%	142,245.4	11.6	0.0%	142,233.8	23.1	0.0%	142,233.8	23.1	0.0%	142,233.8	23.1	0.0%
ME 6	32 49 25	2019	Below Normal	March	--	42,491.9	42,483.8	8.1	0.0%	42,482.6	9.3	0.0%	42,480.3	11.6	0.0%	42,478.0	13.9	0.0%	42,476.9	15.0	0.0%	42,474.5	17.4	0.0%
ME 6	32 49 25	2019	Below Normal	April	--	15,321.8	15,314.8	6.9	0.0%	15,313.7	8.1	0.1%	15,311.3	10.4	0.1%	15,309.0	12.7	0.1%	15,306.7	15.0	0.1%	15,304.4	17.4	0.1%
ME 6	32 49 25	2019	Below Normal	May	--	17,179.4	17,163.2	16.2	0.1%	17,160.9	18.5	0.1%	17,156.3	23.1	0.1%	17,151.6	27.8	0.2%	17,147.0	32.4	0.2%	17,142.4	37.0	0.2%
ME 6	32 49 25	2019	Below Normal	June	--	4,245.1	4,224.0	21.2	0.5%	4,220.9	24.2	0.6%	4,215.0	30.1	0.7%	4,209.4	35.8	0.8%	4,203.7	41.4	1.0%	4,197.9	47.2	1.1%
ME 6	32 49 25	2019	Below Normal	July	--	1,372.3	1,350.8	21.5	1.6%	1,347.7	24.7	1.8%	1,341.6	30.8	2.2%	1,335.4	36.9	2.7%	1,329.3	43.1	3.1%	1,323.1	49.2	3.6%
ME 6	32 49 25	2019	Below Normal	August	--	606.9	586.3	20.6	3.4%	583.3	23.6	3.9%	577.4	29.5	4.9%	571.6	35.3	5.8%	565.7	41.2	6.8%	559.8	47.1	7.8%
ME 6	32 49 25	2019	Below Normal	September	Used in Summary Table Analysis	471.7	452.5	19.3	4.1%	449.7	22.1	4.7%	444.1	27.6	5.8%	438.6	33.1	7.0%	433.1	38.7	8.2%	427.5	44.2	9.4%
ME 6	32 49 25	2020	Dry	October	Used in Summary Table Analysis	363.1	348.3	14.7	4.1%	346.2	16.9	4.6%	341.9	21.1	5.8%	337.7	25.4	7.0%	333.4	29.7	8.2%	329.1	33.9	9.4%
ME 6	32 49 25	2020	Dry	November	Used in Summary Table Analysis	332.4	320.8	11.7	3.5%	319.1	13.3	4.0%	315.6	16.8	5.0%	312.2	20.2	6.1%	308.8	23.6	7.1%	305.4	27.0	8.1%
ME 6	32 49 25	2020	Dry	December	--	13,511.6	13,501.2	10.4	0.1%	13,498.8	12.7	0.1%	13,496.5	15.0	0.1%	13,493.1	18.5	0.1%	13,489.6	22.0	0.2%	13,486.1	25.5	0.2%
ME 6	32 49 25	2020	Dry	January	--	22,508.1	22,498.8	9.3	0.0%	22,497.7	10.4	0.0%	22,494.2	13.9	0.1%	22,491.9	16.2	0.1%	22,488.4	19.7	0.1%	22,486.1	22.0	0.1%
ME 6	32 49 25	2020	Dry	February	--	7,423.8	7,415.4	8.4	0.1%	7,414.1	9.7	0.1%	7,411.7	12.2	0.2%	7,409.1	14.7	0.2%	7,406.6	17.2	0.2%	7,404.2	19.7	0.3%
ME 6	32 49 25	2020	Dry	March	--	7,278.0	7,270.1	7.9	0.1%	7,269.0	9.0	0.1%	7,266.6	11.5	0.2%	7,264.2	13.8	0.2%	7,261.8	16.2	0.2%	7,259.5	18.5	0.3%
ME 6	32 49 25	2020	Dry	April	--	5,520.0	5,504.2	15.9	0.3%	5,501.9	18.2	0.3%	5,497.2	22.8	0.4%	5,492.6	27.4	0.5%	5,488.0	32.1	0.6%	5,483.3	36.7	0.7%
ME 6	32 49 25	2020	Dry	May	--	7,424.1	7,405.0	19.1	0.3%	7,402.2	21.9	0.3%	7,396.6	27.4	0.4%	7,391.1	33.0	0.4%	7,385.5	38.5	0.5%	7,380.1	44.0	0.6%
ME 6	32 49 25	2020	Dry	June	--	2,107.8	2,082.6	25.1	1.2%	2,079.1	28.7	1.4%	2,072.2	35.5	1.7%	2,065.4	42.4	2.0%	2,058.6	49.2	2.3%	2,051.6	56.1	2.7%
ME 6	32 49 25	2020	Dry	July	--	803.6	778.6	25.0	3.1%	775.0	28.6	3.6%	767.8	35.8	4.5%	760.7	42.9	5.3%	753.5	50.1	6.2%	746.4	57.2	7.1%
ME 6	32 49 25	2020	Dry	August	--	406.7	381.9	24.8	6.1%	378.3	28.4	7.0%	371.2	35.5	8.7%	364.1	42.5	10.5%	357.0	49.6	12.2%	350.0	56.7	13.9%
ME 6	32 49 25	2020	Dry	September	Used in Summary Table Analysis	255.9	233.4	22.5	8.8%	230.2	25.7	10.0%	223.0	32.9	12.9%	216.3	39.6	15.5%	209.3	46.6	18.2%	202.5	53.4	20.9%
ME 6	32 48 26	2000	Above Normal	October	Used in Summary Table Analysis	829.1	813.7	15.4	1.9%	811.4	17.6	2.1%	807.1	22.0	2.7%	802.6	26.5	3.2%	798.1	30.9	3.7%	793.7	35.4	4.3%
ME 6	32 48 26	2000	Above Normal	November	Used in Summary Table Analysis	12,306.7	12,294.0	12.7	0.1%	12,292.8	13.9	0.1%	12,289.4	17.4	0.1%	12,284.7	22.0	0.2%	12,281.3	25.5	0.2%	12,277.8	28.9	0.2%
ME 6	32 48 26	2000	Above Normal	December	--	10,911.5	10,901.0	10.4	0.1%	10,899.5	11.9	0.1%	10,896.5	14.9	0.1%	10,893.4	18.1	0.2%	10,890.3	21.2	0.2%	10,887.2	24.3	0.2%
ME 6	32 48 26	2000	Above Normal	January	--	28,890.0	28,880.8	9.3	0.0%	28,879.6	10.4	0.0%	28,876.2	13.9	0.0%	28,873.8	16.2	0.1%	28,870.4	19.7	0.1%	28,868.1	22.0	0.1%
ME 6	32 48 26	2000	Above Normal	February	--	37,246.5	37,238.4	8.1	0.0%	37,236.1	10.4	0.0%	37,233.8	12.7	0.0%	37,231.5	15.0	0.0%	37,229.2	17.4	0.0%	37,226.9	19.7	0.1%
ME 6	32 48 26	2000	Above Normal	March	--	18,380.8	18,372.7	8.1	0.0%	18,371.5	9.3	0.1%	18,369.2	11.6	0.1%	18,366.9	13.9	0.1%	18,364.6	16.2	0.1%	18,362.3	18.5	0.1%
ME 6	32 48 26	2000	Above Normal	April	--	12,364.6	12,356.5	8.1	0.1%	12,355.3	9.3	0.1%	12,353.0	11.6	0.1%	12,350.7	13.9	0.1%	12,349.5	15.0	0.1%	12,347.2	17.4	0.1%
ME 6	32 48 26	2000	Above Normal	May	--	7,136.3	7,120.9	15.4	0.2%	7,118.6	17.7	0.2%	7,114.1	22.2	0.3%	7,109.7	26.6	0.4%	7,105.2	31.1	0.4%	7,100.7	35.6	0.5%
ME 6	32 48 26	2000	Above Normal	June	--	2,628.8	2,605.7	23.1	0.9%	2,602.3	26.5	1.0%	2,595.7	33.1	1.3%	2,589.1	39.7	1.5%	2,582.5	46.3	1.8%	2,575.9	52.9	2.0%
ME 6	32 48 26	2000	Above Normal	July	--	1,001.2	979.7	21.4	2.1%	976.7	24.5	2.4%	970.6	30.6	3.1%	964.5	36.6	3.7%	958.5	42.7	4.3%	952.4	48.8	4.9%
ME 6	32 48 26	2000	Above Normal	August	--	531.7	511.5	20.2	3.8%	508.6	23.1	4.3%	502.8	28.9	5.4%	497.1	34.7	6.5%	491.3	40.4	7.6%	485.5	46.2	8.7%
ME 6	32 48 26	2000	Above Normal	September	Used in Summary Table Analysis	304.1	286.0	18.1	6.0%	283.4	20.7	6.8%	278.2	25.9	8.5%	273.0	31.1	10.2%	267.8	36.3	11.9%	262.6	41.5	13.6%
ME 6	32 48 26	2001	Dry	October	Used in Summary Table Analysis	3,860.6	3,845.5	15.2	0.4%	3,843.3	17.4	0.4%	3,839.0	21.6	0.6%	3,834.6	26.0	0.7%	3,830.2	30.4	0.8%	3,825.8	34.8	0.9%
ME 6	32 48 26	2001	Dry	November	Used in Summary Table Analysis	6,196.2	6,183.9	12.3	0.2%	6,182.2	14.0	0.2%	6,178.7	17.5	0.3%	6,175.1	21.1	0.3%	6,171.6	24.5	0.4%	6,168.1	28.1	0.5%
ME 6	32 48 26	2001	Dry	December	--	8,910.8	8,900.3	10.4	0.1%	8,898.8	11.9	0.1%	8,895.7	15.0	0.2%	8,892.7	18.1	0.2%	8,889.7	21.1	0.2%	8,886.6	24.2	0.3%
ME 6	32 48 26	2001	Dry	January	--	12,927.1	12,917.8	9.3	0.1%	12,916.7	10.4	0.1%	12,913.2	13.9	0.1%	12,910.9	16.2	0.1%	12,908.6	18.5	0.1%	12,905.1	22.0	0.2%
ME 6	32 48 26	2001	Dry	February	--	17,557.9	17,549.8	8.1	0.0%	17,548.6	9.3	0.1%	17,546.3	11.6	0.1%	17,544.0	13.9	0.1%	17,541.7	16.2	0.1%	17,538.2	19.7	0.1%
ME 6	32 48 26	2001	Dry	March	--	12,341.4	12,334.5	6.9	0.1%	12,333.3	8.1	0.1%	12,331.0	10.4	0.1%	12,328.7	12.7	0.1%	12,326.4	15.0	0.1%	12,324.1	17.4	0.1%
ME 6	32 48 26	2001	Dry	April	--	11,019.2	11,003.1	16.1	0.1%	11,000.9	18.3	0.2%	10,996.3	22.9	0.2%	10,991.7	27.5	0.2%	10,987.0	32.2	0.3%	10,982.4	36.8	0.3%
ME 6	32 48 26	2001	Dry	May	--	2,639.6	2,620.7	18.9	0.7%	2,617.9	21.6	0.8%	2,612.5	27.1	1.0%	2,607.1	32.5	1.2%	2,601.6	38.0	1.4%	2,596.2	43.4	1.6%
ME 6	32 48 26	2001	Dry	June	--	2,679.3	2,653.2	26.0	1.0%	2,649.5	29.7	1.1%	2,642.1	37.2	1.4%	2,634.8	44.4	1.7%	2,627.4	51.9	1.9%	2,620.1	59.1	2.2%
ME 6	32 48 26	2001	Dry	July	--	723.5	698.8	24.7	3.4%	695.3	28.3	3.9%	688.3	35.3	4.9%	681.2	42.3	5.8%	674.2	49.3	6.8%	667.2	56.4	7.8%
ME 6	32 48 26	2001	Dry	August	--	180.0	155.8	24.2	13.5%	152.3	27.7	15.4%	145.5	34.6	19.2%	138.6	41.5	23.0%	131.7	48.4	26.9%	124.8	55.3	30.7%
ME 6	32 48 26	2001	Dry	September	Used in Summary Table Analysis	103.4	81.5	21.9	21.2%	78.4	25.1	24.2%	72.1	31.3	30.2%	65.9	37.5	36.3%	59.7	43.7	42.3%	53.4	50.0	48.4%
ME 6	32 48 26	2002	Below Normal	October	Used in Summary Table Analysis	274.0	255.4	18.6	6.8%	252.7	21.2	7.7%	247.4	26.6	9.7%	242.0	31.9	11.7%	236.7	37.2	13.6%	231.3	42.6	15.6%
ME 6	32 48 26	2002	Below Normal	November	Used in Summary Table Analysis	12,121.5	12,106.5	15.0	0.1%	12,105.3	16.2	0.1%	12,100.7	20.8	0.2%	12,096.1	25.5	0.2%	12,091.4	30.1	0.2%	12,088.0	33.6	0.3%
ME 6	32 48 26	2002	Below Normal	December	--	35,965.3	35,952.5	12.7	0.0%	35,950.2	15.0	0.0%	35,946.8	18.5	0.1%	35,943.3	22.0	0.1%	35,938.7	26.6	0.1%	35,935.2	30.1	0.1%
ME 6	32 48 26	2002	Below Normal	January	--	31,055.6	31,044.0	11.6	0.0%	31,042.8	12.7	0.0%	31,039.4	16.2	0.1%	31,035.9	19.7	0.1%	31,033.6	22.0	0.1%	31,030.1	25.5	0.1%
ME 6	32 48 26	2002	Below Normal	February	--	24,784.7	24,774.3	10.4	0.0%	24,773.1	11.6	0.0%	24,769.7	15.0	0.1%	24,767.4	17.4	0.1%	24,763.9	20.8	0.1%	24,760.4	24.3	0.1%
ME 6	32 48 26	2002	Below Normal	March	--	17,863.4	17,853.0	10.4	0.1%	17,851.9	11.6	0.1%	17,849.5	13.9	0.1%	17,846.1	17.4	0.1%	17,843.8	19.7	0.1%	17,841.4	22.0	0.1%
ME 6	32 48 26	2002	Below Normal	April	--	9,957.8	9,941.6	16.2	0.2%	9,939.2	18.5	0.2%	9,934.6	23.1	0.2%	9,930.0	27.8	0.3%	9,925.3	32.4	0.3%	9,920.7	37.0	0.4%
ME 6	32 48 26	2002	Below Normal	May	--	3,332.3	3,313.3	19.0	0.6%	3,310.5	21.8	0.7%	3,305.1	27.2	0.8%	3,299.5	32.8	1.0%	3,294.1	38.2	1.1%	3,288.7	43.6	1.3%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 48 26	2002	Below Normal	June	--	861.1	839.4	21.7	2.5%	836.3	24.8	2.9%	830.2	31.0	3.6%	824.0	37.1	4.3%	817.8	43.3	5.0%	811.6	49.5	5.7%
ME 6	32 48 26	2002	Below Normal	July	--	370.1	347.9	22.2	6.0%	344.7	25.4	6.9%	338.3	31.8	8.6%	332.0	38.1	10.3%	325.6	44.5	12.0%	319.3	50.8	13.7%
ME 6	32 48 26	2002	Below Normal	August	--	236.0	214.9	21.1	8.9%	211.9	24.1	10.2%	205.9	30.1	12.8%	199.8	36.2	15.3%	193.8	42.2	17.9%	187.8	48.2	20.4%
ME 6	32 48 26	2002	Below Normal	September	Used in Summary Table Analysis	172.4	152.3	20.1	11.6%	149.4	23.0	13.3%	143.7	28.7	16.7%	137.9	34.5	20.0%	132.2	40.2	23.3%	126.4	46.0	26.7%
ME 6	32 48 26	2003	Wet	October	Used in Summary Table Analysis	137.2	120.6	16.6	12.1%	118.2	19.0	13.9%	113.4	23.8	17.4%	108.6	28.6	20.9%	103.7	33.5	24.4%	98.9	38.3	27.9%
ME 6	32 48 26	2003	Wet	November	Used in Summary Table Analysis	906.9	893.5	13.4	1.5%	891.5	15.4	1.7%	887.5	19.4	2.1%	883.6	23.3	2.6%	879.7	27.2	3.0%	875.8	31.1	3.4%
ME 6	32 48 26	2003	Wet	December	--	57,482.6	57,471.1	11.6	0.0%	57,469.9	12.7	0.0%	57,466.4	16.2	0.0%	57,463.0	19.7	0.0%	57,458.3	24.3	0.0%	57,454.9	27.8	0.0%
ME 6	32 48 26	2003	Wet	January	--	31,666.7	31,656.3	10.4	0.0%	31,653.9	12.7	0.0%	31,651.6	15.0	0.0%	31,648.1	18.5	0.1%	31,644.7	22.0	0.1%	31,641.2	25.5	0.1%
ME 6	32 48 26	2003	Wet	February	--	20,425.9	20,416.7	9.3	0.0%	20,414.4	11.6	0.1%	20,412.0	13.9	0.1%	20,409.7	16.2	0.1%	20,406.3	19.7	0.1%	20,403.9	22.0	0.1%
ME 6	32 48 26	2003	Wet	March	--	24,145.8	24,136.6	9.3	0.0%	24,135.4	10.4	0.0%	24,133.1	12.7	0.1%	24,130.8	15.0	0.1%	24,128.5	17.4	0.1%	24,125.0	20.8	0.1%
ME 6	32 48 26	2003	Wet	April	--	43,188.7	43,180.6	8.1	0.0%	43,178.2	10.4	0.0%	43,175.9	12.7	0.0%	43,173.6	15.0	0.0%	43,171.3	17.4	0.0%	43,169.0	19.7	0.0%
ME 6	32 48 26	2003	Wet	May	--	12,260.4	12,244.2	16.2	0.1%	12,241.9	18.5	0.2%	12,237.3	23.1	0.2%	12,232.6	27.8	0.2%	12,228.0	32.4	0.3%	12,223.4	37.0	0.3%
ME 6	32 48 26	2003	Wet	June	--	3,176.3	3,155.6	20.7	0.7%	3,152.5	23.7	0.7%	3,146.8	29.5	0.9%	3,141.0	35.3	1.1%	3,135.2	41.1	1.3%	3,129.3	47.0	1.5%
ME 6	32 48 26	2003	Wet	July	--	1,485.3	1,463.2	22.1	1.5%	1,460.1	25.2	1.7%	1,453.8	31.5	2.1%	1,447.6	37.7	2.5%	1,441.2	44.1	3.0%	1,435.0	50.3	3.4%
ME 6	32 48 26	2003	Wet	August	--	770.7	749.3	21.5	2.8%	746.1	24.6	3.2%	740.0	30.7	4.0%	733.9	36.9	4.8%	727.7	43.0	5.6%	721.5	49.3	6.4%
ME 6	32 48 26	2003	Wet	September	Used in Summary Table Analysis	467.8	449.2	18.6	4.0%	446.6	21.2	4.5%	441.2	26.6	5.7%	435.9	31.9	6.8%	430.6	37.2	7.9%	425.3	42.5	9.1%
ME 6	32 48 26	2004	Wet	October	Used in Summary Table Analysis	334.4	319.0	15.5	4.6%	316.7	17.7	5.3%	312.3	22.2	6.6%	307.8	26.7	8.0%	303.3	31.2	9.3%	298.8	35.7	10.7%
ME 6	32 48 26	2004	Wet	November	Used in Summary Table Analysis	5,881.6	5,869.0	12.6	0.2%	5,867.1	14.5	0.2%	5,863.4	18.2	0.3%	5,859.7	21.9	0.4%	5,856.0	25.6	0.4%	5,852.3	29.3	0.5%
ME 6	32 48 26	2004	Wet	December	--	36,656.3	36,644.7	11.6	0.0%	36,643.5	12.7	0.0%	36,640.0	16.2	0.0%	36,636.6	19.7	0.1%	36,633.1	23.1	0.1%	36,629.6	26.6	0.1%
ME 6	32 48 26	2004	Wet	January	--	31,707.2	31,697.9	9.3	0.0%	31,696.8	10.4	0.0%	31,693.3	13.9	0.0%	31,691.0	16.2	0.1%	31,687.5	19.7	0.1%	31,685.2	22.0	0.1%
ME 6	32 48 26	2004	Wet	February	--	38,460.6	38,452.5	8.1	0.0%	38,451.4	9.3	0.0%	38,447.9	12.7	0.0%	38,445.6	15.0	0.0%	38,443.3	17.4	0.0%	38,439.8	20.8	0.1%
ME 6	32 48 26	2004	Wet	March	--	16,563.7	16,555.6	8.1	0.0%	16,554.4	9.3	0.1%	16,552.1	11.6	0.1%	16,549.8	13.9	0.1%	16,547.5	16.2	0.1%	16,545.1	18.5	0.1%
ME 6	32 48 26	2004	Wet	April	--	9,480.7	9,473.0	7.6	0.1%	9,471.9	8.8	0.1%	9,469.7	11.0	0.1%	9,467.4	13.3	0.1%	9,465.0	15.6	0.2%	9,462.7	17.9	0.2%
ME 6	32 48 26	2004	Wet	May	--	3,444.8	3,429.2	15.6	0.5%	3,426.9	17.9	0.5%	3,422.3	22.5	0.7%	3,417.8	27.0	0.8%	3,413.3	31.5	0.9%	3,408.8	36.0	1.0%
ME 6	32 48 26	2004	Wet	June	--	698.8	679.0	19.8	2.8%	676.2	22.6	3.2%	670.5	28.3	4.0%	664.9	33.9	4.9%	659.2	39.6	5.7%	653.6	45.2	6.5%
ME 6	32 48 26	2004	Wet	July	--	365.3	343.7	21.6	5.9%	340.6	24.6	6.7%	334.5	30.8	8.4%	328.3	37.0	10.1%	322.1	43.1	11.8%	316.0	49.3	13.5%
ME 6	32 48 26	2004	Wet	August	--	233.9	213.4	20.5	8.8%	210.4	23.4	10.0%	204.5	29.3	12.5%	198.7	35.2	15.0%	192.8	41.0	17.5%	187.0	46.9	20.0%
ME 6	32 48 26	2004	Wet	September	Used in Summary Table Analysis	170.3	150.7	19.6	11.5%	147.9	22.4	13.2%	142.3	28.0	16.5%	136.7	33.6	19.8%	131.0	39.3	23.1%	125.4	44.9	26.4%
ME 6	32 48 26	2005	Above Normal	October	Used in Summary Table Analysis	7,784.1	7,768.3	15.9	0.2%	7,766.1	18.1	0.2%	7,761.5	22.7	0.3%	7,756.9	27.2	0.3%	7,752.3	31.8	0.4%	7,747.8	36.3	0.5%
ME 6	32 48 26	2005	Above Normal	November	Used in Summary Table Analysis	2,272.5	2,260.0	12.5	0.6%	2,258.2	14.2	0.6%	2,254.6	17.8	0.8%	2,251.0	21.4	0.9%	2,247.3	25.1	1.1%	2,243.8	28.7	1.3%
ME 6	32 48 26	2005	Above Normal	December	--	21,317.1	21,305.6	11.6	0.1%	21,304.4	12.7	0.1%	21,300.9	16.2	0.1%	21,297.5	19.7	0.1%	21,294.0	23.1	0.1%	21,291.7	25.5	0.1%
ME 6	32 48 26	2005	Above Normal	January	--	22,612.3	22,601.9	10.4	0.0%	22,600.7	11.6	0.1%	22,598.4	13.9	0.1%	22,594.9	17.4	0.1%	22,592.6	19.7	0.1%	22,589.1	23.1	0.1%
ME 6	32 48 26	2005	Above Normal	February	--	14,052.1	14,044.0	8.1	0.1%	14,042.8	9.3	0.1%	14,040.5	11.6	0.1%	14,038.2	13.9	0.1%	14,034.7	17.4	0.1%	14,032.4	19.7	0.1%
ME 6	32 48 26	2005	Above Normal	March	--	28,740.7	28,732.6	8.1	0.0%	28,731.5	9.3	0.0%	28,729.2	11.6	0.0%	28,726.9	13.9	0.0%	28,724.5	16.2	0.1%	28,722.2	18.5	0.1%
ME 6	32 48 26	2005	Above Normal	April	--	21,559.0	21,550.9	8.1	0.0%	21,549.8	9.3	0.0%	21,547.5	11.6	0.1%	21,545.1	13.9	0.1%	21,542.8	16.2	0.1%	21,540.5	18.5	0.1%
ME 6	32 48 26	2005	Above Normal	May	--	19,706.0	19,689.8	16.2	0.1%	19,687.5	18.5	0.1%	19,682.9	23.1	0.1%	19,678.2	27.8	0.1%	19,673.6	32.4	0.2%	19,669.0	37.0	0.2%
ME 6	32 48 26	2005	Above Normal	June	--	16,032.4	16,008.1	24.3	0.2%	16,005.8	26.6	0.2%	15,998.8	33.6	0.2%	15,991.9	40.5	0.3%	15,985.0	47.5	0.3%	15,978.0	54.4	0.3%
ME 6	32 48 26	2005	Above Normal	July	--	2,867.2	2,845.0	22.2	0.8%	2,841.8	25.5	0.9%	2,835.5	31.7	1.1%	2,829.2	38.1	1.3%	2,822.8	44.4	1.6%	2,816.6	50.7	1.8%
ME 6	32 48 26	2005	Above Normal	August	--	993.6	973.3	20.3	2.0%	970.4	23.2	2.3%	964.6	29.0	2.9%	958.8	34.8	3.5%	953.0	40.6	4.1%	947.2	46.4	4.7%
ME 6	32 48 26	2005	Above Normal	September	Used in Summary Table Analysis	535.0	516.9	18.2	3.4%	514.3	20.8	3.9%	509.1	26.0	4.9%	503.9	31.2	5.8%	498.7	36.3	6.8%	493.5	41.5	7.8%
ME 6	32 48 26	2006	Wet	October	Used in Summary Table Analysis	646.2	631.3	14.9	2.3%	629.2	17.0	2.6%	624.9	21.3	3.3%	620.6	25.6	4.0%	616.3	29.9	4.6%	612.0	34.2	5.3%
ME 6	32 48 26	2006	Wet	November	Used in Summary Table Analysis	9,439.7	9,427.9	11.8	0.1%	9,426.2	13.5	0.1%	9,422.8	16.9	0.2%	9,419.3	20.4	0.2%	9,415.9	23.8	0.3%	9,412.4	27.3	0.3%
ME 6	32 48 26	2006	Wet	December	--	43,934.0	43,923.6	10.4	0.0%	43,922.5	11.6	0.0%	43,919.0	15.0	0.0%	43,915.5	18.5	0.0%	43,913.2	20.8	0.0%	43,909.7	24.3	0.1%
ME 6	32 48 26	2006	Wet	January	--	46,691.0	46,681.7	9.3	0.0%	46,679.4	11.6	0.0%	46,677.1	13.9	0.0%	46,674.8	16.2	0.0%	46,671.3	19.7	0.0%	46,669.0	22.0	0.0%
ME 6	32 48 26	2006	Wet	February	--	26,787.0	26,778.9	8.1	0.0%	26,777.8	9.3	0.0%	26,775.5	11.6	0.0%	26,773.1	13.9	0.1%	26,770.8	16.2	0.1%	26,768.5	18.5	0.1%
ME 6	32 48 26	2006	Wet	March	--	47,469.9	47,461.8	8.1	0.0%	47,460.6	9.3	0.0%	47,458.3	11.6	0.0%	47,456.0	13.9	0.0%	47,453.7	16.2	0.0%	47,451.4	18.5	0.0%
ME 6	32 48 26	2006	Wet	April	--	30,550.9	30,544.0	6.9	0.0%	30,542.8	8.1	0.0%	30,540.5	10.4	0.0%	30,538.2	12.7	0.0%	30,535.9	15.0	0.0%	30,533.6	17.4	0.1%
ME 6	32 48 26	2006	Wet	May	--	14,278.9	14,269.7	9.3	0.1%	14,267.4	11.6	0.1%	14,265.0	13.9	0.1%	14,262.7	16.2	0.1%	14,259.3	19.7	0.1%	14,256.9	22.0	0.2%
ME 6	32 48 26	2006	Wet	June	--	3,556.5	3,536.9	19.6	0.5%	3,534.1	22.3	0.6%	3,528.6	27.9	0.8%	3,523.0	33.4	0.9%	3,517.5	39.0	1.1%	3,511.9	44.6	1.3%
ME 6	32 48 26	2006	Wet	July	--	1,291.3	1,270.3	21.1	1.6%	1,267.1	24.2	1.9%	1,261.1	30.2	2.3%	1,255.1	36.2	2.8%	1,249.2	42.1	3.3%	1,243.2	48.1	3.7%
ME 6	32 48 26	2006	Wet	August	--	677.5	656.6	20.8	3.1%	653.7	23.8	3.5%	647.8	29.7	4.4%	641.8	35.6	5.3%	635.9	41.6	6.1%	630.0	47.5	7.0%
ME 6	32 48 26	2006	Wet	September	Used in Summary Table Analysis	437.5	419.0	18.4	4.2%	416.4	21.1	4.8%	411.1	26.3	6.0%	405.9	31.6	7.2%	400.6	36.9	8.4%	395.3	42.2	9.6%
ME 6	32 48 26	2007	Above Normal	October	Used in Summary Table Analysis	284.2	269.0	15.2	5.3%	266.9	17.3	6.1%	262.5	21.7	7.6%	258.1	26.1	9.2%	253.7	30.5	10.7%	249.3	34.9	12.3%
ME 6	32 48 26	2007	Above Normal	November	Used in Summary Table Analysis	8,784.6	8,772.2	12.4	0.1%	8,770.4	14.2	0.2%	8,766.8	17.8	0.2%	8,763.2	21.4	0.2%	8,759.6	25.0	0.3%	8,755.9	28.7	0.3%
ME 6	32 48 26	2007	Above Normal	December	--	20,648.1	20,637.7	10.4	0.1%	20,636.6	11.6	0.1%	20,633.1	15.0	0.1%	20,629.6	18.5	0.1%	20,626.2	22.0	0.1%	20,622.7	25.5	0.1%
ME 6	32 48 26	2007	Above Normal	January	--	10,314.8	10,305.3	9.5	0.1%	10,304.1	10.8	0.1%	10,301.3	13.5	0.1%	10,298.5	16.3	0.2%	10,295.7	19.1	0.2%	10,292.8	22.0	0.2%
ME 6	32 48 26	2007	Above Normal	February	--	30,839.1	30,829.9	9.3	0.0%	30,828.7	10.4	0.0%	30,826.4	12.7	0.0%	30,822.9	16.2	0.1%	30,820.6	18.5	0.1%	30,818.3	20.8	0.1%
ME 6	32 48 26	2007	Above Normal	March	--	13,148.1	13,138.9	9.3	0.1%	13,137.7	10.4	0.1%	13,135.4	12.7	0.1%	13,133.1	15.0	0.1%	13,130.8	17.4	0.1%	13,128.5	19.7	0.1%
ME 6	32 48 26	2007	Above Normal	April	--	11,578.7	11,563.3	15.4	0.1%	11,561.1	17.6	0.2%	11,556.7	22.0	0.2%	11,552.3	26.4	0.2%	11,547.8	30.9	0.3%	11,543.4	35.3	0.3%
ME 6	32 48 26	2007	Above Normal	May	--	4,160.4	4,142.1	18.3	0.4%	4,139.5	20.9	0.5%	4,134.3	26.2	0.6%	4,128.9	31.5	0.8%	4,123.6	36.8	0.9%	4,118.3	42.1	1.0%
ME 6	32 48 26	2007	Above Normal	June	--	1,513.8	1,491.6	22.2	1.5%	1,488.4	25.3	1.7%	1,482.1	31.7	2.1%	1,475.8	38.0	2.5%	1,469.4	44.3	2.9%	1,463.2	50.6	3.3%
ME 6	32 48 26	2007	Above Normal	July	--	503.6	481.1	22.6	4.5%	477.8	25.8	5.1%	471.4	32.2	6.4%	465.0	38.6	7.7%	458.6	45.0	8.9%	452.2	51.4	10.2%
ME 6	32 48 26	2007	Above Normal	August	--	232.1	211.6	20.5	8.8%	208.6	23.5	10.1%	202.8	29.3	12.6%	196.9	35.2	15.1%	191.1	41.0	17.7%	185.3	46.8	20.2%
ME 6	32 48 26	2007	Above Normal	September	Used in Summary Table Analysis	159.7	140.2	19.6	12.3%	137.4	22.4	14.0%	131.8	28.0	17.5%	126.2	33.5	21.0%	120.6	39.1	24.5%	115.0	44.7	28.0%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 48 26	2008	Dry	October	Used in Summary Table Analysis	3,477.8	3,461.7	16.1	0.5%	3,459.4	18.4	0.5%	3,454.7	23.0	0.7%	3,450.0	27.8	0.8%	3,445.4	32.4	0.9%	3,440.7	37.0	1.1%
ME 6	32 48 26	2008	Dry	November	Used in Summary Table Analysis	3,316.9	3,304.4	12.5	0.4%	3,302.5	14.4	0.4%	3,299.0	17.9	0.5%	3,295.3	21.6	0.7%	3,291.7	25.2	0.8%	3,288.0	28.9	0.9%
ME 6	32 48 26	2008	Dry	December	--	23,436.3	23,425.9	10.4	0.0%	23,423.6	12.7	0.1%	23,421.3	15.0	0.1%	23,417.8	18.5	0.1%	23,414.4	22.0	0.1%	23,410.9	25.5	0.1%
ME 6	32 48 26	2008	Dry	January	--	37,827.5	37,817.1	10.4	0.0%	37,816.0	11.6	0.0%	37,812.5	15.0	0.0%	37,810.2	17.4	0.0%	37,806.7	20.8	0.1%	37,804.4	23.1	0.1%
ME 6	32 48 26	2008	Dry	February	--	26,342.6	26,334.5	8.1	0.0%	26,333.3	9.3	0.0%	26,329.9	12.7	0.0%	26,327.5	15.0	0.1%	26,325.2	17.4	0.1%	26,322.9	19.7	0.1%
ME 6	32 48 26	2008	Dry	March	--	11,828.7	11,820.6	8.1	0.1%	11,819.4	9.3	0.1%	11,817.1	11.6	0.1%	11,814.8	13.9	0.1%	11,812.5	16.2	0.1%	11,810.2	18.5	0.2%
ME 6	32 48 26	2008	Dry	April	--	9,044.7	9,029.1	15.6	0.2%	9,026.9	17.8	0.2%	9,022.3	22.3	0.2%	9,017.8	26.9	0.3%	9,013.3	31.4	0.3%	9,008.8	35.9	0.4%
ME 6	32 48 26	2008	Dry	May	--	1,359.3	1,342.4	16.9	1.2%	1,339.9	19.3	1.4%	1,335.1	24.2	1.8%	1,330.3	28.9	2.1%	1,325.7	33.6	2.5%	1,321.1	38.2	2.8%
ME 6	32 48 26	2008	Dry	June	--	445.9	421.7	24.2	5.4%	418.2	27.7	6.2%	411.4	34.5	7.7%	404.5	41.4	9.3%	397.7	48.2	10.8%	390.9	55.0	12.3%
ME 6	32 48 26	2008	Dry	July	--	263.6	239.3	24.3	9.2%	235.9	27.7	10.5%	228.9	34.7	13.2%	222.0	41.6	15.8%	215.1	48.5	18.4%	208.2	55.4	21.0%
ME 6	32 48 26	2008	Dry	August	--	187.4	163.6	23.8	12.7%	160.2	27.2	14.5%	153.4	33.9	18.1%	146.7	40.7	21.7%	139.9	47.5	25.3%	133.1	54.3	29.0%
ME 6	32 48 26	2008	Dry	September	Used in Summary Table Analysis	148.9	125.9	23.0	15.5%	122.6	26.3	17.7%	116.0	32.9	22.1%	109.4	39.5	26.5%	102.8	46.1	31.0%	96.3	52.7	35.4%
ME 6	32 48 26	2009	Critical	October	Used in Summary Table Analysis	935.0	916.5	18.5	2.0%	913.9	21.2	2.3%	908.5	26.5	2.8%	903.1	31.9	3.4%	897.9	37.1	4.0%	892.6	42.5	4.5%
ME 6	32 48 26	2009	Critical	November	Used in Summary Table Analysis	5,589.1	5,574.7	14.5	0.3%	5,572.6	16.6	0.3%	5,568.3	20.8	0.4%	5,564.1	25.0	0.4%	5,560.0	29.2	0.5%	5,555.7	33.4	0.6%
ME 6	32 48 26	2009	Critical	December	--	12,326.4	12,313.7	12.7	0.1%	12,312.5	13.9	0.1%	12,307.9	18.5	0.2%	12,304.4	22.0	0.2%	12,300.9	25.5	0.2%	12,297.5	28.9	0.2%
ME 6	32 48 26	2009	Critical	January	--	8,843.5	8,832.5	11.0	0.1%	8,830.9	12.6	0.1%	8,827.7	15.9	0.2%	8,824.3	19.2	0.2%	8,821.1	22.5	0.3%	8,817.8	25.7	0.3%
ME 6	32 48 26	2009	Critical	February	--	22,750.0	22,740.7	9.3	0.0%	22,739.6	10.4	0.0%	22,736.1	13.9	0.1%	22,733.8	16.2	0.1%	22,730.3	19.7	0.1%	22,728.0	22.0	0.1%
ME 6	32 48 26	2009	Critical	March	--	21,222.2	21,214.1	8.1	0.0%	21,213.0	9.3	0.0%	21,210.6	11.6	0.1%	21,207.2	15.0	0.1%	21,204.9	17.4	0.1%	21,202.5	19.7	0.1%
ME 6	32 48 26	2009	Critical	April	--	10,109.8	10,093.5	16.3	0.2%	10,091.2	18.6	0.2%	10,086.5	23.4	0.2%	10,081.7	28.1	0.3%	10,077.1	32.8	0.3%	10,072.3	37.5	0.4%
ME 6	32 48 26	2009	Critical	May	--	15,636.6	15,616.9	19.7	0.1%	15,614.6	22.0	0.1%	15,608.8	27.8	0.2%	15,603.0	33.6	0.2%	15,597.2	39.4	0.3%	15,591.4	45.1	0.3%
ME 6	32 48 26	2009	Critical	June	--	3,169.2	3,143.5	25.7	0.8%	3,139.8	29.4	0.9%	3,132.4	36.8	1.2%	3,125.0	44.2	1.4%	3,117.7	51.5	1.6%	3,110.4	58.8	1.9%
ME 6	32 48 26	2009	Critical	July	--	1,271.5	1,246.9	24.7	1.9%	1,243.4	28.1	2.2%	1,236.3	35.2	2.8%	1,229.4	42.1	3.3%	1,222.5	49.1	3.9%	1,215.5	56.0	4.4%
ME 6	32 48 26	2009	Critical	August	--	677.9	654.0	23.9	3.5%	650.6	27.3	4.0%	643.7	34.2	5.0%	636.9	41.0	6.1%	630.1	47.9	7.1%	623.2	54.7	8.1%
ME 6	32 48 26	2009	Critical	September	Used in Summary Table Analysis	398.5	376.8	21.6	5.4%	373.7	24.8	6.2%	367.5	31.0	7.8%	361.3	37.2	9.3%	355.1	43.4	10.9%	348.9	49.6	12.4%
ME 6	32 48 26	2010	Below Normal	October	Used in Summary Table Analysis	6,102.0	6,083.2	18.8	0.3%	6,080.6	21.4	0.4%	6,075.1	26.9	0.4%	6,069.7	32.3	0.5%	6,064.5	37.5	0.6%	6,059.0	42.9	0.7%
ME 6	32 48 26	2010	Below Normal	November	Used in Summary Table Analysis	8,344.1	8,329.2	14.9	0.2%	8,327.0	17.1	0.2%	8,322.6	21.5	0.3%	8,318.3	25.8	0.3%	8,313.9	30.2	0.4%	8,309.5	34.6	0.4%
ME 6	32 48 26	2010	Below Normal	December	--	12,463.0	12,450.2	12.7	0.1%	12,447.9	15.0	0.1%	12,444.4	18.5	0.1%	12,441.0	22.0	0.2%	12,436.3	26.6	0.2%	12,432.9	30.1	0.2%
ME 6	32 48 26	2010	Below Normal	January	--	36,593.8	36,582.2	11.6	0.0%	36,581.0	12.7	0.0%	36,577.5	16.2	0.0%	36,574.1	19.7	0.1%	36,570.6	23.1	0.1%	36,567.1	26.6	0.1%
ME 6	32 48 26	2010	Below Normal	February	--	27,347.2	27,336.8	10.4	0.0%	27,335.6	11.6	0.0%	27,333.3	13.9	0.1%	27,329.9	17.4	0.1%	27,327.5	19.7	0.1%	27,324.1	23.1	0.1%
ME 6	32 48 26	2010	Below Normal	March	--	28,925.9	28,916.7	9.3	0.0%	28,915.5	10.4	0.0%	28,913.2	12.7	0.0%	28,909.7	16.2	0.1%	28,907.4	18.5	0.1%	28,905.1	20.8	0.1%
ME 6	32 48 26	2010	Below Normal	April	--	40,178.2	40,170.1	8.1	0.0%	40,169.0	9.3	0.0%	40,165.5	12.7	0.0%	40,163.2	15.0	0.0%	40,160.9	17.4	0.0%	40,158.6	19.7	0.0%
ME 6	32 48 26	2010	Below Normal	May	--	20,397.0	20,379.6	17.4	0.1%	20,377.3	19.7	0.1%	20,372.7	24.3	0.1%	20,366.9	30.1	0.1%	20,362.3	34.7	0.2%	20,357.6	39.4	0.2%
ME 6	32 48 26	2010	Below Normal	June	--	9,452.0	9,427.4	24.5	0.3%	9,424.0	28.0	0.3%	9,417.0	35.0	0.4%	9,410.1	41.9	0.4%	9,403.1	48.8	0.5%	9,396.2	55.8	0.6%
ME 6	32 48 26	2010	Below Normal	July	--	1,462.7	1,440.0	22.7	1.6%	1,436.8	25.9	1.8%	1,430.3	32.4	2.2%	1,423.8	38.9	2.7%	1,417.4	45.4	3.1%	1,411.1	51.6	3.5%
ME 6	32 48 26	2010	Below Normal	August	--	579.9	559.0	20.9	3.6%	556.0	23.9	4.1%	550.0	29.9	5.2%	544.1	35.8	6.2%	538.1	41.8	7.2%	532.1	47.8	8.2%
ME 6	32 48 26	2010	Below Normal	September	Used in Summary Table Analysis	662.5	642.5	20.0	3.0%	639.6	22.9	3.5%	633.8	28.7	4.3%	628.1	34.4	5.2%	622.4	40.1	6.1%	616.6	45.9	6.9%
ME 6	32 48 26	2011	Wet	October	Used in Summary Table Analysis	9,715.9	9,700.5	15.4	0.2%	9,698.3	17.6	0.2%	9,693.8	22.1	0.2%	9,689.4	26.5	0.3%	9,685.0	30.9	0.3%	9,680.4	35.4	0.4%
ME 6	32 48 26	2011	Wet	November	Used in Summary Table Analysis	14,312.5	14,300.9	11.6	0.1%	14,298.6	13.9	0.1%	14,295.1	17.4	0.1%	14,291.7	20.8	0.1%	14,288.2	24.3	0.2%	14,284.7	27.8	0.2%
ME 6	32 48 26	2011	Wet	December	--	34,076.4	34,064.8	11.6	0.0%	34,063.7	12.7	0.0%	34,060.2	16.2	0.0%	34,057.9	18.5	0.1%	34,054.4	22.0	0.1%	34,050.9	25.5	0.1%
ME 6	32 48 26	2011	Wet	January	--	14,226.9	14,217.6	9.3	0.1%	14,216.4	10.4	0.1%	14,214.1	12.7	0.1%	14,210.6	16.2	0.1%	14,208.3	18.5	0.1%	14,206.0	20.8	0.1%
ME 6	32 48 26	2011	Wet	February	--	20,838.0	20,829.9	8.1	0.0%	20,828.7	9.3	0.0%	20,826.4	11.6	0.1%	20,824.1	13.9	0.1%	20,820.6	17.4	0.1%	20,818.3	19.7	0.1%
ME 6	32 48 26	2011	Wet	March	--	52,253.5	52,245.4	8.1	0.0%	52,244.2	9.3	0.0%	52,241.9	11.6	0.0%	52,238.4	15.0	0.0%	52,236.1	17.4	0.0%	52,233.8	19.7	0.0%
ME 6	32 48 26	2011	Wet	April	--	24,885.4	24,877.3	8.1	0.0%	24,876.2	9.3	0.0%	24,873.8	11.6	0.0%	24,871.5	13.9	0.1%	24,869.2	16.2	0.1%	24,866.9	18.5	0.1%
ME 6	32 48 26	2011	Wet	May	--	11,424.3	11,408.4	15.9	0.1%	11,406.1	18.2	0.2%	11,401.5	22.8	0.2%	11,396.9	27.4	0.2%	11,392.4	31.9	0.3%	11,387.7	36.6	0.3%
ME 6	32 48 26	2011	Wet	June	--	7,098.3	7,074.4	23.8	0.3%	7,071.1	27.2	0.4%	7,064.4	33.9	0.5%	7,057.6	40.6	0.6%	7,050.8	47.5	0.7%	7,044.1	54.2	0.8%
ME 6	32 48 26	2011	Wet	July	--	1,834.5	1,810.5	24.0	1.3%	1,807.2	27.3	1.5%	1,800.3	34.1	1.9%	1,793.5	41.0	2.2%	1,786.7	47.8	2.6%	1,779.9	54.6	3.0%
ME 6	32 48 26	2011	Wet	August	--	786.3	765.6	20.6	2.6%	762.7	23.6	3.0%	756.8	29.5	3.7%	750.9	35.3	4.5%	745.0	41.2	5.2%	739.2	47.1	6.0%
ME 6	32 48 26	2011	Wet	September	Used in Summary Table Analysis	442.9	424.0	18.9	4.3%	421.3	21.6	4.9%	415.9	27.0	6.1%	410.5	32.4	7.3%	405.1	37.8	8.5%	399.7	43.2	9.7%
ME 6	32 48 26	2012	Below Normal	October	Used in Summary Table Analysis	4,585.0	4,569.3	15.6	0.3%	4,567.0	17.9	0.4%	4,562.5	22.5	0.5%	4,558.1	26.9	0.6%	4,553.5	31.5	0.7%	4,549.0	36.0	0.8%
ME 6	32 48 26	2012	Below Normal	November	Used in Summary Table Analysis	8,324.2	8,311.7	12.5	0.2%	8,310.0	14.2	0.2%	8,306.4	17.8	0.2%	8,302.7	21.5	0.3%	8,299.1	25.1	0.3%	8,295.4	28.8	0.3%
ME 6	32 48 26	2012	Below Normal	December	--	5,222.2	5,211.6	10.6	0.2%	5,210.1	12.2	0.2%	5,206.9	15.3	0.3%	5,203.8	18.4	0.4%	5,200.7	21.5	0.4%	5,197.6	24.7	0.5%
ME 6	32 48 26	2012	Below Normal	January	--	20,361.1	20,350.7	10.4	0.1%	20,349.5	11.6	0.1%	20,347.2	13.9	0.1%	20,343.8	17.4	0.1%	20,341.4	19.7	0.1%	20,338.0	23.1	0.1%
ME 6	32 48 26	2012	Below Normal	February	--	18,283.6	18,275.5	8.1	0.0%	18,273.1	10.4	0.1%	18,270.8	12.7	0.1%	18,268.5	15.0	0.1%	18,266.2	17.4	0.1%	18,263.9	19.7	0.1%
ME 6	32 48 26	2012	Below Normal	March	--	45,713.0	45,703.7	9.3	0.0%	45,702.5	10.4	0.0%	45,700.2	12.7	0.0%	45,697.9	15.0	0.0%	45,695.6	17.4	0.0%	45,693.3	19.7	0.0%
ME 6	32 48 26	2012	Below Normal	April	--	26,964.1	26,956.0	8.1	0.0%	26,954.9	9.3	0.0%	26,952.5	11.6	0.0%	26,950.2	13.9	0.1%	26,947.9	16.2	0.1%	26,945.6	18.5	0.1%
ME 6	32 48 26	2012	Below Normal	May	--	7,508.7	7,492.9	15.7	0.2%	7,490.6	18.1	0.2%	7,486.0	22.7	0.3%	7,481.5	27.2	0.4%	7,477.0	31.7	0.4%	7,472.3	36.3	0.5%
ME 6	32 48 26	2012	Below Normal	June	--	5,557.1	5,532.9	24.2	0.4%	5,529.5	27.5	0.5%	5,522.6	34.5	0.6%	5,515.7	41.3	0.7%	5,508.9	48.1	0.9%	5,502.1	55.0	1.0%
ME 6	32 48 26	2012	Below Normal	July	--	2,250.2	2,227.1	23.1	1.0%	2,223.7	26.5	1.2%	2,217.1	33.1	1.5%	2,210.5	39.7	1.8%	2,203.9	46.3	2.1%	2,197.3	52.9	2.4%
ME 6	32 48 26	2012	Below Normal	August	--	395.8	376.9	18.9	4.8%	374.2	21.6	5.5%	368.8	27.0	6.8%	363.4	32.4	8.2%	358.0	37.8	9.5%	352.7	43.1	10.9%
ME 6	32 48 26	2012	Below Normal	September	Used in Summary Table Analysis	258.2	241.1	17.0	6.6%	238.7	19.5	7.5%	233.9	24.3	9.4%	229.0	29.1	11.3%	224.2	34.0	13.2%	219.4	38.8	15.0%
ME 6	32 48 26	2013	Below Normal	October	Used in Summary Table Analysis	1,941.1	1,926.2	14.9	0.8%	1,924.1	17.0	0.9%	1,919.7	21.4	1.1%	1,915.5	25.6	1.3%	1,911.1	30.0	1.5%	1,906.8	34.3	1.8%
ME 6	32 48 26	2013	Below Normal	November	Used in Summary Table Analysis	14,842.6	14,831.0	11.6	0.1%	14,828.7	13.9	0.1%	14,825.2	17.4	0.1%	14,821.8	20.8	0.1%	14,818.3	24.3	0.2%	14,814.8	27.8	0.2%
ME 6	32 48 26	2013	Below Normal	December	--	60,340.3	60,328.7	11.6	0.0%	60,327.5	12.7	0.0%	60,324.1	16.2	0.0%	60,321.8	18.5	0.0%	60,318.3	22.0	0.0%	60,314.8	25.5	0.0%
ME 6	32 48 26	2013	Below Normal	January	--	22,302.1	22,292.8	9.3	0.0%	22,291.7	10.4	0.0%	22,289.4	12.7	0.1%	22,287.0	15.0	0.1%	22,283.6	18.5	0.1%	22,281.3	20.8	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 48 26	2013	Below Normal	February	--	8,894.0	8,885.4	8.6	0.1%	8,884.3	9.7	0.1%	8,881.7	12.3	0.1%	8,879.2	14.8	0.2%	8,876.7	17.2	0.2%	8,874.2	19.8	0.2%
ME 6	32 48 26	2013	Below Normal	March	--	10,404.1	10,395.8	8.2	0.1%	10,394.7	9.4	0.1%	10,392.2	11.8	0.1%	10,389.8	14.2	0.1%	10,387.4	16.7	0.2%	10,385.0	19.1	0.2%
ME 6	32 48 26	2013	Below Normal	April	--	8,314.5	8,299.4	15.0	0.2%	8,297.2	17.2	0.2%	8,292.9	21.5	0.3%	8,288.7	25.8	0.3%	8,284.3	30.2	0.4%	8,280.0	34.5	0.4%
ME 6	32 48 26	2013	Below Normal	May	--	4,460.9	4,442.6	18.3	0.4%	4,439.9	20.9	0.5%	4,434.7	26.2	0.6%	4,429.5	31.4	0.7%	4,424.3	36.6	0.8%	4,419.1	41.8	0.9%
ME 6	32 48 26	2013	Below Normal	June	--	2,121.8	2,099.8	22.0	1.0%	2,096.5	25.2	1.2%	2,090.3	31.5	1.5%	2,084.0	37.7	1.8%	2,077.8	44.0	2.1%	2,071.5	50.2	2.4%
ME 6	32 48 26	2013	Below Normal	July	--	724.4	702.7	21.7	3.0%	699.6	24.7	3.4%	693.5	30.9	4.3%	687.3	37.0	5.1%	681.2	43.2	6.0%	675.1	49.2	6.8%
ME 6	32 48 26	2013	Below Normal	August	--	348.3	327.9	20.4	5.9%	325.0	23.4	6.7%	319.1	29.2	8.4%	313.3	35.0	10.1%	307.5	40.9	11.7%	301.6	46.7	13.4%
ME 6	32 48 26	2013	Below Normal	September	Used in Summary Table Analysis	4,830.7	4,809.5	21.2	0.4%	4,806.4	24.3	0.5%	4,800.3	30.3	0.6%	4,794.3	36.3	0.8%	4,788.2	42.5	0.9%	4,782.2	48.5	1.0%
ME 6	32 48 26	2014	Critical	October	Used in Summary Table Analysis	284.1	268.4	15.7	5.5%	266.1	18.0	6.3%	261.6	22.5	7.9%	257.1	27.0	9.5%	252.5	31.6	11.1%	248.0	36.1	12.7%
ME 6	32 48 26	2014	Critical	November	Used in Summary Table Analysis	1,562.6	1,550.0	12.6	0.8%	1,548.1	14.5	0.9%	1,544.4	18.2	1.2%	1,540.9	21.8	1.4%	1,537.2	25.5	1.6%	1,533.4	29.2	1.9%
ME 6	32 48 26	2014	Critical	December	--	1,605.1	1,594.1	11.0	0.7%	1,592.5	12.6	0.8%	1,589.4	15.7	1.0%	1,586.1	19.0	1.2%	1,582.9	22.2	1.4%	1,579.6	25.5	1.6%
ME 6	32 48 26	2014	Critical	January	--	2,846.9	2,837.0	9.8	0.3%	2,835.6	11.2	0.4%	2,832.8	14.1	0.5%	2,830.0	16.9	0.6%	2,827.1	19.8	0.7%	2,824.2	22.7	0.8%
ME 6	32 48 26	2014	Critical	February	--	15,824.1	15,816.0	8.1	0.1%	15,813.7	10.4	0.1%	15,811.3	12.7	0.1%	15,809.0	15.0	0.1%	15,806.7	17.4	0.1%	15,803.2	20.8	0.1%
ME 6	32 48 26	2014	Critical	March	--	31,577.5	31,569.4	8.1	0.0%	31,568.3	9.3	0.0%	31,564.8	12.7	0.0%	31,562.5	15.0	0.0%	31,560.2	17.4	0.1%	31,557.9	19.7	0.1%
ME 6	32 48 26	2014	Critical	April	--	13,020.8	13,004.6	16.2	0.1%	13,002.3	18.5	0.1%	12,998.8	22.0	0.2%	12,994.2	26.6	0.2%	12,988.4	32.4	0.2%	12,983.8	37.0	0.3%
ME 6	32 48 26	2014	Critical	May	--	5,208.4	5,189.2	19.2	0.4%	5,186.5	22.0	0.4%	5,180.9	27.5	0.5%	5,175.3	33.1	0.6%	5,169.8	38.7	0.7%	5,164.4	44.1	0.8%
ME 6	32 48 26	2014	Critical	June	--	1,207.4	1,180.9	26.5	2.2%	1,177.2	30.2	2.5%	1,169.7	37.7	3.1%	1,162.3	45.1	3.7%	1,154.8	52.7	4.4%	1,147.3	60.1	5.0%
ME 6	32 48 26	2014	Critical	July	--	552.8	528.0	24.8	4.5%	524.4	28.3	5.1%	517.4	35.4	6.4%	510.3	42.4	7.7%	503.3	49.5	8.9%	496.3	56.5	10.2%
ME 6	32 48 26	2014	Critical	August	--	356.3	332.5	23.8	6.7%	329.1	27.2	7.6%	322.3	34.0	9.6%	315.5	40.8	11.5%	308.7	47.6	13.4%	301.9	54.4	15.3%
ME 6	32 48 26	2014	Critical	September	Used in Summary Table Analysis	2,596.1	2,572.5	23.6	0.9%	2,569.1	27.0	1.0%	2,562.5	33.6	1.3%	2,555.8	40.3	1.6%	2,549.1	47.0	1.8%	2,542.2	53.8	2.1%
ME 6	32 48 26	2015	Dry	October	Used in Summary Table Analysis	11,441.7	11,422.9	18.8	0.2%	11,420.3	21.4	0.2%	11,415.0	26.6	0.2%	11,409.7	31.9	0.3%	11,404.5	37.2	0.3%	11,399.0	42.7	0.4%
ME 6	32 48 26	2015	Dry	November	Used in Summary Table Analysis	9,122.0	9,108.0	14.0	0.2%	9,105.9	16.1	0.2%	9,101.9	20.1	0.2%	9,097.8	24.2	0.3%	9,093.8	28.2	0.3%	9,089.6	32.4	0.4%
ME 6	32 48 26	2015	Dry	December	--	32,925.9	32,914.4	11.6	0.0%	32,913.2	12.7	0.0%	32,909.7	16.2	0.0%	32,906.3	19.7	0.1%	32,902.8	23.1	0.1%	32,899.3	26.6	0.1%
ME 6	32 48 26	2015	Dry	January	--	14,625.0	14,613.4	11.6	0.1%	14,612.3	12.7	0.1%	14,610.0	15.0	0.1%	14,606.5	18.5	0.1%	14,603.0	22.0	0.2%	14,599.5	25.5	0.2%
ME 6	32 48 26	2015	Dry	February	--	27,356.5	27,347.2	9.3	0.0%	27,346.1	10.4	0.0%	27,342.6	13.9	0.1%	27,340.3	16.2	0.1%	27,338.0	18.5	0.1%	27,334.5	22.0	0.1%
ME 6	32 48 26	2015	Dry	March	--	11,599.5	11,591.4	8.1	0.1%	11,590.3	9.3	0.1%	11,588.0	11.6	0.1%	11,585.6	13.9	0.1%	11,583.3	16.2	0.1%	11,581.0	18.5	0.2%
ME 6	32 48 26	2015	Dry	April	--	8,466.9	8,450.9	16.0	0.2%	8,448.6	18.3	0.2%	8,444.0	22.9	0.3%	8,439.4	27.5	0.3%	8,434.7	32.2	0.4%	8,430.1	36.8	0.4%
ME 6	32 48 26	2015	Dry	May	--	1,512.5	1,493.4	19.1	1.3%	1,490.7	21.8	1.4%	1,485.3	27.2	1.8%	1,479.9	32.6	2.2%	1,474.3	38.2	2.5%	1,468.9	43.6	2.9%
ME 6	32 48 26	2015	Dry	June	--	658.4	633.8	24.7	3.7%	630.3	28.1	4.3%	623.3	35.1	5.3%	616.4	42.1	6.4%	609.4	49.0	7.4%	602.6	55.9	8.5%
ME 6	32 48 26	2015	Dry	July	--	275.0	250.6	24.4	8.9%	247.1	27.9	10.2%	240.1	34.9	12.7%	233.0	42.0	15.3%	226.0	49.0	17.8%	219.1	55.9	20.3%
ME 6	32 48 26	2015	Dry	August	--	174.2	150.4	23.8	13.6%	147.0	27.2	15.6%	140.2	34.0	19.5%	133.3	40.9	23.5%	126.5	47.8	27.4%	119.7	54.5	31.3%
ME 6	32 48 26	2015	Dry	September	Used in Summary Table Analysis	127.6	106.1	21.4	16.8%	102.9	24.7	19.3%	96.2	31.4	24.6%	89.6	38.0	29.8%	82.9	44.7	35.0%	76.3	51.3	40.2%
ME 6	32 48 26	2016	Above Normal	October	Used in Summary Table Analysis	92.5	73.5	19.0	20.6%	70.4	22.1	23.9%	65.0	27.5	29.7%	59.4	33.1	35.8%	53.9	38.6	41.7%	48.7	43.8	47.4%
ME 6	32 48 26	2016	Above Normal	November	Used in Summary Table Analysis	3,939.1	3,924.9	14.2	0.4%	3,922.5	16.7	0.4%	3,918.3	20.8	0.5%	3,913.9	25.2	0.6%	3,909.4	29.7	0.8%	3,905.0	34.1	0.9%
ME 6	32 48 26	2016	Above Normal	December	--	36,982.6	36,969.9	12.7	0.0%	36,967.6	15.0	0.0%	36,964.1	18.5	0.1%	36,960.6	22.0	0.1%	36,956.0	26.6	0.1%	36,952.5	30.1	0.1%
ME 6	32 48 26	2016	Above Normal	January	--	57,694.4	57,682.9	11.6	0.0%	57,680.6	13.9	0.0%	57,677.1	17.4	0.0%	57,673.6	20.8	0.0%	57,670.1	24.3	0.0%	57,666.7	27.8	0.0%
ME 6	32 48 26	2016	Above Normal	February	--	24,329.9	24,320.6	9.3	0.0%	24,318.3	11.6	0.0%	24,316.0	13.9	0.1%	24,313.7	16.2	0.1%	24,310.2	19.7	0.1%	24,307.9	22.0	0.1%
ME 6	32 48 26	2016	Above Normal	March	--	41,953.7	41,944.4	9.3	0.0%	41,943.3	10.4	0.0%	41,941.0	12.7	0.0%	41,937.5	16.2	0.0%	41,935.2	18.5	0.0%	41,931.7	22.0	0.1%
ME 6	32 48 26	2016	Above Normal	April	--	18,586.8	18,578.7	8.1	0.0%	18,577.5	9.3	0.0%	18,575.2	11.6	0.1%	18,571.8	15.0	0.1%	18,569.4	17.4	0.1%	18,567.1	19.7	0.1%
ME 6	32 48 26	2016	Above Normal	May	--	5,233.4	5,223.5	10.0	0.2%	5,222.0	11.5	0.2%	5,219.1	14.4	0.3%	5,216.1	17.4	0.3%	5,213.1	20.4	0.4%	5,210.2	23.3	0.4%
ME 6	32 48 26	2016	Above Normal	June	--	1,517.9	1,499.0	19.0	1.3%	1,496.2	21.8	1.4%	1,490.9	27.1	1.8%	1,485.4	32.5	2.1%	1,479.9	38.1	2.5%	1,474.5	43.4	2.9%
ME 6	32 48 26	2016	Above Normal	July	--	832.4	811.1	21.3	2.6%	807.9	24.4	2.9%	801.9	30.5	3.7%	795.8	36.6	4.4%	789.6	42.7	5.1%	783.6	48.8	5.9%
ME 6	32 48 26	2016	Above Normal	August	--	501.4	480.3	21.1	4.2%	477.3	24.1	4.8%	471.3	30.1	6.0%	465.2	36.2	7.2%	459.1	42.3	8.4%	453.1	48.3	9.6%
ME 6	32 48 26	2016	Above Normal	September	Used in Summary Table Analysis	337.3	318.4	19.0	5.6%	315.0	22.3	6.6%	309.3	28.0	8.3%	303.5	33.8	10.0%	297.7	39.6	11.7%	291.9	45.4	13.5%
ME 6	32 48 26	2017	Wet	October	Used in Summary Table Analysis	18,427.1	18,410.9	16.2	0.1%	18,408.6	18.5	0.1%	18,405.1	22.0	0.1%	18,400.5	26.6	0.1%	18,394.7	32.4	0.2%	18,390.0	37.0	0.2%
ME 6	32 48 26	2017	Wet	November	Used in Summary Table Analysis	18,980.3	18,967.6	12.7	0.1%	18,966.4	13.9	0.1%	18,963.0	17.4	0.1%	18,958.3	22.0	0.1%	18,954.9	25.5	0.1%	18,951.4	28.9	0.2%
ME 6	32 48 26	2017	Wet	December	--	24,354.2	24,343.8	10.4	0.0%	24,342.6	11.6	0.0%	24,339.1	15.0	0.1%	24,335.6	18.5	0.1%	24,333.3	20.8	0.1%	24,329.9	24.3	0.1%
ME 6	32 48 26	2017	Wet	January	--	107,608.8	107,599.5	9.3	0.0%	107,598.4	10.4	0.0%	107,594.9	13.9	0.0%	107,592.6	16.2	0.0%	107,589.1	19.7	0.0%	107,586.8	22.0	0.0%
ME 6	32 48 26	2017	Wet	February	--	82,251.2	82,241.9	9.3	0.0%	82,240.7	10.4	0.0%	82,237.3	13.9	0.0%	82,235.0	16.2	0.0%	82,232.6	18.5	0.0%	82,230.3	20.8	0.0%
ME 6	32 48 26	2017	Wet	March	--	27,403.9	27,395.8	8.1	0.0%	27,394.7	9.3	0.0%	27,391.2	12.7	0.0%	27,388.9	15.0	0.1%	27,386.6	17.4	0.1%	27,384.3	19.7	0.1%
ME 6	32 48 26	2017	Wet	April	--	23,076.4	23,068.3	8.1	0.0%	23,067.1	9.3	0.0%	23,064.8	11.6	0.1%	23,062.5	13.9	0.1%	23,060.2	16.2	0.1%	23,057.9	18.5	0.1%
ME 6	32 48 26	2017	Wet	May	--	6,278.6	6,268.5	10.1	0.2%	6,267.0	11.6	0.2%	6,264.1	14.5	0.2%	6,261.2	17.4	0.3%	6,258.3	20.3	0.3%	6,255.3	23.3	0.4%
ME 6	32 48 26	2017	Wet	June	--	2,135.5	2,116.2	19.3	0.9%	2,113.4	22.1	1.0%	2,107.9	27.7	1.3%	2,102.4	33.1	1.6%	2,096.9	38.7	1.8%	2,091.4	44.1	2.1%
ME 6	32 48 26	2017	Wet	July	--	946.6	925.2	21.4	2.3%	922.1	24.5	2.6%	916.0	30.6	3.2%	909.9	36.7	3.9%	903.8	42.7	4.5%	897.8	48.8	5.2%
ME 6	32 48 26	2017	Wet	August	--	518.8	497.8	21.0	4.1%	494.7	24.0	4.6%	488.8	30.0	5.8%	482.8	36.0	6.9%	476.8	42.0	8.1%	470.8	47.9	9.2%
ME 6	32 48 26	2017	Wet	September	Used in Summary Table Analysis	333.3	313.7	19.5	5.9%	310.9	22.4	6.7%	305.3	28.0	8.4%	299.7	33.6	10.1%	294.1	39.2	11.7%	288.5	44.8	13.4%
ME 6	32 48 26	2018	Above Normal	October	Used in Summary Table Analysis	285.9	270.2	15.7	5.5%	268.0	18.0	6.3%	263.4	22.5	7.9%	258.9	27.0	9.5%	254.4	31.6	11.0%	249.8	36.1	12.6%
ME 6	32 48 26	2018	Above Normal	November	Used in Summary Table Analysis	10,951.6	10,939.2	12.4	0.1%	10,937.4	14.2	0.1%	10,933.8	17.8	0.2%	10,930.1	21.5	0.2%	10,926.5	25.1	0.2%	10,922.8	28.8	0.3%
ME 6	32 48 26	2018	Above Normal	December	--	5,462.7	5,452.2	10.5	0.2%	5,450.7	12.0	0.2%	5,447.6	15.2	0.3%	5,444.6	18.2	0.3%	5,441.4	21.3	0.4%	5,438.3	24.4	0.4%
ME 6	32 48 26	2018	Above Normal	January	--	18,054.4	18,045.1	9.3	0.1%	18,042.8	11.6	0.1%	18,040.5	13.9	0.1%	18,037.0	17.4	0.1%	18,034.7	19.7	0.1%	18,032.4	22.0	0.1%
ME 6	32 48 26	2018	Above Normal	February	--	7,611.8	7,603.6	8.2	0.1%	7,602.3	9.5	0.1%	7,599.9	11.9	0.2%	7,597.5	14.4	0.2%	7,594.9	16.9	0.2%	7,592.5	19.3	0.3%
ME 6	32 48 26	2018	Above Normal	March	--	20,876.2	20,869.2	6.9	0.0%	20,868.1	8.1	0.0%	20,864.6	11.6	0.1%	20,862.3	13.9	0.1%	20,860.0	16.2	0.1%	20,857.6	18.5	0.1%
ME 6	32 48 26	2018	Above Normal	April	--	32,407.4	32,400.5	6.9	0.0%	32,399.3	8.1	0.0%	32,397.0	10.4	0.0%	32,394.7	12.7	0.0%	32,392.4	15.0	0.0%	32,391.2	16.2	0.1%
ME 6	32 48 26	2018	Above Normal	May	--	6,996.5	6,981.4	15.2	0.2%	6,979.2	17.4	0.2%	6,974.9	21.6	0.3%	6,970.5	26.0	0.4%	6,966.2	30.3	0.4%	6,962.2	34.4	0.5%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 48 26	2018	Above Normal	June	--	1,923.3	1,903.5	19.8	1.0%	1,900.7	22.6	1.2%	1,895.1	28.1	1.5%	1,889.6	33.7	1.8%	1,883.9	39.4	2.0%	1,878.4	44.9	2.3%
ME 6	32 48 26	2018	Above Normal	July	--	791.7	770.1	21.6	2.7%	767.0	24.7	3.1%	760.9	30.8	3.9%	754.7	37.0	4.7%	748.6	43.2	5.5%	742.4	49.3	6.2%
ME 6	32 48 26	2018	Above Normal	August	--	453.0	432.7	20.3	4.5%	429.8	23.2	5.1%	424.0	29.0	6.4%	418.2	34.8	7.7%	412.4	40.6	9.0%	406.6	46.4	10.2%
ME 6	32 48 26	2018	Above Normal	September	Used in Summary Table Analysis	309.7	290.1	19.6	6.3%	287.3	22.4	7.2%	281.7	28.0	9.0%	276.1	33.6	10.8%	270.5	39.2	12.7%	264.9	44.9	14.5%
ME 6	32 48 26	2019	Below Normal	October	Used in Summary Table Analysis	215.9	200.4	15.5	7.2%	198.2	17.7	8.2%	193.8	22.1	10.3%	189.2	26.7	12.4%	184.8	31.1	14.4%	180.4	35.5	16.5%
ME 6	32 48 26	2019	Below Normal	November	Used in Summary Table Analysis	6,729.5	6,717.0	12.5	0.2%	6,715.2	14.4	0.2%	6,711.5	18.1	0.3%	6,707.9	21.6	0.3%	6,704.2	25.3	0.4%	6,700.5	29.1	0.4%
ME 6	32 48 26	2019	Below Normal	December	--	14,843.8	14,833.3	10.4	0.1%	14,831.0	12.7	0.1%	14,828.7	15.0	0.1%	14,825.2	18.5	0.1%	14,821.8	22.0	0.1%	14,818.3	25.5	0.2%
ME 6	32 48 26	2019	Below Normal	January	--	35,578.7	35,568.3	10.4	0.0%	35,567.1	11.6	0.0%	35,564.8	13.9	0.0%	35,561.3	17.4	0.0%	35,559.0	19.7	0.1%	35,556.7	22.0	0.1%
ME 6	32 48 26	2019	Below Normal	February	--	142,303.2	142,291.7	11.6	0.0%	142,291.7	11.6	0.0%	142,291.7	11.6	0.0%	142,291.7	11.6	0.0%	142,280.1	23.1	0.0%	142,280.1	23.1	0.0%
ME 6	32 48 26	2019	Below Normal	March	--	42,515.0	42,506.9	8.1	0.0%	42,505.8	9.3	0.0%	42,503.5	11.6	0.0%	42,501.2	13.9	0.0%	42,500.0	15.0	0.0%	42,497.7	17.4	0.0%
ME 6	32 48 26	2019	Below Normal	April	--	15,327.5	15,320.6	6.9	0.0%	15,319.4	8.1	0.1%	15,317.1	10.4	0.1%	15,314.8	12.7	0.1%	15,312.5	15.0	0.1%	15,310.2	17.4	0.1%
ME 6	32 48 26	2019	Below Normal	May	--	17,214.1	17,197.9	16.2	0.1%	17,195.6	18.5	0.1%	17,191.0	23.1	0.1%	17,186.3	27.8	0.2%	17,181.7	32.4	0.2%	17,177.1	37.0	0.2%
ME 6	32 48 26	2019	Below Normal	June	--	4,244.9	4,223.6	21.3	0.5%	4,220.6	24.3	0.6%	4,214.6	30.3	0.7%	4,208.9	36.0	0.8%	4,203.1	41.8	1.0%	4,197.5	47.5	1.1%
ME 6	32 48 26	2019	Below Normal	July	--	1,373.6	1,352.0	21.6	1.6%	1,348.8	24.8	1.8%	1,342.7	30.9	2.2%	1,336.5	37.2	2.7%	1,330.3	43.3	3.2%	1,324.2	49.4	3.6%
ME 6	32 48 26	2019	Below Normal	August	--	608.3	587.5	20.8	3.4%	584.5	23.8	3.9%	578.5	29.7	4.9%	572.6	35.6	5.9%	566.7	41.6	6.8%	560.8	47.5	7.8%
ME 6	32 48 26	2019	Below Normal	September	Used in Summary Table Analysis	473.0	453.5	19.5	4.1%	450.7	22.3	4.7%	445.1	27.9	5.9%	439.5	33.4	7.1%	433.9	39.1	8.3%	428.3	44.6	9.4%
ME 6	32 48 26	2020	Dry	October	Used in Summary Table Analysis	364.0	349.1	14.9	4.1%	347.0	17.1	4.7%	342.6	21.4	5.9%	338.3	25.7	7.1%	334.0	30.0	8.3%	329.6	34.4	9.4%
ME 6	32 48 26	2020	Dry	November	Used in Summary Table Analysis	334.3	322.5	11.8	3.5%	320.7	13.5	4.0%	317.3	17.0	5.1%	313.8	20.5	6.1%	310.3	23.9	7.2%	306.8	27.4	8.2%
ME 6	32 48 26	2020	Dry	December	--	13,544.0	13,533.6	10.4	0.1%	13,532.4	11.6	0.1%	13,528.9	15.0	0.1%	13,525.5	18.5	0.1%	13,523.1	20.8	0.2%	13,519.7	24.3	0.2%
ME 6	32 48 26	2020	Dry	January	--	22,533.6	22,524.3	9.3	0.0%	22,523.1	10.4	0.0%	22,519.7	13.9	0.1%	22,517.4	16.2	0.1%	22,513.9	19.7	0.1%	22,511.6	22.0	0.1%
ME 6	32 48 26	2020	Dry	February	--	7,424.5	7,416.0	8.6	0.1%	7,414.7	9.8	0.1%	7,412.2	12.4	0.2%	7,409.6	14.9	0.2%	7,407.1	17.5	0.2%	7,404.6	19.9	0.3%
ME 6	32 48 26	2020	Dry	March	--	7,282.6	7,274.8	7.9	0.1%	7,273.5	9.1	0.1%	7,271.2	11.5	0.2%	7,268.8	13.9	0.2%	7,266.3	16.3	0.2%	7,264.0	18.6	0.3%
ME 6	32 48 26	2020	Dry	April	--	5,525.2	5,509.3	16.0	0.3%	5,506.9	18.3	0.3%	5,502.3	22.9	0.4%	5,497.7	27.5	0.5%	5,493.1	32.2	0.6%	5,488.4	36.8	0.7%
ME 6	32 48 26	2020	Dry	May	--	7,430.9	7,411.7	19.2	0.3%	7,408.9	22.0	0.3%	7,403.4	27.5	0.4%	7,397.7	33.2	0.4%	7,392.2	38.7	0.5%	7,386.7	44.2	0.6%
ME 6	32 48 26	2020	Dry	June	--	2,108.0	2,082.5	25.5	1.2%	2,079.1	28.9	1.4%	2,072.1	35.9	1.7%	2,065.3	42.7	2.0%	2,058.3	49.7	2.4%	2,051.4	56.6	2.7%
ME 6	32 48 26	2020	Dry	July	--	804.5	779.2	25.3	3.1%	775.6	28.9	3.6%	768.4	36.1	4.5%	761.2	43.3	5.4%	754.0	50.5	6.3%	746.7	57.7	7.2%
ME 6	32 48 26	2020	Dry	August	--	407.7	382.6	25.1	6.1%	379.0	28.6	7.0%	371.9	35.8	8.8%	364.7	42.9	10.5%	357.6	50.1	12.3%	350.4	57.2	14.0%
ME 6	32 48 26	2020	Dry	September	Used in Summary Table Analysis	256.9	234.2	22.7	8.8%	230.9	25.9	10.1%	223.6	33.3	13.0%	216.8	40.1	15.6%	209.8	47.1	18.3%	202.9	54.0	21.0%
ME 6	32 47 27	2000	Above Normal	October	Used in Summary Table Analysis	831.0	815.4	15.6	1.9%	813.2	17.8	2.1%	808.8	22.3	2.7%	804.2	26.8	3.2%	799.7	31.3	3.8%	795.2	35.8	4.3%
ME 6	32 47 27	2000	Above Normal	November	Used in Summary Table Analysis	12,332.2	12,320.6	11.6	0.1%	12,318.3	13.9	0.1%	12,314.8	17.4	0.1%	12,311.3	20.8	0.2%	12,306.7	25.5	0.2%	12,303.2	28.9	0.2%
ME 6	32 47 27	2000	Above Normal	December	--	10,925.3	10,914.8	10.5	0.1%	10,913.3	12.0	0.1%	10,910.2	15.2	0.1%	10,907.1	18.3	0.2%	10,903.8	21.5	0.2%	10,900.7	24.7	0.2%
ME 6	32 47 27	2000	Above Normal	January	--	28,932.9	28,923.6	9.3	0.0%	28,922.5	10.4	0.0%	28,919.0	13.9	0.0%	28,916.7	16.2	0.1%	28,913.2	19.7	0.1%	28,910.9	22.0	0.1%
ME 6	32 47 27	2000	Above Normal	February	--	37,274.3	37,266.2	8.1	0.0%	37,265.0	9.3	0.0%	37,261.6	12.7	0.0%	37,259.3	15.0	0.0%	37,256.9	17.4	0.0%	37,254.6	19.7	0.1%
ME 6	32 47 27	2000	Above Normal	March	--	18,388.9	18,380.8	8.1	0.0%	18,379.6	9.3	0.1%	18,377.3	11.6	0.1%	18,375.0	13.9	0.1%	18,372.7	16.2	0.1%	18,370.4	18.5	0.1%
ME 6	32 47 27	2000	Above Normal	April	--	12,370.4	12,363.4	6.9	0.1%	12,362.3	8.1	0.1%	12,360.0	10.4	0.1%	12,357.6	12.7	0.1%	12,355.3	15.0	0.1%	12,353.0	17.4	0.1%
ME 6	32 47 27	2000	Above Normal	May	--	7,142.0	7,126.5	15.5	0.2%	7,124.2	17.8	0.2%	7,119.8	22.2	0.3%	7,115.3	26.7	0.4%	7,110.8	31.3	0.4%	7,106.3	35.8	0.5%
ME 6	32 47 27	2000	Above Normal	June	--	2,631.1	2,608.0	23.1	0.9%	2,604.6	26.5	1.0%	2,597.9	33.2	1.3%	2,591.3	39.8	1.5%	2,584.7	46.4	1.8%	2,578.1	53.0	2.0%
ME 6	32 47 27	2000	Above Normal	July	--	1,002.5	980.9	21.6	2.2%	977.8	24.7	2.5%	971.7	30.8	3.1%	965.6	36.9	3.7%	959.5	43.0	4.3%	953.4	49.1	4.9%
ME 6	32 47 27	2000	Above Normal	August	--	533.2	512.8	20.4	3.8%	509.9	23.3	4.4%	504.1	29.1	5.5%	498.2	35.0	6.6%	492.4	40.8	7.6%	486.6	46.6	8.7%
ME 6	32 47 27	2000	Above Normal	September	Used in Summary Table Analysis	305.4	287.1	18.3	6.0%	284.5	20.9	6.9%	279.3	26.2	8.6%	274.0	31.4	10.3%	268.8	36.6	12.0%	263.6	41.9	13.7%
ME 6	32 47 27	2001	Dry	October	Used in Summary Table Analysis	3,867.1	3,851.9	15.3	0.4%	3,849.5	17.6	0.5%	3,845.1	22.0	0.6%	3,840.7	26.4	0.7%	3,836.3	30.8	0.8%	3,831.9	35.2	0.9%
ME 6	32 47 27	2001	Dry	November	Used in Summary Table Analysis	6,206.1	6,193.9	12.3	0.2%	6,192.1	14.0	0.2%	6,188.5	17.6	0.3%	6,185.0	21.2	0.3%	6,181.4	24.8	0.4%	6,177.8	28.4	0.5%
ME 6	32 47 27	2001	Dry	December	--	8,920.8	8,910.3	10.5	0.1%	8,908.8	12.0	0.1%	8,905.7	15.2	0.2%	8,902.5	18.3	0.2%	8,899.5	21.3	0.2%	8,896.4	24.4	0.3%
ME 6	32 47 27	2001	Dry	January	--	12,945.6	12,936.3	9.3	0.1%	12,935.2	10.4	0.1%	12,931.7	13.9	0.1%	12,929.4	16.2	0.1%	12,927.1	18.5	0.1%	12,923.6	22.0	0.2%
ME 6	32 47 27	2001	Dry	February	--	17,570.6	17,561.3	9.3	0.1%	17,560.2	10.4	0.1%	17,557.9	12.7	0.1%	17,555.6	15.0	0.1%	17,553.2	17.4	0.1%	17,550.9	19.7	0.1%
ME 6	32 47 27	2001	Dry	March	--	12,348.4	12,340.3	8.1	0.1%	12,339.1	9.3	0.1%	12,336.8	11.6	0.1%	12,334.5	13.9	0.1%	12,332.2	16.2	0.1%	12,329.9	18.5	0.1%
ME 6	32 47 27	2001	Dry	April	--	11,025.7	11,009.6	16.1	0.1%	11,007.3	18.4	0.2%	11,002.8	22.9	0.2%	10,998.0	27.7	0.3%	10,993.5	32.2	0.3%	10,988.9	36.8	0.3%
ME 6	32 47 27	2001	Dry	May	--	2,639.9	2,620.9	19.0	0.7%	2,618.2	21.8	0.8%	2,612.7	27.2	1.0%	2,607.3	32.6	1.2%	2,601.9	38.1	1.4%	2,596.3	43.6	1.7%
ME 6	32 47 27	2001	Dry	June	--	2,683.6	2,657.4	26.2	1.0%	2,653.7	29.9	1.1%	2,646.3	37.3	1.4%	2,638.9	44.7	1.7%	2,631.5	52.1	1.9%	2,624.1	59.5	2.2%
ME 6	32 47 27	2001	Dry	July	--	724.3	699.4	25.0	3.4%	695.8	28.5	3.9%	688.7	35.6	4.9%	681.6	42.7	5.9%	674.6	49.7	6.9%	667.5	56.9	7.9%
ME 6	32 47 27	2001	Dry	August	--	181.2	156.7	24.5	13.5%	153.3	28.0	15.4%	146.3	34.9	19.3%	139.3	41.9	23.1%	132.4	48.8	26.9%	125.4	55.8	30.8%
ME 6	32 47 27	2001	Dry	September	Used in Summary Table Analysis	104.7	82.5	22.2	21.2%	79.4	25.3	24.2%	73.1	31.6	30.2%	66.8	37.9	36.2%	60.5	44.2	42.2%	54.1	50.6	48.3%
ME 6	32 47 27	2002	Below Normal	October	Used in Summary Table Analysis	275.4	256.6	18.8	6.8%	253.9	21.5	7.8%	248.4	26.9	9.8%	243.0	32.4	11.8%	237.7	37.7	13.7%	232.2	43.2	15.7%
ME 6	32 47 27	2002	Below Normal	November	Used in Summary Table Analysis	12,135.4	12,120.4	15.0	0.1%	12,118.1	17.4	0.1%	12,113.4	22.0	0.2%	12,110.0	25.5	0.2%	12,105.3	30.1	0.2%	12,100.7	34.7	0.3%
ME 6	32 47 27	2002	Below Normal	December	--	36,003.5	35,990.7	12.7	0.0%	35,988.4	15.0	0.0%	35,985.0	18.5	0.1%	35,981.5	22.0	0.1%	35,976.9	26.6	0.1%	35,973.4	30.1	0.1%
ME 6	32 47 27	2002	Below Normal	January	--	31,079.9	31,068.3	11.6	0.0%	31,067.1	12.7	0.0%	31,063.7	16.2	0.1%	31,060.2	19.7	0.1%	31,056.7	23.1	0.1%	31,053.2	26.6	0.1%
ME 6	32 47 27	2002	Below Normal	February	--	24,798.6	24,789.4	9.3	0.0%	24,787.0	11.6	0.0%	24,784.7	13.9	0.1%	24,781.3	17.4	0.1%	24,777.8	20.8	0.1%	24,775.5	23.1	0.1%
ME 6	32 47 27	2002	Below Normal	March	--	17,873.8	17,864.6	9.3	0.1%	17,863.4	10.4	0.1%	17,861.1	12.7	0.1%	17,857.6	16.2	0.1%	17,855.3	18.5	0.1%	17,851.9	22.0	0.1%
ME 6	32 47 27	2002	Below Normal	April	--	9,962.3	9,945.9	16.3	0.2%	9,943.6	18.6	0.2%	9,939.0	23.3	0.2%	9,934.4	27.9	0.3%	9,929.7	32.5	0.3%	9,925.0	37.3	0.4%
ME 6	32 47 27	2002	Below Normal	May	--	3,334.0	3,314.9	19.1	0.6%	3,312.2	21.9	0.7%	3,306.7	27.3	0.8%	3,301.2	32.9	1.0%	3,295.7	38.3	1.1%	3,290.2	43.9	1.3%
ME 6	32 47 27	2002	Below Normal	June	--	862.2	840.3	21.9	2.5%	837.2	25.0	2.9%	831.0	31.2	3.6%	824.8	37.4	4.3%	818.5	43.7	5.1%	812.3	49.8	5.8%
ME 6	32 47 27	2002	Below Normal	July	--	371.3	348.8	22.4	6.0%	345.6	25.7	6.9%	339.2	32.1	8.6%	332.8	38.5	10.4%	326.4	44.9	12.1%	320.0	51.3	13.8%
ME 6	32 47 27	2002	Below Normal	August	--	237.4	216.1	21.3	9.0%	213.0	24.3	10.3%	206.9	30.4	12.8%	200.8	36.5	15.4%	194.8	42.6	17.9%	188.7	48.7	20.5%
ME 6	32 47 27	2002	Below Normal	September	Used in Summary Table Analysis	173.7	153.4	20.3	11.7%	150.5	23.2	13.4%	144.7	29.0	16.7%	138.9	34.8	20.1%	133.1	40.7	23.4%	127.3	46.5	26.8%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 47 27	2003	Wet	October	Used in Summary Table Analysis	138.5	121.7	16.8	12.1%	119.2	19.3	13.9%	114.4	24.1	17.4%	109.5	29.0	20.9%	104.6	33.9	24.5%	99.7	38.8	28.0%
ME 6	32 47 27	2003	Wet	November	Used in Summary Table Analysis	908.6	895.0	13.6	1.5%	893.0	15.6	1.7%	889.0	19.6	2.2%	885.0	23.6	2.6%	881.0	27.6	3.0%	877.1	31.6	3.5%
ME 6	32 47 27	2003	Wet	December	--	57,574.1	57,562.5	11.6	0.0%	57,560.2	13.9	0.0%	57,556.7	17.4	0.0%	57,553.2	20.8	0.0%	57,549.8	24.3	0.0%	57,546.3	27.8	0.0%
ME 6	32 47 27	2003	Wet	January	--	31,685.2	31,673.6	11.6	0.0%	31,672.5	12.7	0.0%	31,669.0	16.2	0.1%	31,666.7	18.5	0.1%	31,663.2	22.0	0.1%	31,659.7	25.5	0.1%
ME 6	32 47 27	2003	Wet	February	--	20,435.2	20,425.9	9.3	0.0%	20,424.8	10.4	0.1%	20,421.3	13.9	0.1%	20,419.0	16.2	0.1%	20,416.7	18.5	0.1%	20,413.2	22.0	0.1%
ME 6	32 47 27	2003	Wet	March	--	24,160.9	24,152.8	8.1	0.0%	24,150.5	10.4	0.0%	24,148.1	12.7	0.1%	24,145.8	15.0	0.1%	24,143.5	17.4	0.1%	24,140.0	20.8	0.1%
ME 6	32 47 27	2003	Wet	April	--	43,226.9	43,217.6	9.3	0.0%	43,216.4	10.4	0.0%	43,214.1	12.7	0.0%	43,211.8	15.0	0.0%	43,209.5	17.4	0.0%	43,207.2	19.7	0.0%
ME 6	32 47 27	2003	Wet	May	--	12,265.0	12,248.8	16.2	0.1%	12,246.5	18.5	0.2%	12,241.9	23.1	0.2%	12,237.3	27.8	0.2%	12,232.6	32.4	0.3%	12,228.0	37.0	0.3%
ME 6	32 47 27	2003	Wet	June	--	3,177.5	3,156.6	20.9	0.7%	3,153.7	23.8	0.8%	3,147.8	29.7	0.9%	3,141.9	35.6	1.1%	3,136.1	41.4	1.3%	3,130.2	47.3	1.5%
ME 6	32 47 27	2003	Wet	July	--	1,486.8	1,464.6	22.2	1.5%	1,461.5	25.3	1.7%	1,455.1	31.7	2.1%	1,448.7	38.1	2.6%	1,442.5	44.3	3.0%	1,436.1	50.7	3.4%
ME 6	32 47 27	2003	Wet	August	--	772.3	750.6	21.6	2.8%	747.5	24.8	3.2%	741.3	31.0	4.0%	735.1	37.2	4.8%	728.9	43.4	5.6%	722.6	49.7	6.4%
ME 6	32 47 27	2003	Wet	September	Used in Summary Table Analysis	469.3	450.5	18.8	4.0%	447.8	21.5	4.6%	442.4	26.8	5.7%	437.0	32.2	6.9%	431.7	37.6	8.0%	426.3	43.0	9.2%
ME 6	32 47 27	2004	Wet	October	Used in Summary Table Analysis	335.9	320.2	15.7	4.7%	318.0	17.9	5.3%	313.5	22.5	6.7%	308.9	27.0	8.0%	304.4	31.5	9.4%	299.8	36.1	10.8%
ME 6	32 47 27	2004	Wet	November	Used in Summary Table Analysis	5,892.5	5,879.6	12.8	0.2%	5,877.8	14.7	0.2%	5,874.1	18.4	0.3%	5,870.4	22.1	0.4%	5,866.6	25.9	0.4%	5,862.7	29.7	0.5%
ME 6	32 47 27	2004	Wet	December	--	36,702.5	36,691.0	11.6	0.0%	36,689.8	12.7	0.0%	36,686.3	16.2	0.0%	36,682.9	19.7	0.1%	36,679.4	23.1	0.1%	36,675.9	26.6	0.1%
ME 6	32 47 27	2004	Wet	January	--	31,738.4	31,729.2	9.3	0.0%	31,726.9	11.6	0.0%	31,724.5	13.9	0.0%	31,721.1	17.4	0.1%	31,718.8	19.7	0.1%	31,716.4	22.0	0.1%
ME 6	32 47 27	2004	Wet	February	--	38,490.7	38,482.6	8.1	0.0%	38,481.5	9.3	0.0%	38,478.0	12.7	0.0%	38,475.7	15.0	0.0%	38,473.4	17.4	0.0%	38,469.9	20.8	0.1%
ME 6	32 47 27	2004	Wet	March	--	16,568.3	16,560.2	8.1	0.0%	16,559.0	9.3	0.1%	16,556.7	11.6	0.1%	16,554.4	13.9	0.1%	16,552.1	16.2	0.1%	16,549.8	18.5	0.1%
ME 6	32 47 27	2004	Wet	April	--	9,484.7	9,477.0	7.8	0.1%	9,475.8	8.9	0.1%	9,473.6	11.1	0.1%	9,471.3	13.4	0.1%	9,469.0	15.7	0.2%	9,466.7	18.1	0.2%
ME 6	32 47 27	2004	Wet	May	--	3,448.0	3,432.4	15.6	0.5%	3,430.1	17.9	0.5%	3,425.6	22.5	0.7%	3,421.1	27.0	0.8%	3,416.6	31.5	0.9%	3,411.9	36.1	1.0%
ME 6	32 47 27	2004	Wet	June	--	699.8	679.8	19.9	2.8%	677.0	22.8	3.3%	671.3	28.5	4.1%	665.6	34.2	4.9%	659.9	39.8	5.7%	654.3	45.5	6.5%
ME 6	32 47 27	2004	Wet	July	--	366.6	344.9	21.7	5.9%	341.8	24.8	6.8%	335.5	31.1	8.5%	329.3	37.3	10.2%	323.1	43.5	11.9%	316.9	49.7	13.6%
ME 6	32 47 27	2004	Wet	August	--	235.2	214.5	20.7	8.8%	211.5	23.7	10.1%	205.6	29.6	12.6%	199.7	35.5	15.1%	193.8	41.4	17.6%	187.9	47.3	20.1%
ME 6	32 47 27	2004	Wet	September	Used in Summary Table Analysis	171.6	151.8	19.8	11.5%	149.0	22.6	13.2%	143.3	28.3	16.5%	137.6	34.0	19.8%	131.9	39.7	23.1%	126.2	45.4	26.4%
ME 6	32 47 27	2005	Above Normal	October	Used in Summary Table Analysis	7,798.0	7,782.1	16.0	0.2%	7,779.7	18.3	0.2%	7,775.2	22.8	0.3%	7,770.6	27.4	0.4%	7,766.0	32.1	0.4%	7,761.2	36.8	0.5%
ME 6	32 47 27	2005	Above Normal	November	Used in Summary Table Analysis	2,274.7	2,262.0	12.6	0.6%	2,260.3	14.4	0.6%	2,256.6	18.1	0.8%	2,253.0	21.6	1.0%	2,249.3	25.3	1.1%	2,245.6	29.1	1.3%
ME 6	32 47 27	2005	Above Normal	December	--	21,355.3	21,344.9	10.4	0.0%	21,342.6	12.7	0.1%	21,339.1	16.2	0.1%	21,336.8	18.5	0.1%	21,333.3	22.0	0.1%	21,329.9	25.5	0.1%
ME 6	32 47 27	2005	Above Normal	January	--	22,642.4	22,631.9	10.4	0.0%	22,630.8	11.6	0.1%	22,628.5	13.9	0.1%	22,625.0	17.4	0.1%	22,622.7	19.7	0.1%	22,619.2	23.1	0.1%
ME 6	32 47 27	2005	Above Normal	February	--	14,057.9	14,049.8	8.1	0.1%	14,048.6	9.3	0.1%	14,045.1	12.7	0.1%	14,042.8	15.0	0.1%	14,040.5	17.4	0.1%	14,038.2	19.7	0.1%
ME 6	32 47 27	2005	Above Normal	March	--	28,763.9	28,755.8	8.1	0.0%	28,754.6	9.3	0.0%	28,752.3	11.6	0.0%	28,750.0	13.9	0.0%	28,747.7	16.2	0.1%	28,745.4	18.5	0.1%
ME 6	32 47 27	2005	Above Normal	April	--	21,574.1	21,566.0	8.1	0.0%	21,564.8	9.3	0.0%	21,562.5	11.6	0.1%	21,560.2	13.9	0.1%	21,557.9	16.2	0.1%	21,555.6	18.5	0.1%
ME 6	32 47 27	2005	Above Normal	May	--	19,724.5	19,708.3	16.2	0.1%	19,706.0	18.5	0.1%	19,701.4	23.1	0.1%	19,696.8	27.8	0.1%	19,692.1	32.4	0.2%	19,687.5	37.0	0.2%
ME 6	32 47 27	2005	Above Normal	June	--	16,053.2	16,030.1	23.1	0.1%	16,026.6	26.6	0.2%	16,019.7	33.6	0.2%	16,012.7	40.5	0.3%	16,005.8	47.5	0.3%	15,998.8	54.4	0.3%
ME 6	32 47 27	2005	Above Normal	July	--	2,867.6	2,845.1	22.5	0.8%	2,842.0	25.6	0.9%	2,835.5	32.1	1.1%	2,829.2	38.4	1.3%	2,822.8	44.8	1.6%	2,816.4	51.2	1.8%
ME 6	32 47 27	2005	Above Normal	August	--	995.1	974.6	20.5	2.1%	971.7	23.4	2.4%	965.8	29.3	2.9%	959.9	35.1	3.5%	954.1	41.0	4.1%	948.3	46.8	4.7%
ME 6	32 47 27	2005	Above Normal	September	Used in Summary Table Analysis	536.6	518.3	18.3	3.4%	515.6	21.0	3.9%	510.4	26.2	4.9%	505.1	31.5	5.9%	499.9	36.7	6.8%	494.6	42.0	7.8%
ME 6	32 47 27	2006	Wet	October	Used in Summary Table Analysis	648.0	632.9	15.1	2.3%	630.8	17.2	2.7%	626.4	21.6	3.3%	622.1	25.9	4.0%	617.7	30.2	4.7%	613.4	34.6	5.3%
ME 6	32 47 27	2006	Wet	November	Used in Summary Table Analysis	9,457.9	9,445.9	11.9	0.1%	9,444.2	13.7	0.1%	9,440.7	17.1	0.2%	9,437.3	20.6	0.2%	9,433.8	24.1	0.3%	9,430.2	27.7	0.3%
ME 6	32 47 27	2006	Wet	December	--	43,993.1	43,982.6	10.4	0.0%	43,980.3	12.7	0.0%	43,978.0	15.0	0.0%	43,974.5	18.5	0.0%	43,971.1	22.0	0.0%	43,968.8	24.3	0.1%
ME 6	32 47 27	2006	Wet	January	--	46,743.1	46,733.8	9.3	0.0%	46,731.5	11.6	0.0%	46,729.2	13.9	0.0%	46,725.7	17.4	0.0%	46,723.4	19.7	0.0%	46,721.1	22.0	0.0%
ME 6	32 47 27	2006	Wet	February	--	26,809.0	26,800.9	8.1	0.0%	26,799.8	9.3	0.0%	26,797.5	11.6	0.0%	26,795.1	13.9	0.1%	26,792.8	16.2	0.1%	26,789.4	19.7	0.1%
ME 6	32 47 27	2006	Wet	March	--	47,511.6	47,503.5	8.1	0.0%	47,502.3	9.3	0.0%	47,500.0	11.6	0.0%	47,497.7	13.9	0.0%	47,495.4	16.2	0.0%	47,493.1	18.5	0.0%
ME 6	32 47 27	2006	Wet	April	--	30,567.1	30,559.0	8.1	0.0%	30,559.0	8.1	0.0%	30,556.7	10.4	0.0%	30,554.4	12.7	0.0%	30,552.1	15.0	0.0%	30,549.8	17.4	0.1%
ME 6	32 47 27	2006	Wet	May	--	14,288.2	14,278.9	9.3	0.1%	14,276.6	11.6	0.1%	14,274.3	13.9	0.1%	14,270.8	17.4	0.1%	14,268.5	19.7	0.1%	14,266.2	22.0	0.2%
ME 6	32 47 27	2006	Wet	June	--	3,557.6	3,538.0	19.7	0.6%	3,535.1	22.6	0.6%	3,529.5	28.1	0.8%	3,523.8	33.8	0.9%	3,518.3	39.4	1.1%	3,512.7	44.9	1.3%
ME 6	32 47 27	2006	Wet	July	--	1,293.1	1,271.6	21.4	1.7%	1,268.6	24.4	1.9%	1,262.6	30.4	2.4%	1,256.5	36.6	2.8%	1,250.5	42.6	3.3%	1,244.4	48.6	3.8%
ME 6	32 47 27	2006	Wet	August	--	679.2	658.2	21.0	3.1%	655.2	24.0	3.5%	649.2	30.0	4.4%	643.3	35.9	5.3%	637.3	41.9	6.2%	631.3	47.9	7.1%
ME 6	32 47 27	2006	Wet	September	Used in Summary Table Analysis	439.1	420.5	18.6	4.2%	417.8	21.3	4.8%	412.5	26.6	6.1%	407.2	31.9	7.3%	401.9	37.3	8.5%	396.5	42.6	9.7%
ME 6	32 47 27	2007	Above Normal	October	Used in Summary Table Analysis	285.6	270.3	15.3	5.4%	268.1	17.5	6.1%	263.7	21.9	7.7%	259.3	26.4	9.2%	254.8	30.8	10.8%	250.3	35.3	12.4%
ME 6	32 47 27	2007	Above Normal	November	Used in Summary Table Analysis	8,800.6	8,788.1	12.5	0.1%	8,786.3	14.2	0.2%	8,782.6	17.9	0.2%	8,779.1	21.5	0.2%	8,775.3	25.2	0.3%	8,771.6	28.9	0.3%
ME 6	32 47 27	2007	Above Normal	December	--	20,680.6	20,669.0	11.6	0.1%	20,667.8	12.7	0.1%	20,664.4	16.2	0.1%	20,660.9	19.7	0.1%	20,657.4	23.1	0.1%	20,655.1	25.5	0.1%
ME 6	32 47 27	2007	Above Normal	January	--	10,323.1	10,313.7	9.5	0.1%	10,312.3	10.9	0.1%	10,309.5	13.7	0.1%	10,306.7	16.4	0.2%	10,303.8	19.3	0.2%	10,301.0	22.1	0.2%
ME 6	32 47 27	2007	Above Normal	February	--	30,875.0	30,865.7	9.3	0.0%	30,864.6	10.4	0.0%	30,861.1	13.9	0.0%	30,858.8	16.2	0.1%	30,856.5	18.5	0.1%	30,854.2	20.8	0.1%
ME 6	32 47 27	2007	Above Normal	March	--	13,153.9	13,144.7	9.3	0.1%	13,143.5	10.4	0.1%	13,141.2	12.7	0.1%	13,138.9	15.0	0.1%	13,136.6	17.4	0.1%	13,134.3	19.7	0.1%
ME 6	32 47 27	2007	Above Normal	April	--	11,584.5	11,569.3	15.2	0.1%	11,567.0	17.5	0.2%	11,562.6	21.9	0.2%	11,558.2	26.3	0.2%	11,553.7	30.8	0.3%	11,549.2	35.3	0.3%
ME 6	32 47 27	2007	Above Normal	May	--	4,163.1	4,144.7	18.4	0.4%	4,142.1	20.9	0.5%	4,136.8	26.3	0.6%	4,131.5	31.6	0.8%	4,126.2	36.9	0.9%	4,120.8	42.2	1.0%
ME 6	32 47 27	2007	Above Normal	June	--	1,515.7	1,493.5	22.2	1.5%	1,490.3	25.5	1.7%	1,483.9	31.8	2.1%	1,477.5	38.2	2.5%	1,471.2	44.6	2.9%	1,464.9	50.8	3.4%
ME 6	32 47 27	2007	Above Normal	July	--	504.8	482.0	22.8	4.5%	478.8	26.0	5.2%	472.3	32.5	6.4%	465.8	38.9	7.7%	459.4	45.4	9.0%	453.0	51.8	10.3%
ME 6	32 47 27	2007	Above Normal	August	--	233.4	212.7	20.7	8.9%	209.8	23.7	10.1%	203.9	29.6	12.7%	198.0	35.5	15.2%	192.1	41.4	17.7%	186.2	47.2	20.2%
ME 6	32 47 27	2007	Above Normal	September	Used in Summary Table Analysis	161.1	141.3	19.8	12.3%	138.5	22.6	14.0%	132.9	28.2	17.5%	127.2	33.9	21.0%	121.6	39.5	24.5%	115.9	45.2	28.0%
ME 6	32 47 27	2008	Dry	October	Used in Summary Table Analysis	3,484.0	3,467.6	16.4	0.5%	3,465.3	18.8	0.5%	3,460.6	23.4	0.7%	3,455.9	28.1	0.8%	3,451.2	32.9	0.9%	3,446.4	37.6	1.1%
ME 6	32 47 27	2008	Dry	November	Used in Summary Table Analysis	3,322.8	3,310.1	12.7	0.4%	3,308.2	14.6	0.4%	3,304.5	18.3	0.6%	3,300.9	21.9	0.7%	3,297.2	25.6	0.8%	3,293.5	29.3	0.9%
ME 6	32 47 27	2008	Dry	December	--	23,478.0	23,467.6	10.4	0.0%	23,465.3	12.7	0.1%	23,461.8	16.2	0.1%	23,459.5	18.5	0.1%	23,456.0	22.0	0.1%	23,452.5	25.5	0.1%
ME 6	32 47 27	2008	Dry	January	--	37,866.9	37,856.5	10.4	0.0%	37,855.3	11.6	0.0%	37,851.9	15.0	0.0%	37,849.5	17.4	0.0%	37,846.1	20.8	0.1%	37,843.8	23.1	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 47 27	2008	Dry	February	--	26,351.9	26,343.8	8.1	0.0%	26,342.6	9.3	0.0%	26,339.1	12.7	0.0%	26,336.8	15.0	0.1%	26,334.5	17.4	0.1%	26,332.2	19.7	0.1%
ME 6	32 47 27	2008	Dry	March	--	11,833.3	11,825.2	8.1	0.1%	11,824.1	9.3	0.1%	11,821.8	11.6	0.1%	11,819.4	13.9	0.1%	11,817.1	16.2	0.1%	11,814.8	18.5	0.2%
ME 6	32 47 27	2008	Dry	April	--	9,048.5	9,032.9	15.6	0.2%	9,030.6	17.9	0.2%	9,026.0	22.5	0.2%	9,021.5	27.0	0.3%	9,017.0	31.5	0.3%	9,012.5	36.0	0.4%
ME 6	32 47 27	2008	Dry	May	--	1,359.1	1,342.1	17.0	1.3%	1,339.7	19.4	1.4%	1,334.8	24.3	1.8%	1,330.1	29.1	2.1%	1,325.3	33.8	2.5%	1,320.7	38.4	2.8%
ME 6	32 47 27	2008	Dry	June	--	447.0	422.6	24.4	5.5%	419.2	27.9	6.2%	412.3	34.8	7.8%	405.4	41.7	9.3%	398.5	48.6	10.9%	391.6	55.4	12.4%
ME 6	32 47 27	2008	Dry	July	--	264.8	240.3	24.5	9.3%	236.8	28.0	10.6%	229.8	35.0	13.2%	222.8	42.0	15.9%	215.8	49.0	18.5%	208.9	55.9	21.1%
ME 6	32 47 27	2008	Dry	August	--	188.6	164.6	24.0	12.7%	161.2	27.4	14.5%	154.3	34.3	18.2%	147.5	41.1	21.8%	140.6	48.0	25.4%	133.8	54.8	29.1%
ME 6	32 47 27	2008	Dry	September	Used in Summary Table Analysis	150.1	126.9	23.3	15.5%	123.5	26.6	17.7%	116.9	33.3	22.2%	110.2	39.9	26.6%	103.5	46.6	31.0%	96.9	53.2	35.5%
ME 6	32 47 27	2009	Critical	October	Used in Summary Table Analysis	936.7	918.0	18.7	2.0%	915.3	21.5	2.3%	909.8	26.9	2.9%	904.4	32.3	3.5%	899.1	37.6	4.0%	893.7	43.1	4.6%
ME 6	32 47 27	2009	Critical	November	Used in Summary Table Analysis	5,599.7	5,585.1	14.6	0.3%	5,582.9	16.8	0.3%	5,578.7	20.9	0.4%	5,574.4	25.2	0.5%	5,570.1	29.5	0.5%	5,565.9	33.8	0.6%
ME 6	32 47 27	2009	Critical	December	--	12,348.4	12,335.6	12.7	0.1%	12,333.3	15.0	0.1%	12,329.9	18.5	0.1%	12,326.4	22.0	0.2%	12,322.9	25.5	0.2%	12,318.3	30.1	0.2%
ME 6	32 47 27	2009	Critical	January	--	8,849.9	8,838.8	11.1	0.1%	8,837.2	12.7	0.1%	8,833.8	16.1	0.2%	8,830.6	19.3	0.2%	8,827.2	22.7	0.3%	8,824.0	25.9	0.3%
ME 6	32 47 27	2009	Critical	February	--	22,768.5	22,758.1	10.4	0.0%	22,756.9	11.6	0.1%	22,754.6	13.9	0.1%	22,751.2	17.4	0.1%	22,748.8	19.7	0.1%	22,745.4	23.1	0.1%
ME 6	32 47 27	2009	Critical	March	--	21,236.1	21,226.9	9.3	0.0%	21,225.7	10.4	0.0%	21,223.4	12.7	0.1%	21,221.1	15.0	0.1%	21,218.8	17.4	0.1%	21,215.3	20.8	0.1%
ME 6	32 47 27	2009	Critical	April	--	10,111.5	10,095.1	16.3	0.2%	10,092.8	18.6	0.2%	10,088.1	23.4	0.2%	10,083.2	28.2	0.3%	10,078.6	32.9	0.3%	10,073.8	37.6	0.4%
ME 6	32 47 27	2009	Critical	May	--	15,644.7	15,623.8	20.8	0.1%	15,621.5	23.1	0.1%	15,615.7	28.9	0.2%	15,610.0	34.7	0.2%	15,604.2	40.5	0.3%	15,598.4	46.3	0.3%
ME 6	32 47 27	2009	Critical	June	--	3,170.4	3,144.4	25.9	0.8%	3,140.7	29.6	0.9%	3,133.3	37.0	1.2%	3,125.9	44.4	1.4%	3,118.5	51.9	1.6%	3,111.1	59.3	1.9%
ME 6	32 47 27	2009	Critical	July	--	1,272.7	1,247.9	24.8	1.9%	1,244.3	28.4	2.2%	1,237.3	35.4	2.8%	1,230.2	42.5	3.3%	1,223.1	49.5	3.9%	1,216.2	56.5	4.4%
ME 6	32 47 27	2009	Critical	August	--	679.3	655.2	24.1	3.6%	651.7	27.6	4.1%	644.7	34.6	5.1%	637.8	41.4	6.1%	630.9	48.3	7.1%	624.1	55.2	8.1%
ME 6	32 47 27	2009	Critical	September	Used in Summary Table Analysis	399.7	377.9	21.9	5.5%	374.7	25.0	6.3%	368.4	31.4	7.8%	362.1	37.6	9.4%	355.9	43.9	11.0%	349.6	50.2	12.5%
ME 6	32 47 27	2010	Below Normal	October	Used in Summary Table Analysis	6,104.2	6,085.2	19.0	0.3%	6,082.4	21.8	0.4%	6,077.0	27.2	0.4%	6,071.5	32.6	0.5%	6,066.2	38.0	0.6%	6,060.8	43.4	0.7%
ME 6	32 47 27	2010	Below Normal	November	Used in Summary Table Analysis	8,351.5	8,336.3	15.2	0.2%	8,334.1	17.4	0.2%	8,329.6	21.9	0.3%	8,325.2	26.3	0.3%	8,320.8	30.7	0.4%	8,316.4	35.1	0.4%
ME 6	32 47 27	2010	Below Normal	December	--	12,476.9	12,464.1	12.7	0.1%	12,461.8	15.0	0.1%	12,458.3	18.5	0.1%	12,454.9	22.0	0.2%	12,450.2	26.6	0.2%	12,446.8	30.1	0.2%
ME 6	32 47 27	2010	Below Normal	January	--	36,640.0	36,628.5	11.6	0.0%	36,627.3	12.7	0.0%	36,623.8	16.2	0.0%	36,620.4	19.7	0.1%	36,616.9	23.1	0.1%	36,613.4	26.6	0.1%
ME 6	32 47 27	2010	Below Normal	February	--	27,360.0	27,350.7	9.3	0.0%	27,348.4	11.6	0.0%	27,346.1	13.9	0.1%	27,342.6	17.4	0.1%	27,340.3	19.7	0.1%	27,336.8	23.1	0.1%
ME 6	32 47 27	2010	Below Normal	March	--	28,937.5	28,928.2	9.3	0.0%	28,927.1	10.4	0.0%	28,924.8	12.7	0.0%	28,921.3	16.2	0.1%	28,919.0	18.5	0.1%	28,915.5	22.0	0.1%
ME 6	32 47 27	2010	Below Normal	April	--	40,200.2	40,191.0	9.3	0.0%	40,189.8	10.4	0.0%	40,187.5	12.7	0.0%	40,185.2	15.0	0.0%	40,181.7	18.5	0.0%	40,179.4	20.8	0.1%
ME 6	32 47 27	2010	Below Normal	May	--	20,413.2	20,395.8	17.4	0.1%	20,393.5	19.7	0.1%	20,388.9	24.3	0.1%	20,383.1	30.1	0.1%	20,378.5	34.7	0.2%	20,373.8	39.4	0.2%
ME 6	32 47 27	2010	Below Normal	June	--	9,464.9	9,440.3	24.7	0.3%	9,436.7	28.2	0.3%	9,429.7	35.2	0.4%	9,422.8	42.1	0.4%	9,415.7	49.2	0.5%	9,408.8	56.1	0.6%
ME 6	32 47 27	2010	Below Normal	July	--	1,463.7	1,440.9	22.8	1.6%	1,437.6	26.0	1.8%	1,431.0	32.6	2.2%	1,424.5	39.1	2.7%	1,417.9	45.7	3.1%	1,411.7	52.0	3.6%
ME 6	32 47 27	2010	Below Normal	August	--	581.5	560.3	21.1	3.6%	557.3	24.1	4.2%	551.3	30.2	5.2%	545.3	36.2	6.2%	539.3	42.2	7.3%	533.2	48.2	8.3%
ME 6	32 47 27	2010	Below Normal	September	Used in Summary Table Analysis	664.2	644.0	20.2	3.0%	641.1	23.1	3.5%	635.3	28.9	4.4%	629.5	34.7	5.2%	623.7	40.5	6.1%	617.9	46.3	7.0%
ME 6	32 47 27	2011	Wet	October	Used in Summary Table Analysis	9,726.7	9,711.2	15.5	0.2%	9,709.0	17.7	0.2%	9,704.5	22.2	0.2%	9,700.0	26.7	0.3%	9,695.5	31.3	0.3%	9,691.0	35.8	0.4%
ME 6	32 47 27	2011	Wet	November	Used in Summary Table Analysis	14,325.2	14,312.5	12.7	0.1%	14,311.3	13.9	0.1%	14,306.7	18.5	0.1%	14,303.2	22.0	0.2%	14,299.8	25.5	0.2%	14,296.3	28.9	0.2%
ME 6	32 47 27	2011	Wet	December	--	34,123.8	34,113.4	10.4	0.0%	34,111.1	12.7	0.0%	34,108.8	15.0	0.0%	34,105.3	18.5	0.1%	34,101.9	22.0	0.1%	34,098.4	25.5	0.1%
ME 6	32 47 27	2011	Wet	January	--	14,236.1	14,226.9	9.3	0.1%	14,225.7	10.4	0.1%	14,222.2	13.9	0.1%	14,219.9	16.2	0.1%	14,216.4	19.7	0.1%	14,214.1	22.0	0.2%
ME 6	32 47 27	2011	Wet	February	--	20,847.2	20,839.1	8.1	0.0%	20,838.0	9.3	0.0%	20,835.6	11.6	0.1%	20,832.2	15.0	0.1%	20,829.9	17.4	0.1%	20,827.5	19.7	0.1%
ME 6	32 47 27	2011	Wet	March	--	52,284.7	52,276.6	8.1	0.0%	52,275.5	9.3	0.0%	52,273.1	11.6	0.0%	52,270.8	13.9	0.0%	52,268.5	16.2	0.0%	52,266.2	18.5	0.0%
ME 6	32 47 27	2011	Wet	April	--	24,895.8	24,887.7	8.1	0.0%	24,886.6	9.3	0.0%	24,884.3	11.6	0.0%	24,881.9	13.9	0.1%	24,879.6	16.2	0.1%	24,877.3	18.5	0.1%
ME 6	32 47 27	2011	Wet	May	--	11,429.4	11,413.4	16.0	0.1%	11,411.2	18.2	0.2%	11,406.6	22.8	0.2%	11,402.0	27.4	0.2%	11,397.3	32.1	0.3%	11,392.7	36.7	0.3%
ME 6	32 47 27	2011	Wet	June	--	7,103.5	7,079.6	23.8	0.3%	7,076.2	27.3	0.4%	7,069.4	34.0	0.5%	7,062.6	40.9	0.6%	7,055.8	47.7	0.7%	7,049.1	54.4	0.8%
ME 6	32 47 27	2011	Wet	July	--	1,835.3	1,811.2	24.1	1.3%	1,807.8	27.5	1.5%	1,800.9	34.4	1.9%	1,794.0	41.3	2.3%	1,787.2	48.1	2.6%	1,780.3	55.0	3.0%
ME 6	32 47 27	2011	Wet	August	--	787.6	766.8	20.8	2.6%	763.8	23.8	3.0%	757.9	29.7	3.8%	752.0	35.6	4.5%	746.0	41.6	5.3%	740.1	47.5	6.0%
ME 6	32 47 27	2011	Wet	September	Used in Summary Table Analysis	444.3	425.2	19.1	4.3%	422.5	21.8	4.9%	417.0	27.3	6.1%	411.6	32.7	7.4%	406.1	38.1	8.6%	400.7	43.6	9.8%
ME 6	32 47 27	2012	Below Normal	October	Used in Summary Table Analysis	4,590.7	4,575.0	15.7	0.3%	4,572.7	18.1	0.4%	4,568.2	22.6	0.5%	4,563.5	27.2	0.6%	4,559.0	31.7	0.7%	4,554.4	36.3	0.8%
ME 6	32 47 27	2012	Below Normal	November	Used in Summary Table Analysis	8,335.4	8,322.8	12.6	0.2%	8,320.9	14.5	0.2%	8,317.4	18.1	0.2%	8,313.7	21.8	0.3%	8,310.0	25.5	0.3%	8,306.3	29.2	0.3%
ME 6	32 47 27	2012	Below Normal	December	--	5,227.2	5,216.6	10.6	0.2%	5,214.9	12.3	0.2%	5,211.8	15.4	0.3%	5,208.7	18.5	0.4%	5,205.6	21.6	0.4%	5,202.3	24.9	0.5%
ME 6	32 47 27	2012	Below Normal	January	--	20,392.4	20,381.9	10.4	0.1%	20,380.8	11.6	0.1%	20,378.5	13.9	0.1%	20,375.0	17.4	0.1%	20,372.7	19.7	0.1%	20,369.2	23.1	0.1%
ME 6	32 47 27	2012	Below Normal	February	--	18,292.8	18,283.6	9.3	0.1%	18,282.4	10.4	0.1%	18,280.1	12.7	0.1%	18,277.8	15.0	0.1%	18,275.5	17.4	0.1%	18,272.0	20.8	0.1%
ME 6	32 47 27	2012	Below Normal	March	--	45,750.0	45,740.7	9.3	0.0%	45,739.6	10.4	0.0%	45,737.3	12.7	0.0%	45,735.0	15.0	0.0%	45,731.5	18.5	0.0%	45,729.2	20.8	0.0%
ME 6	32 47 27	2012	Below Normal	April	--	26,976.9	26,968.8	8.1	0.0%	26,967.6	9.3	0.0%	26,965.3	11.6	0.0%	26,963.0	13.9	0.1%	26,960.6	16.2	0.1%	26,958.3	18.5	0.1%
ME 6	32 47 27	2012	Below Normal	May	--	7,511.6	7,495.8	15.7	0.2%	7,493.5	18.1	0.2%	7,488.9	22.7	0.3%	7,484.4	27.2	0.4%	7,479.7	31.8	0.4%	7,475.2	36.3	0.5%
ME 6	32 47 27	2012	Below Normal	June	--	5,562.4	5,538.1	24.3	0.4%	5,534.6	27.8	0.5%	5,527.7	34.7	0.6%	5,520.8	41.6	0.7%	5,513.9	48.5	0.9%	5,507.1	55.3	1.0%
ME 6	32 47 27	2012	Below Normal	July	--	2,253.6	2,230.2	23.4	1.0%	2,227.0	26.6	1.2%	2,220.3	33.3	1.5%	2,213.7	39.9	1.8%	2,206.9	46.6	2.1%	2,200.3	53.2	2.4%
ME 6	32 47 27	2012	Below Normal	August	--	396.9	377.8	19.1	4.8%	375.1	21.8	5.5%	369.6	27.2	6.9%	364.2	32.7	8.2%	358.8	38.1	9.6%	353.3	43.5	11.0%
ME 6	32 47 27	2012	Below Normal	September	Used in Summary Table Analysis	259.5	242.3	17.2	6.6%	239.9	19.7	7.6%	235.0	24.6	9.5%	230.1	29.4	11.3%	225.2	34.3	13.2%	220.3	39.2	15.1%
ME 6	32 47 27	2013	Below Normal	October	Used in Summary Table Analysis	1,945.1	1,930.0	15.2	0.8%	1,927.8	17.4	0.9%	1,923.5	21.6	1.1%	1,919.1	26.0	1.3%	1,914.8	30.3	1.6%	1,910.4	34.7	1.8%
ME 6	32 47 27	2013	Below Normal	November	Used in Summary Table Analysis	14,863.4	14,850.7	12.7	0.1%	14,849.5	13.9	0.1%	14,846.1	17.4	0.1%	14,842.6	20.8	0.1%	14,839.1	24.3	0.2%	14,834.5	28.9	0.2%
ME 6	32 47 27	2013	Below Normal	December	--	60,384.3	60,373.8	10.4	0.0%	60,372.7	11.6	0.0%	60,369.2	15.0	0.0%	60,365.7	18.5	0.0%	60,362.3	22.0	0.0%	60,358.8	25.5	0.0%
ME 6	32 47 27	2013	Below Normal	January	--	22,314.8	22,305.6	9.3	0.0%	22,304.4	10.4	0.0%	22,300.9	13.9	0.1%	22,298.6	16.2	0.1%	22,296.3	18.5	0.1%	22,292.8	22.0	0.1%
ME 6	32 47 27	2013	Below Normal	February	--	8,900.0	8,891.4	8.6	0.1%	8,890.2	9.8	0.1%	8,887.6	12.4	0.1%	8,885.1	14.9	0.2%	8,882.5	17.5	0.2%	8,880.0	20.0	0.2%
ME 6	32 47 27	2013	Below Normal	March	--	10,413.4	10,405.2	8.2	0.1%	10,404.1	9.4	0.1%	10,401.6	11.8	0.1%	10,399.2	14.2	0.1%	10,396.8	16.7	0.2%	10,394.3	19.1	0.2%
ME 6	32 47 27	2013	Below Normal	April	--	8,317.6	8,302.4	15.2	0.2%	8,300.3	17.2	0.2%	8,295.9	21.6	0.3%	8,291.7	25.9	0.3%	8,287.3	30.3	0.4%	8,283.0	34.6	0.4%
ME 6	32 47 27	2013	Below Normal	May	--	4,464.7	4,446.4	18.3	0.4%	4,443.8	20.9	0.5%	4,438.5	26.2	0.6%	4,433.2	31.5	0.7%	4,428.0	36.7	0.8%	4,422.8	41.9	0.9%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 47 27	2013	Below Normal	June	--	2,123.3	2,101.2	22.1	1.0%	2,098.0	25.2	1.2%	2,091.7	31.6	1.5%	2,085.3	38.0	1.8%	2,079.1	44.2	2.1%	2,072.7	50.6	2.4%
ME 6	32 47 27	2013	Below Normal	July	--	725.3	703.4	21.8	3.0%	700.3	24.9	3.4%	694.1	31.1	4.3%	688.0	37.3	5.1%	681.8	43.5	6.0%	675.6	49.7	6.8%
ME 6	32 47 27	2013	Below Normal	August	--	349.5	328.9	20.6	5.9%	326.0	23.6	6.7%	320.1	29.4	8.4%	314.2	35.3	10.1%	308.3	41.2	11.8%	302.4	47.1	13.5%
ME 6	32 47 27	2013	Below Normal	September	Used in Summary Table Analysis	4,836.7	4,815.3	21.4	0.4%	4,812.2	24.5	0.5%	4,806.0	30.7	0.6%	4,799.9	36.8	0.8%	4,793.8	42.9	0.9%	4,787.6	49.1	1.0%
ME 6	32 47 27	2014	Critical	October	Used in Summary Table Analysis	284.6	268.7	15.9	5.6%	266.4	18.1	6.4%	261.9	22.7	8.0%	257.3	27.3	9.6%	252.7	31.9	11.2%	248.1	36.5	12.8%
ME 6	32 47 27	2014	Critical	November	Used in Summary Table Analysis	1,566.0	1,553.2	12.7	0.8%	1,551.4	14.6	0.9%	1,547.7	18.3	1.2%	1,543.9	22.1	1.4%	1,540.2	25.8	1.6%	1,536.5	29.5	1.9%
ME 6	32 47 27	2014	Critical	December	--	1,607.3	1,596.2	11.1	0.7%	1,594.6	12.7	0.8%	1,591.3	16.0	1.0%	1,588.1	19.2	1.2%	1,584.8	22.5	1.4%	1,581.6	25.7	1.6%
ME 6	32 47 27	2014	Critical	January	--	2,850.3	2,840.5	9.8	0.3%	2,839.0	11.3	0.4%	2,836.2	14.1	0.5%	2,833.3	17.0	0.6%	2,830.3	20.0	0.7%	2,827.5	22.8	0.8%
ME 6	32 47 27	2014	Critical	February	--	15,834.5	15,825.2	9.3	0.1%	15,824.1	10.4	0.1%	15,820.6	13.9	0.1%	15,818.3	16.2	0.1%	15,816.0	18.5	0.1%	15,813.7	20.8	0.1%
ME 6	32 47 27	2014	Critical	March	--	31,589.1	31,581.0	8.1	0.0%	31,579.9	9.3	0.0%	31,577.5	11.6	0.0%	31,575.2	13.9	0.0%	31,571.8	17.4	0.1%	31,569.4	19.7	0.1%
ME 6	32 47 27	2014	Critical	April	--	13,025.5	13,009.3	16.2	0.1%	13,006.9	18.5	0.1%	13,002.3	23.1	0.2%	12,997.7	27.8	0.2%	12,993.1	32.4	0.2%	12,988.4	37.0	0.3%
ME 6	32 47 27	2014	Critical	May	--	5,211.1	5,191.7	19.4	0.4%	5,188.9	22.2	0.4%	5,183.3	27.8	0.5%	5,177.8	33.3	0.6%	5,172.2	38.9	0.7%	5,166.7	44.4	0.9%
ME 6	32 47 27	2014	Critical	June	--	1,208.7	1,182.1	26.6	2.2%	1,178.2	30.4	2.5%	1,170.7	38.0	3.1%	1,163.2	45.5	3.8%	1,155.7	53.0	4.4%	1,148.2	60.5	5.0%
ME 6	32 47 27	2014	Critical	July	--	553.8	528.8	25.0	4.5%	525.2	28.6	5.2%	518.1	35.7	6.4%	511.0	42.8	7.7%	503.9	49.9	9.0%	496.8	57.0	10.3%
ME 6	32 47 27	2014	Critical	August	--	357.6	333.5	24.1	6.7%	330.1	27.5	7.7%	323.2	34.3	9.6%	316.4	41.2	11.5%	309.5	48.1	13.4%	302.7	54.9	15.4%
ME 6	32 47 27	2014	Critical	September	Used in Summary Table Analysis	2,599.2	2,575.5	23.7	0.9%	2,572.0	27.2	1.0%	2,565.3	33.9	1.3%	2,558.6	40.6	1.6%	2,551.7	47.5	1.8%	2,544.9	54.3	2.1%
ME 6	32 47 27	2015	Dry	October	Used in Summary Table Analysis	11,452.2	11,433.2	19.0	0.2%	11,430.6	21.6	0.2%	11,425.3	26.9	0.2%	11,419.9	32.3	0.3%	11,414.6	37.6	0.3%	11,409.0	43.2	0.4%
ME 6	32 47 27	2015	Dry	November	Used in Summary Table Analysis	9,132.6	9,118.4	14.2	0.2%	9,116.3	16.3	0.2%	9,112.3	20.4	0.2%	9,108.1	24.5	0.3%	9,103.9	28.7	0.3%	9,099.9	32.8	0.4%
ME 6	32 47 27	2015	Dry	December	--	32,965.3	32,953.7	11.6	0.0%	32,951.4	13.9	0.0%	32,947.9	17.4	0.1%	32,944.4	20.8	0.1%	32,941.0	24.3	0.1%	32,937.5	27.8	0.1%
ME 6	32 47 27	2015	Dry	January	--	14,630.8	14,619.2	11.6	0.1%	14,618.1	12.7	0.1%	14,614.6	16.2	0.1%	14,612.3	18.5	0.1%	14,608.8	22.0	0.2%	14,605.3	25.5	0.2%
ME 6	32 47 27	2015	Dry	February	--	27,372.7	27,362.3	10.4	0.0%	27,361.1	11.6	0.0%	27,358.8	13.9	0.1%	27,355.3	17.4	0.1%	27,353.0	19.7	0.1%	27,350.7	22.0	0.1%
ME 6	32 47 27	2015	Dry	March	--	11,603.0	11,594.9	8.1	0.1%	11,593.8	9.3	0.1%	11,591.4	11.6	0.1%	11,589.1	13.9	0.1%	11,586.8	16.2	0.1%	11,584.5	18.5	0.2%
ME 6	32 47 27	2015	Dry	April	--	8,477.1	8,460.9	16.2	0.2%	8,458.6	18.5	0.2%	8,453.9	23.1	0.3%	8,449.3	27.8	0.3%	8,444.7	32.4	0.4%	8,439.9	37.2	0.4%
ME 6	32 47 27	2015	Dry	May	--	1,512.8	1,493.8	19.1	1.3%	1,491.1	21.8	1.4%	1,485.6	27.2	1.8%	1,480.1	32.8	2.2%	1,474.7	38.2	2.5%	1,469.1	43.8	2.9%
ME 6	32 47 27	2015	Dry	June	--	659.3	634.5	24.8	3.8%	631.0	28.3	4.3%	624.0	35.3	5.4%	616.9	42.4	6.4%	609.9	49.4	7.5%	603.0	56.3	8.5%
ME 6	32 47 27	2015	Dry	July	--	276.0	251.3	24.7	8.9%	247.8	28.2	10.2%	240.7	35.2	12.8%	233.6	42.4	15.3%	226.5	49.4	17.9%	219.5	56.4	20.4%
ME 6	32 47 27	2015	Dry	August	--	175.4	151.4	24.0	13.7%	148.0	27.5	15.7%	141.1	34.4	19.6%	134.1	41.3	23.5%	127.2	48.2	27.5%	120.3	55.1	31.4%
ME 6	32 47 27	2015	Dry	September	Used in Summary Table Analysis	128.6	107.0	21.6	16.8%	103.7	24.9	19.4%	96.9	31.7	24.7%	90.3	38.4	29.8%	83.5	45.2	35.1%	76.8	51.8	40.3%
ME 6	32 47 27	2016	Above Normal	October	Used in Summary Table Analysis	93.6	74.4	19.2	20.5%	71.2	22.4	23.9%	65.7	27.8	29.7%	60.1	33.5	35.8%	54.5	39.1	41.7%	49.2	44.4	47.4%
ME 6	32 47 27	2016	Above Normal	November	Used in Summary Table Analysis	3,948.6	3,934.3	14.4	0.4%	3,931.8	16.8	0.4%	3,927.5	21.1	0.5%	3,923.0	25.6	0.6%	3,918.5	30.1	0.8%	3,914.1	34.5	0.9%
ME 6	32 47 27	2016	Above Normal	December	--	37,028.9	37,016.2	12.7	0.0%	37,013.9	15.0	0.0%	37,010.4	18.5	0.1%	37,005.8	23.1	0.1%	37,002.3	26.6	0.1%	36,997.7	31.3	0.1%
ME 6	32 47 27	2016	Above Normal	January	--	57,741.9	57,730.3	11.6	0.0%	57,728.0	13.9	0.0%	57,724.5	17.4	0.0%	57,721.1	20.8	0.0%	57,717.6	24.3	0.0%	57,714.1	27.8	0.0%
ME 6	32 47 27	2016	Above Normal	February	--	24,336.8	24,327.5	9.3	0.0%	24,325.2	11.6	0.0%	24,322.9	13.9	0.1%	24,320.6	16.2	0.1%	24,317.1	19.7	0.1%	24,314.8	22.0	0.1%
ME 6	32 47 27	2016	Above Normal	March	--	41,975.7	41,966.4	9.3	0.0%	41,965.3	10.4	0.0%	41,963.0	12.7	0.0%	41,959.5	16.2	0.0%	41,957.2	18.5	0.0%	41,954.9	20.8	0.0%
ME 6	32 47 27	2016	Above Normal	April	--	18,592.6	18,584.5	8.1	0.0%	18,583.3	9.3	0.0%	18,581.0	11.6	0.1%	18,577.5	15.0	0.1%	18,575.2	17.4	0.1%	18,572.9	19.7	0.1%
ME 6	32 47 27	2016	Above Normal	May	--	5,235.5	5,225.6	10.0	0.2%	5,224.0	11.6	0.2%	5,221.2	14.4	0.3%	5,218.2	17.4	0.3%	5,215.2	20.4	0.4%	5,212.2	23.4	0.4%
ME 6	32 47 27	2016	Above Normal	June	--	1,519.0	1,500.0	19.0	1.2%	1,497.1	21.9	1.4%	1,491.8	27.2	1.8%	1,486.2	32.8	2.2%	1,480.8	38.2	2.5%	1,475.3	43.6	2.9%
ME 6	32 47 27	2016	Above Normal	July	--	833.7	812.2	21.5	2.6%	809.1	24.6	3.0%	803.0	30.7	3.7%	796.8	36.9	4.4%	790.6	43.1	5.2%	784.5	49.2	5.9%
ME 6	32 47 27	2016	Above Normal	August	--	502.8	481.6	21.3	4.2%	478.5	24.4	4.8%	472.4	30.4	6.1%	466.3	36.6	7.3%	460.2	42.7	8.5%	454.0	48.8	9.7%
ME 6	32 47 27	2016	Above Normal	September	Used in Summary Table Analysis	338.7	319.5	19.2	5.7%	316.1	22.6	6.7%	310.4	28.3	8.3%	304.5	34.2	10.1%	298.7	40.0	11.8%	292.8	45.9	13.5%
ME 6	32 47 27	2017	Wet	October	Used in Summary Table Analysis	18,445.6	18,429.4	16.2	0.1%	18,427.1	18.5	0.1%	18,422.5	23.1	0.1%	18,417.8	27.8	0.2%	18,413.2	32.4	0.2%	18,408.6	37.0	0.2%
ME 6	32 47 27	2017	Wet	November	Used in Summary Table Analysis	19,000.0	18,987.3	12.7	0.1%	18,986.1	13.9	0.1%	18,982.6	17.4	0.1%	18,978.0	22.0	0.1%	18,974.5	25.5	0.1%	18,971.1	28.9	0.2%
ME 6	32 47 27	2017	Wet	December	--	24,385.4	24,375.0	10.4	0.0%	24,372.7	12.7	0.1%	24,370.4	15.0	0.1%	24,366.9	18.5	0.1%	24,363.4	22.0	0.1%	24,360.0	25.5	0.1%
ME 6	32 47 27	2017	Wet	January	--	107,699.1	107,689.8	9.3	0.0%	107,687.5	11.6	0.0%	107,685.2	13.9	0.0%	107,681.7	17.4	0.0%	107,679.4	19.7	0.0%	107,675.9	23.1	0.0%
ME 6	32 47 27	2017	Wet	February	--	82,302.1	82,292.8	9.3	0.0%	82,291.7	10.4	0.0%	82,289.4	12.7	0.0%	82,287.0	15.0	0.0%	82,283.6	18.5	0.0%	82,281.3	20.8	0.0%
ME 6	32 47 27	2017	Wet	March	--	27,419.0	27,410.9	8.1	0.0%	27,409.7	9.3	0.0%	27,407.4	11.6	0.0%	27,405.1	13.9	0.1%	27,402.8	16.2	0.1%	27,400.5	18.5	0.1%
ME 6	32 47 27	2017	Wet	April	--	23,093.8	23,085.6	8.1	0.0%	23,084.5	9.3	0.0%	23,082.2	11.6	0.1%	23,079.9	13.9	0.1%	23,077.5	16.2	0.1%	23,075.2	18.5	0.1%
ME 6	32 47 27	2017	Wet	May	--	6,278.9	6,268.9	10.1	0.2%	6,267.4	11.6	0.2%	6,264.5	14.5	0.2%	6,261.6	17.4	0.3%	6,258.6	20.4	0.3%	6,255.7	23.3	0.4%
ME 6	32 47 27	2017	Wet	June	--	2,138.0	2,118.5	19.4	0.9%	2,115.7	22.2	1.0%	2,110.2	27.8	1.3%	2,104.6	33.3	1.6%	2,099.2	38.8	1.8%	2,093.6	44.3	2.1%
ME 6	32 47 27	2017	Wet	July	--	948.2	926.7	21.6	2.3%	923.6	24.7	2.6%	917.4	30.8	3.2%	911.3	36.9	3.9%	905.2	43.1	4.5%	899.1	49.2	5.2%
ME 6	32 47 27	2017	Wet	August	--	520.5	499.3	21.2	4.1%	496.3	24.2	4.7%	490.2	30.3	5.8%	484.2	36.3	7.0%	478.2	42.3	8.1%	472.1	48.4	9.3%
ME 6	32 47 27	2017	Wet	September	Used in Summary Table Analysis	334.8	315.1	19.7	5.9%	312.2	22.6	6.7%	306.6	28.2	8.4%	300.9	33.9	10.1%	295.3	39.5	11.8%	289.6	45.2	13.5%
ME 6	32 47 27	2018	Above Normal	October	Used in Summary Table Analysis	287.5	271.6	15.9	5.5%	269.3	18.2	6.3%	264.7	22.8	7.9%	260.1	27.4	9.5%	255.5	32.0	11.1%	251.0	36.5	12.7%
ME 6	32 47 27	2018	Above Normal	November	Used in Summary Table Analysis	10,972.7	10,960.1	12.6	0.1%	10,958.2	14.5	0.1%	10,954.5	18.2	0.2%	10,950.8	21.9	0.2%	10,947.1	25.6	0.2%	10,943.4	29.3	0.3%
ME 6	32 47 27	2018	Above Normal	December	--	5,464.9	5,454.3	10.6	0.2%	5,452.8	12.2	0.2%	5,449.7	15.3	0.3%	5,446.5	18.4	0.3%	5,443.4	21.5	0.4%	5,440.3	24.7	0.5%
ME 6	32 47 27	2018	Above Normal	January	--	18,089.1	18,079.9	9.3	0.1%	18,078.7	10.4	0.1%	18,075.2	13.9	0.1%	18,072.9	16.2	0.1%	18,069.4	19.7	0.1%	18,067.1	22.0	0.1%
ME 6	32 47 27	2018	Above Normal	February	--	7,613.5	7,605.3	8.2	0.1%	7,604.1	9.5	0.1%	7,601.5	12.0	0.2%	7,599.1	14.5	0.2%	7,596.5	17.0	0.2%	7,594.0	19.6	0.3%
ME 6	32 47 27	2018	Above Normal	March	--	20,899.3	20,891.2	8.1	0.0%	20,890.0	9.3	0.0%	20,887.7	11.6	0.1%	20,885.4	13.9	0.1%	20,883.1	16.2	0.1%	20,880.8	18.5	0.1%
ME 6	32 47 27	2018	Above Normal	April	--	32,434.0	32,427.1	6.9	0.0%	32,425.9	8.1	0.0%	32,423.6	10.4	0.0%	32,421.3	12.7	0.0%	32,419.0	15.0	0.0%	32,416.7	17.4	0.1%
ME 6	32 47 27	2018	Above Normal	May	--	6,997.2	6,982.1	15.2	0.2%	6,979.9	17.4	0.2%	6,975.6	21.6	0.3%	6,971.2	26.0	0.4%	6,966.8	30.4	0.4%	6,962.7	34.5	0.5%
ME 6	32 47 27	2018	Above Normal	June	--	1,924.4	1,904.5	19.9	1.0%	1,901.7	22.7	1.2%	1,896.1	28.4	1.5%	1,890.5	33.9	1.8%	1,884.8	39.6	2.1%	1,879.2	45.3	2.4%
ME 6	32 47 27	2018	Above Normal	July	--	793.2	771.4	21.8	2.7%	768.3	24.9	3.1%	762.1	31.1	3.9%	755.9	37.3	4.7%	749.7	43.5	5.5%	743.5	49.7	6.3%
ME 6	32 47 27	2018	Above Normal	August	--	454.5	434.0	20.5	4.5%	431.1	23.4	5.1%	425.2	29.2	6.4%	419.4	35.1	7.7%	413.5	41.0	9.0%	407.7	46.8	10.3%
ME 6	32 47 27	2018	Above Normal	September	Used in Summary Table Analysis	311.2	291.4	19.8	6.4%	288.6	22.6	7.3%	282.9	28.3	9.1%	277.2	33.9	10.9%	271.5	39.6	12.7%	265.8	45.3	14.6%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 47 27	2019	Below Normal	October	Used in Summary Table Analysis	217.1	201.5	15.7	7.2%	199.3	17.9	8.2%	194.7	22.4	10.3%	190.1	27.0	12.5%	185.7	31.4	14.5%	181.2	36.0	16.6%
ME 6	32 47 27	2019	Below Normal	November	Used in Summary Table Analysis	6,743.5	6,730.8	12.7	0.2%	6,728.9	14.6	0.2%	6,725.2	18.3	0.3%	6,721.5	22.0	0.3%	6,717.8	25.7	0.4%	6,714.1	29.4	0.4%
ME 6	32 47 27	2019	Below Normal	December	--	14,866.9	14,856.5	10.4	0.1%	14,854.2	12.7	0.1%	14,851.9	15.0	0.1%	14,848.4	18.5	0.1%	14,844.9	22.0	0.1%	14,841.4	25.5	0.2%
ME 6	32 47 27	2019	Below Normal	January	--	35,625.0	35,614.6	10.4	0.0%	35,613.4	11.6	0.0%	35,611.1	13.9	0.0%	35,607.6	17.4	0.0%	35,605.3	19.7	0.1%	35,601.9	23.1	0.1%
ME 6	32 47 27	2019	Below Normal	February	--	142,349.5	142,338.0	11.6	0.0%	142,338.0	11.6	0.0%	142,338.0	11.6	0.0%	142,338.0	11.6	0.0%	142,338.0	11.6	0.0%	142,326.4	23.1	0.0%
ME 6	32 47 27	2019	Below Normal	March	--	42,539.4	42,531.3	8.1	0.0%	42,530.1	9.3	0.0%	42,527.8	11.6	0.0%	42,525.5	13.9	0.0%	42,523.1	16.2	0.0%	42,520.8	18.5	0.0%
ME 6	32 47 27	2019	Below Normal	April	--	15,334.5	15,326.4	8.1	0.1%	15,326.4	8.1	0.1%	15,324.1	10.4	0.1%	15,321.8	12.7	0.1%	15,319.4	15.0	0.1%	15,317.1	17.4	0.1%
ME 6	32 47 27	2019	Below Normal	May	--	17,248.8	17,232.6	16.2	0.1%	17,230.3	18.5	0.1%	17,225.7	23.1	0.1%	17,221.1	27.8	0.2%	17,216.4	32.4	0.2%	17,211.8	37.0	0.2%
ME 6	32 47 27	2019	Below Normal	June	--	4,244.9	4,223.5	21.4	0.5%	4,220.5	24.4	0.6%	4,214.5	30.4	0.7%	4,208.7	36.2	0.9%	4,202.9	42.0	1.0%	4,197.2	47.7	1.1%
ME 6	32 47 27	2019	Below Normal	July	--	1,375.2	1,353.4	21.9	1.6%	1,350.2	25.0	1.8%	1,344.1	31.1	2.3%	1,337.8	37.4	2.7%	1,331.6	43.6	3.2%	1,325.3	49.9	3.6%
ME 6	32 47 27	2019	Below Normal	August	--	609.9	588.9	21.0	3.4%	585.9	24.0	3.9%	579.9	30.0	4.9%	574.0	35.9	5.9%	568.0	41.9	6.9%	562.0	47.9	7.9%
ME 6	32 47 27	2019	Below Normal	September	Used in Summary Table Analysis	474.5	454.8	19.7	4.1%	452.0	22.5	4.7%	446.3	28.1	5.9%	440.7	33.8	7.1%	435.0	39.4	8.3%	429.4	45.1	9.5%
ME 6	32 47 27	2020	Dry	October	Used in Summary Table Analysis	365.3	350.2	15.1	4.1%	348.0	17.3	4.7%	343.6	21.6	5.9%	339.2	26.0	7.1%	334.8	30.4	8.3%	330.5	34.8	9.5%
ME 6	32 47 27	2020	Dry	November	Used in Summary Table Analysis	336.4	324.5	12.0	3.6%	322.7	13.7	4.1%	319.2	17.2	5.1%	315.7	20.7	6.2%	312.2	24.3	7.2%	308.6	27.8	8.3%
ME 6	32 47 27	2020	Dry	December	--	13,578.7	13,567.1	11.6	0.1%	13,566.0	12.7	0.1%	13,562.5	16.2	0.1%	13,559.0	19.7	0.1%	13,556.7	22.0	0.2%	13,553.2	25.5	0.2%
ME 6	32 47 27	2020	Dry	January	--	22,560.2	22,550.9	9.3	0.0%	22,549.8	10.4	0.0%	22,546.3	13.9	0.1%	22,544.0	16.2	0.1%	22,540.5	19.7	0.1%	22,538.2	22.0	0.1%
ME 6	32 47 27	2020	Dry	February	--	7,425.6	7,417.0	8.6	0.1%	7,415.7	9.8	0.1%	7,413.2	12.4	0.2%	7,410.6	14.9	0.2%	7,408.0	17.6	0.2%	7,405.4	20.1	0.3%
ME 6	32 47 27	2020	Dry	March	--	7,287.7	7,279.7	8.0	0.1%	7,278.6	9.1	0.1%	7,276.2	11.6	0.2%	7,273.7	14.0	0.2%	7,271.3	16.4	0.2%	7,268.9	18.9	0.3%
ME 6	32 47 27	2020	Dry	April	--	5,530.8	5,514.8	16.0	0.3%	5,512.5	18.3	0.3%	5,507.9	22.9	0.4%	5,503.1	27.7	0.5%	5,498.5	32.3	0.6%	5,493.9	36.9	0.7%
ME 6	32 47 27	2020	Dry	May	--	7,438.1	7,418.8	19.3	0.3%	7,416.0	22.1	0.3%	7,410.4	27.7	0.4%	7,404.7	33.3	0.4%	7,399.2	38.9	0.5%	7,393.6	44.4	0.6%
ME 6	32 47 27	2020	Dry	June	--	2,108.4	2,082.9	25.6	1.2%	2,079.3	29.2	1.4%	2,072.3	36.1	1.7%	2,065.4	43.1	2.0%	2,058.4	50.0	2.4%	2,051.5	56.9	2.7%
ME 6	32 47 27	2020	Dry	July	--	805.6	780.2	25.5	3.2%	776.5	29.1	3.6%	769.2	36.4	4.5%	762.0	43.7	5.4%	754.7	51.0	6.3%	747.4	58.2	7.2%
ME 6	32 47 27	2020	Dry	August	--	408.9	383.7	25.3	6.2%	380.0	28.9	7.1%	372.8	36.1	8.8%	365.6	43.3	10.6%	358.4	50.6	12.4%	351.2	57.8	14.1%
ME 6	32 47 27	2020	Dry	September	Used in Summary Table Analysis	258.2	235.2	23.0	8.9%	231.9	26.2	10.2%	224.5	33.6	13.0%	217.7	40.5	15.7%	210.6	47.6	18.4%	203.6	54.6	21.1%
ME 7	32 44 30	2000	Above Normal	October	Used in Summary Table Analysis	838.1	821.6	16.5	2.0%	819.2	18.9	2.3%	814.4	23.6	2.8%	809.6	28.5	3.4%	804.8	33.3	4.0%	800.0	38.1	4.5%
ME 7	32 44 30	2000	Above Normal	November	Used in Summary Table Analysis	12,409.7	12,397.0	12.7	0.1%	12,394.7	15.0	0.1%	12,391.2	18.5	0.1%	12,386.6	23.1	0.2%	12,383.1	26.6	0.2%	12,379.6	30.1	0.2%
ME 7	32 44 30	2000	Above Normal	December	--	10,967.0	10,956.0	11.0	0.1%	10,954.3	12.7	0.1%	10,951.0	16.0	0.1%	10,947.7	19.3	0.2%	10,944.3	22.7	0.2%	10,941.0	26.0	0.2%
ME 7	32 44 30	2000	Above Normal	January	--	29,061.3	29,050.9	10.4	0.0%	29,049.8	11.6	0.0%	29,046.3	15.0	0.1%	29,044.0	17.4	0.1%	29,040.5	20.8	0.1%	29,037.0	24.3	0.1%
ME 7	32 44 30	2000	Above Normal	February	--	37,357.6	37,349.5	8.1	0.0%	37,347.2	10.4	0.0%	37,344.9	12.7	0.0%	37,342.6	15.0	0.0%	37,340.3	17.4	0.0%	37,336.8	20.8	0.1%
ME 7	32 44 30	2000	Above Normal	March	--	18,415.5	18,407.4	8.1	0.0%	18,406.3	9.3	0.1%	18,403.9	11.6	0.1%	18,401.6	13.9	0.1%	18,399.3	16.2	0.1%	18,395.8	19.7	0.1%
ME 7	32 44 30	2000	Above Normal	April	--	12,392.4	12,384.3	8.1	0.1%	12,383.1	9.3	0.1%	12,380.8	11.6	0.1%	12,378.5	13.9	0.1%	12,376.2	16.2	0.1%	12,373.8	18.5	0.1%
ME 7	32 44 30	2000	Above Normal	May	--	7,160.4	7,144.6	15.9	0.2%	7,142.2	18.2	0.3%	7,137.6	22.8	0.3%	7,133.0	27.4	0.4%	7,128.5	31.9	0.4%	7,123.8	36.6	0.5%
ME 7	32 44 30	2000	Above Normal	June	--	2,639.9	2,615.9	24.1	0.9%	2,612.4	27.5	1.0%	2,605.6	34.4	1.3%	2,598.6	41.3	1.6%	2,591.8	48.1	1.8%	2,585.0	55.0	2.1%
ME 7	32 44 30	2000	Above Normal	July	--	1,008.2	985.6	22.6	2.2%	982.3	25.8	2.6%	975.9	32.3	3.2%	969.5	38.7	3.8%	963.1	45.1	4.5%	956.7	51.5	5.1%
ME 7	32 44 30	2000	Above Normal	August	--	539.1	517.7	21.4	4.0%	514.6	24.5	4.5%	508.5	30.6	5.7%	502.4	36.7	6.8%	496.3	42.8	7.9%	490.2	48.9	9.1%
ME 7	32 44 30	2000	Above Normal	September	Used in Summary Table Analysis	310.9	291.5	19.3	6.2%	288.8	22.1	7.1%	283.2	27.6	8.9%	277.7	33.2	10.7%	272.2	38.7	12.5%	266.6	44.3	14.2%
ME 7	32 44 30	2001	Dry	October	Used in Summary Table Analysis	3,887.2	3,870.9	16.2	0.4%	3,868.6	18.5	0.5%	3,863.9	23.3	0.6%	3,859.3	27.9	0.7%	3,854.5	32.6	0.8%	3,849.8	37.4	1.0%
ME 7	32 44 30	2001	Dry	November	Used in Summary Table Analysis	6,236.7	6,223.7	13.0	0.2%	6,221.9	14.8	0.2%	6,218.1	18.6	0.3%	6,214.2	22.5	0.4%	6,210.4	26.3	0.4%	6,206.6	30.1	0.5%
ME 7	32 44 30	2001	Dry	December	--	8,951.4	8,940.3	11.1	0.1%	8,938.7	12.7	0.1%	8,935.4	16.0	0.2%	8,932.2	19.2	0.2%	8,928.9	22.5	0.3%	8,925.6	25.8	0.3%
ME 7	32 44 30	2001	Dry	January	--	13,002.3	12,991.9	10.4	0.1%	12,990.7	11.6	0.1%	12,987.3	15.0	0.1%	12,985.0	17.4	0.1%	12,981.5	20.8	0.2%	12,979.2	23.1	0.2%
ME 7	32 44 30	2001	Dry	February	--	17,606.5	17,597.2	9.3	0.1%	17,596.1	10.4	0.1%	17,593.8	12.7	0.1%	17,591.4	15.0	0.1%	17,588.0	18.5	0.1%	17,585.6	20.8	0.1%
ME 7	32 44 30	2001	Dry	March	--	12,366.9	12,358.8	8.1	0.1%	12,357.6	9.3	0.1%	12,355.3	11.6	0.1%	12,353.0	13.9	0.1%	12,350.7	16.2	0.1%	12,348.4	18.5	0.1%
ME 7	32 44 30	2001	Dry	April	--	11,046.2	11,029.9	16.3	0.1%	11,027.4	18.8	0.2%	11,022.8	23.4	0.2%	11,018.1	28.1	0.3%	11,013.3	32.9	0.3%	11,008.6	37.6	0.3%
ME 7	32 44 30	2001	Dry	May	--	2,642.5	2,623.0	19.4	0.7%	2,620.1	22.3	0.8%	2,614.6	27.9	1.1%	2,608.9	33.6	1.3%	2,603.4	39.1	1.5%	2,597.7	44.8	1.7%
ME 7	32 44 30	2001	Dry	June	--	2,697.9	2,670.6	27.3	1.0%	2,666.7	31.3	1.2%	2,658.9	39.0	1.4%	2,651.2	46.8	1.7%	2,643.4	54.5	2.0%	2,635.8	62.2	2.3%
ME 7	32 44 30	2001	Dry	July	--	728.1	701.8	26.2	3.6%	698.1	30.0	4.1%	690.6	37.4	5.1%	683.2	44.9	6.2%	675.8	52.3	7.2%	668.2	59.8	8.2%
ME 7	32 44 30	2001	Dry	August	--	186.1	160.4	25.7	13.8%	156.7	29.4	15.8%	149.4	36.7	19.7%	142.0	44.0	23.7%	134.8	51.3	27.6%	127.4	58.7	31.5%
ME 7	32 44 30	2001	Dry	September	Used in Summary Table Analysis	109.8	86.4	23.4	21.3%	83.0	26.8	24.4%	76.3	33.5	30.5%	69.6	40.1	36.6%	63.0	46.8	42.6%	56.2	53.6	48.8%
ME 7	32 44 30	2002	Below Normal	October	Used in Summary Table Analysis	280.8	260.8	20.0	7.1%	258.0	22.9	8.1%	252.2	28.7	10.2%	246.4	34.4	12.3%	240.7	40.2	14.3%	234.8	46.1	16.4%
ME 7	32 44 30	2002	Below Normal	November	Used in Summary Table Analysis	12,175.9	12,159.7	16.2	0.1%	12,157.4	18.5	0.2%	12,152.8	23.1	0.2%	12,148.1	27.8	0.2%	12,143.5	32.4	0.3%	12,138.9	37.0	0.3%
ME 7	32 44 30	2002	Below Normal	December	--	36,119.2	36,105.3	13.9	0.0%	36,103.0	16.2	0.0%	36,098.4	20.8	0.1%	36,094.9	24.3	0.1%	36,090.3	28.9	0.1%	36,086.8	32.4	0.1%
ME 7	32 44 30	2002	Below Normal	January	--	31,152.8	31,141.2	11.6	0.0%	31,138.9	13.9	0.0%	31,135.4	17.4	0.1%	31,131.9	20.8	0.1%	31,128.5	24.3	0.1%	31,125.0	27.8	0.1%
ME 7	32 44 30	2002	Below Normal	February	--	24,843.8	24,832.2	11.6	0.0%	24,831.0	12.7	0.1%	24,827.5	16.2	0.1%	24,825.2	18.5	0.1%	24,821.8	22.0	0.1%	24,818.3	25.5	0.1%
ME 7	32 44 30	2002	Below Normal	March	--	17,909.7	17,899.3	10.4	0.1%	17,898.1	11.6	0.1%	17,895.8	13.9	0.1%	17,892.4	17.4	0.1%	17,890.0	19.7	0.1%	17,886.6	23.1	0.1%
ME 7	32 44 30	2002	Below Normal	April	--	9,977.1	9,960.4	16.7	0.2%	9,958.0	19.1	0.2%	9,953.2	23.8	0.2%	9,948.5	28.6	0.3%	9,943.8	33.3	0.3%	9,938.9	38.2	0.4%
ME 7	32 44 30	2002	Below Normal	May	--	3,341.1	3,321.4	19.7	0.6%	3,318.5	22.6	0.7%	3,313.0	28.1	0.8%	3,307.3	33.8	1.0%	3,301.6	39.5	1.2%	3,295.9	45.1	1.4%
ME 7	32 44 30	2002	Below Normal	June	--	867.0	844.1	22.9	2.6%	840.8	26.1	3.0%	834.3	32.7	3.8%	827.8	39.2	4.5%	821.3	45.7	5.3%	814.8	52.2	6.0%
ME 7	32 44 30	2002	Below Normal	July	--	376.3	352.7	23.6	6.3%	349.4	27.0	7.2%	342.6	33.7	9.0%	335.9	40.5	10.7%	329.1	47.2	12.5%	322.4	53.9	14.3%
ME 7	32 44 30	2002	Below Normal	August	--	242.8	220.4	22.4	9.2%	217.2	25.6	10.6%	210.8	32.1	13.2%	204.4	38.5	15.9%	197.9	44.9	18.5%	191.5	51.4	21.1%
ME 7	32 44 30	2002	Below Normal	September	Used in Summary Table Analysis	179.0	157.6	21.4	12.0%	154.5	24.5	13.7%	148.3	30.7	17.1%	142.1	36.9	20.6%	136.0	43.0	24.0%	129.8	49.2	27.5%
ME 7	32 44 30	2003	Wet	October	Used in Summary Table Analysis	143.7	125.8	17.9	12.4%	123.2	20.5	14.3%	118.0	25.7	17.9%	112.8	30.9	21.5%	107.6	36.1	25.1%	102.4	41.3	28.7%
ME 7	32 44 30	2003	Wet	November	Used in Summary Table Analysis	914.7	900.2	14.6	1.6%	898.0	16.7	1.8%	893.8	21.0	2.3%	889.4	25.3	2.8%	885.2	29.6	3.2%	880.9	33.8	3.7%
ME 7	32 44 30	2003	Wet	December	--	57,843.8	57,831.0	12.7	0.0%	57,828.7	15.0	0.0%	57,825.2	18.5	0.0%	57,820.6	23.1	0.0%	57,817.1	26.6	0.0%	57,812.5	31.3	0.1%
ME 7	32 44 30	2003	Wet	January	--	31,739.6	31,728.0	11.6	0.0%	31,726.9	12.7	0.0%	31,723.4	16.2	0.1%	31,719.9	19.7	0.1%	31,716.4	23.1	0.1%	31,713.0	26.6	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 44 30	2003	Wet	February	--	20,465.3	20,456.0	9.3	0.0%	20,453.7	11.6	0.1%	20,451.4	13.9	0.1%	20,447.9	17.4	0.1%	20,445.6	19.7	0.1%	20,442.1	23.1	0.1%
ME 7	32 44 30	2003	Wet	March	--	24,208.3	24,199.1	9.3	0.0%	24,196.8	11.6	0.0%	24,194.4	13.9	0.1%	24,192.1	16.2	0.1%	24,188.7	19.7	0.1%	24,186.3	22.0	0.1%
ME 7	32 44 30	2003	Wet	April	--	43,338.0	43,329.9	8.1	0.0%	43,328.7	9.3	0.0%	43,326.4	11.6	0.0%	43,322.9	15.0	0.0%	43,320.6	17.4	0.0%	43,318.3	19.7	0.0%
ME 7	32 44 30	2003	Wet	May	--	12,281.3	12,263.9	17.4	0.1%	12,261.6	19.7	0.2%	12,256.9	24.3	0.2%	12,252.3	28.9	0.2%	12,247.7	33.6	0.3%	12,243.1	38.2	0.3%
ME 7	32 44 30	2003	Wet	June	--	3,183.3	3,161.6	21.8	0.7%	3,158.4	24.9	0.8%	3,152.3	31.0	1.0%	3,146.2	37.2	1.2%	3,140.2	43.2	1.4%	3,134.0	49.3	1.5%
ME 7	32 44 30	2003	Wet	July	--	1,493.3	1,470.0	23.3	1.6%	1,466.7	26.6	1.8%	1,460.1	33.2	2.2%	1,453.4	39.9	2.7%	1,446.8	46.5	3.1%	1,440.0	53.2	3.6%
ME 7	32 44 30	2003	Wet	August	--	778.6	755.8	22.7	2.9%	752.5	26.0	3.3%	746.0	32.5	4.2%	739.5	39.0	5.0%	733.0	45.6	5.9%	726.3	52.2	6.7%
ME 7	32 44 30	2003	Wet	September	Used in Summary Table Analysis	475.2	455.3	19.8	4.2%	452.5	22.7	4.8%	446.7	28.4	6.0%	441.0	34.1	7.2%	435.3	39.8	8.4%	429.6	45.6	9.6%
ME 7	32 44 30	2004	Wet	October	Used in Summary Table Analysis	341.6	325.0	16.6	4.9%	322.6	19.0	5.6%	317.8	23.8	7.0%	313.0	28.7	8.4%	308.1	33.5	9.8%	303.3	38.4	11.2%
ME 7	32 44 30	2004	Wet	November	Used in Summary Table Analysis	5,925.5	5,911.8	13.7	0.2%	5,909.8	15.6	0.3%	5,905.8	19.7	0.3%	5,901.9	23.6	0.4%	5,897.8	27.7	0.5%	5,893.8	31.7	0.5%
ME 7	32 44 30	2004	Wet	December	--	36,840.3	36,827.5	12.7	0.0%	36,826.4	13.9	0.0%	36,822.9	17.4	0.0%	36,819.4	20.8	0.1%	36,816.0	24.3	0.1%	36,811.3	28.9	0.1%
ME 7	32 44 30	2004	Wet	January	--	31,831.0	31,821.8	9.3	0.0%	31,819.4	11.6	0.0%	31,817.1	13.9	0.0%	31,813.7	17.4	0.1%	31,811.3	19.7	0.1%	31,807.9	23.1	0.1%
ME 7	32 44 30	2004	Wet	February	--	38,581.0	38,571.8	9.3	0.0%	38,570.6	10.4	0.0%	38,568.3	12.7	0.0%	38,564.8	16.2	0.0%	38,562.5	18.5	0.0%	38,559.0	22.0	0.1%
ME 7	32 44 30	2004	Wet	March	--	16,585.6	16,576.4	9.3	0.1%	16,575.2	10.4	0.1%	16,572.9	12.7	0.1%	16,570.6	15.0	0.1%	16,568.3	17.4	0.1%	16,564.8	20.8	0.1%
ME 7	32 44 30	2004	Wet	April	--	9,498.4	9,490.4	8.0	0.1%	9,489.2	9.1	0.1%	9,486.9	11.5	0.1%	9,484.6	13.8	0.1%	9,482.2	16.2	0.2%	9,479.7	18.6	0.2%
ME 7	32 44 30	2004	Wet	May	--	3,459.7	3,443.6	16.1	0.5%	3,441.3	18.4	0.5%	3,436.7	23.0	0.7%	3,432.1	27.7	0.8%	3,427.4	32.3	0.9%	3,422.8	36.9	1.1%
ME 7	32 44 30	2004	Wet	June	--	704.5	683.6	20.8	3.0%	680.7	23.8	3.4%	674.7	29.7	4.2%	668.8	35.7	5.1%	662.9	41.6	5.9%	656.9	47.5	6.7%
ME 7	32 44 30	2004	Wet	July	--	372.2	349.4	22.8	6.1%	346.1	26.1	7.0%	339.6	32.6	8.8%	333.1	39.1	10.5%	326.6	45.6	12.3%	320.0	52.2	14.0%
ME 7	32 44 30	2004	Wet	August	--	240.6	218.8	21.7	9.0%	215.7	24.9	10.3%	209.5	31.1	12.9%	203.2	37.3	15.5%	197.0	43.6	18.1%	190.8	49.8	20.7%
ME 7	32 44 30	2004	Wet	September	Used in Summary Table Analysis	176.7	155.8	20.9	11.8%	152.8	23.9	13.5%	146.8	29.9	16.9%	140.8	35.9	20.3%	134.7	41.9	23.7%	128.7	48.0	27.2%
ME 7	32 44 30	2005	Above Normal	October	Used in Summary Table Analysis	7,840.0	7,823.1	16.9	0.2%	7,820.7	19.3	0.2%	7,815.7	24.3	0.3%	7,810.9	29.2	0.4%	7,805.9	34.1	0.4%	7,800.9	39.1	0.5%
ME 7	32 44 30	2005	Above Normal	November	Used in Summary Table Analysis	2,282.3	2,269.0	13.3	0.6%	2,267.0	15.3	0.7%	2,263.2	19.1	0.8%	2,259.3	23.0	1.0%	2,255.4	26.9	1.2%	2,251.5	30.8	1.3%
ME 7	32 44 30	2005	Above Normal	December	--	21,471.1	21,459.5	11.6	0.1%	21,458.3	12.7	0.1%	21,454.9	16.2	0.1%	21,451.4	19.7	0.1%	21,447.9	23.1	0.1%	21,444.4	26.6	0.1%
ME 7	32 44 30	2005	Above Normal	January	--	22,732.6	22,722.2	10.4	0.0%	22,721.1	11.6	0.1%	22,717.6	15.0	0.1%	22,714.1	18.5	0.1%	22,711.8	20.8	0.1%	22,708.3	24.3	0.1%
ME 7	32 44 30	2005	Above Normal	February	--	14,075.2	14,067.1	8.1	0.1%	14,064.8	10.4	0.1%	14,062.5	12.7	0.1%	14,060.2	15.0	0.1%	14,057.9	17.4	0.1%	14,054.4	20.8	0.1%
ME 7	32 44 30	2005	Above Normal	March	--	28,833.3	28,825.2	8.1	0.0%	28,824.1	9.3	0.0%	28,821.8	11.6	0.0%	28,819.4	13.9	0.0%	28,817.1	16.2	0.1%	28,814.8	18.5	0.1%
ME 7	32 44 30	2005	Above Normal	April	--	21,619.2	21,612.3	6.9	0.0%	21,610.0	9.3	0.0%	21,607.6	11.6	0.1%	21,605.3	13.9	0.1%	21,603.0	16.2	0.1%	21,600.7	18.5	0.1%
ME 7	32 44 30	2005	Above Normal	May	--	19,778.9	19,762.7	16.2	0.1%	19,760.4	18.5	0.1%	19,755.8	23.1	0.1%	19,751.2	27.8	0.1%	19,746.5	32.4	0.2%	19,740.7	38.2	0.2%
ME 7	32 44 30	2005	Above Normal	June	--	16,118.1	16,093.8	24.3	0.2%	16,090.3	27.8	0.2%	16,083.3	34.7	0.2%	16,076.4	41.7	0.3%	16,068.3	49.8	0.3%	16,061.3	56.7	0.4%
ME 7	32 44 30	2005	Above Normal	July	--	2,870.5	2,847.1	23.4	0.8%	2,843.8	26.7	0.9%	2,837.0	33.4	1.2%	2,830.3	40.2	1.4%	2,823.7	46.8	1.6%	2,817.0	53.5	1.9%
ME 7	32 44 30	2005	Above Normal	August	--	1,001.3	979.8	21.5	2.1%	976.8	24.5	2.5%	970.6	30.7	3.1%	964.5	36.8	3.7%	958.4	43.0	4.3%	952.3	49.1	4.9%
ME 7	32 44 30	2005	Above Normal	September	Used in Summary Table Analysis	542.8	523.5	19.4	3.6%	520.7	22.1	4.1%	515.1	27.7	5.1%	509.6	33.2	6.1%	504.0	38.8	7.1%	498.5	44.3	8.2%
ME 7	32 44 30	2006	Wet	October	Used in Summary Table Analysis	654.7	638.8	16.0	2.4%	636.4	18.3	2.8%	631.8	22.9	3.5%	627.2	27.5	4.2%	622.6	32.1	4.9%	618.0	36.8	5.6%
ME 7	32 44 30	2006	Wet	November	Used in Summary Table Analysis	9,512.5	9,499.9	12.6	0.1%	9,498.0	14.5	0.2%	9,494.3	18.2	0.2%	9,490.6	21.9	0.2%	9,486.9	25.6	0.3%	9,483.2	29.3	0.3%
ME 7	32 44 30	2006	Wet	December	--	44,165.5	44,153.9	11.6	0.0%	44,152.8	12.7	0.0%	44,149.3	16.2	0.0%	44,145.8	19.7	0.0%	44,142.4	23.1	0.1%	44,138.9	26.6	0.1%
ME 7	32 44 30	2006	Wet	January	--	46,898.1	46,887.7	10.4	0.0%	46,886.6	11.6	0.0%	46,883.1	15.0	0.0%	46,880.8	17.4	0.0%	46,877.3	20.8	0.0%	46,875.0	23.1	0.0%
ME 7	32 44 30	2006	Wet	February	--	26,876.2	26,868.1	8.1	0.0%	26,865.7	10.4	0.0%	26,863.4	12.7	0.0%	26,861.1	15.0	0.1%	26,858.8	17.4	0.1%	26,856.5	19.7	0.1%
ME 7	32 44 30	2006	Wet	March	--	47,635.4	47,627.3	8.1	0.0%	47,626.2	9.3	0.0%	47,623.8	11.6	0.0%	47,621.5	13.9	0.0%	47,618.1	17.4	0.0%	47,615.7	19.7	0.0%
ME 7	32 44 30	2006	Wet	April	--	30,615.7	30,608.8	6.9	0.0%	30,607.6	8.1	0.0%	30,605.3	10.4	0.0%	30,603.0	12.7	0.0%	30,600.7	15.0	0.0%	30,598.4	17.4	0.1%
ME 7	32 44 30	2006	Wet	May	--	14,317.1	14,307.9	9.3	0.1%	14,306.7	10.4	0.1%	14,303.2	13.9	0.1%	14,300.9	16.2	0.1%	14,297.5	19.7	0.1%	14,294.0	23.1	0.2%
ME 7	32 44 30	2006	Wet	June	--	3,563.0	3,542.6	20.4	0.6%	3,539.7	23.3	0.7%	3,533.9	29.1	0.8%	3,528.1	34.8	1.0%	3,522.3	40.6	1.1%	3,516.6	46.4	1.3%
ME 7	32 44 30	2006	Wet	July	--	1,299.9	1,277.7	22.2	1.7%	1,274.4	25.5	2.0%	1,268.1	31.8	2.4%	1,261.7	38.2	2.9%	1,255.4	44.4	3.4%	1,249.1	50.8	3.9%
ME 7	32 44 30	2006	Wet	August	--	686.1	664.1	22.1	3.2%	660.9	25.2	3.7%	654.6	31.5	4.6%	648.3	37.8	5.5%	642.0	44.1	6.4%	635.7	50.4	7.3%
ME 7	32 44 30	2006	Wet	September	Used in Summary Table Analysis	445.6	425.9	19.7	4.4%	423.1	22.5	5.0%	417.5	28.1	6.3%	411.8	33.8	7.6%	406.2	39.4	8.9%	400.5	45.1	10.1%
ME 7	32 44 30	2007	Above Normal	October	Used in Summary Table Analysis	291.4	275.2	16.3	5.6%	272.8	18.6	6.4%	268.1	23.3	8.0%	263.4	28.1	9.6%	258.6	32.8	11.3%	253.8	37.6	12.9%
ME 7	32 44 30	2007	Above Normal	November	Used in Summary Table Analysis	8,848.8	8,835.6	13.2	0.1%	8,833.7	15.2	0.2%	8,829.7	19.1	0.2%	8,825.8	23.0	0.3%	8,821.9	27.0	0.3%	8,817.8	31.0	0.4%
ME 7	32 44 30	2007	Above Normal	December	--	20,775.5	20,763.9	11.6	0.1%	20,761.6	13.9	0.1%	20,758.1	17.4	0.1%	20,754.6	20.8	0.1%	20,751.2	24.3	0.1%	20,747.7	27.8	0.1%
ME 7	32 44 30	2007	Above Normal	January	--	10,349.2	10,339.2	10.0	0.1%	10,337.7	11.5	0.1%	10,334.8	14.4	0.1%	10,331.8	17.4	0.2%	10,328.9	20.3	0.2%	10,325.8	23.4	0.2%
ME 7	32 44 30	2007	Above Normal	February	--	30,981.5	30,972.2	9.3	0.0%	30,971.1	10.4	0.0%	30,967.6	13.9	0.0%	30,965.3	16.2	0.1%	30,961.8	19.7	0.1%	30,959.5	22.0	0.1%
ME 7	32 44 30	2007	Above Normal	March	--	13,172.5	13,164.4	8.1	0.1%	13,163.2	9.3	0.1%	13,159.7	12.7	0.1%	13,157.4	15.0	0.1%	13,155.1	17.4	0.1%	13,152.8	19.7	0.1%
ME 7	32 44 30	2007	Above Normal	April	--	11,604.2	11,588.0	16.2	0.1%	11,585.6	18.5	0.2%	11,581.0	23.1	0.2%	11,576.4	27.8	0.2%	11,572.1	32.1	0.3%	11,567.5	36.7	0.3%
ME 7	32 44 30	2007	Above Normal	May	--	4,172.8	4,153.9	18.9	0.5%	4,151.3	21.5	0.5%	4,145.8	27.0	0.6%	4,140.4	32.4	0.8%	4,135.0	37.8	0.9%	4,129.5	43.3	1.0%
ME 7	32 44 30	2007	Above Normal	June	--	1,523.6	1,500.3	23.3	1.5%	1,497.0	26.6	1.7%	1,490.4	33.2	2.2%	1,483.7	39.9	2.6%	1,477.1	46.5	3.1%	1,470.5	53.1	3.5%
ME 7	32 44 30	2007	Above Normal	July	--	509.6	485.8	23.8	4.7%	482.4	27.2	5.3%	475.6	34.0	6.7%	468.9	40.8	8.0%	462.1	47.5	9.3%	455.3	54.3	10.7%
ME 7	32 44 30	2007	Above Normal	August	--	238.9	217.1	21.8	9.1%	214.0	24.9	10.4%	207.8	31.1	13.0%	201.6	37.3	15.6%	195.4	43.5	18.2%	189.2	49.7	20.8%
ME 7	32 44 30	2007	Above Normal	September	Used in Summary Table Analysis	166.6	145.7	20.8	12.5%	142.7	23.8	14.3%	136.7	29.8	17.9%	130.8	35.8	21.5%	124.8	41.7	25.1%	118.9	47.7	28.6%
ME 7	32 44 30	2008	Dry	October	Used in Summary Table Analysis	3,503.2	3,485.9	17.4	0.5%	3,483.3	19.9	0.6%	3,478.4	24.9	0.7%	3,473.4	29.9	0.9%	3,468.3	35.0	1.0%	3,463.2	40.0	1.1%
ME 7	32 44 30	2008	Dry	November	Used in Summary Table Analysis	3,341.0	3,327.5	13.4	0.4%	3,325.6	15.4	0.5%	3,321.6	19.3	0.6%	3,317.7	23.3	0.7%	3,313.8	27.2	0.8%	3,309.8	31.1	0.9%
ME 7	32 44 30	2008	Dry	December	--	23,601.9	23,590.3	11.6	0.0%	23,588.0	13.9	0.1%	23,584.5	17.4	0.1%	23,581.0	20.8	0.1%	23,577.5	24.3	0.1%	23,574.1	27.8	0.1%
ME 7	32 44 30	2008	Dry	January	--	37,985.0	37,973.4	11.6	0.0%	37,972.2	12.7	0.0%	37,968.8	16.2	0.0%	37,966.4	18.5	0.0%	37,963.0	22.0	0.1%	37,959.5	25.5	0.1%
ME 7	32 44 30	2008	Dry	February	--	26,380.8	26,371.5	9.3	0.0%	26,370.4	10.4	0.0%	26,368.1	12.7	0.0%	26,365.7	15.0	0.1%	26,362.3	18.5	0.1%	26,360.0	20.8	0.1%
ME 7	32 44 30	2008	Dry	March	--	11,847.2	11,839.1	8.1	0.1%	11,838.0	9.3	0.1%	11,835.6	11.6	0.1%	11,833.3	13.9	0.1%	11,831.0	16.2	0.1%	11,828.7	18.5	0.2%
ME 7	32 44 30	2008	Dry	April	--	9,061.3	9,045.3	16.1	0.2%	9,042.9	18.4	0.2%	9,038.3	23.0	0.3%	9,033.7	27.7	0.3%	9,029.1	32.3	0.4%	9,024.4	36.9	0.4%
ME 7	32 44 30	2008	Dry	May	--	1,360.6	1,343.2	17.5	1.3%	1,340.6	20.0	1.5%	1,335.5	25.1	1.8%	1,330.7	30.0	2.2%	1,325.8	34.8	2.6%	1,320.9	39.7	2.9%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 44 30	2008	Dry	June	--	452.1	426.6	25.6	5.7%	422.9	29.2	6.5%	415.7	36.4	8.1%	408.5	43.6	9.7%	401.2	50.9	11.3%	394.1	58.1	12.8%
ME 7	32 44 30	2008	Dry	July	--	269.7	243.9	25.9	9.6%	240.2	29.5	11.0%	232.8	36.9	13.7%	225.4	44.3	16.4%	218.0	51.7	19.2%	210.7	59.0	21.9%
ME 7	32 44 30	2008	Dry	August	--	193.7	168.3	25.4	13.1%	164.7	29.0	15.0%	157.4	36.2	18.7%	150.2	43.5	22.4%	142.9	50.7	26.2%	135.7	57.9	29.9%
ME 7	32 44 30	2008	Dry	September	Used in Summary Table Analysis	155.1	130.4	24.7	15.9%	126.9	28.2	18.2%	119.8	35.3	22.8%	112.7	42.4	27.3%	105.6	49.5	31.9%	98.5	56.5	36.5%
ME 7	32 44 30	2009	Critical	October	Used in Summary Table Analysis	942.9	922.9	20.0	2.1%	920.0	22.9	2.4%	914.1	28.8	3.1%	908.3	34.6	3.7%	902.6	40.3	4.3%	896.7	46.1	4.9%
ME 7	32 44 30	2009	Critical	November	Used in Summary Table Analysis	5,631.8	5,616.2	15.6	0.3%	5,613.9	17.9	0.3%	5,609.4	22.5	0.4%	5,604.7	27.1	0.5%	5,600.1	31.7	0.6%	5,595.5	36.3	0.6%
ME 7	32 44 30	2009	Critical	December	--	12,412.0	12,399.3	12.7	0.1%	12,397.0	15.0	0.1%	12,393.5	18.5	0.1%	12,388.9	23.1	0.2%	12,385.4	26.6	0.2%	12,380.8	31.3	0.3%
ME 7	32 44 30	2009	Critical	January	--	8,869.7	8,857.9	11.8	0.1%	8,856.1	13.5	0.2%	8,852.7	17.0	0.2%	8,849.2	20.5	0.2%	8,845.7	24.0	0.3%	8,842.2	27.4	0.3%
ME 7	32 44 30	2009	Critical	February	--	22,822.9	22,812.5	10.4	0.0%	22,811.3	11.6	0.1%	22,807.9	15.0	0.1%	22,805.6	17.4	0.1%	22,802.1	20.8	0.1%	22,798.6	24.3	0.1%
ME 7	32 44 30	2009	Critical	March	--	21,276.6	21,267.4	9.3	0.0%	21,266.2	10.4	0.0%	21,263.9	12.7	0.1%	21,260.4	16.2	0.1%	21,258.1	18.5	0.1%	21,255.8	20.8	0.1%
ME 7	32 44 30	2009	Critical	April	--	10,117.9	10,101.2	16.8	0.2%	10,098.7	19.2	0.2%	10,093.9	24.1	0.2%	10,089.0	28.9	0.3%	10,084.1	33.8	0.3%	10,079.2	38.8	0.4%
ME 7	32 44 30	2009	Critical	May	--	15,666.7	15,645.8	20.8	0.1%	15,643.5	23.1	0.1%	15,637.7	28.9	0.2%	15,630.8	35.9	0.2%	15,625.0	41.7	0.3%	15,619.2	47.5	0.3%
ME 7	32 44 30	2009	Critical	June	--	3,175.3	3,148.3	27.1	0.9%	3,144.4	30.9	1.0%	3,136.6	38.8	1.2%	3,128.8	46.5	1.5%	3,121.2	54.2	1.7%	3,113.4	61.9	2.0%
ME 7	32 44 30	2009	Critical	July	--	1,278.0	1,251.9	26.2	2.0%	1,248.1	29.9	2.3%	1,240.6	37.4	2.9%	1,233.2	44.8	3.5%	1,225.7	52.3	4.1%	1,218.4	59.6	4.7%
ME 7	32 44 30	2009	Critical	August	--	684.8	659.4	25.4	3.7%	655.7	29.1	4.3%	648.3	36.5	5.3%	641.1	43.7	6.4%	633.8	51.0	7.5%	626.5	58.3	8.5%
ME 7	32 44 30	2009	Critical	September	Used in Summary Table Analysis	405.0	381.7	23.2	5.7%	378.4	26.6	6.6%	371.6	33.4	8.2%	365.0	40.0	9.9%	358.3	46.7	11.5%	351.6	53.4	13.2%
ME 7	32 44 30	2010	Below Normal	October	Used in Summary Table Analysis	6,111.3	6,091.2	20.1	0.3%	6,088.2	23.1	0.4%	6,082.3	29.1	0.5%	6,076.5	34.8	0.6%	6,070.8	40.5	0.7%	6,064.9	46.4	0.8%
ME 7	32 44 30	2010	Below Normal	November	Used in Summary Table Analysis	8,374.1	8,357.9	16.2	0.2%	8,355.6	18.5	0.2%	8,350.7	23.4	0.3%	8,345.9	28.1	0.3%	8,341.2	32.9	0.4%	8,336.3	37.7	0.5%
ME 7	32 44 30	2010	Below Normal	December	--	12,519.7	12,506.9	12.7	0.1%	12,504.6	15.0	0.1%	12,500.0	19.7	0.2%	12,496.5	23.1	0.2%	12,491.9	27.8	0.2%	12,488.4	31.3	0.2%
ME 7	32 44 30	2010	Below Normal	January	--	36,780.1	36,767.4	12.7	0.0%	36,766.2	13.9	0.0%	36,762.7	17.4	0.0%	36,758.1	22.0	0.1%	36,754.6	25.5	0.1%	36,751.2	28.9	0.1%
ME 7	32 44 30	2010	Below Normal	February	--	27,400.5	27,390.0	10.4	0.0%	27,388.9	11.6	0.0%	27,385.4	15.0	0.1%	27,381.9	18.5	0.1%	27,378.5	22.0	0.1%	27,376.2	24.3	0.1%
ME 7	32 44 30	2010	Below Normal	March	--	28,973.4	28,964.1	9.3	0.0%	28,961.8	11.6	0.0%	28,959.5	13.9	0.0%	28,956.0	17.4	0.1%	28,953.7	19.7	0.1%	28,950.2	23.1	0.1%
ME 7	32 44 30	2010	Below Normal	April	--	40,265.0	40,255.8	9.3	0.0%	40,253.5	11.6	0.0%	40,251.2	13.9	0.0%	40,248.8	16.2	0.0%	40,245.4	19.7	0.0%	40,243.1	22.0	0.1%
ME 7	32 44 30	2010	Below Normal	May	--	20,461.8	20,444.4	17.4	0.1%	20,442.1	19.7	0.1%	20,437.5	24.3	0.1%	20,431.7	30.1	0.1%	20,427.1	34.7	0.2%	20,422.5	39.4	0.2%
ME 7	32 44 30	2010	Below Normal	June	--	9,505.1	9,479.5	25.6	0.3%	9,475.8	29.3	0.3%	9,468.5	36.6	0.4%	9,461.2	43.9	0.5%	9,454.1	51.0	0.5%	9,446.8	58.3	0.6%
ME 7	32 44 30	2010	Below Normal	July	--	1,468.8	1,444.9	23.8	1.6%	1,441.4	27.3	1.9%	1,434.6	34.1	2.3%	1,427.8	41.0	2.8%	1,420.8	47.9	3.3%	1,414.2	54.5	3.7%
ME 7	32 44 30	2010	Below Normal	August	--	587.9	565.7	22.1	3.8%	562.6	25.3	4.3%	556.2	31.7	5.4%	550.0	37.9	6.5%	543.6	44.3	7.5%	537.3	50.6	8.6%
ME 7	32 44 30	2010	Below Normal	September	Used in Summary Table Analysis	670.8	649.5	21.3	3.2%	646.5	24.3	3.6%	640.3	30.5	4.5%	634.3	36.5	5.4%	628.1	42.6	6.4%	622.0	48.8	7.3%
ME 7	32 44 30	2011	Wet	October	Used in Summary Table Analysis	9,759.8	9,743.4	16.4	0.2%	9,741.1	18.8	0.2%	9,736.3	23.5	0.2%	9,731.6	28.2	0.3%	9,726.9	33.0	0.3%	9,722.0	37.8	0.4%
ME 7	32 44 30	2011	Wet	November	Used in Summary Table Analysis	14,361.1	14,348.4	12.7	0.1%	14,346.1	15.0	0.1%	14,342.6	18.5	0.1%	14,339.1	22.0	0.2%	14,334.5	26.6	0.2%	14,331.0	30.1	0.2%
ME 7	32 44 30	2011	Wet	December	--	34,265.0	34,253.5	11.6	0.0%	34,252.3	12.7	0.0%	34,248.8	16.2	0.0%	34,245.4	19.7	0.1%	34,241.9	23.1	0.1%	34,238.4	26.6	0.1%
ME 7	32 44 30	2011	Wet	January	--	14,262.7	14,253.5	9.3	0.1%	14,252.3	10.4	0.1%	14,250.0	12.7	0.1%	14,246.5	16.2	0.1%	14,244.2	18.5	0.1%	14,240.7	22.0	0.2%
ME 7	32 44 30	2011	Wet	February	--	20,876.2	20,866.9	9.3	0.0%	20,865.7	10.4	0.0%	20,863.4	12.7	0.1%	20,860.0	16.2	0.1%	20,857.6	18.5	0.1%	20,855.3	20.8	0.1%
ME 7	32 44 30	2011	Wet	March	--	52,378.5	52,370.4	8.1	0.0%	52,369.2	9.3	0.0%	52,365.7	12.7	0.0%	52,363.4	15.0	0.0%	52,361.1	17.4	0.0%	52,358.8	19.7	0.0%
ME 7	32 44 30	2011	Wet	April	--	24,928.2	24,920.1	8.1	0.0%	24,919.0	9.3	0.0%	24,916.7	11.6	0.0%	24,913.2	15.0	0.1%	24,910.9	17.4	0.1%	24,908.6	19.7	0.1%
ME 7	32 44 30	2011	Wet	May	--	11,446.3	11,430.1	16.2	0.1%	11,427.8	18.5	0.2%	11,423.1	23.1	0.2%	11,418.4	27.9	0.2%	11,413.7	32.6	0.3%	11,409.0	37.3	0.3%
ME 7	32 44 30	2011	Wet	June	--	7,120.8	7,096.1	24.8	0.3%	7,092.6	28.2	0.4%	7,085.5	35.3	0.5%	7,078.6	42.2	0.6%	7,071.5	49.3	0.7%	7,064.6	56.3	0.8%
ME 7	32 44 30	2011	Wet	July	--	1,839.4	1,814.4	25.0	1.4%	1,810.8	28.6	1.6%	1,803.6	35.8	1.9%	1,796.4	42.9	2.3%	1,789.4	50.0	2.7%	1,782.2	57.2	3.1%
ME 7	32 44 30	2011	Wet	August	--	793.3	771.5	21.7	2.7%	768.4	24.8	3.1%	762.2	31.0	3.9%	756.0	37.2	4.7%	749.8	43.4	5.5%	743.7	49.6	6.3%
ME 7	32 44 30	2011	Wet	September	Used in Summary Table Analysis	450.0	429.8	20.1	4.5%	427.0	23.0	5.1%	421.2	28.8	6.4%	415.5	34.5	7.7%	409.7	40.2	8.9%	404.0	46.0	10.2%
ME 7	32 44 30	2012	Below Normal	October	Used in Summary Table Analysis	4,609.0	4,592.4	16.7	0.4%	4,589.9	19.1	0.4%	4,585.2	23.8	0.5%	4,580.3	28.7	0.6%	4,575.5	33.6	0.7%	4,570.6	38.4	0.8%
ME 7	32 44 30	2012	Below Normal	November	Used in Summary Table Analysis	8,369.4	8,356.1	13.3	0.2%	8,354.2	15.3	0.2%	8,350.3	19.1	0.2%	8,346.4	23.0	0.3%	8,342.5	27.0	0.3%	8,338.5	30.9	0.4%
ME 7	32 44 30	2012	Below Normal	December	--	5,243.3	5,232.1	11.2	0.2%	5,230.4	12.8	0.2%	5,227.2	16.1	0.3%	5,224.0	19.3	0.4%	5,220.6	22.7	0.4%	5,217.2	26.0	0.5%
ME 7	32 44 30	2012	Below Normal	January	--	20,485.0	20,474.5	10.4	0.1%	20,473.4	11.6	0.1%	20,469.9	15.0	0.1%	20,467.6	17.4	0.1%	20,464.1	20.8	0.1%	20,461.8	23.1	0.1%
ME 7	32 44 30	2012	Below Normal	February	--	18,320.6	18,311.3	9.3	0.1%	18,310.2	10.4	0.1%	18,306.7	13.9	0.1%	18,304.4	16.2	0.1%	18,302.1	18.5	0.1%	18,298.6	22.0	0.1%
ME 7	32 44 30	2012	Below Normal	March	--	45,858.8	45,849.5	9.3	0.0%	45,848.4	10.4	0.0%	45,844.9	13.9	0.0%	45,842.6	16.2	0.0%	45,840.3	18.5	0.0%	45,838.0	20.8	0.0%
ME 7	32 44 30	2012	Below Normal	April	--	27,016.2	27,008.1	8.1	0.0%	27,006.9	9.3	0.0%	27,004.6	11.6	0.0%	27,002.3	13.9	0.1%	27,000.0	16.2	0.1%	26,997.7	18.5	0.1%
ME 7	32 44 30	2012	Below Normal	May	--	7,522.5	7,506.4	16.1	0.2%	7,504.1	18.4	0.2%	7,499.3	23.1	0.3%	7,494.7	27.8	0.4%	7,490.0	32.4	0.4%	7,485.3	37.2	0.5%
ME 7	32 44 30	2012	Below Normal	June	--	5,579.7	5,554.5	25.2	0.5%	5,550.9	28.8	0.5%	5,543.9	35.9	0.6%	5,536.7	43.1	0.8%	5,529.5	50.2	0.9%	5,522.3	57.4	1.0%
ME 7	32 44 30	2012	Below Normal	July	--	2,265.3	2,241.0	24.3	1.1%	2,237.5	27.8	1.2%	2,230.6	34.7	1.5%	2,223.6	41.7	1.8%	2,216.7	48.6	2.1%	2,209.7	55.6	2.5%
ME 7	32 44 30	2012	Below Normal	August	--	401.7	381.7	20.0	5.0%	378.8	22.9	5.7%	373.1	28.6	7.1%	367.4	34.3	8.5%	361.7	40.0	10.0%	356.0	45.7	11.4%
ME 7	32 44 30	2012	Below Normal	September	Used in Summary Table Analysis	265.1	246.9	18.2	6.9%	244.3	20.7	7.8%	239.2	25.9	9.8%	234.0	31.1	11.7%	228.8	36.2	13.7%	223.7	41.4	15.6%
ME 7	32 44 30	2013	Below Normal	October	Used in Summary Table Analysis	1,958.0	1,942.0	16.0	0.8%	1,939.7	18.3	0.9%	1,935.2	22.8	1.2%	1,930.6	27.4	1.4%	1,925.9	32.1	1.6%	1,921.4	36.6	1.9%
ME 7	32 44 30	2013	Below Normal	November	Used in Summary Table Analysis	14,923.6	14,910.9	12.7	0.1%	14,908.6	15.0	0.1%	14,905.1	18.5	0.1%	14,901.6	22.0	0.1%	14,898.1	25.5	0.2%	14,893.5	30.1	0.2%
ME 7	32 44 30	2013	Below Normal	December	--	60,516.2	60,504.6	11.6	0.0%	60,502.3	13.9	0.0%	60,498.8	17.4	0.0%	60,496.5	19.7	0.0%	60,493.1	23.1	0.0%	60,489.6	26.6	0.0%
ME 7	32 44 30	2013	Below Normal	January	--	22,351.9	22,342.6	9.3	0.0%	22,341.4	10.4	0.0%	22,339.1	12.7	0.1%	22,335.6	16.2	0.1%	22,333.3	18.5	0.1%	22,329.9	22.0	0.1%
ME 7	32 44 30	2013	Below Normal	February	--	8,919.6	8,910.8	8.8	0.1%	8,909.4	10.2	0.1%	8,906.8	12.7	0.1%	8,904.2	15.4	0.2%	8,901.5	18.1	0.2%	8,899.0	20.6	0.2%
ME 7	32 44 30	2013	Below Normal	March	--	10,442.9	10,434.4	8.6	0.1%	10,433.2	9.7	0.1%	10,430.7	12.3	0.1%	10,428.2	14.7	0.1%	10,425.7	17.2	0.2%	10,423.1	19.8	0.2%
ME 7	32 44 30	2013	Below Normal	April	--	8,328.1	8,312.7	15.4	0.2%	8,310.5	17.6	0.2%	8,306.1	22.0	0.3%	8,301.7	26.4	0.3%	8,297.3	30.8	0.4%	8,292.9	35.2	0.4%
ME 7	32 44 30	2013	Below Normal	May	--	4,477.8	4,459.0	18.8	0.4%	4,456.3	21.5	0.5%	4,450.9	26.9	0.6%	4,445.5	32.3	0.7%	4,440.0	37.7	0.8%	4,434.7	43.1	1.0%
ME 7	32 44 30	2013	Below Normal	June	--	2,129.5	2,106.4	23.1	1.1%	2,103.0	26.5	1.2%	2,096.4	33.1	1.6%	2,089.8	39.7	1.9%	2,083.2	46.3	2.2%	2,076.7	52.8	2.5%
ME 7	32 44 30	2013	Below Normal	July	--	729.5	706.6	22.9	3.1%	703.4	26.2	3.6%	696.9	32.7	4.5%	690.3	39.2	5.4%	683.9	45.7	6.3%	677.4	52.1	7.1%
ME 7	32 44 30	2013	Below Normal	August	--	354.6	332.9	21.7	6.1%	329.8	24.7	7.0%	323.7	30.9	8.7%	317.5	37.1	10.5%	311.3	43.3	12.2%	305.1	49.5	14.0%
ME 7	32 44 30	2013	Below Normal	September	Used in Summary Table Analysis	4,855.3	4,832.8	22.6	0.5%	4,829.6	25.7	0.5%	4,823.1	32.2	0.7%	4,816.7	38.7	0.8%	4,810.2	45.1	0.9%	4,803.7	51.6	1.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 44 30	2014	Critical	October	Used in Summary Table Analysis	287.4	270.6	16.8	5.8%	268.2	19.2	6.7%	263.3	24.1	8.4%	258.5	28.9	10.1%	253.6	33.8	11.8%	248.7	38.7	13.5%
ME 7	32 44 30	2014	Critical	November	Used in Summary Table Analysis	1,577.1	1,563.5	13.5	0.9%	1,561.6	15.5	1.0%	1,557.8	19.3	1.2%	1,553.8	23.3	1.5%	1,549.8	27.3	1.7%	1,545.8	31.3	2.0%
ME 7	32 44 30	2014	Critical	December	--	1,614.8	1,603.1	11.7	0.7%	1,601.5	13.3	0.8%	1,598.0	16.8	1.0%	1,594.7	20.1	1.2%	1,591.2	23.6	1.5%	1,587.8	27.0	1.7%
ME 7	32 44 30	2014	Critical	January	--	2,861.7	2,851.4	10.3	0.4%	2,849.9	11.8	0.4%	2,846.9	14.8	0.5%	2,843.9	17.8	0.6%	2,840.7	20.9	0.7%	2,837.7	24.0	0.8%
ME 7	32 44 30	2014	Critical	February	--	15,862.3	15,853.0	9.3	0.1%	15,851.9	10.4	0.1%	15,849.5	12.7	0.1%	15,846.1	16.2	0.1%	15,843.8	18.5	0.1%	15,841.4	20.8	0.1%
ME 7	32 44 30	2014	Critical	March	--	31,625.0	31,615.7	9.3	0.0%	31,614.6	10.4	0.0%	31,612.3	12.7	0.0%	31,610.0	15.0	0.0%	31,607.6	17.4	0.1%	31,604.2	20.8	0.1%
ME 7	32 44 30	2014	Critical	April	--	13,038.2	13,020.8	17.4	0.1%	13,018.5	19.7	0.2%	13,013.9	24.3	0.2%	13,009.3	28.9	0.2%	13,004.6	33.6	0.3%	13,000.0	38.2	0.3%
ME 7	32 44 30	2014	Critical	May	--	5,220.3	5,200.3	19.9	0.4%	5,197.5	22.8	0.4%	5,191.8	28.5	0.5%	5,186.1	34.1	0.7%	5,180.3	39.9	0.8%	5,174.7	45.6	0.9%
ME 7	32 44 30	2014	Critical	June	--	1,214.0	1,186.2	27.8	2.3%	1,182.3	31.7	2.6%	1,174.4	39.6	3.3%	1,166.6	47.5	3.9%	1,158.7	55.3	4.6%	1,150.9	63.1	5.2%
ME 7	32 44 30	2014	Critical	July	--	558.2	532.0	26.3	4.7%	528.2	30.0	5.4%	520.7	37.5	6.7%	513.3	45.0	8.1%	505.8	52.4	9.4%	498.3	59.9	10.7%
ME 7	32 44 30	2014	Critical	August	--	362.6	337.4	25.3	7.0%	333.7	28.9	8.0%	326.5	36.1	10.0%	319.3	43.3	11.9%	312.1	50.5	13.9%	304.9	57.7	15.9%
ME 7	32 44 30	2014	Critical	September	Used in Summary Table Analysis	2,609.6	2,584.6	25.0	1.0%	2,581.0	28.6	1.1%	2,573.8	35.8	1.4%	2,566.7	42.9	1.6%	2,559.5	50.1	1.9%	2,552.3	57.3	2.2%
ME 7	32 44 30	2015	Dry	October	Used in Summary Table Analysis	11,483.8	11,463.7	20.1	0.2%	11,460.8	23.0	0.2%	11,455.2	28.6	0.2%	11,449.4	34.4	0.3%	11,443.9	39.9	0.3%	11,438.0	45.8	0.4%
ME 7	32 44 30	2015	Dry	November	Used in Summary Table Analysis	9,164.8	9,149.8	15.0	0.2%	9,147.6	17.2	0.2%	9,143.3	21.5	0.2%	9,138.9	25.9	0.3%	9,134.5	30.3	0.3%	9,130.1	34.7	0.4%
ME 7	32 44 30	2015	Dry	December	--	33,081.0	33,068.3	12.7	0.0%	33,066.0	15.0	0.0%	33,062.5	18.5	0.1%	33,059.0	22.0	0.1%	33,055.6	25.5	0.1%	33,050.9	30.1	0.1%
ME 7	32 44 30	2015	Dry	January	--	14,648.1	14,637.7	10.4	0.1%	14,635.4	12.7	0.1%	14,633.1	15.0	0.1%	14,629.6	18.5	0.1%	14,626.2	22.0	0.2%	14,622.7	25.5	0.2%
ME 7	32 44 30	2015	Dry	February	--	27,419.0	27,409.7	9.3	0.0%	27,407.4	11.6	0.0%	27,405.1	13.9	0.1%	27,401.6	17.4	0.1%	27,399.3	19.7	0.1%	27,395.8	23.1	0.1%
ME 7	32 44 30	2015	Dry	March	--	11,615.7	11,606.5	9.3	0.1%	11,605.3	10.4	0.1%	11,603.0	12.7	0.1%	11,600.7	15.0	0.1%	11,598.4	17.4	0.1%	11,594.9	20.8	0.2%
ME 7	32 44 30	2015	Dry	April	--	8,508.4	8,492.0	16.4	0.2%	8,489.6	18.9	0.2%	8,484.8	23.6	0.3%	8,480.1	28.4	0.3%	8,475.3	33.1	0.4%	8,470.6	37.8	0.4%
ME 7	32 44 30	2015	Dry	May	--	1,516.0	1,496.3	19.7	1.3%	1,493.5	22.5	1.5%	1,487.8	28.1	1.9%	1,482.2	33.8	2.2%	1,476.6	39.4	2.6%	1,470.9	45.0	3.0%
ME 7	32 44 30	2015	Dry	June	--	663.5	637.5	26.0	3.9%	633.8	29.7	4.5%	626.5	37.0	5.6%	619.1	44.4	6.7%	611.8	51.7	7.8%	604.5	59.0	8.9%
ME 7	32 44 30	2015	Dry	July	--	280.4	254.4	26.0	9.3%	250.7	29.7	10.6%	243.2	37.2	13.3%	235.7	44.7	15.9%	228.2	52.1	18.6%	220.8	59.5	21.2%
ME 7	32 44 30	2015	Dry	August	--	180.3	155.1	25.3	14.0%	151.4	28.9	16.0%	144.1	36.2	20.1%	136.8	43.6	24.1%	129.5	50.9	28.2%	122.2	58.1	32.2%
ME 7	32 44 30	2015	Dry	September	Used in Summary Table Analysis	133.2	110.3	22.9	17.2%	106.8	26.4	19.8%	99.6	33.6	25.2%	92.6	40.6	30.5%	85.3	47.9	35.9%	78.2	55.0	41.3%
ME 7	32 44 30	2016	Above Normal	October	Used in Summary Table Analysis	98.0	77.7	20.2	20.6%	74.3	23.6	24.1%	68.6	29.4	30.0%	62.5	35.5	36.2%	56.5	41.4	42.3%	50.8	47.1	48.1%
ME 7	32 44 30	2016	Above Normal	November	Used in Summary Table Analysis	3,977.7	3,962.5	15.2	0.4%	3,959.8	17.8	0.4%	3,955.3	22.3	0.6%	3,950.6	27.1	0.7%	3,945.6	32.1	0.8%	3,940.9	36.8	0.9%
ME 7	32 44 30	2016	Above Normal	December	--	37,164.4	37,150.5	13.9	0.0%	37,148.1	16.2	0.0%	37,144.7	19.7	0.1%	37,140.0	24.3	0.1%	37,136.6	27.8	0.1%	37,131.9	32.4	0.1%
ME 7	32 44 30	2016	Above Normal	January	--	57,880.8	57,869.2	11.6	0.0%	57,866.9	13.9	0.0%	57,863.4	17.4	0.0%	57,860.0	20.8	0.0%	57,856.5	24.3	0.0%	57,853.0	27.8	0.0%
ME 7	32 44 30	2016	Above Normal	February	--	24,360.0	24,349.5	10.4	0.0%	24,348.4	11.6	0.0%	24,346.1	13.9	0.1%	24,342.6	17.4	0.1%	24,339.1	20.8	0.1%	24,336.8	23.1	0.1%
ME 7	32 44 30	2016	Above Normal	March	--	42,042.8	42,033.6	9.3	0.0%	42,032.4	10.4	0.0%	42,028.9	13.9	0.0%	42,026.6	16.2	0.0%	42,023.1	19.7	0.0%	42,020.8	22.0	0.1%
ME 7	32 44 30	2016	Above Normal	April	--	18,611.1	18,603.0	8.1	0.0%	18,601.9	9.3	0.0%	18,599.5	11.6	0.1%	18,596.1	15.0	0.1%	18,593.8	17.4	0.1%	18,591.4	19.7	0.1%
ME 7	32 44 30	2016	Above Normal	May	--	5,243.9	5,233.7	10.2	0.2%	5,232.1	11.8	0.2%	5,229.1	14.8	0.3%	5,226.0	17.8	0.3%	5,222.8	21.1	0.4%	5,219.8	24.1	0.5%
ME 7	32 44 30	2016	Above Normal	June	--	1,524.3	1,504.4	19.9	1.3%	1,501.5	22.8	1.5%	1,495.9	28.4	1.9%	1,490.2	34.1	2.2%	1,484.5	39.8	2.6%	1,478.8	45.5	3.0%
ME 7	32 44 30	2016	Above Normal	July	--	839.4	816.9	22.5	2.7%	813.5	25.8	3.1%	807.1	32.2	3.8%	800.7	38.7	4.6%	794.2	45.2	5.4%	787.7	51.6	6.2%
ME 7	32 44 30	2016	Above Normal	August	--	508.6	486.2	22.4	4.4%	483.0	25.7	5.0%	476.6	32.1	6.3%	470.1	38.5	7.6%	463.6	45.0	8.8%	457.2	51.5	10.1%
ME 7	32 44 30	2016	Above Normal	September	Used in Summary Table Analysis	344.3	324.0	20.3	5.9%	320.4	23.9	6.9%	314.4	29.9	8.7%	308.1	36.1	10.5%	302.0	42.3	12.3%	295.7	48.5	14.1%
ME 7	32 44 30	2017	Wet	October	Used in Summary Table Analysis	18,501.2	18,483.8	17.4	0.1%	18,481.5	19.7	0.1%	18,476.9	24.3	0.1%	18,472.2	28.9	0.2%	18,465.3	35.9	0.2%	18,461.8	39.4	0.2%
ME 7	32 44 30	2017	Wet	November	Used in Summary Table Analysis	19,059.0	19,046.3	12.7	0.1%	19,044.0	15.0	0.1%	19,040.5	18.5	0.1%	19,035.9	23.1	0.1%	19,032.4	26.6	0.1%	19,027.8	31.3	0.2%
ME 7	32 44 30	2017	Wet	December	--	24,476.9	24,465.3	11.6	0.0%	24,464.1	12.7	0.1%	24,460.6	16.2	0.1%	24,457.2	19.7	0.1%	24,453.7	23.1	0.1%	24,450.2	26.6	0.1%
ME 7	32 44 30	2017	Wet	January	--	107,964.1	107,953.7	10.4	0.0%	107,951.4	12.7	0.0%	107,949.1	15.0	0.0%	107,945.6	18.5	0.0%	107,942.1	22.0	0.0%	107,939.8	24.3	0.0%
ME 7	32 44 30	2017	Wet	February	--	82,456.0	82,446.8	9.3	0.0%	82,445.6	10.4	0.0%	82,443.3	12.7	0.0%	82,439.8	16.2	0.0%	82,437.5	18.5	0.0%	82,434.0	22.0	0.0%
ME 7	32 44 30	2017	Wet	March	--	27,468.8	27,459.5	9.3	0.0%	27,458.3	10.4	0.0%	27,456.0	12.7	0.0%	27,452.5	16.2	0.1%	27,450.2	18.5	0.1%	27,447.9	20.8	0.1%
ME 7	32 44 30	2017	Wet	April	--	23,147.0	23,138.9	8.1	0.0%	23,137.7	9.3	0.0%	23,135.4	11.6	0.1%	23,133.1	13.9	0.1%	23,130.8	16.2	0.1%	23,128.5	18.5	0.1%
ME 7	32 44 30	2017	Wet	May	--	6,282.5	6,272.2	10.3	0.2%	6,270.7	11.8	0.2%	6,267.7	14.8	0.2%	6,264.7	17.8	0.3%	6,261.7	20.8	0.3%	6,258.6	24.0	0.4%
ME 7	32 44 30	2017	Wet	June	--	2,147.3	2,127.2	20.1	0.9%	2,124.3	23.0	1.1%	2,118.5	28.8	1.3%	2,112.7	34.6	1.6%	2,107.1	40.3	1.9%	2,101.3	46.1	2.1%
ME 7	32 44 30	2017	Wet	July	--	955.1	932.5	22.6	2.4%	929.3	25.8	2.7%	922.9	32.2	3.4%	916.4	38.7	4.1%	910.0	45.1	4.7%	903.6	51.5	5.4%
ME 7	32 44 30	2017	Wet	August	--	527.3	505.1	22.3	4.2%	501.9	25.5	4.8%	495.5	31.8	6.0%	489.2	38.1	7.2%	482.8	44.5	8.4%	476.5	50.8	9.6%
ME 7	32 44 30	2017	Wet	September	Used in Summary Table Analysis	340.9	320.1	20.8	6.1%	317.1	23.8	7.0%	311.2	29.7	8.7%	305.2	35.7	10.5%	299.2	41.7	12.2%	293.2	47.7	14.0%
ME 7	32 44 30	2018	Above Normal	October	Used in Summary Table Analysis	293.5	276.7	16.8	5.7%	274.2	19.3	6.6%	269.4	24.1	8.2%	264.5	29.1	9.9%	259.6	33.9	11.6%	254.7	38.8	13.2%
ME 7	32 44 30	2018	Above Normal	November	Used in Summary Table Analysis	11,035.4	11,022.1	13.3	0.1%	11,020.0	15.4	0.1%	11,016.2	19.2	0.2%	11,012.2	23.3	0.2%	11,008.2	27.2	0.2%	11,004.3	31.1	0.3%
ME 7	32 44 30	2018	Above Normal	December	--	5,472.5	5,461.2	11.2	0.2%	5,459.6	12.8	0.2%	5,456.3	16.2	0.3%	5,452.9	19.6	0.4%	5,449.5	22.9	0.4%	5,446.2	26.3	0.5%
ME 7	32 44 30	2018	Above Normal	January	--	18,195.6	18,185.2	10.4	0.1%	18,182.9	12.7	0.1%	18,180.6	15.0	0.1%	18,177.1	18.5	0.1%	18,174.8	20.8	0.1%	18,171.3	24.3	0.1%
ME 7	32 44 30	2018	Above Normal	February	--	7,620.3	7,611.5	8.8	0.1%	7,610.2	10.1	0.1%	7,607.6	12.6	0.2%	7,605.0	15.3	0.2%	7,602.3	17.9	0.2%	7,599.7	20.6	0.3%
ME 7	32 44 30	2018	Above Normal	March	--	20,968.8	20,960.6	8.1	0.0%	20,958.3	10.4	0.0%	20,956.0	12.7	0.1%	20,953.7	15.0	0.1%	20,951.4	17.4	0.1%	20,949.1	19.7	0.1%
ME 7	32 44 30	2018	Above Normal	April	--	32,513.9	32,505.8	8.1	0.0%	32,505.8	8.1	0.0%	32,503.5	10.4	0.0%	32,501.2	12.7	0.0%	32,498.8	15.0	0.0%	32,496.5	17.4	0.1%
ME 7	32 44 30	2018	Above Normal	May	--	7,001.3	6,985.8	15.5	0.2%	6,983.4	17.8	0.3%	6,979.1	22.2	0.3%	6,974.5	26.7	0.4%	6,970.1	31.1	0.4%	6,965.9	35.4	0.5%
ME 7	32 44 30	2018	Above Normal	June	--	1,929.7	1,909.0	20.7	1.1%	1,906.1	23.6	1.2%	1,900.2	29.5	1.5%	1,894.4	35.3	1.8%	1,888.4	41.3	2.1%	1,882.6	47.1	2.4%
ME 7	32 44 30	2018	Above Normal	July	--	799.2	776.3	22.9	2.9%	773.0	26.1	3.3%	766.5	32.6	4.1%	760.0	39.2	4.9%	753.5	45.7	5.7%	747.0	52.2	6.5%
ME 7	32 44 30	2018	Above Normal	August	--	460.5	439.0	21.5	4.7%	435.9	24.6	5.3%	429.7	30.8	6.7%	423.6	36.9	8.0%	417.4	43.1	9.4%	411.2	49.3	10.7%
ME 7	32 44 30	2018	Above Normal	September	Used in Summary Table Analysis	316.9	296.0	20.9	6.6%	293.0	23.9	7.5%	287.0	29.8	9.4%	281.0	35.8	11.3%	275.0	41.9	13.2%	269.0	47.9	15.1%
ME 7	32 44 30	2019	Below Normal	October	Used in Summary Table Analysis	222.1	205.5	16.6	7.5%	203.1	19.0	8.6%	198.3	23.8	10.7%	193.4	28.8	13.0%	188.6	33.5	15.1%	183.8	38.3	17.2%
ME 7	32 44 30	2019	Below Normal	November	Used in Summary Table Analysis	6,785.6	6,772.1	13.5	0.2%	6,770.1	15.5	0.2%	6,766.2	19.4	0.3%	6,762.3	23.4	0.3%	6,758.2	27.4	0.4%	6,754.2	31.5	0.5%
ME 7	32 44 30	2019	Below Normal	December	--	14,936.3	14,924.8	11.6	0.1%	14,922.5	13.9	0.1%	14,919.0	17.4	0.1%	14,916.7	19.7	0.1%	14,913.2	23.1	0.2%	14,909.7	26.6	0.2%
ME 7	32 44 30	2019	Below Normal	January	--	35,761.6	35,751.2	10.4	0.0%	35,750.0	11.6	0.0%	35,747.7	13.9	0.0%	35,744.2	17.4	0.0%	35,740.7	20.8	0.1%	35,738.4	23.1	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 44 30	2019	Below Normal	February	--	142,500.0	142,488.4	11.6	0.0%	142,488.4	11.6	0.0%	142,488.4	11.6	0.0%	142,476.9	23.1	0.0%	142,476.9	23.1	0.0%	142,476.9	23.1	0.0%
ME 7	32 44 30	2019	Below Normal	March	--	42,613.4	42,604.2	9.3	0.0%	42,603.0	10.4	0.0%	42,600.7	12.7	0.0%	42,598.4	15.0	0.0%	42,597.2	16.2	0.0%	42,593.8	19.7	0.0%
ME 7	32 44 30	2019	Below Normal	April	--	15,356.5	15,348.4	8.1	0.1%	15,347.2	9.3	0.1%	15,344.9	11.6	0.1%	15,342.6	13.9	0.1%	15,340.3	16.2	0.1%	15,338.0	18.5	0.1%
ME 7	32 44 30	2019	Below Normal	May	--	17,354.2	17,338.0	16.2	0.1%	17,335.6	18.5	0.1%	17,329.9	24.3	0.1%	17,325.2	28.9	0.2%	17,320.6	33.6	0.2%	17,316.0	38.2	0.2%
ME 7	32 44 30	2019	Below Normal	June	--	4,247.2	4,224.9	22.3	0.5%	4,221.6	25.6	0.6%	4,215.5	31.7	0.7%	4,209.5	37.7	0.9%	4,203.5	43.8	1.0%	4,197.5	49.8	1.2%
ME 7	32 44 30	2019	Below Normal	July	--	1,382.3	1,359.3	23.0	1.7%	1,356.0	26.3	1.9%	1,349.4	32.9	2.4%	1,342.9	39.4	2.8%	1,336.3	45.9	3.3%	1,329.9	52.4	3.8%
ME 7	32 44 30	2019	Below Normal	August	--	616.6	594.6	22.0	3.6%	591.4	25.2	4.1%	585.2	31.5	5.1%	578.9	37.7	6.1%	572.6	44.1	7.1%	566.3	50.3	8.2%
ME 7	32 44 30	2019	Below Normal	September	Used in Summary Table Analysis	480.5	459.8	20.7	4.3%	456.9	23.7	4.9%	450.9	29.6	6.2%	444.9	35.6	7.4%	439.0	41.6	8.7%	433.0	47.6	9.9%
ME 7	32 44 30	2020	Dry	October	Used in Summary Table Analysis	370.4	354.4	16.0	4.3%	352.1	18.3	4.9%	347.4	23.0	6.2%	342.7	27.7	7.5%	338.0	32.4	8.7%	333.3	37.1	10.0%
ME 7	32 44 30	2020	Dry	November	Used in Summary Table Analysis	344.2	331.4	12.7	3.7%	329.5	14.6	4.2%	325.8	18.4	5.3%	322.0	22.2	6.4%	318.2	25.9	7.5%	314.4	29.8	8.6%
ME 7	32 44 30	2020	Dry	December	--	13,678.2	13,667.8	10.4	0.1%	13,665.5	12.7	0.1%	13,662.0	16.2	0.1%	13,658.6	19.7	0.1%	13,655.1	23.1	0.2%	13,651.6	26.6	0.2%
ME 7	32 44 30	2020	Dry	January	--	22,638.9	22,629.6	9.3	0.0%	22,627.3	11.6	0.1%	22,625.0	13.9	0.1%	22,621.5	17.4	0.1%	22,618.1	20.8	0.1%	22,614.6	24.3	0.1%
ME 7	32 44 30	2020	Dry	February	--	7,430.6	7,421.6	8.9	0.1%	7,420.3	10.3	0.1%	7,417.6	13.0	0.2%	7,414.8	15.7	0.2%	7,412.0	18.5	0.2%	7,409.4	21.2	0.3%
ME 7	32 44 30	2020	Dry	March	--	7,304.3	7,295.9	8.3	0.1%	7,294.7	9.6	0.1%	7,292.1	12.2	0.2%	7,289.6	14.7	0.2%	7,287.0	17.2	0.2%	7,284.5	19.8	0.3%
ME 7	32 44 30	2020	Dry	April	--	5,548.7	5,532.4	16.3	0.3%	5,530.0	18.8	0.3%	5,525.2	23.5	0.4%	5,520.5	28.2	0.5%	5,515.6	33.1	0.6%	5,510.9	37.8	0.7%
ME 7	32 44 30	2020	Dry	May	--	7,460.5	7,440.7	19.8	0.3%	7,437.8	22.7	0.3%	7,432.1	28.5	0.4%	7,426.3	34.3	0.5%	7,420.5	40.0	0.5%	7,414.8	45.7	0.6%
ME 7	32 44 30	2020	Dry	June	--	2,111.3	2,084.6	26.7	1.3%	2,080.9	30.4	1.4%	2,073.6	37.7	1.8%	2,066.3	45.0	2.1%	2,059.0	52.3	2.5%	2,051.7	59.6	2.8%
ME 7	32 44 30	2020	Dry	July	--	810.6	783.8	26.8	3.3%	780.0	30.7	3.8%	772.3	38.3	4.7%	764.6	46.0	5.7%	757.0	53.7	6.6%	749.3	61.3	7.6%
ME 7	32 44 30	2020	Dry	August	--	414.1	387.5	26.6	6.4%	383.7	30.4	7.3%	376.1	38.0	9.2%	368.5	45.6	11.0%	360.9	53.3	12.9%	353.3	60.9	14.7%
ME 7	32 44 30	2020	Dry	September	Used in Summary Table Analysis	263.3	238.9	24.3	9.2%	235.5	27.8	10.6%	227.6	35.6	13.5%	220.4	42.9	16.3%	212.9	50.4	19.1%	205.5	57.8	21.9%
ME 7	32 43 31	2000	Above Normal	October	Used in Summary Table Analysis	840.9	823.9	16.9	2.0%	821.5	19.4	2.3%	816.6	24.2	2.9%	811.7	29.2	3.5%	806.7	34.2	4.1%	801.8	39.1	4.6%
ME 7	32 43 31	2000	Above Normal	November	Used in Summary Table Analysis	12,436.3	12,422.5	13.9	0.1%	12,421.3	15.0	0.1%	12,416.7	19.7	0.2%	12,413.2	23.1	0.2%	12,408.6	27.8	0.2%	12,405.1	31.3	0.3%
ME 7	32 43 31	2000	Above Normal	December	--	10,981.7	10,970.5	11.2	0.1%	10,968.8	13.0	0.1%	10,965.4	16.3	0.1%	10,962.0	19.7	0.2%	10,958.6	23.1	0.2%	10,955.1	26.6	0.2%
ME 7	32 43 31	2000	Above Normal	January	--	29,104.2	29,094.9	9.3	0.0%	29,092.6	11.6	0.0%	29,090.3	13.9	0.0%	29,086.8	17.4	0.1%	29,083.3	20.8	0.1%	29,081.0	23.1	0.1%
ME 7	32 43 31	2000	Above Normal	February	--	37,387.7	37,378.5	9.3	0.0%	37,377.3	10.4	0.0%	37,373.8	13.9	0.0%	37,371.5	16.2	0.0%	37,369.2	18.5	0.0%	37,365.7	22.0	0.1%
ME 7	32 43 31	2000	Above Normal	March	--	18,424.8	18,416.7	8.1	0.0%	18,415.5	9.3	0.1%	18,413.2	11.6	0.1%	18,410.9	13.9	0.1%	18,408.6	16.2	0.1%	18,406.3	18.5	0.1%
ME 7	32 43 31	2000	Above Normal	April	--	12,400.5	12,392.4	8.1	0.1%	12,391.2	9.3	0.1%	12,388.9	11.6	0.1%	12,386.6	13.9	0.1%	12,384.3	16.2	0.1%	12,381.9	18.5	0.1%
ME 7	32 43 31	2000	Above Normal	May	--	7,167.4	7,151.4	16.0	0.2%	7,149.1	18.3	0.3%	7,144.4	22.9	0.3%	7,139.8	27.5	0.4%	7,135.2	32.2	0.4%	7,130.4	36.9	0.5%
ME 7	32 43 31	2000	Above Normal	June	--	2,643.5	2,619.1	24.4	0.9%	2,615.5	28.0	1.1%	2,608.6	35.0	1.3%	2,601.5	42.0	1.6%	2,594.6	49.0	1.9%	2,587.5	56.0	2.1%
ME 7	32 43 31	2000	Above Normal	July	--	1,010.6	987.5	23.1	2.3%	984.2	26.4	2.6%	977.7	32.9	3.3%	971.1	39.5	3.9%	964.6	46.0	4.6%	958.0	52.6	5.2%
ME 7	32 43 31	2000	Above Normal	August	--	541.5	519.7	21.8	4.0%	516.6	25.0	4.6%	510.3	31.2	5.8%	504.1	37.4	6.9%	497.9	43.6	8.1%	491.6	49.9	9.2%
ME 7	32 43 31	2000	Above Normal	September	Used in Summary Table Analysis	313.1	293.3	19.7	6.3%	290.5	22.6	7.2%	284.8	28.3	9.0%	279.2	33.9	10.8%	273.5	39.6	12.6%	267.8	45.3	14.5%
ME 7	32 43 31	2001	Dry	October	Used in Summary Table Analysis	3,894.4	3,877.8	16.7	0.4%	3,875.5	19.0	0.5%	3,870.6	23.8	0.6%	3,865.7	28.7	0.7%	3,861.0	33.4	0.9%	3,856.1	38.3	1.0%
ME 7	32 43 31	2001	Dry	November	Used in Summary Table Analysis	6,247.5	6,234.3	13.2	0.2%	6,232.3	15.2	0.2%	6,228.5	19.0	0.3%	6,224.5	22.9	0.4%	6,220.7	26.7	0.4%	6,216.7	30.8	0.5%
ME 7	32 43 31	2001	Dry	December	--	8,962.4	8,951.0	11.3	0.1%	8,949.4	13.0	0.1%	8,946.1	16.3	0.2%	8,942.7	19.7	0.2%	8,939.4	23.0	0.3%	8,936.0	26.4	0.3%
ME 7	32 43 31	2001	Dry	January	--	13,020.8	13,011.6	9.3	0.1%	13,010.4	10.4	0.1%	13,006.9	13.9	0.1%	13,003.5	17.4	0.1%	13,001.2	19.7	0.2%	12,997.7	23.1	0.2%
ME 7	32 43 31	2001	Dry	February	--	17,619.2	17,611.1	8.1	0.0%	17,608.8	10.4	0.1%	17,606.5	12.7	0.1%	17,604.2	15.0	0.1%	17,601.9	17.4	0.1%	17,598.4	20.8	0.1%
ME 7	32 43 31	2001	Dry	March	--	12,375.0	12,366.9	8.1	0.1%	12,365.7	9.3	0.1%	12,363.4	11.6	0.1%	12,360.0	15.0	0.1%	12,357.6	17.4	0.1%	12,355.3	19.7	0.2%
ME 7	32 43 31	2001	Dry	April	--	11,053.9	11,037.4	16.6	0.1%	11,035.1	18.9	0.2%	11,030.3	23.6	0.2%	11,025.6	28.4	0.3%	11,020.8	33.1	0.3%	11,016.1	37.8	0.3%
ME 7	32 43 31	2001	Dry	May	--	2,644.1	2,624.3	19.8	0.7%	2,621.5	22.6	0.9%	2,615.9	28.2	1.1%	2,610.1	34.0	1.3%	2,604.4	39.7	1.5%	2,598.7	45.4	1.7%
ME 7	32 43 31	2001	Dry	June	--	2,703.2	2,675.3	27.9	1.0%	2,671.3	31.9	1.2%	2,663.4	39.8	1.5%	2,655.6	47.7	1.8%	2,647.7	55.6	2.1%	2,639.8	63.4	2.3%
ME 7	32 43 31	2001	Dry	July	--	729.9	703.0	26.8	3.7%	699.2	30.6	4.2%	691.6	38.3	5.2%	684.0	45.9	6.3%	676.4	53.5	7.3%	668.7	61.2	8.4%
ME 7	32 43 31	2001	Dry	August	--	188.1	161.9	26.3	14.0%	158.1	30.0	16.0%	150.6	37.5	19.9%	143.2	45.0	23.9%	135.7	52.4	27.9%	128.2	60.0	31.9%
ME 7	32 43 31	2001	Dry	September	Used in Summary Table Analysis	111.9	87.9	24.0	21.4%	84.4	27.5	24.5%	77.6	34.3	30.7%	70.8	41.1	36.8%	63.9	48.0	42.9%	57.0	54.9	49.1%
ME 7	32 43 31	2002	Below Normal	October	Used in Summary Table Analysis	283.1	262.5	20.5	7.2%	259.6	23.5	8.3%	253.6	29.4	10.4%	247.7	35.3	12.5%	241.9	41.2	14.6%	235.8	47.3	16.7%
ME 7	32 43 31	2002	Below Normal	November	Used in Summary Table Analysis	12,189.8	12,173.6	16.2	0.1%	12,171.3	18.5	0.2%	12,166.7	23.1	0.2%	12,162.0	27.8	0.2%	12,157.4	32.4	0.3%	12,151.6	38.2	0.3%
ME 7	32 43 31	2002	Below Normal	December	--	36,158.6	36,144.7	13.9	0.0%	36,141.2	17.4	0.0%	36,137.7	20.8	0.1%	36,133.1	25.5	0.1%	36,129.6	28.9	0.1%	36,125.0	33.6	0.1%
ME 7	32 43 31	2002	Below Normal	January	--	31,178.2	31,166.7	11.6	0.0%	31,164.4	13.9	0.0%	31,160.9	17.4	0.1%	31,157.4	20.8	0.1%	31,153.9	24.3	0.1%	31,150.5	27.8	0.1%
ME 7	32 43 31	2002	Below Normal	February	--	24,858.8	24,848.4	10.4	0.0%	24,847.2	11.6	0.0%	24,843.8	15.0	0.1%	24,840.3	18.5	0.1%	24,838.0	20.8	0.1%	24,834.5	24.3	0.1%
ME 7	32 43 31	2002	Below Normal	March	--	17,922.5	17,912.0	10.4	0.1%	17,910.9	11.6	0.1%	17,907.4	15.0	0.1%	17,905.1	17.4	0.1%	17,901.6	20.8	0.1%	17,899.3	23.1	0.1%
ME 7	32 43 31	2002	Below Normal	April	--	9,983.0	9,966.2	16.8	0.2%	9,963.8	19.2	0.2%	9,958.9	24.1	0.2%	9,954.2	28.8	0.3%	9,949.3	33.7	0.3%	9,944.4	38.5	0.4%
ME 7	32 43 31	2002	Below Normal	May	--	3,344.1	3,324.2	19.9	0.6%	3,321.4	22.7	0.7%	3,315.6	28.5	0.9%	3,310.0	34.1	1.0%	3,304.2	39.9	1.2%	3,298.5	45.6	1.4%
ME 7	32 43 31	2002	Below Normal	June	--	869.2	845.8	23.4	2.7%	842.4	26.7	3.1%	835.8	33.4	3.8%	829.2	40.0	4.6%	822.5	46.7	5.4%	815.8	53.3	6.1%
ME 7	32 43 31	2002	Below Normal	July	--	378.5	354.4	24.1	6.4%	350.9	27.5	7.3%	344.1	34.4	9.1%	337.2	41.3	10.9%	330.3	48.2	12.7%	323.4	55.1	14.6%
ME 7	32 43 31	2002	Below Normal	August	--	245.1	222.2	22.9	9.3%	218.9	26.2	10.7%	212.3	32.8	13.4%	205.7	39.4	16.1%	199.2	45.9	18.7%	192.6	52.5	21.4%
ME 7	32 43 31	2002	Below Normal	September	Used in Summary Table Analysis	181.2	159.2	22.0	12.1%	156.1	25.1	13.9%	149.7	31.4	17.4%	143.4	37.8	20.9%	137.1	44.1	24.3%	130.7	50.5	27.8%
ME 7	32 43 31	2003	Wet	October	Used in Summary Table Analysis	145.8	127.4	18.3	12.6%	124.8	21.0	14.4%	119.4	26.3	18.1%	114.1	31.7	21.7%	108.7	37.0	25.4%	103.4	42.4	29.1%
ME 7	32 43 31	2003	Wet	November	Used in Summary Table Analysis	917.2	902.3	15.0	1.6%	900.0	17.2	1.9%	895.6	21.6	2.4%	891.2	26.0	2.8%	886.8	30.4	3.3%	882.4	34.8	3.8%
ME 7	32 43 31	2003	Wet	December	--	57,934.0	57,921.3	12.7	0.0%	57,919.0	15.0	0.0%	57,915.5	18.5	0.0%	57,910.9	23.1	0.0%	57,907.4	26.6	0.0%	57,902.8	31.3	0.1%
ME 7	32 43 31	2003	Wet	January	--	31,759.3	31,747.7	11.6	0.0%	31,746.5	12.7	0.0%	31,743.1	16.2	0.1%	31,739.6	19.7	0.1%	31,736.1	23.1	0.1%	31,732.6	26.6	0.1%
ME 7	32 43 31	2003	Wet	February	--	20,476.9	20,466.4	10.4	0.1%	20,465.3	11.6	0.1%	20,461.8	15.0	0.1%	20,459.5	17.4	0.1%	20,456.0	20.8	0.1%	20,452.5	24.3	0.1%
ME 7	32 43 31	2003	Wet	March	--	24,224.5	24,215.3	9.3	0.0%	24,214.1	10.4	0.0%	24,210.6	13.9	0.1%	24,208.3	16.2	0.1%	24,206.0	18.5	0.1%	24,202.5	22.0	0.1%
ME 7	32 43 31	2003	Wet	April	--	43,377.3	43,368.1	9.3	0.0%	43,366.9	10.4	0.0%	43,364.6	12.7	0.0%	43,362.3	15.0	0.0%	43,358.8	18.5	0.0%	43,356.5	20.8	0.0%
ME 7	32 43 31	2003	Wet	May	--	12,287.0	12,269.7	17.4	0.1%	12,267.4	19.7	0.2%	12,262.7	24.3	0.2%	12,258.1	28.9	0.2%	12,253.5	33.6	0.3%	12,248.8	38.2	0.3%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 43 31	2003	Wet	June	--	3,186.0	3,163.8	22.2	0.7%	3,160.6	25.3	0.8%	3,154.4	31.6	1.0%	3,148.1	37.8	1.2%	3,141.9	44.1	1.4%	3,135.6	50.3	1.6%
ME 7	32 43 31	2003	Wet	July	--	1,496.1	1,472.2	23.8	1.6%	1,468.9	27.2	1.8%	1,462.2	33.9	2.3%	1,455.3	40.7	2.7%	1,448.5	47.6	3.2%	1,441.7	54.4	3.6%
ME 7	32 43 31	2003	Wet	August	--	781.1	758.0	23.2	3.0%	754.6	26.6	3.4%	748.0	33.2	4.2%	741.3	39.8	5.1%	734.6	46.5	6.0%	727.8	53.3	6.8%
ME 7	32 43 31	2003	Wet	September	Used in Summary Table Analysis	477.6	457.3	20.3	4.3%	454.3	23.2	4.9%	448.5	29.1	6.1%	442.6	35.0	7.3%	436.8	40.8	8.5%	430.9	46.7	9.8%
ME 7	32 43 31	2004	Wet	October	Used in Summary Table Analysis	344.0	327.0	17.0	4.9%	324.5	19.5	5.7%	319.5	24.4	7.1%	314.6	29.4	8.5%	309.6	34.4	10.0%	304.6	39.4	11.5%
ME 7	32 43 31	2004	Wet	November	Used in Summary Table Analysis	5,936.9	5,923.0	13.9	0.2%	5,920.9	16.0	0.3%	5,916.9	20.0	0.3%	5,912.7	24.2	0.4%	5,908.6	28.4	0.5%	5,904.4	32.5	0.5%
ME 7	32 43 31	2004	Wet	December	--	36,886.6	36,875.0	11.6	0.0%	36,872.7	13.9	0.0%	36,869.2	17.4	0.0%	36,865.7	20.8	0.1%	36,862.3	24.3	0.1%	36,857.6	28.9	0.1%
ME 7	32 43 31	2004	Wet	January	--	31,863.4	31,853.0	10.4	0.0%	31,851.9	11.6	0.0%	31,848.4	15.0	0.0%	31,846.1	17.4	0.1%	31,842.6	20.8	0.1%	31,839.1	24.3	0.1%
ME 7	32 43 31	2004	Wet	February	--	38,612.3	38,603.0	9.3	0.0%	38,601.9	10.4	0.0%	38,599.5	12.7	0.0%	38,596.1	16.2	0.0%	38,593.8	18.5	0.0%	38,590.3	22.0	0.1%
ME 7	32 43 31	2004	Wet	March	--	16,591.4	16,583.3	8.1	0.0%	16,582.2	9.3	0.1%	16,579.9	11.6	0.1%	16,576.4	15.0	0.1%	16,574.1	17.4	0.1%	16,571.8	19.7	0.1%
ME 7	32 43 31	2004	Wet	April	--	9,503.9	9,495.8	8.1	0.1%	9,494.7	9.3	0.1%	9,492.4	11.6	0.1%	9,489.9	14.0	0.1%	9,487.5	16.4	0.2%	9,485.1	18.9	0.2%
ME 7	32 43 31	2004	Wet	May	--	3,464.4	3,448.1	16.2	0.5%	3,445.7	18.6	0.5%	3,441.1	23.3	0.7%	3,436.5	27.9	0.8%	3,431.7	32.6	0.9%	3,427.1	37.3	1.1%
ME 7	32 43 31	2004	Wet	June	--	706.6	685.3	21.2	3.0%	682.3	24.3	3.4%	676.2	30.3	4.3%	670.2	36.4	5.2%	664.1	42.5	6.0%	658.1	48.5	6.9%
ME 7	32 43 31	2004	Wet	July	--	374.5	351.3	23.3	6.2%	347.9	26.6	7.1%	341.3	33.3	8.9%	334.6	40.0	10.7%	327.9	46.6	12.4%	321.3	53.3	14.2%
ME 7	32 43 31	2004	Wet	August	--	242.8	220.6	22.2	9.1%	217.4	25.4	10.5%	211.0	31.8	13.1%	204.6	38.1	15.7%	198.3	44.5	18.3%	191.9	50.9	21.0%
ME 7	32 43 31	2004	Wet	September	Used in Summary Table Analysis	178.8	157.4	21.4	11.9%	154.3	24.4	13.7%	148.2	30.6	17.1%	142.0	36.7	20.5%	135.9	42.9	24.0%	129.7	49.1	27.5%
ME 7	32 43 31	2005	Above Normal	October	Used in Summary Table Analysis	7,854.6	7,837.3	17.4	0.2%	7,834.7	19.9	0.3%	7,829.7	24.9	0.3%	7,824.7	30.0	0.4%	7,819.6	35.1	0.4%	7,814.5	40.2	0.5%
ME 7	32 43 31	2005	Above Normal	November	Used in Summary Table Analysis	2,285.5	2,271.9	13.7	0.6%	2,269.9	15.6	0.7%	2,265.9	19.7	0.9%	2,261.9	23.6	1.0%	2,257.9	27.7	1.2%	2,253.8	31.7	1.4%
ME 7	32 43 31	2005	Above Normal	December	--	21,510.4	21,498.8	11.6	0.1%	21,496.5	13.9	0.1%	21,493.1	17.4	0.1%	21,489.6	20.8	0.1%	21,486.1	24.3	0.1%	21,482.6	27.8	0.1%
ME 7	32 43 31	2005	Above Normal	January	--	22,762.7	22,753.5	9.3	0.0%	22,751.2	11.6	0.1%	22,748.8	13.9	0.1%	22,745.4	17.4	0.1%	22,741.9	20.8	0.1%	22,739.6	23.1	0.1%
ME 7	32 43 31	2005	Above Normal	February	--	14,082.2	14,072.9	9.3	0.1%	14,071.8	10.4	0.1%	14,069.4	12.7	0.1%	14,067.1	15.0	0.1%	14,063.7	18.5	0.1%	14,061.3	20.8	0.1%
ME 7	32 43 31	2005	Above Normal	March	--	28,858.8	28,849.5	9.3	0.0%	28,848.4	10.4	0.0%	28,846.1	12.7	0.0%	28,843.8	15.0	0.1%	28,841.4	17.4	0.1%	28,838.0	20.8	0.1%
ME 7	32 43 31	2005	Above Normal	April	--	21,636.6	21,628.5	8.1	0.0%	21,627.3	9.3	0.0%	21,625.0	11.6	0.1%	21,621.5	15.0	0.1%	21,619.2	17.4	0.1%	21,616.9	19.7	0.1%
ME 7	32 43 31	2005	Above Normal	May	--	19,798.6	19,782.4	16.2	0.1%	19,778.9	19.7	0.1%	19,774.3	24.3	0.1%	19,769.7	28.9	0.1%	19,765.0	33.6	0.2%	19,760.4	38.2	0.2%
ME 7	32 43 31	2005	Above Normal	June	--	16,141.2	16,115.7	25.5	0.2%	16,112.3	28.9	0.2%	16,105.3	35.9	0.2%	16,097.2	44.0	0.3%	16,090.3	50.9	0.3%	16,083.3	57.9	0.4%
ME 7	32 43 31	2005	Above Normal	July	--	2,872.2	2,848.4	23.8	0.8%	2,844.9	27.3	1.0%	2,838.1	34.1	1.2%	2,831.3	41.0	1.4%	2,824.5	47.7	1.7%	2,817.7	54.5	1.9%
ME 7	32 43 31	2005	Above Normal	August	--	1,004.0	982.1	21.9	2.2%	978.9	25.0	2.5%	972.7	31.3	3.1%	966.4	37.6	3.7%	960.2	43.8	4.4%	953.9	50.1	5.0%
ME 7	32 43 31	2005	Above Normal	September	Used in Summary Table Analysis	545.4	525.6	19.8	3.6%	522.8	22.6	4.1%	517.1	28.3	5.2%	511.4	34.0	6.2%	505.7	39.7	7.3%	500.1	45.3	8.3%
ME 7	32 43 31	2006	Wet	October	Used in Summary Table Analysis	657.4	641.1	16.3	2.5%	638.7	18.7	2.8%	634.0	23.4	3.6%	629.2	28.2	4.3%	624.5	32.9	5.0%	619.8	37.7	5.7%
ME 7	32 43 31	2006	Wet	November	Used in Summary Table Analysis	9,531.4	9,518.4	13.0	0.1%	9,516.6	14.8	0.2%	9,512.7	18.6	0.2%	9,509.0	22.3	0.2%	9,505.2	26.2	0.3%	9,501.3	30.1	0.3%
ME 7	32 43 31	2006	Wet	December	--	44,224.5	44,213.0	11.6	0.0%	44,210.6	13.9	0.0%	44,207.2	17.4	0.0%	44,204.9	19.7	0.0%	44,201.4	23.1	0.1%	44,197.9	26.6	0.1%
ME 7	32 43 31	2006	Wet	January	--	46,951.4	46,941.0	10.4	0.0%	46,939.8	11.6	0.0%	46,936.3	15.0	0.0%	46,932.9	18.5	0.0%	46,930.6	20.8	0.0%	46,927.1	24.3	0.1%
ME 7	32 43 31	2006	Wet	February	--	26,900.5	26,891.2	9.3	0.0%	26,890.0	10.4	0.0%	26,887.7	12.7	0.0%	26,884.3	16.2	0.1%	26,881.9	18.5	0.1%	26,879.6	20.8	0.1%
ME 7	32 43 31	2006	Wet	March	--	47,678.2	47,670.1	8.1	0.0%	47,669.0	9.3	0.0%	47,666.7	11.6	0.0%	47,663.2	15.0	0.0%	47,660.9	17.4	0.0%	47,658.6	19.7	0.0%
ME 7	32 43 31	2006	Wet	April	--	30,634.3	30,626.2	8.1	0.0%	30,625.0	9.3	0.0%	30,622.7	11.6	0.0%	30,620.4	13.9	0.0%	30,618.1	16.2	0.1%	30,615.7	18.5	0.1%
ME 7	32 43 31	2006	Wet	May	--	14,328.7	14,318.3	10.4	0.1%	14,317.1	11.6	0.1%	14,313.7	15.0	0.1%	14,311.3	17.4	0.1%	14,307.9	20.8	0.1%	14,305.6	23.1	0.2%
ME 7	32 43 31	2006	Wet	June	--	3,565.6	3,544.8	20.8	0.6%	3,541.9	23.7	0.7%	3,536.0	29.6	0.8%	3,530.1	35.5	1.0%	3,524.2	41.4	1.2%	3,518.3	47.3	1.3%
ME 7	32 43 31	2006	Wet	July	--	1,302.9	1,280.1	22.8	1.8%	1,276.9	26.0	2.0%	1,270.4	32.5	2.5%	1,263.9	39.0	3.0%	1,257.4	45.5	3.5%	1,250.9	52.0	4.0%
ME 7	32 43 31	2006	Wet	August	--	688.9	666.4	22.6	3.3%	663.2	25.8	3.7%	656.8	32.2	4.7%	650.3	38.6	5.6%	643.9	45.1	6.5%	637.4	51.5	7.5%
ME 7	32 43 31	2006	Wet	September	Used in Summary Table Analysis	448.2	428.1	20.2	4.5%	425.2	23.0	5.1%	419.4	28.8	6.4%	413.6	34.6	7.7%	407.8	40.4	9.0%	402.0	46.2	10.3%
ME 7	32 43 31	2007	Above Normal	October	Used in Summary Table Analysis	293.8	277.1	16.7	5.7%	274.7	19.1	6.5%	269.9	23.9	8.1%	265.0	28.8	9.8%	260.1	33.6	11.5%	255.2	38.6	13.1%
ME 7	32 43 31	2007	Above Normal	November	Used in Summary Table Analysis	8,865.6	8,852.0	13.7	0.2%	8,850.0	15.6	0.2%	8,845.9	19.7	0.2%	8,841.9	23.7	0.3%	8,837.8	27.8	0.3%	8,833.8	31.8	0.4%
ME 7	32 43 31	2007	Above Normal	December	--	20,807.9	20,796.3	11.6	0.1%	20,794.0	13.9	0.1%	20,790.5	17.4	0.1%	20,787.0	20.8	0.1%	20,783.6	24.3	0.1%	20,780.1	27.8	0.1%
ME 7	32 43 31	2007	Above Normal	January	--	10,358.8	10,348.6	10.2	0.1%	10,347.1	11.7	0.1%	10,344.2	14.6	0.1%	10,341.1	17.7	0.2%	10,338.1	20.7	0.2%	10,335.0	23.8	0.2%
ME 7	32 43 31	2007	Above Normal	February	--	31,017.4	31,008.1	9.3	0.0%	31,006.9	10.4	0.0%	31,004.6	12.7	0.0%	31,001.2	16.2	0.1%	30,998.8	18.5	0.1%	30,995.4	22.0	0.1%
ME 7	32 43 31	2007	Above Normal	March	--	13,180.6	13,171.3	9.3	0.1%	13,170.1	10.4	0.1%	13,167.8	12.7	0.1%	13,164.4	16.2	0.1%	13,162.0	18.5	0.1%	13,159.7	20.8	0.2%
ME 7	32 43 31	2007	Above Normal	April	--	11,611.1	11,594.9	16.2	0.1%	11,592.6	18.5	0.2%	11,588.0	23.1	0.2%	11,583.3	27.8	0.2%	11,578.7	32.4	0.3%	11,574.1	37.0	0.3%
ME 7	32 43 31	2007	Above Normal	May	--	4,176.9	4,157.8	19.1	0.5%	4,155.1	21.8	0.5%	4,149.5	27.3	0.7%	4,144.1	32.8	0.8%	4,138.5	38.3	0.9%	4,133.0	43.9	1.1%
ME 7	32 43 31	2007	Above Normal	June	--	1,526.9	1,503.0	23.8	1.6%	1,499.7	27.2	1.8%	1,492.8	34.0	2.2%	1,486.1	40.7	2.7%	1,479.3	47.6	3.1%	1,472.6	54.3	3.6%
ME 7	32 43 31	2007	Above Normal	July	--	511.8	487.5	24.3	4.8%	484.0	27.8	5.4%	477.1	34.7	6.8%	470.2	41.6	8.1%	463.3	48.5	9.5%	456.4	55.4	10.8%
ME 7	32 43 31	2007	Above Normal	August	--	241.2	219.0	22.2	9.2%	215.8	25.4	10.5%	209.4	31.7	13.2%	203.1	38.1	15.8%	196.7	44.4	18.4%	190.4	50.8	21.0%
ME 7	32 43 31	2007	Above Normal	September	Used in Summary Table Analysis	168.8	147.5	21.3	12.6%	144.4	24.4	14.4%	138.3	30.5	18.1%	132.2	36.6	21.7%	126.1	42.7	25.3%	120.0	48.8	28.9%
ME 7	32 43 31	2008	Dry	October	Used in Summary Table Analysis	3,510.1	3,492.4	17.7	0.5%	3,489.8	20.3	0.6%	3,484.6	25.5	0.7%	3,479.5	30.6	0.9%	3,474.3	35.8	1.0%	3,469.1	41.0	1.2%
ME 7	32 43 31	2008	Dry	November	Used in Summary Table Analysis	3,347.6	3,333.8	13.8	0.4%	3,331.8	15.7	0.5%	3,327.8	19.8	0.6%	3,323.8	23.7	0.7%	3,319.8	27.8	0.8%	3,315.7	31.8	1.0%
ME 7	32 43 31	2008	Dry	December	--	23,643.5	23,631.9	11.6	0.0%	23,629.6	13.9	0.1%	23,626.2	17.4	0.1%	23,622.7	20.8	0.1%	23,619.2	24.3	0.1%	23,615.7	27.8	0.1%
ME 7	32 43 31	2008	Dry	January	--	38,025.5	38,013.9	11.6	0.0%	38,012.7	12.7	0.0%	38,009.3	16.2	0.0%	38,005.8	19.7	0.1%	38,003.5	22.0	0.1%	38,000.0	25.5	0.1%
ME 7	32 43 31	2008	Dry	February	--	26,392.4	26,383.1	9.3	0.0%	26,381.9	10.4	0.0%	26,378.5	13.9	0.1%	26,376.2	16.2	0.1%	26,373.8	18.5	0.1%	26,370.4	22.0	0.1%
ME 7	32 43 31	2008	Dry	March	--	11,853.0	11,844.9	8.1	0.1%	11,843.8	9.3	0.1%	11,841.4	11.6	0.1%	11,839.1	13.9	0.1%	11,836.8	16.2	0.1%	11,834.5	18.5	0.2%
ME 7	32 43 31	2008	Dry	April	--	9,066.4	9,050.2	16.2	0.2%	9,047.9	18.5	0.2%	9,043.3	23.1	0.3%	9,038.7	27.8	0.3%	9,033.9	32.5	0.4%	9,029.3	37.2	0.4%
ME 7	32 43 31	2008	Dry	May	--	1,361.8	1,344.0	17.8	1.3%	1,341.4	20.4	1.5%	1,336.3	25.5	1.9%	1,331.4	30.4	2.2%	1,326.5	35.3	2.6%	1,321.6	40.2	2.9%
ME 7	32 43 31	2008	Dry	June	--	454.3	428.2	26.1	5.8%	424.5	29.9	6.6%	417.1	37.3	8.2%	409.7	44.7	9.8%	402.3	52.1	11.5%	394.9	59.4	13.1%
ME 7	32 43 31	2008	Dry	July	--	271.8	245.3	26.5	9.7%	241.6	30.2	11.1%	234.0	37.8	13.9%	226.4	45.4	16.7%	218.9	52.9	19.5%	211.4	60.4	22.2%
ME 7	32 43 31	2008	Dry	August	--	195.8	169.8	26.0	13.3%	166.1	29.7	15.2%	158.6	37.1	19.0%	151.2	44.5	22.8%	143.8	52.0	26.5%	136.4	59.4	30.3%
ME 7	32 43 31	2008	Dry	September	Used in Summary Table Analysis	157.1	131.8	25.3	16.1%	128.2	28.9	18.4%	120.9	36.2	23.0%	113.6	43.5	27.7%	106.4	50.8	32.3%	99.1	58.0	36.9%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 43 31	2009	Critical	October	Used in Summary Table Analysis	945.4	924.8	20.6	2.2%	921.8	23.6	2.5%	915.8	29.6	3.1%	909.7	35.6	3.8%	903.9	41.5	4.4%	897.9	47.5	5.0%
ME 7	32 43 31	2009	Critical	November	Used in Summary Table Analysis	5,643.1	5,627.1	16.0	0.3%	5,624.7	18.4	0.3%	5,620.0	23.0	0.4%	5,615.3	27.8	0.5%	5,610.5	32.5	0.6%	5,605.8	37.3	0.7%
ME 7	32 43 31	2009	Critical	December	--	12,434.0	12,421.3	12.7	0.1%	12,419.0	15.0	0.1%	12,414.4	19.7	0.2%	12,410.9	23.1	0.2%	12,406.3	27.8	0.2%	12,402.8	31.3	0.3%
ME 7	32 43 31	2009	Critical	January	--	8,877.0	8,865.0	11.9	0.1%	8,863.3	13.7	0.2%	8,859.7	17.2	0.2%	8,856.3	20.7	0.2%	8,852.7	24.3	0.3%	8,849.1	27.9	0.3%
ME 7	32 43 31	2009	Critical	February	--	22,842.6	22,832.2	10.4	0.0%	22,829.9	12.7	0.1%	22,827.5	15.0	0.1%	22,824.1	18.5	0.1%	22,820.6	22.0	0.1%	22,818.3	24.3	0.1%
ME 7	32 43 31	2009	Critical	March	--	21,291.7	21,282.4	9.3	0.0%	21,281.3	10.4	0.0%	21,277.8	13.9	0.1%	21,275.5	16.2	0.1%	21,273.1	18.5	0.1%	21,269.7	22.0	0.1%
ME 7	32 43 31	2009	Critical	April	--	10,120.9	10,104.1	16.9	0.2%	10,101.6	19.3	0.2%	10,096.8	24.2	0.2%	10,091.8	29.2	0.3%	10,086.9	34.0	0.3%	10,081.9	39.0	0.4%
ME 7	32 43 31	2009	Critical	May	--	15,674.8	15,653.9	20.8	0.1%	15,651.6	23.1	0.1%	15,645.8	28.9	0.2%	15,638.9	35.9	0.2%	15,633.1	41.7	0.3%	15,627.3	47.5	0.3%
ME 7	32 43 31	2009	Critical	June	--	3,177.8	3,150.1	27.7	0.9%	3,146.2	31.6	1.0%	3,138.2	39.6	1.2%	3,130.3	47.5	1.5%	3,122.3	55.4	1.7%	3,114.5	63.3	2.0%
ME 7	32 43 31	2009	Critical	July	--	1,280.3	1,253.6	26.7	2.1%	1,249.8	30.6	2.4%	1,242.0	38.3	3.0%	1,234.5	45.8	3.6%	1,226.9	53.5	4.2%	1,219.3	61.0	4.8%
ME 7	32 43 31	2009	Critical	August	--	687.1	661.1	26.0	3.8%	657.3	29.8	4.3%	649.8	37.3	5.4%	642.4	44.7	6.5%	634.9	52.2	7.6%	627.4	59.7	8.7%
ME 7	32 43 31	2009	Critical	September	Used in Summary Table Analysis	407.2	383.3	23.8	5.9%	379.9	27.3	6.7%	372.9	34.2	8.4%	366.1	41.1	10.1%	359.2	47.9	11.8%	352.3	54.8	13.5%
ME 7	32 43 31	2010	Below Normal	October	Used in Summary Table Analysis	6,114.4	6,093.6	20.7	0.3%	6,090.6	23.7	0.4%	6,084.6	29.7	0.5%	6,078.6	35.8	0.6%	6,072.7	41.7	0.7%	6,066.7	47.7	0.8%
ME 7	32 43 31	2010	Below Normal	November	Used in Summary Table Analysis	8,382.3	8,365.6	16.7	0.2%	8,363.2	19.1	0.2%	8,358.3	24.0	0.3%	8,353.5	28.8	0.3%	8,348.5	33.8	0.4%	8,343.5	38.8	0.5%
ME 7	32 43 31	2010	Below Normal	December	--	12,534.7	12,520.8	13.9	0.1%	12,519.7	15.0	0.1%	12,515.0	19.7	0.2%	12,510.4	24.3	0.2%	12,506.9	27.8	0.2%	12,502.3	32.4	0.3%
ME 7	32 43 31	2010	Below Normal	January	--	36,827.5	36,814.8	12.7	0.0%	36,812.5	15.0	0.0%	36,809.0	18.5	0.1%	36,805.6	22.0	0.1%	36,802.1	25.5	0.1%	36,797.5	30.1	0.1%
ME 7	32 43 31	2010	Below Normal	February	--	27,415.5	27,403.9	11.6	0.0%	27,402.8	12.7	0.0%	27,399.3	16.2	0.1%	27,397.0	18.5	0.1%	27,393.5	22.0	0.1%	27,390.0	25.5	0.1%
ME 7	32 43 31	2010	Below Normal	March	--	28,986.1	28,976.9	9.3	0.0%	28,975.7	10.4	0.0%	28,972.2	13.9	0.0%	28,968.8	17.4	0.1%	28,966.4	19.7	0.1%	28,963.0	23.1	0.1%
ME 7	32 43 31	2010	Below Normal	April	--	40,287.0	40,277.8	9.3	0.0%	40,276.6	10.4	0.0%	40,274.3	12.7	0.0%	40,270.8	16.2	0.0%	40,268.5	18.5	0.0%	40,265.0	22.0	0.1%
ME 7	32 43 31	2010	Below Normal	May	--	20,480.3	20,461.8	18.5	0.1%	20,459.5	20.8	0.1%	20,454.9	25.5	0.1%	20,449.1	31.3	0.2%	20,444.4	35.9	0.2%	20,439.8	40.5	0.2%
ME 7	32 43 31	2010	Below Normal	June	--	9,519.3	9,493.3	26.0	0.3%	9,489.6	29.7	0.3%	9,482.2	37.2	0.4%	9,474.8	44.6	0.5%	9,467.4	52.0	0.5%	9,460.1	59.3	0.6%
ME 7	32 43 31	2010	Below Normal	July	--	1,471.2	1,446.8	24.4	1.7%	1,443.3	27.9	1.9%	1,436.2	35.0	2.4%	1,429.3	41.9	2.8%	1,422.2	49.0	3.3%	1,415.5	55.7	3.8%
ME 7	32 43 31	2010	Below Normal	August	--	590.6	568.0	22.6	3.8%	564.7	25.8	4.4%	558.3	32.3	5.5%	551.9	38.7	6.6%	545.4	45.2	7.6%	538.9	51.6	8.7%
ME 7	32 43 31	2010	Below Normal	September	Used in Summary Table Analysis	673.5	651.8	21.7	3.2%	648.7	24.8	3.7%	642.4	31.1	4.6%	636.2	37.3	5.5%	629.9	43.5	6.5%	623.7	49.8	7.4%
ME 7	32 43 31	2011	Wet	October	Used in Summary Table Analysis	9,771.5	9,754.7	16.8	0.2%	9,752.3	19.2	0.2%	9,747.6	24.0	0.2%	9,742.7	28.8	0.3%	9,737.7	33.8	0.3%	9,732.9	38.7	0.4%
ME 7	32 43 31	2011	Wet	November	Used in Summary Table Analysis	14,373.8	14,361.1	12.7	0.1%	14,358.8	15.0	0.1%	14,355.3	18.5	0.1%	14,350.7	23.1	0.2%	14,347.2	26.6	0.2%	14,343.8	30.1	0.2%
ME 7	32 43 31	2011	Wet	December	--	34,312.5	34,302.1	10.4	0.0%	34,299.8	12.7	0.0%	34,296.3	16.2	0.0%	34,294.0	18.5	0.1%	34,290.5	22.0	0.1%	34,287.0	25.5	0.1%
ME 7	32 43 31	2011	Wet	January	--	14,273.1	14,263.9	9.3	0.1%	14,262.7	10.4	0.1%	14,259.3	13.9	0.1%	14,256.9	16.2	0.1%	14,253.5	19.7	0.1%	14,251.2	22.0	0.2%
ME 7	32 43 31	2011	Wet	February	--	20,886.6	20,877.3	9.3	0.0%	20,876.2	10.4	0.0%	20,873.8	12.7	0.1%	20,870.4	16.2	0.1%	20,868.1	18.5	0.1%	20,865.7	20.8	0.1%
ME 7	32 43 31	2011	Wet	March	--	52,410.9	52,402.8	8.1	0.0%	52,401.6	9.3	0.0%	52,399.3	11.6	0.0%	52,397.0	13.9	0.0%	52,393.5	17.4	0.0%	52,391.2	19.7	0.0%
ME 7	32 43 31	2011	Wet	April	--	24,939.8	24,931.7	8.1	0.0%	24,930.6	9.3	0.0%	24,928.2	11.6	0.0%	24,925.9	13.9	0.1%	24,923.6	16.2	0.1%	24,920.1	19.7	0.1%
ME 7	32 43 31	2011	Wet	May	--	11,453.0	11,436.7	16.3	0.1%	11,434.4	18.6	0.2%	11,429.6	23.4	0.2%	11,424.8	28.2	0.2%	11,420.1	32.9	0.3%	11,415.4	37.6	0.3%
ME 7	32 43 31	2011	Wet	June	--	7,127.4	7,102.3	25.1	0.4%	7,098.7	28.7	0.4%	7,091.6	35.9	0.5%	7,084.5	42.9	0.6%	7,077.3	50.1	0.7%	7,070.1	57.3	0.8%
ME 7	32 43 31	2011	Wet	July	--	1,841.4	1,815.9	25.6	1.4%	1,812.3	29.2	1.6%	1,805.0	36.5	2.0%	1,797.7	43.8	2.4%	1,790.4	51.0	2.8%	1,783.1	58.3	3.2%
ME 7	32 43 31	2011	Wet	August	--	795.7	773.5	22.2	2.8%	770.4	25.3	3.2%	764.0	31.7	4.0%	757.7	38.0	4.8%	751.4	44.3	5.6%	745.1	50.6	6.4%
ME 7	32 43 31	2011	Wet	September	Used in Summary Table Analysis	452.3	431.8	20.6	4.5%	428.8	23.5	5.2%	423.0	29.4	6.5%	417.1	35.2	7.8%	411.2	41.1	9.1%	405.3	47.0	10.4%
ME 7	32 43 31	2012	Below Normal	October	Used in Summary Table Analysis	4,615.6	4,598.6	17.0	0.4%	4,596.2	19.4	0.4%	4,591.2	24.4	0.5%	4,586.3	29.3	0.6%	4,581.4	34.3	0.7%	4,576.4	39.2	0.9%
ME 7	32 43 31	2012	Below Normal	November	Used in Summary Table Analysis	8,381.4	8,367.8	13.5	0.2%	8,365.9	15.5	0.2%	8,361.9	19.4	0.2%	8,358.0	23.4	0.3%	8,353.9	27.4	0.3%	8,349.9	31.5	0.4%
ME 7	32 43 31	2012	Below Normal	December	--	5,249.3	5,238.0	11.3	0.2%	5,236.3	13.0	0.2%	5,233.0	16.3	0.3%	5,229.6	19.7	0.4%	5,226.3	23.0	0.4%	5,222.8	26.5	0.5%
ME 7	32 43 31	2012	Below Normal	January	--	20,517.4	20,506.9	10.4	0.1%	20,504.6	12.7	0.1%	20,502.3	15.0	0.1%	20,498.8	18.5	0.1%	20,496.5	20.8	0.1%	20,493.1	24.3	0.1%
ME 7	32 43 31	2012	Below Normal	February	--	18,329.9	18,320.6	9.3	0.1%	18,319.4	10.4	0.1%	18,317.1	12.7	0.1%	18,314.8	15.0	0.1%	18,311.3	18.5	0.1%	18,309.0	20.8	0.1%
ME 7	32 43 31	2012	Below Normal	March	--	45,895.8	45,886.6	9.3	0.0%	45,885.4	10.4	0.0%	45,883.1	12.7	0.0%	45,880.8	15.0	0.0%	45,877.3	18.5	0.0%	45,875.0	20.8	0.0%
ME 7	32 43 31	2012	Below Normal	April	--	27,031.3	27,023.1	8.1	0.0%	27,022.0	9.3	0.0%	27,018.5	12.7	0.0%	27,016.2	15.0	0.1%	27,013.9	17.4	0.1%	27,011.6	19.7	0.1%
ME 7	32 43 31	2012	Below Normal	May	--	7,527.1	7,510.8	16.3	0.2%	7,508.4	18.6	0.2%	7,503.7	23.4	0.3%	7,499.1	28.0	0.4%	7,494.3	32.8	0.4%	7,489.6	37.5	0.5%
ME 7	32 43 31	2012	Below Normal	June	--	5,586.2	5,560.6	25.6	0.5%	5,557.1	29.2	0.5%	5,549.8	36.5	0.7%	5,542.5	43.8	0.8%	5,535.3	50.9	0.9%	5,528.0	58.2	1.0%
ME 7	32 43 31	2012	Below Normal	July	--	2,269.9	2,245.0	24.9	1.1%	2,241.6	28.4	1.2%	2,234.5	35.4	1.6%	2,227.4	42.5	1.9%	2,220.3	49.7	2.2%	2,213.2	56.7	2.5%
ME 7	32 43 31	2012	Below Normal	August	--	403.8	383.4	20.4	5.1%	380.5	23.3	5.8%	374.7	29.2	7.2%	368.8	35.0	8.7%	363.0	40.8	10.1%	357.2	46.6	11.5%
ME 7	32 43 31	2012	Below Normal	September	Used in Summary Table Analysis	267.4	248.8	18.6	6.9%	246.2	21.2	7.9%	240.9	26.5	9.9%	235.6	31.8	11.9%	230.3	37.1	13.9%	225.0	42.4	15.8%
ME 7	32 43 31	2013	Below Normal	October	Used in Summary Table Analysis	1,962.8	1,946.4	16.4	0.8%	1,944.1	18.8	1.0%	1,939.5	23.4	1.2%	1,934.7	28.1	1.4%	1,930.1	32.8	1.7%	1,925.3	37.5	1.9%
ME 7	32 43 31	2013	Below Normal	November	Used in Summary Table Analysis	14,944.4	14,931.7	12.7	0.1%	14,929.4	15.0	0.1%	14,925.9	18.5	0.1%	14,922.5	22.0	0.1%	14,917.8	26.6	0.2%	14,914.4	30.1	0.2%
ME 7	32 43 31	2013	Below Normal	December	--	60,561.3	60,549.8	11.6	0.0%	60,547.5	13.9	0.0%	60,544.0	17.4	0.0%	60,541.7	19.7	0.0%	60,538.2	23.1	0.0%	60,533.6	27.8	0.0%
ME 7	32 43 31	2013	Below Normal	January	--	22,365.7	22,356.5	9.3	0.0%	22,355.3	10.4	0.0%	22,351.9	13.9	0.1%	22,349.5	16.2	0.1%	22,346.1	19.7	0.1%	22,343.8	22.0	0.1%
ME 7	32 43 31	2013	Below Normal	February	--	8,927.1	8,918.1	9.0	0.1%	8,916.8	10.3	0.1%	8,914.1	13.0	0.1%	8,911.5	15.6	0.2%	8,908.8	18.3	0.2%	8,906.1	20.9	0.2%
ME 7	32 43 31	2013	Below Normal	March	--	10,453.6	10,445.0	8.6	0.1%	10,443.8	9.8	0.1%	10,441.3	12.3	0.1%	10,438.8	14.8	0.1%	10,436.2	17.4	0.2%	10,433.7	19.9	0.2%
ME 7	32 43 31	2013	Below Normal	April	--	8,332.5	8,317.0	15.5	0.2%	8,314.8	17.7	0.2%	8,310.4	22.1	0.3%	8,306.0	26.5	0.3%	8,301.5	31.0	0.4%	8,297.0	35.5	0.4%
ME 7	32 43 31	2013	Below Normal	May	--	4,482.9	4,463.8	19.1	0.4%	4,461.1	21.8	0.5%	4,455.7	27.2	0.6%	4,450.2	32.6	0.7%	4,444.7	38.2	0.9%	4,439.2	43.6	1.0%
ME 7	32 43 31	2013	Below Normal	June	--	2,132.2	2,108.6	23.6	1.1%	2,105.2	27.0	1.3%	2,098.5	33.7	1.6%	2,091.7	40.5	1.9%	2,085.0	47.2	2.2%	2,078.2	53.9	2.5%
ME 7	32 43 31	2013	Below Normal	July	--	731.5	708.1	23.4	3.2%	704.8	26.7	3.7%	698.1	33.3	4.6%	691.5	40.0	5.5%	684.8	46.6	6.4%	678.3	53.2	7.3%
ME 7	32 43 31	2013	Below Normal	August	--	356.7	334.6	22.1	6.2%	331.5	25.3	7.1%	325.1	31.6	8.9%	318.8	37.9	10.6%	312.5	44.3	12.4%	306.2	50.6	14.2%
ME 7	32 43 31	2013	Below Normal	September	Used in Summary Table Analysis	4,862.2	4,839.1	23.0	0.5%	4,835.8	26.4	0.5%	4,829.2	33.0	0.7%	4,822.6	39.6	0.8%	4,816.0	46.2	0.9%	4,809.4	52.8	1.1%
ME 7	32 43 31	2014	Critical	October	Used in Summary Table Analysis	288.8	271.7	17.2	5.9%	269.2	19.7	6.8%	264.2	24.6	8.5%	259.2	29.6	10.2%	254.2	34.6	12.0%	249.2	39.6	13.7%
ME 7	32 43 31	2014	Critical	November	Used in Summary Table Analysis	1,581.3	1,567.5	13.8	0.9%	1,565.5	15.7	1.0%	1,561.5	19.8	1.3%	1,557.4	23.8	1.5%	1,553.4	27.9	1.8%	1,549.4	31.8	2.0%
ME 7	32 43 31	2014	Critical	December	--	1,617.8	1,606.0	11.8	0.7%	1,604.3	13.5	0.8%	1,600.8	17.0	1.1%	1,597.3	20.5	1.3%	1,593.9	24.0	1.5%	1,590.3	27.5	1.7%
ME 7	32 43 31	2014	Critical	January	--	2,866.0	2,855.6	10.4	0.4%	2,854.1	11.9	0.4%	2,850.9	15.0	0.5%	2,847.9	18.1	0.6%	2,844.8	21.2	0.7%	2,841.7	24.3	0.8%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 43 31	2014	Critical	February	--	15,872.7	15,863.4	9.3	0.1%	15,862.3	10.4	0.1%	15,860.0	12.7	0.1%	15,856.5	16.2	0.1%	15,854.2	18.5	0.1%	15,850.7	22.0	0.1%
ME 7	32 43 31	2014	Critical	March	--	31,637.7	31,629.6	8.1	0.0%	31,628.5	9.3	0.0%	31,625.0	12.7	0.0%	31,622.7	15.0	0.0%	31,620.4	17.4	0.1%	31,618.1	19.7	0.1%
ME 7	32 43 31	2014	Critical	April	--	13,042.8	13,026.6	16.2	0.1%	13,024.3	18.5	0.1%	13,019.7	23.1	0.2%	13,015.0	27.8	0.2%	13,009.3	33.6	0.3%	13,004.6	38.2	0.3%
ME 7	32 43 31	2014	Critical	May	--	5,224.1	5,203.9	20.1	0.4%	5,201.0	23.0	0.4%	5,195.3	28.8	0.6%	5,189.5	34.6	0.7%	5,183.7	40.4	0.8%	5,177.9	46.2	0.9%
ME 7	32 43 31	2014	Critical	June	--	1,216.3	1,188.0	28.4	2.3%	1,184.0	32.3	2.7%	1,175.9	40.4	3.3%	1,167.9	48.4	4.0%	1,160.0	56.4	4.6%	1,152.0	64.3	5.3%
ME 7	32 43 31	2014	Critical	July	--	560.2	533.4	26.8	4.8%	529.6	30.6	5.5%	521.9	38.3	6.8%	514.3	45.9	8.2%	506.7	53.6	9.6%	499.0	61.2	10.9%
ME 7	32 43 31	2014	Critical	August	--	364.8	339.0	25.8	7.1%	335.3	29.5	8.1%	327.9	36.9	10.1%	320.5	44.3	12.1%	313.1	51.7	14.2%	305.8	59.1	16.2%
ME 7	32 43 31	2014	Critical	September	Used in Summary Table Analysis	2,613.5	2,588.0	25.6	1.0%	2,584.3	29.3	1.1%	2,577.0	36.6	1.4%	2,569.6	44.0	1.7%	2,562.3	51.3	2.0%	2,554.9	58.7	2.2%
ME 7	32 43 31	2015	Dry	October	Used in Summary Table Analysis	11,495.0	11,474.4	20.6	0.2%	11,471.5	23.5	0.2%	11,465.9	29.2	0.3%	11,459.8	35.2	0.3%	11,454.2	40.9	0.4%	11,448.0	47.0	0.4%
ME 7	32 43 31	2015	Dry	November	Used in Summary Table Analysis	9,176.4	9,161.0	15.4	0.2%	9,158.8	17.6	0.2%	9,154.3	22.1	0.2%	9,149.9	26.5	0.3%	9,145.4	31.0	0.3%	9,140.9	35.5	0.4%
ME 7	32 43 31	2015	Dry	December	--	33,120.4	33,107.6	12.7	0.0%	33,105.3	15.0	0.0%	33,101.9	18.5	0.1%	33,098.4	22.0	0.1%	33,094.9	25.5	0.1%	33,090.3	30.1	0.1%
ME 7	32 43 31	2015	Dry	January	--	14,656.3	14,644.7	11.6	0.1%	14,642.4	13.9	0.1%	14,640.0	16.2	0.1%	14,636.6	19.7	0.1%	14,633.1	23.1	0.2%	14,629.6	26.6	0.2%
ME 7	32 43 31	2015	Dry	February	--	27,436.3	27,425.9	10.4	0.0%	27,424.8	11.6	0.0%	27,421.3	15.0	0.1%	27,419.0	17.4	0.1%	27,415.5	20.8	0.1%	27,413.2	23.1	0.1%
ME 7	32 43 31	2015	Dry	March	--	11,620.4	11,612.3	8.1	0.1%	11,610.0	10.4	0.1%	11,607.6	12.7	0.1%	11,605.3	15.0	0.1%	11,603.0	17.4	0.1%	11,599.5	20.8	0.2%
ME 7	32 43 31	2015	Dry	April	--	8,519.7	8,503.1	16.6	0.2%	8,500.7	19.0	0.2%	8,495.9	23.7	0.3%	8,491.2	28.5	0.3%	8,486.3	33.3	0.4%	8,481.6	38.1	0.4%
ME 7	32 43 31	2015	Dry	May	--	1,517.6	1,497.7	19.9	1.3%	1,494.9	22.7	1.5%	1,489.2	28.4	1.9%	1,483.4	34.1	2.2%	1,477.8	39.8	2.6%	1,472.0	45.6	3.0%
ME 7	32 43 31	2015	Dry	June	--	665.4	638.9	26.6	4.0%	635.1	30.3	4.6%	627.6	37.8	5.7%	620.0	45.4	6.8%	612.5	52.9	7.9%	605.1	60.3	9.1%
ME 7	32 43 31	2015	Dry	July	--	282.3	255.7	26.6	9.4%	251.9	30.4	10.8%	244.3	38.0	13.5%	236.6	45.7	16.2%	228.9	53.4	18.9%	221.4	60.9	21.6%
ME 7	32 43 31	2015	Dry	August	--	182.4	156.6	25.8	14.2%	152.8	29.6	16.2%	145.4	37.0	20.3%	137.9	44.6	24.4%	130.4	52.1	28.5%	122.9	59.5	32.6%
ME 7	32 43 31	2015	Dry	September	Used in Summary Table Analysis	135.2	111.7	23.4	17.3%	108.1	27.1	20.0%	100.8	34.4	25.4%	93.5	41.6	30.8%	86.1	49.1	36.3%	78.8	56.4	41.7%
ME 7	32 43 31	2016	Above Normal	October	Used in Summary Table Analysis	99.8	79.2	20.6	20.7%	75.7	24.2	24.2%	69.8	30.1	30.1%	63.5	36.3	36.4%	57.4	42.4	42.5%	51.5	48.3	48.4%
ME 7	32 43 31	2016	Above Normal	November	Used in Summary Table Analysis	3,987.8	3,972.5	15.4	0.4%	3,969.7	18.2	0.5%	3,965.0	22.8	0.6%	3,960.1	27.8	0.7%	3,955.1	32.8	0.8%	3,950.1	37.7	0.9%
ME 7	32 43 31	2016	Above Normal	December	--	37,210.6	37,196.8	13.9	0.0%	37,194.4	16.2	0.0%	37,191.0	19.7	0.1%	37,186.3	24.3	0.1%	37,181.7	28.9	0.1%	37,177.1	33.6	0.1%
ME 7	32 43 31	2016	Above Normal	January	--	57,929.4	57,917.8	11.6	0.0%	57,915.5	13.9	0.0%	57,912.0	17.4	0.0%	57,908.6	20.8	0.0%	57,903.9	25.5	0.0%	57,900.5	28.9	0.0%
ME 7	32 43 31	2016	Above Normal	February	--	24,369.2	24,358.8	10.4	0.0%	24,357.6	11.6	0.0%	24,354.2	15.0	0.1%	24,350.7	18.5	0.1%	24,348.4	20.8	0.1%	24,344.9	24.3	0.1%
ME 7	32 43 31	2016	Above Normal	March	--	42,066.0	42,056.7	9.3	0.0%	42,055.6	10.4	0.0%	42,053.2	12.7	0.0%	42,049.8	16.2	0.0%	42,046.3	19.7	0.0%	42,044.0	22.0	0.1%
ME 7	32 43 31	2016	Above Normal	April	--	18,619.2	18,610.0	9.3	0.0%	18,608.8	10.4	0.1%	18,606.5	12.7	0.1%	18,604.2	15.0	0.1%	18,600.7	18.5	0.1%	18,598.4	20.8	0.1%
ME 7	32 43 31	2016	Above Normal	May	--	5,247.6	5,237.2	10.4	0.2%	5,235.5	12.0	0.2%	5,232.5	15.0	0.3%	5,229.5	18.1	0.3%	5,226.3	21.3	0.4%	5,223.1	24.4	0.5%
ME 7	32 43 31	2016	Above Normal	June	--	1,526.6	1,506.5	20.1	1.3%	1,503.5	23.1	1.5%	1,497.8	28.8	1.9%	1,492.0	34.6	2.3%	1,486.1	40.5	2.7%	1,480.3	46.3	3.0%
ME 7	32 43 31	2016	Above Normal	July	--	841.8	818.8	23.0	2.7%	815.4	26.4	3.1%	808.9	32.9	3.9%	802.3	39.5	4.7%	795.6	46.1	5.5%	789.1	52.7	6.3%
ME 7	32 43 31	2016	Above Normal	August	--	511.0	488.2	22.9	4.5%	484.8	26.2	5.1%	478.3	32.8	6.4%	471.7	39.4	7.7%	465.0	46.0	9.0%	458.4	52.6	10.3%
ME 7	32 43 31	2016	Above Normal	September	Used in Summary Table Analysis	346.6	325.8	20.8	6.0%	322.2	24.4	7.0%	316.0	30.6	8.8%	309.6	37.0	10.7%	303.2	43.3	12.5%	296.9	49.7	14.3%
ME 7	32 43 31	2017	Wet	October	Used in Summary Table Analysis	18,520.8	18,502.3	18.5	0.1%	18,500.0	20.8	0.1%	18,495.4	25.5	0.1%	18,489.6	31.3	0.2%	18,483.8	37.0	0.2%	18,479.2	41.7	0.2%
ME 7	32 43 31	2017	Wet	November	Used in Summary Table Analysis	19,079.9	19,067.1	12.7	0.1%	19,064.8	15.0	0.1%	19,060.2	19.7	0.1%	19,056.7	23.1	0.1%	19,052.1	27.8	0.1%	19,048.6	31.3	0.2%
ME 7	32 43 31	2017	Wet	December	--	24,508.1	24,496.5	11.6	0.0%	24,495.4	12.7	0.1%	24,491.9	16.2	0.1%	24,488.4	19.7	0.1%	24,485.0	23.1	0.1%	24,481.5	26.6	0.1%
ME 7	32 43 31	2017	Wet	January	--	108,054.4	108,044.0	10.4	0.0%	108,041.7	12.7	0.0%	108,039.4	15.0	0.0%	108,035.9	18.5	0.0%	108,032.4	22.0	0.0%	108,030.1	24.3	0.0%
ME 7	32 43 31	2017	Wet	February	--	82,509.3	82,500.0	9.3	0.0%	82,498.8	10.4	0.0%	82,495.4	13.9	0.0%	82,493.1	16.2	0.0%	82,490.7	18.5	0.0%	82,487.3	22.0	0.0%
ME 7	32 43 31	2017	Wet	March	--	27,486.1	27,476.9	9.3	0.0%	27,475.7	10.4	0.0%	27,473.4	12.7	0.0%	27,471.1	15.0	0.1%	27,467.6	18.5	0.1%	27,465.3	20.8	0.1%
ME 7	32 43 31	2017	Wet	April	--	23,165.5	23,158.6	6.9	0.0%	23,157.4	8.1	0.0%	23,155.1	10.4	0.0%	23,152.8	12.7	0.1%	23,150.5	15.0	0.1%	23,148.1	17.4	0.1%
ME 7	32 43 31	2017	Wet	May	--	6,284.7	6,274.3	10.4	0.2%	6,272.8	11.9	0.2%	6,269.8	14.9	0.2%	6,266.7	18.1	0.3%	6,263.7	21.1	0.3%	6,260.5	24.2	0.4%
ME 7	32 43 31	2017	Wet	June	--	2,151.2	2,130.7	20.5	1.0%	2,127.7	23.5	1.1%	2,121.9	29.3	1.4%	2,116.0	35.2	1.6%	2,110.1	41.1	1.9%	2,104.3	46.9	2.2%
ME 7	32 43 31	2017	Wet	July	--	958.0	934.9	23.1	2.4%	931.6	26.4	2.8%	925.1	32.9	3.4%	918.5	39.5	4.1%	911.9	46.0	4.8%	905.4	52.6	5.5%
ME 7	32 43 31	2017	Wet	August	--	530.1	507.3	22.7	4.3%	504.1	26.0	4.9%	497.6	32.5	6.1%	491.1	39.0	7.4%	484.6	45.5	8.6%	478.1	51.9	9.8%
ME 7	32 43 31	2017	Wet	September	Used in Summary Table Analysis	343.4	322.1	21.3	6.2%	319.1	24.3	7.1%	313.0	30.4	8.9%	306.8	36.6	10.6%	300.7	42.7	12.4%	294.6	48.8	14.2%
ME 7	32 43 31	2018	Above Normal	October	Used in Summary Table Analysis	295.9	278.7	17.2	5.8%	276.2	19.7	6.7%	271.2	24.7	8.4%	266.2	29.8	10.1%	261.2	34.8	11.8%	256.2	39.8	13.4%
ME 7	32 43 31	2018	Above Normal	November	Used in Summary Table Analysis	11,056.9	11,043.3	13.7	0.1%	11,041.3	15.6	0.1%	11,037.3	19.7	0.2%	11,033.2	23.7	0.2%	11,029.1	27.9	0.3%	11,025.0	31.9	0.3%
ME 7	32 43 31	2018	Above Normal	December	--	5,475.7	5,464.2	11.5	0.2%	5,462.5	13.2	0.2%	5,459.1	16.6	0.3%	5,455.8	19.9	0.4%	5,452.3	23.4	0.4%	5,448.8	26.9	0.5%
ME 7	32 43 31	2018	Above Normal	January	--	18,231.5	18,221.1	10.4	0.1%	18,218.8	12.7	0.1%	18,216.4	15.0	0.1%	18,213.0	18.5	0.1%	18,209.5	22.0	0.1%	18,207.2	24.3	0.1%
ME 7	32 43 31	2018	Above Normal	February	--	7,623.3	7,614.5	8.8	0.1%	7,613.1	10.2	0.1%	7,610.5	12.7	0.2%	7,607.9	15.4	0.2%	7,605.1	18.2	0.2%	7,602.4	20.8	0.3%
ME 7	32 43 31	2018	Above Normal	March	--	20,991.9	20,983.8	8.1	0.0%	20,982.6	9.3	0.0%	20,980.3	11.6	0.1%	20,978.0	13.9	0.1%	20,974.5	17.4	0.1%	20,972.2	19.7	0.1%
ME 7	32 43 31	2018	Above Normal	April	--	32,541.7	32,533.6	8.1	0.0%	32,532.4	9.3	0.0%	32,531.3	10.4	0.0%	32,528.9	12.7	0.0%	32,526.6	15.0	0.0%	32,524.3	17.4	0.1%
ME 7	32 43 31	2018	Above Normal	May	--	7,003.6	6,987.8	15.7	0.2%	6,985.6	17.9	0.3%	6,981.1	22.5	0.3%	6,976.6	27.0	0.4%	6,972.1	31.5	0.4%	6,967.9	35.6	0.5%
ME 7	32 43 31	2018	Above Normal	June	--	1,932.3	1,911.1	21.2	1.1%	1,908.1	24.2	1.3%	1,902.1	30.2	1.6%	1,896.2	36.1	1.9%	1,890.0	42.2	2.2%	1,884.1	48.1	2.5%
ME 7	32 43 31	2018	Above Normal	July	--	801.7	778.4	23.3	2.9%	775.0	26.7	3.3%	768.4	33.3	4.2%	761.7	40.0	5.0%	755.0	46.7	5.8%	748.4	53.3	6.7%
ME 7	32 43 31	2018	Above Normal	August	--	463.0	441.0	22.0	4.7%	437.8	25.2	5.4%	431.6	31.4	6.8%	425.2	37.7	8.2%	418.9	44.1	9.5%	412.6	50.4	10.9%
ME 7	32 43 31	2018	Above Normal	September	Used in Summary Table Analysis	319.2	297.9	21.3	6.7%	294.8	24.4	7.6%	288.7	30.5	9.6%	282.6	36.7	11.5%	276.4	42.8	13.4%	270.2	49.0	15.3%
ME 7	32 43 31	2019	Below Normal	October	Used in Summary Table Analysis	224.2	207.2	17.1	7.6%	204.7	19.5	8.7%	199.8	24.4	10.9%	194.7	29.5	13.2%	189.8	34.4	15.3%	184.9	39.3	17.5%
ME 7	32 43 31	2019	Below Normal	November	Used in Summary Table Analysis	6,800.2	6,786.5	13.8	0.2%	6,784.4	15.9	0.2%	6,780.3	19.9	0.3%	6,776.2	24.1	0.4%	6,772.1	28.1	0.4%	6,767.9	32.3	0.5%
ME 7	32 43 31	2019	Below Normal	December	--	14,959.5	14,947.9	11.6	0.1%	14,946.8	12.7	0.1%	14,943.3	16.2	0.1%	14,939.8	19.7	0.1%	14,936.3	23.1	0.2%	14,932.9	26.6	0.2%
ME 7	32 43 31	2019	Below Normal	January	--	35,809.0	35,798.6	10.4	0.0%	35,796.3	12.7	0.0%	35,794.0	15.0	0.0%	35,790.5	18.5	0.1%	35,787.0	22.0	0.1%	35,784.7	24.3	0.1%
ME 7	32 43 31	2019	Below Normal	February	--	142,546.3	142,534.7	11.6	0.0%	142,534.7	11.6	0.0%	142,534.7	11.6	0.0%	142,534.7	11.6	0.0%	142,534.7	11.6	0.0%	142,523.1	23.1	0.0%
ME 7	32 43 31	2019	Below Normal	March	--	42,638.9	42,630.8	8.1	0.0%	42,629.6	9.3	0.0%	42,627.3	11.6	0.0%	42,625.0	13.9	0.0%	42,622.7	16.2	0.0%	42,620.4	18.5	0.0%
ME 7	32 43 31	2019	Below Normal	April	--	15,364.6	15,356.5	8.1	0.1%	15,355.3	9.3	0.1%	15,353.0	11.6	0.1%	15,350.7	13.9	0.1%	15,348.4	16.2	0.1%	15,346.1	18.5	0.1%
ME 7	32 43 31	2019	Below Normal	May	--	17,390.0	17,373.8	16.2	0.1%	17,371.5	18.5	0.1%	17,365.7	24.3	0.1%	17,361.1	28.9	0.2%	17,356.5	33.6	0.2%	17,351.9	38.2	0.2%

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							75% Pumping Increase			100% Pumping Increase			150% Pumping Increase			200% Pumping Increase			250% Pumping Increase			300% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 43 31	2019	Below Normal	June	--	4,248.8	4,226.0	22.8	0.5%	4,222.8	26.0	0.6%	4,216.6	32.3	0.8%	4,210.4	38.4	0.9%	4,204.3	44.6	1.0%	4,198.1	50.7	1.2%
ME 7	32 43 31	2019	Below Normal	July	--	1,385.2	1,361.8	23.4	1.7%	1,358.4	26.7	1.9%	1,351.7	33.4	2.4%	1,345.0	40.2	2.9%	1,338.3	46.9	3.4%	1,331.7	53.5	3.9%
ME 7	32 43 31	2019	Below Normal	August	--	619.4	596.9	22.5	3.6%	593.7	25.7	4.2%	587.3	32.1	5.2%	580.9	38.5	6.2%	574.4	45.0	7.3%	568.0	51.4	8.3%
ME 7	32 43 31	2019	Below Normal	September	Used in Summary Table Analysis	483.0	461.9	21.1	4.4%	458.8	24.2	5.0%	452.7	30.3	6.3%	446.6	36.4	7.5%	440.5	42.5	8.8%	434.4	48.6	10.1%
ME 7	32 43 31	2020	Dry	October	Used in Summary Table Analysis	372.6	356.2	16.4	4.4%	353.8	18.8	5.0%	349.0	23.6	6.3%	344.2	28.4	7.6%	339.4	33.2	8.9%	334.5	38.0	10.2%
ME 7	32 43 31	2020	Dry	November	Used in Summary Table Analysis	347.2	334.1	13.1	3.8%	332.2	15.0	4.3%	328.3	18.9	5.4%	324.4	22.7	6.6%	320.5	26.6	7.7%	316.6	30.6	8.8%
ME 7	32 43 31	2020	Dry	December	--	13,713.0	13,701.4	11.6	0.1%	13,699.1	13.9	0.1%	13,695.6	17.4	0.1%	13,692.1	20.8	0.2%	13,688.7	24.3	0.2%	13,685.2	27.8	0.2%
ME 7	32 43 31	2020	Dry	January	--	22,666.7	22,656.3	10.4	0.0%	22,655.1	11.6	0.1%	22,651.6	15.0	0.1%	22,648.1	18.5	0.1%	22,644.7	22.0	0.1%	22,642.4	24.3	0.1%
ME 7	32 43 31	2020	Dry	February	--	7,433.1	7,424.1	9.0	0.1%	7,422.7	10.4	0.1%	7,419.9	13.2	0.2%	7,417.1	16.0	0.2%	7,414.4	18.8	0.3%	7,411.6	21.5	0.3%
ME 7	32 43 31	2020	Dry	March	--	7,310.5	7,302.1	8.4	0.1%	7,300.8	9.7	0.1%	7,298.3	12.3	0.2%	7,295.7	14.8	0.2%	7,293.1	17.5	0.2%	7,290.5	20.0	0.3%
ME 7	32 43 31	2020	Dry	April	--	5,555.4	5,538.9	16.6	0.3%	5,536.6	18.9	0.3%	5,531.7	23.7	0.4%	5,526.9	28.6	0.5%	5,522.1	33.3	0.6%	5,517.2	38.2	0.7%
ME 7	32 43 31	2020	Dry	May	--	7,468.8	7,448.7	20.0	0.3%	7,445.7	23.0	0.3%	7,439.9	28.8	0.4%	7,434.0	34.7	0.5%	7,428.2	40.5	0.5%	7,422.5	46.3	0.6%
ME 7	32 43 31	2020	Dry	June	--	2,112.8	2,085.6	27.2	1.3%	2,081.8	31.0	1.5%	2,074.4	38.4	1.8%	2,066.9	45.9	2.2%	2,059.5	53.4	2.5%	2,052.0	60.9	2.9%
ME 7	32 43 31	2020	Dry	July	--	812.8	785.4	27.4	3.4%	781.5	31.3	3.9%	773.6	39.2	4.8%	765.8	47.0	5.8%	758.0	54.9	6.7%	750.1	62.7	7.7%
ME 7	32 43 31	2020	Dry	August	--	416.3	389.1	27.2	6.5%	385.2	31.1	7.5%	377.5	38.9	9.3%	369.7	46.7	11.2%	361.9	54.5	13.1%	354.1	62.2	14.9%
ME 7	32 43 31	2020	Dry	September	Used in Summary Table Analysis	265.4	240.5	24.9	9.4%	236.9	28.5	10.7%	228.9	36.5	13.8%	221.4	44.0	16.6%	213.8	51.6	19.5%	206.2	59.2	22.3%

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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 62 27	2000	Above Normal	October	Used in Summary Table Analysis	380.5	372.9	7.6	2.0%	371.3	9.2	2.4%	366.6	14.0	3.7%
ME 1	48 62 27	2000	Above Normal	November	Used in Summary Table Analysis	8,151.3	8,145.3	6.0	0.1%	8,144.1	7.2	0.1%	8,140.4	10.9	0.1%
ME 1	48 62 27	2000	Above Normal	December	--	4,770.1	4,765.2	5.0	0.1%	4,764.1	6.0	0.1%	4,761.1	9.0	0.2%
ME 1	48 62 27	2000	Above Normal	January	--	14,959.5	14,956.0	3.5	0.0%	14,954.9	4.6	0.0%	14,951.4	8.1	0.1%
ME 1	48 62 27	2000	Above Normal	February	--	16,283.6	16,280.1	3.5	0.0%	16,278.9	4.6	0.0%	16,276.6	6.9	0.0%
ME 1	48 62 27	2000	Above Normal	March	--	5,733.6	5,730.6	3.0	0.1%	5,729.9	3.7	0.1%	5,727.9	5.7	0.1%
ME 1	48 62 27	2000	Above Normal	April	--	5,364.2	5,361.8	2.4	0.0%	5,361.2	3.0	0.1%	5,359.5	4.7	0.1%
ME 1	48 62 27	2000	Above Normal	May	--	2,751.9	2,738.3	13.5	0.5%	2,735.6	16.2	0.6%	2,727.4	24.4	0.9%
ME 1	48 62 27	2000	Above Normal	June	--	602.9	586.1	16.7	2.8%	582.8	20.1	3.3%	572.8	30.0	5.0%
ME 1	48 62 27	2000	Above Normal	July	--	68.5	60.0	8.6	12.5%	58.3	10.2	14.9%	53.4	15.2	22.2%
ME 1	48 62 27	2000	Above Normal	August	--	55.3	47.0	8.2	14.9%	45.4	9.9	17.9%	40.5	14.8	26.8%
ME 1	48 62 27	2000	Above Normal	September	Used in Summary Table Analysis	48.9	41.6	7.3	15.0%	40.1	8.8	18.1%	35.6	13.3	27.3%
ME 1	48 62 27	2001	Dry	October	Used in Summary Table Analysis	2,771.6	2,763.7	8.0	0.3%	2,762.0	9.6	0.3%	2,757.1	14.6	0.5%
ME 1	48 62 27	2001	Dry	November	Used in Summary Table Analysis	3,308.9	3,302.9	6.0	0.2%	3,301.6	7.3	0.2%	3,297.9	11.0	0.3%
ME 1	48 62 27	2001	Dry	December	--	4,924.0	4,919.0	5.0	0.1%	4,917.9	6.0	0.1%	4,914.8	9.1	0.2%
ME 1	48 62 27	2001	Dry	January	--	6,508.2	6,503.9	4.3	0.1%	6,503.0	5.2	0.1%	6,500.5	7.8	0.1%
ME 1	48 62 27	2001	Dry	February	--	8,597.5	8,593.9	3.6	0.0%	8,593.2	4.3	0.0%	8,590.9	6.6	0.1%
ME 1	48 62 27	2001	Dry	March	--	5,147.5	5,144.4	3.0	0.1%	5,143.8	3.7	0.1%	5,141.9	5.6	0.1%
ME 1	48 62 27	2001	Dry	April	--	5,085.8	5,070.3	15.5	0.3%	5,067.1	18.6	0.4%	5,057.9	27.9	0.5%
ME 1	48 62 27	2001	Dry	May	--	603.3	590.6	12.6	2.1%	588.1	15.1	2.5%	580.6	22.6	3.8%
ME 1	48 62 27	2001	Dry	June	--	1,342.2	1,323.6	18.6	1.4%	1,320.0	22.2	1.7%	1,309.0	33.2	2.5%
ME 1	48 62 27	2001	Dry	July	--	66.6	56.5	10.1	15.1%	54.4	12.1	18.2%	48.3	18.3	27.5%
ME 1	48 62 27	2001	Dry	August	--	53.3	42.7	10.6	19.9%	40.6	12.8	23.9%	34.2	19.1	35.9%
ME 1	48 62 27	2001	Dry	September	Used in Summary Table Analysis	47.7	38.0	9.7	20.4%	36.0	11.7	24.5%	30.1	17.6	36.8%
ME 1	48 62 27	2002	Below Normal	October	Used in Summary Table Analysis	135.9	125.4	10.5	7.7%	123.2	12.7	9.3%	116.6	19.3	14.2%
ME 1	48 62 27	2002	Below Normal	November	Used in Summary Table Analysis	7,269.7	7,261.5	8.2	0.1%	7,259.8	9.8	0.1%	7,255.0	14.7	0.2%
ME 1	48 62 27	2002	Below Normal	December	--	13,850.7	13,842.6	8.1	0.1%	13,841.4	9.3	0.1%	13,836.8	13.9	0.1%
ME 1	48 62 27	2002	Below Normal	January	--	9,657.3	9,651.4	5.9	0.1%	9,650.1	7.2	0.1%	9,646.4	10.9	0.1%
ME 1	48 62 27	2002	Below Normal	February	--	8,380.2	8,375.1	5.1	0.1%	8,374.1	6.1	0.1%	8,370.8	9.4	0.1%
ME 1	48 62 27	2002	Below Normal	March	--	7,244.0	7,239.9	4.1	0.1%	7,239.1	4.9	0.1%	7,236.6	7.4	0.1%
ME 1	48 62 27	2002	Below Normal	April	--	4,277.9	4,264.0	13.9	0.3%	4,261.2	16.7	0.4%	4,252.9	25.0	0.6%
ME 1	48 62 27	2002	Below Normal	May	--	1,138.0	1,126.6	11.4	1.0%	1,124.3	13.7	1.2%	1,117.4	20.6	1.8%
ME 1	48 62 27	2002	Below Normal	June	--	193.8	180.7	13.2	6.8%	178.1	15.8	8.1%	170.3	23.5	12.1%
ME 1	48 62 27	2002	Below Normal	July	--	56.7	47.3	9.4	16.6%	45.4	11.3	19.9%	39.9	16.9	29.8%
ME 1	48 62 27	2002	Below Normal	August	--	50.5	41.3	9.2	18.2%	39.5	11.0	21.9%	33.9	16.6	32.9%
ME 1	48 62 27	2002	Below Normal	September	Used in Summary Table Analysis	46.5	38.1	8.3	17.9%	36.4	10.0	21.6%	30.4	16.0	34.5%
ME 1	48 62 27	2003	Wet	October	Used in Summary Table Analysis	34.8	26.0	8.8	25.2%	24.2	10.6	30.3%	18.8	16.0	45.9%
ME 1	48 62 27	2003	Wet	November	Used in Summary Table Analysis	620.0	613.1	6.9	1.1%	611.6	8.4	1.3%	607.2	12.8	2.1%
ME 1	48 62 27	2003	Wet	December	--	29,729.2	29,723.4	5.8	0.0%	29,722.2	6.9	0.0%	29,718.8	10.4	0.0%
ME 1	48 62 27	2003	Wet	January	--	7,596.1	7,591.2	4.9	0.1%	7,590.2	5.9	0.1%	7,587.0	9.0	0.1%
ME 1	48 62 27	2003	Wet	February	--	5,526.9	5,522.8	4.1	0.1%	5,521.9	5.0	0.1%	5,519.3	7.5	0.1%
ME 1	48 62 27	2003	Wet	March	--	11,054.9	11,051.3	3.6	0.0%	11,050.5	4.4	0.0%	11,048.3	6.6	0.1%
ME 1	48 62 27	2003	Wet	April	--	21,741.9	21,738.4	3.5	0.0%	21,738.4	3.5	0.0%	21,736.1	5.8	0.0%
ME 1	48 62 27	2003	Wet	May	--	2,078.5	2,064.7	13.8	0.7%	2,061.9	16.6	0.8%	2,053.7	24.8	1.2%
ME 1	48 62 27	2003	Wet	June	--	78.4	70.7	7.8	9.9%	69.2	9.2	11.7%	64.9	13.5	17.2%
ME 1	48 62 27	2003	Wet	July	--	62.4	53.2	9.2	14.7%	51.4	11.0	17.6%	46.1	16.3	26.2%
ME 1	48 62 27	2003	Wet	August	--	63.9	52.9	11.0	17.2%	50.2	13.7	21.4%	41.0	22.9	35.9%
ME 1	48 62 27	2003	Wet	September	Used in Summary Table Analysis	48.8	41.4	7.3	15.0%	39.9	8.8	18.1%	34.3	14.5	29.7%
ME 1	48 62 27	2004	Wet	October	Used in Summary Table Analysis	36.0	28.5	7.6	21.0%	26.9	9.2	25.4%	22.1	14.0	38.8%
ME 1	48 62 27	2004	Wet	November	Used in Summary Table Analysis	4,121.1	4,114.8	6.3	0.2%	4,113.5	7.5	0.2%	4,109.5	11.6	0.3%
ME 1	48 62 27	2004	Wet	December	--	18,019.7	18,013.9	5.8	0.0%	18,012.7	6.9	0.0%	18,009.3	10.4	0.1%
ME 1	48 62 27	2004	Wet	January	--	10,196.3	10,191.9	4.4	0.0%	10,191.0	5.3	0.1%	10,188.2	8.1	0.1%
ME 1	48 62 27	2004	Wet	February	--	17,441.0	17,437.5	3.5	0.0%	17,436.3	4.6	0.0%	17,434.0	6.9	0.0%
ME 1	48 62 27	2004	Wet	March	--	4,147.7	4,144.7	3.0	0.1%	4,144.1	3.6	0.1%	4,142.0	5.7	0.1%
ME 1	48 62 27	2004	Wet	April	--	3,533.6	3,531.0	2.5	0.1%	3,530.6	3.0	0.1%	3,528.8	4.7	0.1%
ME 1	48 62 27	2004	Wet	May	--	1,054.5	1,041.0	13.5	1.3%	1,038.3	16.2	1.5%	1,030.2	24.3	2.3%
ME 1	48 62 27	2004	Wet	June	--	68.8	61.8	7.0	10.1%	60.4	8.3	12.1%	56.4	12.3	17.9%
ME 1	48 62 27	2004	Wet	July	--	55.9	47.0	8.9	15.9%	45.2	10.7	19.1%	39.9	15.9	28.5%
ME 1	48 62 27	2004	Wet	August	--	49.2	40.8	8.4	17.2%	39.1	10.1	20.6%	34.0	15.2	31.0%
ME 1	48 62 27	2004	Wet	September	Used in Summary Table Analysis	43.1	32.2	10.9	25.3%	30.0	13.1	30.4%	23.3	19.7	45.8%
ME 1	48 62 27	2005	Above Normal	October	Used in Summary Table Analysis	5,793.5	5,785.2	8.3	0.1%	5,783.4	10.1	0.2%	5,778.4	15.2	0.3%
ME 1	48 62 27	2005	Above Normal	November	Used in Summary Table Analysis	959.5	953.3	6.2	0.6%	952.0	7.4	0.8%	948.2	11.3	1.2%
ME 1	48 62 27	2005	Above Normal	December	--	11,813.7	11,809.0	4.6	0.0%	11,807.9	5.8	0.0%	11,804.4	9.3	0.1%
ME 1	48 62 27	2005	Above Normal	January	--	8,355.4	8,351.0	4.4	0.1%	8,350.1	5.3	0.1%	8,347.2	8.2	0.1%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 62 27	2005	Above Normal	February	--	4,628.9	4,625.3	3.6	0.1%	4,624.5	4.4	0.1%	4,622.2	6.7	0.1%
ME 1	48 62 27	2005	Above Normal	March	--	14,200.2	14,196.8	3.5	0.0%	14,196.8	3.5	0.0%	14,194.4	5.8	0.0%
ME 1	48 62 27	2005	Above Normal	April	--	9,180.0	9,177.2	2.8	0.0%	9,176.6	3.4	0.0%	9,174.9	5.1	0.1%
ME 1	48 62 27	2005	Above Normal	May	--	8,471.5	8,457.1	14.5	0.2%	8,454.3	17.2	0.2%	8,445.7	25.8	0.3%
ME 1	48 62 27	2005	Above Normal	June	--	6,334.0	6,316.6	17.5	0.3%	6,313.1	20.9	0.3%	6,302.9	31.1	0.5%
ME 1	48 62 27	2005	Above Normal	July	--	91.8	81.1	10.7	11.6%	79.5	12.2	13.3%	74.8	17.0	18.5%
ME 1	48 62 27	2005	Above Normal	August	--	64.8	56.5	8.3	12.8%	54.9	9.9	15.2%	50.1	14.7	22.7%
ME 1	48 62 27	2005	Above Normal	September	Used in Summary Table Analysis	54.8	47.5	7.3	13.4%	46.0	8.8	16.0%	41.6	13.2	24.0%
ME 1	48 62 27	2006	Wet	October	Used in Summary Table Analysis	247.6	239.9	7.6	3.1%	238.4	9.2	3.7%	233.6	14.0	5.6%
ME 1	48 62 27	2006	Wet	November	Used in Summary Table Analysis	6,495.8	6,490.2	5.7	0.1%	6,489.0	6.8	0.1%	6,485.4	10.4	0.2%
ME 1	48 62 27	2006	Wet	December	--	19,958.3	19,952.5	5.8	0.0%	19,951.4	6.9	0.0%	19,947.9	10.4	0.1%
ME 1	48 62 27	2006	Wet	January	--	16,843.8	16,839.1	4.6	0.0%	16,839.1	4.6	0.0%	16,835.6	8.1	0.0%
ME 1	48 62 27	2006	Wet	February	--	9,294.4	9,291.1	3.4	0.0%	9,290.3	4.2	0.0%	9,288.1	6.4	0.1%
ME 1	48 62 27	2006	Wet	March	--	23,150.5	23,148.1	2.3	0.0%	23,147.0	3.5	0.0%	23,144.7	5.8	0.0%
ME 1	48 62 27	2006	Wet	April	--	11,453.2	11,450.6	2.7	0.0%	11,450.1	3.1	0.0%	11,448.5	4.7	0.0%
ME 1	48 62 27	2006	Wet	May	--	4,628.2	4,623.5	4.7	0.1%	4,622.6	5.7	0.1%	4,619.8	8.4	0.2%
ME 1	48 62 27	2006	Wet	June	--	561.9	547.3	14.6	2.6%	544.5	17.5	3.1%	536.2	25.8	4.6%
ME 1	48 62 27	2006	Wet	July	--	74.6	66.0	8.6	11.6%	64.3	10.3	13.7%	59.5	15.1	20.2%
ME 1	48 62 27	2006	Wet	August	--	60.4	52.0	8.4	13.8%	50.4	10.0	16.5%	45.5	14.9	24.7%
ME 1	48 62 27	2006	Wet	September	Used in Summary Table Analysis	53.0	45.8	7.2	13.6%	44.4	8.7	16.3%	40.0	13.0	24.6%
ME 1	48 62 27	2007	Above Normal	October	Used in Summary Table Analysis	43.8	36.3	7.5	17.2%	34.7	9.1	20.7%	30.0	13.8	31.6%
ME 1	48 62 27	2007	Above Normal	November	Used in Summary Table Analysis	5,881.8	5,875.5	6.4	0.1%	5,874.2	7.6	0.1%	5,870.0	11.8	0.2%
ME 1	48 62 27	2007	Above Normal	December	--	10,860.9	10,855.2	5.7	0.1%	10,854.1	6.8	0.1%	10,850.5	10.4	0.1%
ME 1	48 62 27	2007	Above Normal	January	--	2,463.4	2,459.0	4.4	0.2%	2,458.2	5.2	0.2%	2,455.3	8.1	0.3%
ME 1	48 62 27	2007	Above Normal	February	--	17,594.9	17,591.4	3.5	0.0%	17,590.3	4.6	0.0%	17,588.0	6.9	0.0%
ME 1	48 62 27	2007	Above Normal	March	--	5,045.7	5,042.6	3.1	0.1%	5,041.9	3.8	0.1%	5,039.9	5.8	0.1%
ME 1	48 62 27	2007	Above Normal	April	--	6,482.5	6,469.0	13.5	0.2%	6,466.2	16.3	0.3%	6,458.1	24.4	0.4%
ME 1	48 62 27	2007	Above Normal	May	--	1,264.5	1,253.7	10.8	0.9%	1,251.5	13.0	1.0%	1,244.9	19.6	1.5%
ME 1	48 62 27	2007	Above Normal	June	--	458.8	443.1	15.7	3.4%	440.0	18.8	4.1%	430.9	27.9	6.1%
ME 1	48 62 27	2007	Above Normal	July	--	107.3	96.1	11.2	10.5%	93.9	13.5	12.5%	87.3	20.1	18.7%
ME 1	48 62 27	2007	Above Normal	August	--	53.5	44.9	8.7	16.2%	43.1	10.4	19.4%	38.0	15.6	29.1%
ME 1	48 62 27	2007	Above Normal	September	Used in Summary Table Analysis	48.5	40.6	8.0	16.4%	39.0	9.6	19.7%	34.1	14.4	29.7%
ME 1	48 62 27	2008	Dry	October	Used in Summary Table Analysis	2,917.7	2,909.3	8.4	0.3%	2,907.5	10.2	0.3%	2,902.2	15.5	0.5%
ME 1	48 62 27	2008	Dry	November	Used in Summary Table Analysis	2,156.0	2,149.7	6.4	0.3%	2,148.4	7.6	0.4%	2,144.4	11.6	0.5%
ME 1	48 62 27	2008	Dry	December	--	14,186.3	14,180.6	5.8	0.0%	14,179.4	6.9	0.0%	14,175.9	10.4	0.1%
ME 1	48 62 27	2008	Dry	January	--	15,875.0	15,869.2	5.8	0.0%	15,869.2	5.8	0.0%	15,865.7	9.3	0.1%
ME 1	48 62 27	2008	Dry	February	--	6,489.9	6,486.2	3.7	0.1%	6,485.4	4.5	0.1%	6,483.0	6.9	0.1%
ME 1	48 62 27	2008	Dry	March	--	3,163.8	3,160.6	3.1	0.1%	3,160.1	3.7	0.1%	3,158.1	5.7	0.2%
ME 1	48 62 27	2008	Dry	April	--	4,317.8	4,302.3	15.5	0.4%	4,299.2	18.6	0.4%	4,289.7	28.1	0.7%
ME 1	48 62 27	2008	Dry	May	--	76.0	69.3	6.7	8.8%	68.2	7.8	10.3%	64.9	11.1	14.7%
ME 1	48 62 27	2008	Dry	June	--	75.7	59.7	16.0	21.2%	56.5	19.2	25.4%	46.9	28.8	38.1%
ME 1	48 62 27	2008	Dry	July	--	48.1	36.9	11.2	23.4%	34.6	13.5	28.0%	28.0	20.1	41.9%
ME 1	48 62 27	2008	Dry	August	--	44.6	33.5	11.1	24.9%	31.3	13.3	29.9%	21.6	22.9	51.5%
ME 1	48 62 27	2008	Dry	September	Used in Summary Table Analysis	33.3	19.2	14.1	42.4%	16.3	16.9	50.9%	7.9	25.4	76.2%
ME 1	48 62 27	2009	Critical	October	Used in Summary Table Analysis	650.9	640.4	10.5	1.6%	638.2	12.7	2.0%	631.5	19.4	3.0%
ME 1	48 62 27	2009	Critical	November	Used in Summary Table Analysis	3,864.9	3,857.1	7.9	0.2%	3,855.6	9.4	0.2%	3,850.6	14.4	0.4%
ME 1	48 62 27	2009	Critical	December	--	7,165.9	7,158.9	6.9	0.1%	7,157.6	8.2	0.1%	7,153.7	12.2	0.2%
ME 1	48 62 27	2009	Critical	January	--	4,429.4	4,423.8	5.6	0.1%	4,422.8	6.6	0.1%	4,419.4	10.0	0.2%
ME 1	48 62 27	2009	Critical	February	--	13,515.0	13,510.4	4.6	0.0%	13,509.3	5.8	0.0%	13,505.8	9.3	0.1%
ME 1	48 62 27	2009	Critical	March	--	10,992.5	10,988.5	3.9	0.0%	10,987.6	4.9	0.0%	10,985.2	7.3	0.1%
ME 1	48 62 27	2009	Critical	April	--	4,796.2	4,780.1	16.1	0.3%	4,777.0	19.2	0.4%	4,767.2	28.9	0.6%
ME 1	48 62 27	2009	Critical	May	--	10,345.9	10,331.4	14.6	0.1%	10,328.6	17.4	0.2%	10,319.8	26.2	0.3%
ME 1	48 62 27	2009	Critical	June	--	336.9	317.8	19.1	5.7%	314.2	22.6	6.7%	303.1	33.7	10.0%
ME 1	48 62 27	2009	Critical	July	--	68.3	57.3	11.0	16.1%	55.2	13.1	19.2%	48.8	19.5	28.6%
ME 1	48 62 27	2009	Critical	August	--	54.2	43.3	10.9	20.2%	41.1	13.1	24.2%	34.6	19.7	36.3%
ME 1	48 62 27	2009	Critical	September	Used in Summary Table Analysis	48.2	38.3	9.8	20.4%	36.3	11.8	24.6%	30.3	17.9	37.1%
ME 1	48 62 27	2010	Below Normal	October	Used in Summary Table Analysis	5,087.3	5,077.1	10.2	0.2%	5,075.0	12.3	0.2%	5,067.7	19.6	0.4%
ME 1	48 62 27	2010	Below Normal	November	Used in Summary Table Analysis	6,061.6	6,053.6	8.0	0.1%	6,052.0	9.6	0.2%	6,046.9	14.7	0.2%
ME 1	48 62 27	2010	Below Normal	December	--	6,261.1	6,254.4	6.7	0.1%	6,253.1	8.0	0.1%	6,249.1	12.0	0.2%
ME 1	48 62 27	2010	Below Normal	January	--	17,998.8	17,993.1	5.8	0.0%	17,991.9	6.9	0.0%	17,988.4	10.4	0.1%
ME 1	48 62 27	2010	Below Normal	February	--	11,604.2	11,599.5	4.6	0.0%	11,598.4	5.8	0.0%	11,594.9	9.3	0.1%
ME 1	48 62 27	2010	Below Normal	March	--	15,943.3	15,938.7	4.6	0.0%	15,938.7	4.6	0.0%	15,935.2	8.1	0.1%
ME 1	48 62 27	2010	Below Normal	April	--	22,751.2	22,747.7	3.5	0.0%	22,747.7	3.5	0.0%	22,745.4	5.8	0.0%
ME 1	48 62 27	2010	Below Normal	May	--	6,388.7	6,373.7	14.9	0.2%	6,370.9	17.7	0.3%	6,362.4	26.3	0.4%

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Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 62 27	2010	Below Normal	June	--	3,599.0	3,581.1	17.8	0.5%	3,577.7	21.3	0.6%	3,567.2	31.7	0.9%
ME 1	48 62 27	2010	Below Normal	July	--	88.4	78.1	10.2	11.6%	76.4	12.0	13.6%	71.3	17.1	19.3%
ME 1	48 62 27	2010	Below Normal	August	--	66.3	57.7	8.7	13.1%	56.0	10.4	15.6%	51.0	15.4	23.2%
ME 1	48 62 27	2010	Below Normal	September	Used in Summary Table Analysis	319.5	308.0	11.5	3.6%	305.6	13.8	4.3%	298.7	20.8	6.5%
ME 1	48 62 27	2011	Wet	October	Used in Summary Table Analysis	7,127.0	7,119.3	7.6	0.1%	7,117.7	9.3	0.1%	7,113.0	14.0	0.2%
ME 1	48 62 27	2011	Wet	November	Used in Summary Table Analysis	6,143.3	6,137.2	6.1	0.1%	6,135.8	7.5	0.1%	6,131.9	11.3	0.2%
ME 1	48 62 27	2011	Wet	December	--	17,415.5	17,409.7	5.8	0.0%	17,408.6	6.9	0.0%	17,405.1	10.4	0.1%
ME 1	48 62 27	2011	Wet	January	--	3,454.4	3,450.6	3.8	0.1%	3,449.8	4.6	0.1%	3,447.2	7.2	0.2%
ME 1	48 62 27	2011	Wet	February	--	10,677.4	10,673.8	3.6	0.0%	10,673.0	4.4	0.0%	10,670.5	6.9	0.1%
ME 1	48 62 27	2011	Wet	March	--	28,556.7	28,553.2	3.5	0.0%	28,552.1	4.6	0.0%	28,549.8	6.9	0.0%
ME 1	48 62 27	2011	Wet	April	--	11,030.7	11,027.9	2.8	0.0%	11,027.3	3.4	0.0%	11,025.5	5.2	0.0%
ME 1	48 62 27	2011	Wet	May	--	4,788.8	4,775.0	13.8	0.3%	4,772.2	16.6	0.3%	4,764.0	24.8	0.5%
ME 1	48 62 27	2011	Wet	June	--	3,122.9	3,105.4	17.5	0.6%	3,102.0	20.9	0.7%	3,091.7	31.3	1.0%
ME 1	48 62 27	2011	Wet	July	--	215.1	199.8	15.3	7.1%	196.9	18.2	8.5%	189.5	25.6	11.9%
ME 1	48 62 27	2011	Wet	August	--	65.2	56.9	8.2	12.6%	55.3	9.8	15.1%	50.5	14.7	22.6%
ME 1	48 62 27	2011	Wet	September	Used in Summary Table Analysis	54.8	47.5	7.2	13.2%	46.1	8.7	15.9%	41.7	13.1	23.9%
ME 1	48 62 27	2012	Below Normal	October	Used in Summary Table Analysis	3,519.2	3,511.8	7.4	0.2%	3,510.3	8.9	0.3%	3,505.7	13.5	0.4%
ME 1	48 62 27	2012	Below Normal	November	Used in Summary Table Analysis	4,803.2	4,797.2	6.0	0.1%	4,795.9	7.3	0.2%	4,792.1	11.1	0.2%
ME 1	48 62 27	2012	Below Normal	December	--	1,952.0	1,947.0	5.0	0.3%	1,945.9	6.0	0.3%	1,942.8	9.1	0.5%
ME 1	48 62 27	2012	Below Normal	January	--	11,396.2	11,392.0	4.2	0.0%	11,391.0	5.2	0.0%	11,388.2	8.0	0.1%
ME 1	48 62 27	2012	Below Normal	February	--	6,636.2	6,632.8	3.5	0.1%	6,631.9	4.3	0.1%	6,629.7	6.5	0.1%
ME 1	48 62 27	2012	Below Normal	March	--	25,053.2	25,049.8	3.5	0.0%	25,048.6	4.6	0.0%	25,046.3	6.9	0.0%
ME 1	48 62 27	2012	Below Normal	April	--	12,476.9	12,473.4	3.5	0.0%	12,473.4	3.5	0.0%	12,471.1	5.8	0.0%
ME 1	48 62 27	2012	Below Normal	May	--	2,041.2	2,027.2	14.0	0.7%	2,024.4	16.8	0.8%	2,016.3	24.9	1.2%
ME 1	48 62 27	2012	Below Normal	June	--	3,028.2	3,010.5	17.7	0.6%	3,007.1	21.2	0.7%	2,996.9	31.4	1.0%
ME 1	48 62 27	2012	Below Normal	July	--	1,079.9	1,064.3	15.6	1.4%	1,061.3	18.6	1.7%	1,052.4	27.5	2.5%
ME 1	48 62 27	2012	Below Normal	August	--	72.1	64.1	8.1	11.2%	62.5	9.7	13.4%	57.8	14.4	19.9%
ME 1	48 62 27	2012	Below Normal	September	Used in Summary Table Analysis	58.6	51.3	7.3	12.4%	49.9	8.8	14.9%	45.6	13.1	22.3%
ME 1	48 62 27	2013	Below Normal	October	Used in Summary Table Analysis	1,478.7	1,470.5	8.2	0.6%	1,468.9	9.8	0.7%	1,463.8	14.9	1.0%
ME 1	48 62 27	2013	Below Normal	November	Used in Summary Table Analysis	9,451.6	9,445.1	6.5	0.1%	9,443.9	7.8	0.1%	9,439.8	11.8	0.1%
ME 1	48 62 27	2013	Below Normal	December	--	32,023.1	32,017.4	5.8	0.0%	32,015.0	8.1	0.0%	32,011.6	11.6	0.0%
ME 1	48 62 27	2013	Below Normal	January	--	4,806.3	4,802.0	4.3	0.1%	4,800.9	5.3	0.1%	4,798.3	8.0	0.2%
ME 1	48 62 27	2013	Below Normal	February	--	3,058.8	3,055.0	3.8	0.1%	3,054.1	4.7	0.2%	3,051.6	7.2	0.2%
ME 1	48 62 27	2013	Below Normal	March	--	5,617.1	5,613.9	3.2	0.1%	5,613.2	3.9	0.1%	5,611.2	5.9	0.1%
ME 1	48 62 27	2013	Below Normal	April	--	4,383.1	4,369.9	13.2	0.3%	4,367.2	15.9	0.4%	4,359.3	23.8	0.5%
ME 1	48 62 27	2013	Below Normal	May	--	2,265.5	2,254.6	10.9	0.5%	2,252.3	13.2	0.6%	2,245.8	19.7	0.9%
ME 1	48 62 27	2013	Below Normal	June	--	1,010.3	994.6	15.6	1.5%	991.6	18.7	1.9%	982.4	27.9	2.8%
ME 1	48 62 27	2013	Below Normal	July	--	68.1	59.3	8.8	12.9%	57.6	10.5	15.4%	52.4	15.7	23.0%
ME 1	48 62 27	2013	Below Normal	August	--	55.1	46.3	8.8	16.0%	44.5	10.6	19.2%	39.2	15.9	28.9%
ME 1	48 62 27	2013	Below Normal	September	Used in Summary Table Analysis	3,820.4	3,808.0	12.4	0.3%	3,805.4	14.9	0.4%	3,797.8	22.6	0.6%
ME 1	48 62 27	2014	Critical	October	Used in Summary Table Analysis	89.3	81.2	8.1	9.1%	79.6	9.8	10.9%	75.4	13.9	15.6%
ME 1	48 62 27	2014	Critical	November	Used in Summary Table Analysis	1,146.0	1,139.6	6.4	0.6%	1,138.3	7.7	0.7%	1,134.3	11.7	1.0%
ME 1	48 62 27	2014	Critical	December	--	915.0	909.8	5.1	0.6%	908.8	6.2	0.7%	905.6	9.4	1.0%
ME 1	48 62 27	2014	Critical	January	--	1,812.0	1,807.8	4.3	0.2%	1,806.8	5.2	0.3%	1,804.2	7.9	0.4%
ME 1	48 62 27	2014	Critical	February	--	9,847.8	9,844.0	3.8	0.0%	9,843.2	4.6	0.0%	9,840.4	7.4	0.1%
ME 1	48 62 27	2014	Critical	March	--	14,798.6	14,795.1	3.5	0.0%	14,795.1	3.5	0.0%	14,792.8	5.8	0.0%
ME 1	48 62 27	2014	Critical	April	--	3,617.5	3,602.1	15.4	0.4%	3,599.1	18.4	0.5%	3,589.8	27.7	0.8%
ME 1	48 62 27	2014	Critical	May	--	1,846.1	1,833.1	13.0	0.7%	1,830.4	15.6	0.8%	1,822.7	23.4	1.3%
ME 1	48 62 27	2014	Critical	June	--	120.6	102.0	18.6	15.4%	98.3	22.3	18.5%	88.0	32.5	27.0%
ME 1	48 62 27	2014	Critical	July	--	57.0	46.2	10.9	19.1%	44.0	13.1	22.9%	37.5	19.6	34.3%
ME 1	48 62 27	2014	Critical	August	--	49.6	38.7	10.9	22.0%	36.5	13.1	26.4%	30.0	19.7	39.7%
ME 1	48 62 27	2014	Critical	September	Used in Summary Table Analysis	2,098.1	2,082.9	15.3	0.7%	2,080.0	18.2	0.9%	2,070.7	27.4	1.3%
ME 1	48 62 27	2015	Dry	October	Used in Summary Table Analysis	8,226.7	8,215.3	11.5	0.1%	8,213.2	13.5	0.2%	8,207.2	19.6	0.2%
ME 1	48 62 27	2015	Dry	November	Used in Summary Table Analysis	4,147.0	4,139.1	7.9	0.2%	4,137.6	9.4	0.2%	4,132.9	14.1	0.3%
ME 1	48 62 27	2015	Dry	December	--	15,217.6	15,210.6	6.9	0.0%	15,209.5	8.1	0.1%	15,206.0	11.6	0.1%
ME 1	48 62 27	2015	Dry	January	--	2,392.7	2,387.5	5.2	0.2%	2,386.3	6.4	0.3%	2,383.0	9.7	0.4%
ME 1	48 62 27	2015	Dry	February	--	15,027.8	15,023.1	4.6	0.0%	15,022.0	5.8	0.0%	15,019.7	8.1	0.1%
ME 1	48 62 27	2015	Dry	March	--	4,129.6	4,126.0	3.6	0.1%	4,125.2	4.4	0.1%	4,123.0	6.6	0.2%
ME 1	48 62 27	2015	Dry	April	--	4,470.7	4,454.7	16.0	0.4%	4,451.5	19.2	0.4%	4,441.9	28.8	0.6%
ME 1	48 62 27	2015	Dry	May	--	141.3	128.3	13.0	9.2%	125.9	15.4	10.9%	119.3	21.9	15.5%
ME 1	48 62 27	2015	Dry	June	--	175.4	159.1	16.4	9.3%	155.8	19.7	11.2%	145.9	29.5	16.8%
ME 1	48 62 27	2015	Dry	July	--	53.0	41.6	11.4	21.5%	39.3	13.6	25.7%	32.6	20.4	38.5%
ME 1	48 62 27	2015	Dry	August	--	47.4	36.2	11.1	23.5%	34.0	13.4	28.2%	27.3	20.1	42.4%
ME 1	48 62 27	2015	Dry	September	Used in Summary Table Analysis	45.7	33.0	12.7	27.8%	30.1	15.6	34.1%	21.5	24.3	53.1%

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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 62 27	2016	Above Normal	October	Used in Summary Table Analysis	37.6	24.7	12.9	34.4%	22.5	15.1	40.2%	15.8	21.8	57.9%
ME 1	48 62 27	2016	Above Normal	November	Used in Summary Table Analysis	2,977.0	2,968.9	8.1	0.3%	2,967.2	9.7	0.3%	2,962.3	14.7	0.5%
ME 1	48 62 27	2016	Above Normal	December	--	19,766.2	19,759.3	6.9	0.0%	19,758.1	8.1	0.0%	19,753.5	12.7	0.1%
ME 1	48 62 27	2016	Above Normal	January	--	20,850.7	20,844.9	5.8	0.0%	20,843.8	6.9	0.0%	20,840.3	10.4	0.0%
ME 1	48 62 27	2016	Above Normal	February	--	5,489.1	5,484.7	4.4	0.1%	5,483.8	5.3	0.1%	5,480.9	8.2	0.1%
ME 1	48 62 27	2016	Above Normal	March	--	20,191.0	20,186.3	4.6	0.0%	20,186.3	4.6	0.0%	20,182.9	8.1	0.0%
ME 1	48 62 27	2016	Above Normal	April	--	5,666.4	5,663.1	3.4	0.1%	5,662.5	3.9	0.1%	5,660.4	6.0	0.1%
ME 1	48 62 27	2016	Above Normal	May	--	1,239.8	1,234.8	5.0	0.4%	1,233.8	6.0	0.5%	1,230.7	9.1	0.7%
ME 1	48 62 27	2016	Above Normal	June	--	80.3	69.1	11.1	13.8%	68.0	12.3	15.3%	64.7	15.5	19.4%
ME 1	48 62 27	2016	Above Normal	July	--	59.9	50.9	9.0	15.0%	49.2	10.7	17.9%	44.0	15.9	26.5%
ME 1	48 62 27	2016	Above Normal	August	--	51.1	42.4	8.7	17.0%	40.7	10.4	20.4%	35.6	15.5	30.4%
ME 1	48 62 27	2016	Above Normal	September	Used in Summary Table Analysis	47.3	37.3	10.0	21.2%	35.1	12.2	25.9%	28.5	18.8	39.6%
ME 1	48 62 27	2017	Wet	October	Used in Summary Table Analysis	12,827.5	12,818.3	9.3	0.1%	12,817.1	10.4	0.1%	12,812.5	15.0	0.1%
ME 1	48 62 27	2017	Wet	November	Used in Summary Table Analysis	7,380.0	7,373.5	6.5	0.1%	7,372.1	7.9	0.1%	7,368.4	11.6	0.2%
ME 1	48 62 27	2017	Wet	December	--	9,425.5	9,420.0	5.4	0.1%	9,418.9	6.6	0.1%	9,415.5	10.0	0.1%
ME 1	48 62 27	2017	Wet	January	--	35,022.0	35,017.4	4.6	0.0%	35,016.2	5.8	0.0%	35,013.9	8.1	0.0%
ME 1	48 62 27	2017	Wet	February	--	33,784.7	33,781.3	3.5	0.0%	33,780.1	4.6	0.0%	33,777.8	6.9	0.0%
ME 1	48 62 27	2017	Wet	March	--	6,422.2	6,419.0	3.2	0.1%	6,418.3	3.9	0.1%	6,416.3	5.9	0.1%
ME 1	48 62 27	2017	Wet	April	--	8,124.2	8,121.6	2.5	0.0%	8,121.1	3.1	0.0%	8,119.4	4.7	0.1%
ME 1	48 62 27	2017	Wet	May	--	192.4	187.8	4.6	2.4%	187.0	5.5	2.8%	184.1	8.3	4.3%
ME 1	48 62 27	2017	Wet	June	--	182.7	168.4	14.3	7.8%	165.5	17.2	9.4%	157.1	25.6	14.0%
ME 1	48 62 27	2017	Wet	July	--	55.9	47.4	8.5	15.3%	45.7	10.2	18.3%	40.8	15.1	27.0%
ME 1	48 62 27	2017	Wet	August	--	51.2	42.8	8.4	16.4%	41.1	10.1	19.7%	36.1	15.1	29.5%
ME 1	48 62 27	2017	Wet	September	Used in Summary Table Analysis	46.4	35.8	10.6	22.9%	33.6	12.8	27.6%	27.2	19.3	41.5%
ME 1	48 62 27	2018	Above Normal	October	Used in Summary Table Analysis	53.6	45.5	8.1	15.1%	43.8	9.7	18.2%	38.9	14.7	27.4%
ME 1	48 62 27	2018	Above Normal	November	Used in Summary Table Analysis	7,127.7	7,121.6	6.0	0.1%	7,120.5	7.2	0.1%	7,116.7	11.0	0.2%
ME 1	48 62 27	2018	Above Normal	December	--	613.0	608.3	4.7	0.8%	607.3	5.7	0.9%	604.4	8.7	1.4%
ME 1	48 62 27	2018	Above Normal	January	--	9,033.8	9,029.6	4.2	0.0%	9,028.7	5.1	0.1%	9,026.2	7.6	0.1%
ME 1	48 62 27	2018	Above Normal	February	--	727.0	723.8	3.3	0.4%	723.0	4.0	0.5%	720.9	6.2	0.8%
ME 1	48 62 27	2018	Above Normal	March	--	9,553.8	9,550.8	3.0	0.0%	9,550.2	3.6	0.0%	9,548.3	5.6	0.1%
ME 1	48 62 27	2018	Above Normal	April	--	17,384.3	17,380.8	3.5	0.0%	17,380.8	3.5	0.0%	17,378.5	5.8	0.0%
ME 1	48 62 27	2018	Above Normal	May	--	725.0	711.9	13.1	1.8%	709.4	15.6	2.2%	701.3	23.7	3.3%
ME 1	48 62 27	2018	Above Normal	June	--	64.8	57.4	7.4	11.4%	56.0	8.7	13.5%	51.9	12.9	19.9%
ME 1	48 62 27	2018	Above Normal	July	--	53.8	44.8	8.9	16.6%	43.0	10.7	19.9%	37.7	16.0	29.8%
ME 1	48 62 27	2018	Above Normal	August	--	49.4	41.0	8.5	17.1%	39.3	10.1	20.5%	34.2	15.2	30.9%
ME 1	48 62 27	2018	Above Normal	September	Used in Summary Table Analysis	42.9	32.1	10.8	25.2%	29.9	13.0	30.3%	23.3	19.6	45.6%
ME 1	48 62 27	2019	Below Normal	October	Used in Summary Table Analysis	57.5	48.6	8.9	15.5%	46.7	10.7	18.7%	41.2	16.3	28.3%
ME 1	48 62 27	2019	Below Normal	November	Used in Summary Table Analysis	4,560.6	4,554.3	6.4	0.1%	4,553.0	7.6	0.2%	4,549.0	11.7	0.3%
ME 1	48 62 27	2019	Below Normal	December	--	7,083.3	7,078.1	5.2	0.1%	7,077.1	6.3	0.1%	7,073.6	9.7	0.1%
ME 1	48 62 27	2019	Below Normal	January	--	16,199.1	16,194.4	4.6	0.0%	16,193.3	5.8	0.0%	16,189.8	9.3	0.1%
ME 1	48 62 27	2019	Below Normal	February	--	44,743.1	44,739.6	3.5	0.0%	44,738.4	4.6	0.0%	44,736.1	6.9	0.0%
ME 1	48 62 27	2019	Below Normal	March	--	10,377.0	10,373.6	3.4	0.0%	10,372.9	4.1	0.0%	10,370.8	6.1	0.1%
ME 1	48 62 27	2019	Below Normal	April	--	3,490.0	3,487.5	2.5	0.1%	3,486.9	3.1	0.1%	3,485.3	4.7	0.1%
ME 1	48 62 27	2019	Below Normal	May	--	6,610.0	6,595.9	14.0	0.2%	6,593.2	16.8	0.3%	6,584.8	25.1	0.4%
ME 1	48 62 27	2019	Below Normal	June	--	81.6	73.0	8.6	10.5%	71.7	10.0	12.2%	67.7	13.9	17.0%
ME 1	48 62 27	2019	Below Normal	July	--	64.0	55.1	8.9	14.0%	53.3	10.7	16.7%	48.2	15.8	24.7%
ME 1	48 62 27	2019	Below Normal	August	--	53.9	45.5	8.4	15.6%	43.8	10.1	18.7%	38.8	15.0	27.9%
ME 1	48 62 27	2019	Below Normal	September	Used in Summary Table Analysis	124.6	113.8	10.8	8.6%	111.6	13.0	10.4%	105.1	19.5	15.7%
ME 1	48 62 27	2020	Dry	October	Used in Summary Table Analysis	157.7	150.1	7.6	4.8%	148.5	9.2	5.8%	143.7	14.0	8.9%
ME 1	48 62 27	2020	Dry	November	Used in Summary Table Analysis	85.1	80.4	4.6	5.4%	79.5	5.6	6.6%	76.5	8.6	10.1%
ME 1	48 62 27	2020	Dry	December	--	7,846.3	7,841.4	4.9	0.1%	7,840.4	5.9	0.1%	7,837.3	9.0	0.1%
ME 1	48 62 27	2020	Dry	January	--	8,976.4	8,972.0	4.4	0.0%	8,971.1	5.3	0.1%	8,968.4	8.0	0.1%
ME 1	48 62 27	2020	Dry	February	--	253.9	250.5	3.4	1.3%	249.8	4.1	1.6%	247.6	6.3	2.5%
ME 1	48 62 27	2020	Dry	March	--	2,657.1	2,654.1	3.0	0.1%	2,653.5	3.6	0.1%	2,651.5	5.6	0.2%
ME 1	48 62 27	2020	Dry	April	--	2,150.1	2,135.0	15.2	0.7%	2,131.9	18.2	0.8%	2,122.8	27.3	1.3%
ME 1	48 62 27	2020	Dry	May	--	3,756.1	3,743.2	13.0	0.3%	3,740.6	15.5	0.4%	3,733.0	23.1	0.6%
ME 1	48 62 27	2020	Dry	June	--	91.8	75.9	15.9	17.4%	73.0	18.9	20.6%	64.1	27.7	30.2%
ME 1	48 62 27	2020	Dry	July	--	54.1	43.3	10.9	20.1%	41.1	13.0	24.1%	34.6	19.5	36.1%
ME 1	48 62 27	2020	Dry	August	--	47.0	36.2	10.9	23.1%	34.0	13.1	27.8%	27.4	19.6	41.7%
ME 1	48 62 27	2020	Dry	September	Used in Summary Table Analysis	44.7	31.8	12.8	28.7%	29.0	15.7	35.1%	20.4	24.2	54.3%
ME 1	48 61 28	2000	Above Normal	October	Used in Summary Table Analysis	382.0	374.3	7.7	2.0%	372.6	9.4	2.5%	367.8	14.2	3.7%
ME 1	48 61 28	2000	Above Normal	November	Used in Summary Table Analysis	8,171.5	8,165.4	6.1	0.1%	8,164.2	7.3	0.1%	8,160.4	11.1	0.1%
ME 1	48 61 28	2000	Above Normal	December	--	4,781.5	4,776.5	5.0	0.1%	4,775.5	6.0	0.1%	4,772.3	9.1	0.2%
ME 1	48 61 28	2000	Above Normal	January	--	14,993.1	14,988.4	4.6	0.0%	14,987.3	5.8	0.0%	14,985.0	8.1	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 61 28	2000	Above Normal	February	--	16,317.1	16,313.7	3.5	0.0%	16,312.5	4.6	0.0%	16,310.2	6.9	0.0%
ME 1	48 61 28	2000	Above Normal	March	--	5,745.5	5,742.5	3.0	0.1%	5,741.8	3.7	0.1%	5,739.8	5.7	0.1%
ME 1	48 61 28	2000	Above Normal	April	--	5,376.9	5,374.3	2.5	0.0%	5,373.8	3.0	0.1%	5,372.1	4.7	0.1%
ME 1	48 61 28	2000	Above Normal	May	--	2,761.7	2,748.1	13.5	0.5%	2,745.4	16.3	0.6%	2,737.2	24.5	0.9%
ME 1	48 61 28	2000	Above Normal	June	--	605.1	588.1	17.0	2.8%	584.7	20.3	3.4%	574.7	30.4	5.0%
ME 1	48 61 28	2000	Above Normal	July	--	68.9	60.1	8.8	12.7%	58.4	10.5	15.2%	53.3	15.6	22.6%
ME 1	48 61 28	2000	Above Normal	August	--	55.8	47.3	8.5	15.2%	45.6	10.1	18.2%	40.6	15.2	27.2%
ME 1	48 61 28	2000	Above Normal	September	Used in Summary Table Analysis	49.4	41.9	7.5	15.2%	40.4	9.0	18.3%	35.8	13.6	27.6%
ME 1	48 61 28	2001	Dry	October	Used in Summary Table Analysis	2,777.0	2,768.9	8.1	0.3%	2,767.2	9.7	0.4%	2,762.2	14.8	0.5%
ME 1	48 61 28	2001	Dry	November	Used in Summary Table Analysis	3,317.2	3,311.1	6.1	0.2%	3,309.8	7.4	0.2%	3,306.1	11.1	0.3%
ME 1	48 61 28	2001	Dry	December	--	4,932.4	4,927.3	5.1	0.1%	4,926.3	6.1	0.1%	4,923.1	9.3	0.2%
ME 1	48 61 28	2001	Dry	January	--	6,524.3	6,520.0	4.3	0.1%	6,519.1	5.2	0.1%	6,516.4	7.9	0.1%
ME 1	48 61 28	2001	Dry	February	--	8,614.4	8,610.8	3.6	0.0%	8,610.0	4.4	0.1%	8,607.6	6.7	0.1%
ME 1	48 61 28	2001	Dry	March	--	5,158.2	5,155.2	3.0	0.1%	5,154.5	3.7	0.1%	5,152.5	5.7	0.1%
ME 1	48 61 28	2001	Dry	April	--	5,099.2	5,083.6	15.6	0.3%	5,080.4	18.8	0.4%	5,071.1	28.1	0.6%
ME 1	48 61 28	2001	Dry	May	--	604.4	591.6	12.8	2.1%	589.0	15.3	2.5%	581.4	23.0	3.8%
ME 1	48 61 28	2001	Dry	June	--	1,344.1	1,325.2	18.9	1.4%	1,321.5	22.6	1.7%	1,310.4	33.7	2.5%
ME 1	48 61 28	2001	Dry	July	--	66.6	56.3	10.3	15.5%	54.2	12.4	18.7%	47.9	18.8	28.1%
ME 1	48 61 28	2001	Dry	August	--	53.6	42.7	10.9	20.3%	40.5	13.1	24.4%	34.0	19.6	36.6%
ME 1	48 61 28	2001	Dry	September	Used in Summary Table Analysis	48.1	38.1	9.9	20.7%	36.1	12.0	24.9%	30.1	18.0	37.4%
ME 1	48 61 28	2002	Below Normal	October	Used in Summary Table Analysis	136.6	125.9	10.7	7.8%	123.6	12.9	9.5%	117.0	19.6	14.3%
ME 1	48 61 28	2002	Below Normal	November	Used in Summary Table Analysis	7,283.1	7,274.8	8.3	0.1%	7,273.0	10.1	0.1%	7,268.1	15.0	0.2%
ME 1	48 61 28	2002	Below Normal	December	--	13,884.3	13,877.3	6.9	0.1%	13,875.0	9.3	0.1%	13,870.4	13.9	0.1%
ME 1	48 61 28	2002	Below Normal	January	--	9,677.1	9,670.9	6.1	0.1%	9,669.8	7.3	0.1%	9,666.0	11.1	0.1%
ME 1	48 61 28	2002	Below Normal	February	--	8,397.2	8,392.1	5.1	0.1%	8,391.0	6.3	0.1%	8,387.7	9.5	0.1%
ME 1	48 61 28	2002	Below Normal	March	--	7,261.5	7,257.3	4.2	0.1%	7,256.5	5.0	0.1%	7,253.9	7.5	0.1%
ME 1	48 61 28	2002	Below Normal	April	--	4,287.6	4,273.6	14.0	0.3%	4,270.8	16.8	0.4%	4,262.4	25.2	0.6%
ME 1	48 61 28	2002	Below Normal	May	--	1,141.7	1,130.1	11.6	1.0%	1,127.8	13.9	1.2%	1,120.8	20.9	1.8%
ME 1	48 61 28	2002	Below Normal	June	--	193.9	180.5	13.4	6.9%	177.8	16.0	8.3%	170.0	23.9	12.3%
ME 1	48 61 28	2002	Below Normal	July	--	57.0	47.3	9.6	16.9%	45.4	11.6	20.3%	39.7	17.3	30.3%
ME 1	48 61 28	2002	Below Normal	August	--	51.0	41.5	9.4	18.5%	39.6	11.3	22.2%	33.9	17.0	33.4%
ME 1	48 61 28	2002	Below Normal	September	Used in Summary Table Analysis	47.0	38.4	8.5	18.1%	36.7	10.3	21.8%	30.6	16.4	34.9%
ME 1	48 61 28	2003	Wet	October	Used in Summary Table Analysis	35.3	26.4	8.9	25.2%	24.6	10.7	30.4%	19.1	16.2	45.9%
ME 1	48 61 28	2003	Wet	November	Used in Summary Table Analysis	620.9	613.9	7.0	1.1%	612.4	8.5	1.4%	607.9	13.0	2.1%
ME 1	48 61 28	2003	Wet	December	--	29,795.1	29,789.4	5.8	0.0%	29,788.2	6.9	0.0%	29,784.7	10.4	0.0%
ME 1	48 61 28	2003	Wet	January	--	7,612.6	7,607.6	5.0	0.1%	7,606.6	6.0	0.1%	7,603.5	9.1	0.1%
ME 1	48 61 28	2003	Wet	February	--	5,539.1	5,535.0	4.2	0.1%	5,534.1	5.0	0.1%	5,531.5	7.6	0.1%
ME 1	48 61 28	2003	Wet	March	--	11,079.3	11,075.7	3.6	0.0%	11,074.9	4.4	0.0%	11,072.6	6.7	0.1%
ME 1	48 61 28	2003	Wet	April	--	21,796.3	21,792.8	3.5	0.0%	21,791.7	4.6	0.0%	21,789.4	6.9	0.0%
ME 1	48 61 28	2003	Wet	May	--	2,085.1	2,071.2	13.9	0.7%	2,068.5	16.6	0.8%	2,060.2	24.9	1.2%
ME 1	48 61 28	2003	Wet	June	--	78.6	70.7	8.0	10.1%	69.2	9.5	12.0%	64.8	13.9	17.6%
ME 1	48 61 28	2003	Wet	July	--	63.0	53.6	9.4	14.9%	51.7	11.2	17.9%	46.2	16.7	26.6%
ME 1	48 61 28	2003	Wet	August	--	64.6	53.4	11.2	17.4%	50.6	13.9	21.6%	41.3	23.3	36.1%
ME 1	48 61 28	2003	Wet	September	Used in Summary Table Analysis	49.4	41.9	7.5	15.2%	40.3	9.0	18.3%	34.6	14.8	30.0%
ME 1	48 61 28	2004	Wet	October	Used in Summary Table Analysis	36.7	29.0	7.7	21.0%	27.4	9.3	25.4%	22.5	14.2	38.7%
ME 1	48 61 28	2004	Wet	November	Used in Summary Table Analysis	4,127.8	4,121.5	6.3	0.2%	4,120.1	7.6	0.2%	4,116.1	11.7	0.3%
ME 1	48 61 28	2004	Wet	December	--	18,060.2	18,054.4	5.8	0.0%	18,053.2	6.9	0.0%	18,049.8	10.4	0.1%
ME 1	48 61 28	2004	Wet	January	--	10,221.3	10,216.9	4.4	0.0%	10,216.0	5.3	0.1%	10,213.1	8.2	0.1%
ME 1	48 61 28	2004	Wet	February	--	17,475.7	17,472.2	3.5	0.0%	17,471.1	4.6	0.0%	17,468.8	6.9	0.0%
ME 1	48 61 28	2004	Wet	March	--	4,157.1	4,154.1	3.0	0.1%	4,153.5	3.6	0.1%	4,151.4	5.7	0.1%
ME 1	48 61 28	2004	Wet	April	--	3,542.5	3,539.9	2.5	0.1%	3,539.4	3.1	0.1%	3,537.6	4.9	0.1%
ME 1	48 61 28	2004	Wet	May	--	1,058.6	1,044.9	13.6	1.3%	1,042.2	16.3	1.5%	1,034.1	24.5	2.3%
ME 1	48 61 28	2004	Wet	June	--	68.8	61.7	7.2	10.4%	60.3	8.6	12.4%	56.2	12.7	18.4%
ME 1	48 61 28	2004	Wet	July	--	56.2	47.1	9.1	16.2%	45.3	10.9	19.4%	39.9	16.3	29.0%
ME 1	48 61 28	2004	Wet	August	--	49.7	41.0	8.7	17.4%	39.3	10.4	20.9%	34.1	15.6	31.4%
ME 1	48 61 28	2004	Wet	September	Used in Summary Table Analysis	43.6	32.5	11.1	25.4%	30.3	13.3	30.6%	23.6	20.1	46.0%
ME 1	48 61 28	2005	Above Normal	October	Used in Summary Table Analysis	5,807.1	5,798.6	8.4	0.1%	5,796.9	10.2	0.2%	5,791.7	15.4	0.3%
ME 1	48 61 28	2005	Above Normal	November	Used in Summary Table Analysis	961.9	955.6	6.3	0.7%	954.3	7.6	0.8%	950.4	11.4	1.2%
ME 1	48 61 28	2005	Above Normal	December	--	11,843.8	11,839.1	4.6	0.0%	11,838.0	5.8	0.0%	11,834.5	9.3	0.1%
ME 1	48 61 28	2005	Above Normal	January	--	8,378.1	8,373.6	4.5	0.1%	8,372.7	5.4	0.1%	8,369.8	8.3	0.1%
ME 1	48 61 28	2005	Above Normal	February	--	4,637.8	4,634.3	3.6	0.1%	4,633.4	4.4	0.1%	4,631.1	6.7	0.1%
ME 1	48 61 28	2005	Above Normal	March	--	14,233.8	14,230.3	3.5	0.0%	14,230.3	3.5	0.0%	14,228.0	5.8	0.0%
ME 1	48 61 28	2005	Above Normal	April	--	9,202.3	9,199.5	2.8	0.0%	9,199.0	3.4	0.0%	9,197.2	5.1	0.1%
ME 1	48 61 28	2005	Above Normal	May	--	8,498.4	8,483.9	14.5	0.2%	8,481.0	17.4	0.2%	8,472.5	25.9	0.3%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 61 28	2005	Above Normal	June	--	6,358.1	6,340.4	17.7	0.3%	6,336.9	21.2	0.3%	6,326.6	31.5	0.5%
ME 1	48 61 28	2005	Above Normal	July	--	91.3	80.4	10.9	11.9%	78.8	12.5	13.7%	73.9	17.4	19.0%
ME 1	48 61 28	2005	Above Normal	August	--	65.2	56.8	8.5	13.0%	55.1	10.1	15.5%	50.2	15.1	23.1%
ME 1	48 61 28	2005	Above Normal	September	Used in Summary Table Analysis	55.4	47.9	7.5	13.5%	46.4	9.0	16.2%	41.9	13.5	24.3%
ME 1	48 61 28	2006	Wet	October	Used in Summary Table Analysis	248.9	241.2	7.8	3.1%	239.6	9.4	3.8%	234.7	14.2	5.7%
ME 1	48 61 28	2006	Wet	November	Used in Summary Table Analysis	6,511.1	6,505.3	5.8	0.1%	6,504.2	6.9	0.1%	6,500.5	10.6	0.2%
ME 1	48 61 28	2006	Wet	December	--	20,006.9	20,001.2	5.8	0.0%	20,000.0	6.9	0.0%	19,996.5	10.4	0.1%
ME 1	48 61 28	2006	Wet	January	--	16,886.6	16,881.9	4.6	0.0%	16,880.8	5.8	0.0%	16,878.5	8.1	0.0%
ME 1	48 61 28	2006	Wet	February	--	9,316.0	9,312.4	3.6	0.0%	9,311.7	4.3	0.0%	9,309.4	6.6	0.1%
ME 1	48 61 28	2006	Wet	March	--	23,204.9	23,201.4	3.5	0.0%	23,200.2	4.6	0.0%	23,197.9	6.9	0.0%
ME 1	48 61 28	2006	Wet	April	--	11,477.3	11,474.7	2.7	0.0%	11,474.1	3.2	0.0%	11,472.6	4.7	0.0%
ME 1	48 61 28	2006	Wet	May	--	4,638.8	4,634.0	4.7	0.1%	4,633.1	5.7	0.1%	4,630.3	8.4	0.2%
ME 1	48 61 28	2006	Wet	June	--	562.5	547.7	14.8	2.6%	544.9	17.6	3.1%	536.5	26.0	4.6%
ME 1	48 61 28	2006	Wet	July	--	75.1	66.3	8.8	11.8%	64.6	10.5	14.0%	59.7	15.4	20.6%
ME 1	48 61 28	2006	Wet	August	--	61.1	52.5	8.6	14.0%	50.8	10.2	16.8%	45.8	15.3	25.0%
ME 1	48 61 28	2006	Wet	September	Used in Summary Table Analysis	53.7	46.3	7.4	13.8%	44.8	8.9	16.5%	40.3	13.4	24.9%
ME 1	48 61 28	2007	Above Normal	October	Used in Summary Table Analysis	44.4	36.7	7.7	17.3%	35.1	9.2	20.8%	30.3	14.1	31.7%
ME 1	48 61 28	2007	Above Normal	November	Used in Summary Table Analysis	5,895.4	5,888.9	6.5	0.1%	5,887.5	7.9	0.1%	5,883.3	12.0	0.2%
ME 1	48 61 28	2007	Above Normal	December	--	10,887.2	10,881.4	5.8	0.1%	10,880.2	6.9	0.1%	10,876.5	10.6	0.1%
ME 1	48 61 28	2007	Above Normal	January	--	2,469.3	2,464.9	4.4	0.2%	2,464.0	5.3	0.2%	2,461.2	8.1	0.3%
ME 1	48 61 28	2007	Above Normal	February	--	17,635.4	17,630.8	4.6	0.0%	17,629.6	5.8	0.0%	17,627.3	8.1	0.0%
ME 1	48 61 28	2007	Above Normal	March	--	5,055.1	5,052.0	3.1	0.1%	5,051.3	3.8	0.1%	5,049.2	5.9	0.1%
ME 1	48 61 28	2007	Above Normal	April	--	6,495.5	6,481.9	13.5	0.2%	6,479.2	16.3	0.3%	6,470.9	24.5	0.4%
ME 1	48 61 28	2007	Above Normal	May	--	1,269.0	1,258.0	11.0	0.9%	1,255.8	13.2	1.0%	1,249.1	19.9	1.6%
ME 1	48 61 28	2007	Above Normal	June	--	459.3	443.4	15.8	3.5%	440.3	19.0	4.1%	431.1	28.2	6.1%
ME 1	48 61 28	2007	Above Normal	July	--	107.6	96.1	11.5	10.7%	93.9	13.7	12.8%	87.1	20.5	19.0%
ME 1	48 61 28	2007	Above Normal	August	--	53.9	45.0	8.9	16.5%	43.2	10.7	19.8%	37.9	16.0	29.6%
ME 1	48 61 28	2007	Above Normal	September	Used in Summary Table Analysis	49.0	40.9	8.2	16.6%	39.2	9.8	20.0%	34.2	14.8	30.2%
ME 1	48 61 28	2008	Dry	October	Used in Summary Table Analysis	2,923.5	2,914.8	8.7	0.3%	2,913.1	10.4	0.4%	2,907.8	15.7	0.5%
ME 1	48 61 28	2008	Dry	November	Used in Summary Table Analysis	2,159.6	2,153.1	6.5	0.3%	2,151.9	7.8	0.4%	2,147.8	11.8	0.5%
ME 1	48 61 28	2008	Dry	December	--	14,219.9	14,214.1	5.8	0.0%	14,213.0	6.9	0.0%	14,209.5	10.4	0.1%
ME 1	48 61 28	2008	Dry	January	--	15,909.7	15,905.1	4.6	0.0%	15,903.9	5.8	0.0%	15,900.5	9.3	0.1%
ME 1	48 61 28	2008	Dry	February	--	6,502.7	6,499.0	3.7	0.1%	6,498.1	4.5	0.1%	6,495.6	7.1	0.1%
ME 1	48 61 28	2008	Dry	March	--	3,171.1	3,167.9	3.1	0.1%	3,167.2	3.8	0.1%	3,165.3	5.8	0.2%
ME 1	48 61 28	2008	Dry	April	--	4,326.6	4,311.0	15.6	0.4%	4,307.9	18.8	0.4%	4,298.4	28.2	0.7%
ME 1	48 61 28	2008	Dry	May	--	75.4	68.5	6.9	9.2%	67.4	8.1	10.7%	63.9	11.5	15.2%
ME 1	48 61 28	2008	Dry	June	--	76.0	59.7	16.3	21.4%	56.5	19.5	25.7%	46.7	29.3	38.5%
ME 1	48 61 28	2008	Dry	July	--	48.4	36.9	11.5	23.8%	34.6	13.8	28.5%	27.8	20.6	42.6%
ME 1	48 61 28	2008	Dry	August	--	45.0	33.6	11.3	25.2%	31.4	13.6	30.3%	21.6	23.4	52.0%
ME 1	48 61 28	2008	Dry	September	Used in Summary Table Analysis	33.8	19.4	14.3	42.4%	16.6	17.2	50.9%	8.0	25.8	76.3%
ME 1	48 61 28	2009	Critical	October	Used in Summary Table Analysis	652.6	641.9	10.7	1.6%	639.7	12.9	2.0%	632.9	19.7	3.0%
ME 1	48 61 28	2009	Critical	November	Used in Summary Table Analysis	3,874.8	3,866.8	8.0	0.2%	3,865.2	9.6	0.2%	3,860.2	14.6	0.4%
ME 1	48 61 28	2009	Critical	December	--	7,184.4	7,177.3	7.1	0.1%	7,176.0	8.3	0.1%	7,172.0	12.4	0.2%
ME 1	48 61 28	2009	Critical	January	--	4,435.0	4,429.3	5.7	0.1%	4,428.2	6.7	0.2%	4,424.8	10.2	0.2%
ME 1	48 61 28	2009	Critical	February	--	13,541.7	13,537.0	4.6	0.0%	13,535.9	5.8	0.0%	13,532.4	9.3	0.1%
ME 1	48 61 28	2009	Critical	March	--	11,012.7	11,008.7	4.1	0.0%	11,007.9	4.9	0.0%	11,005.3	7.4	0.1%
ME 1	48 61 28	2009	Critical	April	--	4,801.4	4,785.2	16.2	0.3%	4,782.1	19.3	0.4%	4,772.3	29.1	0.6%
ME 1	48 61 28	2009	Critical	May	--	10,363.4	10,348.6	14.8	0.1%	10,345.8	17.6	0.2%	10,336.9	26.5	0.3%
ME 1	48 61 28	2009	Critical	June	--	336.7	317.3	19.3	5.7%	313.7	22.9	6.8%	302.5	34.1	10.1%
ME 1	48 61 28	2009	Critical	July	--	68.7	57.4	11.3	16.4%	55.2	13.4	19.6%	48.7	20.0	29.1%
ME 1	48 61 28	2009	Critical	August	--	54.8	43.6	11.2	20.5%	41.3	13.4	24.5%	34.6	20.1	36.8%
ME 1	48 61 28	2009	Critical	September	Used in Summary Table Analysis	48.8	38.7	10.1	20.7%	36.6	12.1	24.9%	30.5	18.3	37.5%
ME 1	48 61 28	2010	Below Normal	October	Used in Summary Table Analysis	5,090.3	5,080.0	10.3	0.2%	5,077.8	12.5	0.2%	5,070.5	19.8	0.4%
ME 1	48 61 28	2010	Below Normal	November	Used in Summary Table Analysis	6,068.9	6,060.6	8.2	0.1%	6,059.0	9.8	0.2%	6,053.9	14.9	0.2%
ME 1	48 61 28	2010	Below Normal	December	--	6,273.8	6,267.0	6.8	0.1%	6,265.7	8.1	0.1%	6,261.6	12.3	0.2%
ME 1	48 61 28	2010	Below Normal	January	--	18,039.4	18,033.6	5.8	0.0%	18,032.4	6.9	0.0%	18,028.9	10.4	0.1%
ME 1	48 61 28	2010	Below Normal	February	--	11,623.8	11,619.2	4.6	0.0%	11,618.1	5.8	0.0%	11,614.6	9.3	0.1%
ME 1	48 61 28	2010	Below Normal	March	--	15,967.6	15,963.0	4.6	0.0%	15,963.0	4.6	0.0%	15,959.5	8.1	0.1%
ME 1	48 61 28	2010	Below Normal	April	--	22,789.4	22,785.9	3.5	0.0%	22,784.7	4.6	0.0%	22,782.4	6.9	0.0%
ME 1	48 61 28	2010	Below Normal	May	--	6,408.3	6,393.4	14.9	0.2%	6,390.6	17.7	0.3%	6,381.9	26.4	0.4%
ME 1	48 61 28	2010	Below Normal	June	--	3,612.6	3,594.6	18.1	0.5%	3,591.1	21.5	0.6%	3,580.4	32.2	0.9%
ME 1	48 61 28	2010	Below Normal	July	--	88.2	77.7	10.5	11.9%	75.9	12.3	13.9%	70.7	17.5	19.8%
ME 1	48 61 28	2010	Below Normal	August	--	66.8	57.9	8.9	13.3%	56.2	10.6	15.9%	51.0	15.8	23.6%
ME 1	48 61 28	2010	Below Normal	September	Used in Summary Table Analysis	320.7	309.0	11.7	3.6%	306.6	14.1	4.4%	299.5	21.1	6.6%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 61 28	2011	Wet	October	Used in Summary Table Analysis	7,138.7	7,130.8	7.9	0.1%	7,129.2	9.5	0.1%	7,124.4	14.2	0.2%
ME 1	48 61 28	2011	Wet	November	Used in Summary Table Analysis	6,155.2	6,149.0	6.3	0.1%	6,147.6	7.6	0.1%	6,143.6	11.6	0.2%
ME 1	48 61 28	2011	Wet	December	--	17,456.0	17,451.4	4.6	0.0%	17,449.1	6.9	0.0%	17,445.6	10.4	0.1%
ME 1	48 61 28	2011	Wet	January	--	3,461.1	3,457.4	3.7	0.1%	3,456.6	4.5	0.1%	3,453.9	7.2	0.2%
ME 1	48 61 28	2011	Wet	February	--	10,692.9	10,689.2	3.7	0.0%	10,688.4	4.5	0.0%	10,685.9	7.1	0.1%
ME 1	48 61 28	2011	Wet	March	--	28,608.8	28,605.3	3.5	0.0%	28,605.3	3.5	0.0%	28,603.0	5.8	0.0%
ME 1	48 61 28	2011	Wet	April	--	11,049.4	11,046.5	2.9	0.0%	11,046.1	3.4	0.0%	11,044.1	5.3	0.0%
ME 1	48 61 28	2011	Wet	May	--	4,800.1	4,786.2	13.9	0.3%	4,783.4	16.7	0.3%	4,775.1	25.0	0.5%
ME 1	48 61 28	2011	Wet	June	--	3,130.9	3,113.2	17.7	0.6%	3,109.6	21.3	0.7%	3,099.2	31.7	1.0%
ME 1	48 61 28	2011	Wet	July	--	215.0	199.5	15.5	7.2%	196.6	18.5	8.6%	189.1	26.0	12.1%
ME 1	48 61 28	2011	Wet	August	--	65.6	57.1	8.4	12.9%	55.5	10.1	15.4%	50.5	15.1	23.0%
ME 1	48 61 28	2011	Wet	September	Used in Summary Table Analysis	55.3	47.9	7.4	13.4%	46.4	8.9	16.1%	41.9	13.4	24.2%
ME 1	48 61 28	2012	Below Normal	October	Used in Summary Table Analysis	3,523.8	3,516.3	7.5	0.2%	3,514.8	9.0	0.3%	3,510.0	13.9	0.4%
ME 1	48 61 28	2012	Below Normal	November	Used in Summary Table Analysis	4,810.8	4,804.6	6.1	0.1%	4,803.4	7.4	0.2%	4,799.5	11.2	0.2%
ME 1	48 61 28	2012	Below Normal	December	--	1,955.9	1,950.9	5.0	0.3%	1,949.9	6.0	0.3%	1,946.8	9.1	0.5%
ME 1	48 61 28	2012	Below Normal	January	--	11,418.8	11,414.6	4.2	0.0%	11,413.5	5.2	0.0%	11,410.6	8.1	0.1%
ME 1	48 61 28	2012	Below Normal	February	--	6,648.4	6,644.9	3.5	0.1%	6,644.1	4.3	0.1%	6,641.8	6.6	0.1%
ME 1	48 61 28	2012	Below Normal	March	--	25,101.9	25,098.4	3.5	0.0%	25,098.4	3.5	0.0%	25,096.1	5.8	0.0%
ME 1	48 61 28	2012	Below Normal	April	--	12,497.7	12,494.2	3.5	0.0%	12,494.2	3.5	0.0%	12,491.9	5.8	0.0%
ME 1	48 61 28	2012	Below Normal	May	--	2,045.4	2,031.4	14.0	0.7%	2,028.6	16.8	0.8%	2,020.4	25.0	1.2%
ME 1	48 61 28	2012	Below Normal	June	--	3,034.1	3,016.3	17.8	0.6%	3,012.7	21.4	0.7%	3,002.4	31.7	1.0%
ME 1	48 61 28	2012	Below Normal	July	--	1,081.3	1,065.5	15.8	1.5%	1,062.4	18.9	1.7%	1,053.5	27.9	2.6%
ME 1	48 61 28	2012	Below Normal	August	--	72.2	63.9	8.3	11.5%	62.3	9.9	13.7%	57.5	14.7	20.4%
ME 1	48 61 28	2012	Below Normal	September	Used in Summary Table Analysis	59.1	51.6	7.5	12.7%	50.1	9.0	15.2%	45.7	13.4	22.7%
ME 1	48 61 28	2013	Below Normal	October	Used in Summary Table Analysis	1,481.0	1,472.8	8.2	0.6%	1,471.1	10.0	0.7%	1,466.0	15.0	1.0%
ME 1	48 61 28	2013	Below Normal	November	Used in Summary Table Analysis	9,471.1	9,464.6	6.5	0.1%	9,463.2	7.9	0.1%	9,459.1	11.9	0.1%
ME 1	48 61 28	2013	Below Normal	December	--	32,061.3	32,055.6	5.8	0.0%	32,054.4	6.9	0.0%	32,049.8	11.6	0.0%
ME 1	48 61 28	2013	Below Normal	January	--	4,815.9	4,811.6	4.3	0.1%	4,810.5	5.3	0.1%	4,807.8	8.1	0.2%
ME 1	48 61 28	2013	Below Normal	February	--	3,064.5	3,060.5	3.9	0.1%	3,059.7	4.7	0.2%	3,057.2	7.3	0.2%
ME 1	48 61 28	2013	Below Normal	March	--	5,628.8	5,625.6	3.2	0.1%	5,624.9	3.9	0.1%	5,622.8	6.0	0.1%
ME 1	48 61 28	2013	Below Normal	April	--	4,390.7	4,377.5	13.2	0.3%	4,374.8	16.0	0.4%	4,366.8	24.0	0.5%
ME 1	48 61 28	2013	Below Normal	May	--	2,269.2	2,258.1	11.1	0.5%	2,255.8	13.4	0.6%	2,249.2	20.0	0.9%
ME 1	48 61 28	2013	Below Normal	June	--	1,010.5	994.7	15.8	1.6%	991.6	18.9	1.9%	982.3	28.2	2.8%
ME 1	48 61 28	2013	Below Normal	July	--	68.2	59.2	9.0	13.2%	57.4	10.8	15.8%	52.1	16.1	23.6%
ME 1	48 61 28	2013	Below Normal	August	--	55.5	46.4	9.0	16.3%	44.6	10.9	19.6%	39.2	16.3	29.4%
ME 1	48 61 28	2013	Below Normal	September	Used in Summary Table Analysis	3,826.7	3,814.0	12.7	0.3%	3,811.5	15.3	0.4%	3,803.7	23.0	0.6%
ME 1	48 61 28	2014	Critical	October	Used in Summary Table Analysis	88.9	80.6	8.3	9.3%	79.0	10.0	11.2%	74.7	14.2	16.0%
ME 1	48 61 28	2014	Critical	November	Used in Summary Table Analysis	1,146.9	1,140.4	6.5	0.6%	1,139.1	7.8	0.7%	1,135.0	11.8	1.0%
ME 1	48 61 28	2014	Critical	December	--	916.0	910.8	5.2	0.6%	909.7	6.3	0.7%	906.4	9.6	1.0%
ME 1	48 61 28	2014	Critical	January	--	1,813.8	1,809.4	4.4	0.2%	1,808.4	5.3	0.3%	1,805.8	8.0	0.4%
ME 1	48 61 28	2014	Critical	February	--	9,864.4	9,860.4	3.9	0.0%	9,859.6	4.7	0.0%	9,856.8	7.5	0.1%
ME 1	48 61 28	2014	Critical	March	--	14,825.2	14,821.8	3.5	0.0%	14,820.6	4.6	0.0%	14,818.3	6.9	0.0%
ME 1	48 61 28	2014	Critical	April	--	3,624.4	3,608.9	15.5	0.4%	3,605.9	18.5	0.5%	3,596.5	27.9	0.8%
ME 1	48 61 28	2014	Critical	May	--	1,849.9	1,836.7	13.2	0.7%	1,834.1	15.7	0.9%	1,826.3	23.6	1.3%
ME 1	48 61 28	2014	Critical	June	--	120.8	102.0	18.8	15.6%	98.3	22.6	18.7%	87.9	32.9	27.2%
ME 1	48 61 28	2014	Critical	July	--	57.3	46.2	11.2	19.5%	44.0	13.4	23.3%	37.3	20.1	35.0%
ME 1	48 61 28	2014	Critical	August	--	50.1	38.9	11.2	22.3%	36.7	13.4	26.8%	30.0	20.2	40.2%
ME 1	48 61 28	2014	Critical	September	Used in Summary Table Analysis	2,100.0	2,084.5	15.5	0.7%	2,081.5	18.5	0.9%	2,072.1	27.9	1.3%
ME 1	48 61 28	2015	Dry	October	Used in Summary Table Analysis	8,240.5	8,228.9	11.6	0.1%	8,226.9	13.7	0.2%	8,220.6	19.9	0.2%
ME 1	48 61 28	2015	Dry	November	Used in Summary Table Analysis	4,155.9	4,147.9	8.0	0.2%	4,146.3	9.6	0.2%	4,141.4	14.5	0.3%
ME 1	48 61 28	2015	Dry	December	--	15,250.0	15,243.1	6.9	0.0%	15,241.9	8.1	0.1%	15,237.3	12.7	0.1%
ME 1	48 61 28	2015	Dry	January	--	2,397.3	2,392.0	5.3	0.2%	2,390.9	6.5	0.3%	2,387.5	9.8	0.4%
ME 1	48 61 28	2015	Dry	February	--	15,054.4	15,049.8	4.6	0.0%	15,048.6	5.8	0.0%	15,046.3	8.1	0.1%
ME 1	48 61 28	2015	Dry	March	--	4,137.6	4,134.0	3.6	0.1%	4,133.2	4.4	0.1%	4,130.9	6.7	0.2%
ME 1	48 61 28	2015	Dry	April	--	4,484.1	4,468.1	16.1	0.4%	4,464.8	19.3	0.4%	4,455.2	28.9	0.6%
ME 1	48 61 28	2015	Dry	May	--	141.5	128.3	13.2	9.3%	125.8	15.7	11.1%	119.1	22.3	15.8%
ME 1	48 61 28	2015	Dry	June	--	175.5	158.9	16.6	9.5%	155.6	19.9	11.4%	145.6	29.9	17.0%
ME 1	48 61 28	2015	Dry	July	--	53.3	41.7	11.6	21.8%	39.4	13.9	26.2%	32.5	20.9	39.1%
ME 1	48 61 28	2015	Dry	August	--	47.8	36.4	11.4	23.9%	34.1	13.7	28.7%	27.2	20.6	43.1%
ME 1	48 61 28	2015	Dry	September	Used in Summary Table Analysis	46.2	33.3	12.9	28.0%	30.4	15.9	34.3%	21.5	24.7	53.4%
ME 1	48 61 28	2016	Above Normal	October	Used in Summary Table Analysis	38.1	25.0	13.1	34.4%	22.7	15.3	40.3%	16.0	22.1	58.0%
ME 1	48 61 28	2016	Above Normal	November	Used in Summary Table Analysis	2,983.0	2,974.9	8.1	0.3%	2,973.1	9.8	0.3%	2,968.1	14.9	0.5%
ME 1	48 61 28	2016	Above Normal	December	--	19,809.0	19,802.1	6.9	0.0%	19,799.8	9.3	0.0%	19,796.3	12.7	0.1%
ME 1	48 61 28	2016	Above Normal	January	--	20,895.8	20,890.0	5.8	0.0%	20,888.9	6.9	0.0%	20,884.3	11.6	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
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Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 61 28	2016	Above Normal	February	--	5,498.6	5,494.1	4.5	0.1%	5,493.2	5.4	0.1%	5,490.3	8.3	0.2%
ME 1	48 61 28	2016	Above Normal	March	--	20,233.8	20,229.2	4.6	0.0%	20,228.0	5.8	0.0%	20,225.7	8.1	0.0%
ME 1	48 61 28	2016	Above Normal	April	--	5,678.8	5,675.5	3.4	0.1%	5,674.9	3.9	0.1%	5,672.7	6.1	0.1%
ME 1	48 61 28	2016	Above Normal	May	--	1,244.7	1,239.7	5.0	0.4%	1,238.7	6.0	0.5%	1,235.4	9.3	0.7%
ME 1	48 61 28	2016	Above Normal	June	--	80.5	69.2	11.2	14.0%	68.0	12.4	15.5%	64.7	15.8	19.6%
ME 1	48 61 28	2016	Above Normal	July	--	60.4	51.2	9.2	15.2%	49.4	11.0	18.2%	44.1	16.3	26.9%
ME 1	48 61 28	2016	Above Normal	August	--	51.7	42.8	8.9	17.2%	41.0	10.7	20.6%	35.8	15.9	30.7%
ME 1	48 61 28	2016	Above Normal	September	Used in Summary Table Analysis	47.9	37.7	10.2	21.3%	35.5	12.4	26.0%	28.8	19.1	39.8%
ME 1	48 61 28	2017	Wet	October	Used in Summary Table Analysis	12,855.3	12,846.1	9.3	0.1%	12,843.8	11.6	0.1%	12,839.1	16.2	0.1%
ME 1	48 61 28	2017	Wet	November	Used in Summary Table Analysis	7,398.1	7,391.6	6.6	0.1%	7,390.2	8.0	0.1%	7,386.3	11.8	0.2%
ME 1	48 61 28	2017	Wet	December	--	9,449.3	9,443.9	5.4	0.1%	9,442.7	6.6	0.1%	9,439.2	10.1	0.1%
ME 1	48 61 28	2017	Wet	January	--	35,086.8	35,082.2	4.6	0.0%	35,081.0	5.8	0.0%	35,077.5	9.3	0.0%
ME 1	48 61 28	2017	Wet	February	--	33,828.7	33,825.2	3.5	0.0%	33,824.1	4.6	0.0%	33,821.8	6.9	0.0%
ME 1	48 61 28	2017	Wet	March	--	6,441.1	6,437.8	3.2	0.1%	6,437.2	3.9	0.1%	6,435.1	6.0	0.1%
ME 1	48 61 28	2017	Wet	April	--	8,151.6	8,149.1	2.5	0.0%	8,148.5	3.1	0.0%	8,146.8	4.9	0.1%
ME 1	48 61 28	2017	Wet	May	--	193.3	188.6	4.6	2.4%	187.7	5.5	2.9%	184.8	8.4	4.4%
ME 1	48 61 28	2017	Wet	June	--	183.1	168.7	14.4	7.9%	165.8	17.3	9.4%	157.3	25.8	14.1%
ME 1	48 61 28	2017	Wet	July	--	56.4	47.7	8.7	15.5%	46.0	10.5	18.5%	41.0	15.5	27.4%
ME 1	48 61 28	2017	Wet	August	--	51.8	43.2	8.6	16.6%	41.5	10.3	19.9%	36.4	15.5	29.8%
ME 1	48 61 28	2017	Wet	September	Used in Summary Table Analysis	47.1	36.3	10.8	23.0%	34.1	13.0	27.7%	27.5	19.6	41.6%
ME 1	48 61 28	2018	Above Normal	October	Used in Summary Table Analysis	54.8	46.6	8.2	15.0%	44.9	9.9	18.1%	39.9	14.9	27.2%
ME 1	48 61 28	2018	Above Normal	November	Used in Summary Table Analysis	7,147.7	7,141.7	6.0	0.1%	7,140.4	7.3	0.1%	7,136.6	11.1	0.2%
ME 1	48 61 28	2018	Above Normal	December	--	614.8	610.1	4.8	0.8%	609.1	5.8	0.9%	606.0	8.8	1.4%
ME 1	48 61 28	2018	Above Normal	January	--	9,058.8	9,054.6	4.2	0.0%	9,053.7	5.1	0.1%	9,051.2	7.6	0.1%
ME 1	48 61 28	2018	Above Normal	February	--	729.1	725.8	3.3	0.5%	725.0	4.1	0.6%	722.8	6.3	0.9%
ME 1	48 61 28	2018	Above Normal	March	--	9,582.8	9,579.7	3.0	0.0%	9,579.2	3.6	0.0%	9,577.2	5.6	0.1%
ME 1	48 61 28	2018	Above Normal	April	--	17,414.4	17,410.9	3.5	0.0%	17,410.9	3.5	0.0%	17,408.6	5.8	0.0%
ME 1	48 61 28	2018	Above Normal	May	--	726.0	712.8	13.1	1.8%	710.2	15.7	2.2%	702.1	23.8	3.3%
ME 1	48 61 28	2018	Above Normal	June	--	64.8	57.2	7.5	11.7%	55.8	9.0	13.8%	51.5	13.2	20.4%
ME 1	48 61 28	2018	Above Normal	July	--	54.1	45.0	9.2	16.9%	43.2	11.0	20.3%	37.7	16.4	30.3%
ME 1	48 61 28	2018	Above Normal	August	--	50.0	41.3	8.7	17.3%	39.6	10.4	20.8%	34.3	15.6	31.2%
ME 1	48 61 28	2018	Above Normal	September	Used in Summary Table Analysis	43.5	32.5	11.0	25.2%	30.3	13.2	30.3%	23.6	19.9	45.7%
ME 1	48 61 28	2019	Below Normal	October	Used in Summary Table Analysis	58.3	49.2	9.0	15.5%	47.4	10.9	18.7%	41.8	16.5	28.3%
ME 1	48 61 28	2019	Below Normal	November	Used in Summary Table Analysis	4,573.7	4,567.2	6.5	0.1%	4,565.9	7.9	0.2%	4,561.8	11.9	0.3%
ME 1	48 61 28	2019	Below Normal	December	--	7,103.8	7,098.5	5.3	0.1%	7,097.5	6.4	0.1%	7,094.0	9.8	0.1%
ME 1	48 61 28	2019	Below Normal	January	--	16,232.6	16,228.0	4.6	0.0%	16,226.9	5.8	0.0%	16,223.4	9.3	0.1%
ME 1	48 61 28	2019	Below Normal	February	--	44,789.4	44,784.7	4.6	0.0%	44,784.7	4.6	0.0%	44,781.3	8.1	0.0%
ME 1	48 61 28	2019	Below Normal	March	--	10,405.6	10,402.2	3.4	0.0%	10,401.5	4.1	0.0%	10,399.4	6.1	0.1%
ME 1	48 61 28	2019	Below Normal	April	--	3,501.0	3,498.4	2.7	0.1%	3,497.8	3.2	0.1%	3,496.2	4.9	0.1%
ME 1	48 61 28	2019	Below Normal	May	--	6,640.2	6,626.0	14.1	0.2%	6,623.3	16.9	0.3%	6,614.9	25.2	0.4%
ME 1	48 61 28	2019	Below Normal	June	--	81.1	72.3	8.8	10.8%	70.9	10.2	12.6%	66.8	14.3	17.6%
ME 1	48 61 28	2019	Below Normal	July	--	64.5	55.3	9.2	14.2%	53.5	11.0	17.0%	48.3	16.2	25.1%
ME 1	48 61 28	2019	Below Normal	August	--	54.5	45.9	8.6	15.8%	44.1	10.3	19.0%	39.1	15.4	28.3%
ME 1	48 61 28	2019	Below Normal	September	Used in Summary Table Analysis	125.9	115.0	10.9	8.7%	112.7	13.2	10.5%	106.1	19.8	15.7%
ME 1	48 61 28	2020	Dry	October	Used in Summary Table Analysis	158.7	150.9	7.8	4.9%	149.3	9.4	5.9%	144.4	14.2	9.0%
ME 1	48 61 28	2020	Dry	November	Used in Summary Table Analysis	85.7	81.0	4.7	5.5%	80.0	5.7	6.7%	77.0	8.7	10.2%
ME 1	48 61 28	2020	Dry	December	--	7,868.1	7,863.1	5.0	0.1%	7,862.0	6.0	0.1%	7,858.9	9.1	0.1%
ME 1	48 61 28	2020	Dry	January	--	8,997.6	8,993.1	4.5	0.1%	8,992.1	5.4	0.1%	8,989.5	8.1	0.1%
ME 1	48 61 28	2020	Dry	February	--	254.6	251.2	3.4	1.4%	250.4	4.2	1.7%	248.2	6.4	2.5%
ME 1	48 61 28	2020	Dry	March	--	2,666.4	2,663.4	3.0	0.1%	2,662.8	3.6	0.1%	2,660.9	5.6	0.2%
ME 1	48 61 28	2020	Dry	April	--	2,157.2	2,141.9	15.3	0.7%	2,138.9	18.3	0.8%	2,129.7	27.4	1.3%
ME 1	48 61 28	2020	Dry	May	--	3,770.8	3,757.8	13.1	0.3%	3,755.2	15.6	0.4%	3,747.5	23.4	0.6%
ME 1	48 61 28	2020	Dry	June	--	91.2	75.0	16.2	17.7%	72.0	19.2	21.0%	63.0	28.1	30.8%
ME 1	48 61 28	2020	Dry	July	--	54.2	43.1	11.1	20.5%	40.8	13.3	24.6%	34.2	20.0	36.9%
ME 1	48 61 28	2020	Dry	August	--	47.4	36.3	11.1	23.5%	34.0	13.4	28.2%	27.3	20.1	42.4%
ME 1	48 61 28	2020	Dry	September	Used in Summary Table Analysis	45.1	32.1	13.1	28.9%	29.2	16.0	35.4%	20.5	24.7	54.6%
ME 1	47 60 29	2000	Above Normal	October	Used in Summary Table Analysis	383.4	375.6	7.8	2.0%	373.9	9.4	2.5%	369.0	14.3	3.7%
ME 1	47 60 29	2000	Above Normal	November	Used in Summary Table Analysis	8,191.2	8,185.0	6.3	0.1%	8,183.8	7.4	0.1%	8,180.0	11.2	0.1%
ME 1	47 60 29	2000	Above Normal	December	--	4,792.5	4,787.4	5.1	0.1%	4,786.3	6.1	0.1%	4,783.2	9.3	0.2%
ME 1	47 60 29	2000	Above Normal	January	--	15,025.5	15,020.8	4.6	0.0%	15,019.7	5.8	0.0%	15,017.4	8.1	0.1%
ME 1	47 60 29	2000	Above Normal	February	--	16,349.5	16,346.1	3.5	0.0%	16,344.9	4.6	0.0%	16,342.6	6.9	0.0%
ME 1	47 60 29	2000	Above Normal	March	--	5,756.9	5,753.9	3.0	0.1%	5,753.2	3.7	0.1%	5,751.2	5.8	0.1%
ME 1	47 60 29	2000	Above Normal	April	--	5,388.9	5,386.3	2.5	0.0%	5,385.8	3.1	0.1%	5,384.0	4.9	0.1%
ME 1	47 60 29	2000	Above Normal	May	--	2,771.1	2,757.5	13.5	0.5%	2,754.7	16.3	0.6%	2,746.5	24.5	0.9%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 60 29	2000	Above Normal	June	--	607.1	590.0	17.1	2.8%	586.6	20.5	3.4%	576.5	30.6	5.0%
ME 1	47 60 29	2000	Above Normal	July	--	69.1	60.2	8.9	12.9%	58.5	10.6	15.4%	53.3	15.8	22.9%
ME 1	47 60 29	2000	Above Normal	August	--	56.2	47.6	8.6	15.2%	45.9	10.3	18.3%	40.8	15.4	27.4%
ME 1	47 60 29	2000	Above Normal	September	Used in Summary Table Analysis	49.9	42.2	7.6	15.3%	40.7	9.2	18.4%	36.0	13.8	27.7%
ME 1	47 60 29	2001	Dry	October	Used in Summary Table Analysis	2,782.1	2,774.0	8.1	0.3%	2,772.2	9.8	0.4%	2,767.1	14.9	0.5%
ME 1	47 60 29	2001	Dry	November	Used in Summary Table Analysis	3,325.3	3,319.1	6.3	0.2%	3,317.9	7.4	0.2%	3,314.1	11.2	0.3%
ME 1	47 60 29	2001	Dry	December	--	4,940.5	4,935.4	5.1	0.1%	4,934.4	6.1	0.1%	4,931.3	9.3	0.2%
ME 1	47 60 29	2001	Dry	January	--	6,539.9	6,535.5	4.4	0.1%	6,534.6	5.3	0.1%	6,531.9	8.0	0.1%
ME 1	47 60 29	2001	Dry	February	--	8,630.7	8,627.1	3.6	0.0%	8,626.3	4.4	0.1%	8,623.8	6.8	0.1%
ME 1	47 60 29	2001	Dry	March	--	5,168.5	5,165.5	3.0	0.1%	5,164.8	3.7	0.1%	5,162.8	5.7	0.1%
ME 1	47 60 29	2001	Dry	April	--	5,111.9	5,096.3	15.6	0.3%	5,093.2	18.8	0.4%	5,083.8	28.1	0.6%
ME 1	47 60 29	2001	Dry	May	--	605.3	592.4	12.9	2.1%	589.8	15.5	2.6%	582.1	23.2	3.8%
ME 1	47 60 29	2001	Dry	June	--	1,345.7	1,326.7	19.0	1.4%	1,323.0	22.7	1.7%	1,311.8	33.9	2.5%
ME 1	47 60 29	2001	Dry	July	--	66.6	56.2	10.5	15.7%	54.0	12.6	18.9%	47.6	19.0	28.5%
ME 1	47 60 29	2001	Dry	August	--	53.8	42.8	11.0	20.5%	40.6	13.2	24.6%	33.9	19.9	36.9%
ME 1	47 60 29	2001	Dry	September	Used in Summary Table Analysis	48.4	38.4	10.1	20.8%	36.3	12.1	25.0%	30.2	18.2	37.6%
ME 1	47 60 29	2002	Below Normal	October	Used in Summary Table Analysis	137.2	126.4	10.8	7.9%	124.1	13.0	9.5%	117.4	19.7	14.4%
ME 1	47 60 29	2002	Below Normal	November	Used in Summary Table Analysis	7,296.2	7,287.7	8.4	0.1%	7,286.0	10.2	0.1%	7,281.0	15.2	0.2%
ME 1	47 60 29	2002	Below Normal	December	--	13,917.8	13,909.7	8.1	0.1%	13,908.6	9.3	0.1%	13,903.9	13.9	0.1%
ME 1	47 60 29	2002	Below Normal	January	--	9,696.2	9,690.0	6.1	0.1%	9,688.8	7.4	0.1%	9,685.1	11.1	0.1%
ME 1	47 60 29	2002	Below Normal	February	--	8,413.7	8,408.4	5.2	0.1%	8,407.4	6.3	0.1%	8,404.2	9.5	0.1%
ME 1	47 60 29	2002	Below Normal	March	--	7,278.2	7,274.1	4.2	0.1%	7,273.3	5.0	0.1%	7,270.7	7.5	0.1%
ME 1	47 60 29	2002	Below Normal	April	--	4,296.8	4,282.8	14.0	0.3%	4,280.0	16.8	0.4%	4,271.5	25.2	0.6%
ME 1	47 60 29	2002	Below Normal	May	--	1,145.1	1,133.4	11.7	1.0%	1,131.1	14.0	1.2%	1,124.0	21.1	1.8%
ME 1	47 60 29	2002	Below Normal	June	--	193.7	180.3	13.5	7.0%	177.6	16.1	8.3%	169.7	24.1	12.4%
ME 1	47 60 29	2002	Below Normal	July	--	57.1	47.4	9.8	17.1%	45.4	11.7	20.5%	39.6	17.5	30.6%
ME 1	47 60 29	2002	Below Normal	August	--	51.3	41.8	9.5	18.6%	39.9	11.5	22.3%	34.1	17.2	33.5%
ME 1	47 60 29	2002	Below Normal	September	Used in Summary Table Analysis	47.4	38.8	8.6	18.2%	37.0	10.4	21.9%	30.8	16.6	35.0%
ME 1	47 60 29	2003	Wet	October	Used in Summary Table Analysis	35.8	26.9	9.0	25.1%	25.0	10.8	30.2%	19.5	16.4	45.6%
ME 1	47 60 29	2003	Wet	November	Used in Summary Table Analysis	621.8	614.8	7.0	1.1%	613.2	8.6	1.4%	608.7	13.1	2.1%
ME 1	47 60 29	2003	Wet	December	--	29,858.8	29,853.0	5.8	0.0%	29,851.9	6.9	0.0%	29,848.4	10.4	0.0%
ME 1	47 60 29	2003	Wet	January	--	7,628.6	7,623.6	5.0	0.1%	7,622.6	6.0	0.1%	7,619.3	9.3	0.1%
ME 1	47 60 29	2003	Wet	February	--	5,550.8	5,546.6	4.2	0.1%	5,545.8	5.0	0.1%	5,543.2	7.6	0.1%
ME 1	47 60 29	2003	Wet	March	--	11,102.9	11,099.2	3.7	0.0%	11,098.5	4.4	0.0%	11,096.1	6.8	0.1%
ME 1	47 60 29	2003	Wet	April	--	21,848.4	21,844.9	3.5	0.0%	21,843.8	4.6	0.0%	21,841.4	6.9	0.0%
ME 1	47 60 29	2003	Wet	May	--	2,091.3	2,077.3	14.0	0.7%	2,074.7	16.7	0.8%	2,066.3	25.0	1.2%
ME 1	47 60 29	2003	Wet	June	--	78.6	70.5	8.1	10.3%	69.0	9.6	12.2%	64.5	14.1	17.9%
ME 1	47 60 29	2003	Wet	July	--	63.4	53.9	9.5	15.0%	52.0	11.4	17.9%	46.5	17.0	26.7%
ME 1	47 60 29	2003	Wet	August	--	65.1	53.8	11.3	17.4%	51.1	14.0	21.6%	41.6	23.5	36.1%
ME 1	47 60 29	2003	Wet	September	Used in Summary Table Analysis	49.9	42.3	7.6	15.2%	40.8	9.2	18.3%	35.0	15.0	30.0%
ME 1	47 60 29	2004	Wet	October	Used in Summary Table Analysis	37.3	29.5	7.8	20.9%	27.9	9.4	25.3%	22.9	14.3	38.5%
ME 1	47 60 29	2004	Wet	November	Used in Summary Table Analysis	4,134.3	4,127.9	6.4	0.2%	4,126.6	7.6	0.2%	4,122.5	11.8	0.3%
ME 1	47 60 29	2004	Wet	December	--	18,099.5	18,093.8	5.8	0.0%	18,092.6	6.9	0.0%	18,089.1	10.4	0.1%
ME 1	47 60 29	2004	Wet	January	--	10,245.6	10,241.1	4.5	0.0%	10,240.2	5.4	0.1%	10,237.3	8.3	0.1%
ME 1	47 60 29	2004	Wet	February	--	17,510.4	17,505.8	4.6	0.0%	17,505.8	4.6	0.0%	17,502.3	8.1	0.0%
ME 1	47 60 29	2004	Wet	March	--	4,166.0	4,163.0	3.0	0.1%	4,162.3	3.7	0.1%	4,160.2	5.8	0.1%
ME 1	47 60 29	2004	Wet	April	--	3,550.9	3,548.4	2.5	0.1%	3,547.8	3.1	0.1%	3,546.1	4.9	0.1%
ME 1	47 60 29	2004	Wet	May	--	1,062.3	1,048.6	13.7	1.3%	1,045.9	16.4	1.5%	1,037.7	24.6	2.3%
ME 1	47 60 29	2004	Wet	June	--	68.8	61.5	7.3	10.6%	60.1	8.7	12.6%	55.9	12.9	18.7%
ME 1	47 60 29	2004	Wet	July	--	56.5	47.3	9.2	16.3%	45.4	11.1	19.6%	40.0	16.5	29.2%
ME 1	47 60 29	2004	Wet	August	--	50.1	41.3	8.8	17.5%	39.6	10.5	21.0%	34.3	15.8	31.5%
ME 1	47 60 29	2004	Wet	September	Used in Summary Table Analysis	44.1	32.9	11.2	25.3%	30.6	13.4	30.5%	23.9	20.2	45.9%
ME 1	47 60 29	2005	Above Normal	October	Used in Summary Table Analysis	5,820.1	5,811.6	8.6	0.1%	5,810.0	10.2	0.2%	5,804.7	15.4	0.3%
ME 1	47 60 29	2005	Above Normal	November	Used in Summary Table Analysis	964.0	957.7	6.3	0.7%	956.4	7.6	0.8%	952.5	11.5	1.2%
ME 1	47 60 29	2005	Above Normal	December	--	11,873.8	11,868.1	5.8	0.0%	11,866.9	6.9	0.1%	11,863.4	10.4	0.1%
ME 1	47 60 29	2005	Above Normal	January	--	8,400.0	8,395.5	4.5	0.1%	8,394.6	5.4	0.1%	8,391.7	8.3	0.1%
ME 1	47 60 29	2005	Above Normal	February	--	4,646.4	4,642.8	3.6	0.1%	4,642.0	4.4	0.1%	4,639.7	6.7	0.1%
ME 1	47 60 29	2005	Above Normal	March	--	14,266.2	14,262.7	3.5	0.0%	14,262.7	3.5	0.0%	14,260.4	5.8	0.0%
ME 1	47 60 29	2005	Above Normal	April	--	9,223.8	9,220.9	2.9	0.0%	9,220.4	3.5	0.0%	9,218.6	5.2	0.1%
ME 1	47 60 29	2005	Above Normal	May	--	8,524.3	8,509.7	14.6	0.2%	8,506.9	17.4	0.2%	8,498.3	26.0	0.3%
ME 1	47 60 29	2005	Above Normal	June	--	6,381.4	6,363.4	17.9	0.3%	6,360.0	21.4	0.3%	6,349.7	31.7	0.5%
ME 1	47 60 29	2005	Above Normal	July	--	90.6	79.6	11.0	12.1%	78.0	12.6	14.0%	73.0	17.6	19.4%
ME 1	47 60 29	2005	Above Normal	August	--	65.5	56.9	8.6	13.1%	55.3	10.2	15.6%	50.3	15.3	23.3%
ME 1	47 60 29	2005	Above Normal	September	Used in Summary Table Analysis	55.9	48.3	7.6	13.6%	46.8	9.1	16.3%	42.3	13.6	24.4%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 60 29	2006	Wet	October	Used in Summary Table Analysis	250.2	242.4	7.8	3.1%	240.8	9.4	3.8%	235.9	14.3	5.7%
ME 1	47 60 29	2006	Wet	November	Used in Summary Table Analysis	6,525.8	6,520.0	5.8	0.1%	6,518.8	7.1	0.1%	6,515.0	10.8	0.2%
ME 1	47 60 29	2006	Wet	December	--	20,053.2	20,047.5	5.8	0.0%	20,046.3	6.9	0.0%	20,042.8	10.4	0.1%
ME 1	47 60 29	2006	Wet	January	--	16,928.2	16,923.6	4.6	0.0%	16,922.5	5.8	0.0%	16,920.1	8.1	0.0%
ME 1	47 60 29	2006	Wet	February	--	9,336.6	9,333.0	3.6	0.0%	9,332.3	4.3	0.0%	9,330.0	6.6	0.1%
ME 1	47 60 29	2006	Wet	March	--	23,255.8	23,253.5	2.3	0.0%	23,252.3	3.5	0.0%	23,250.0	5.8	0.0%
ME 1	47 60 29	2006	Wet	April	--	11,500.5	11,497.8	2.7	0.0%	11,497.2	3.2	0.0%	11,495.6	4.9	0.0%
ME 1	47 60 29	2006	Wet	May	--	4,648.7	4,644.0	4.7	0.1%	4,643.1	5.7	0.1%	4,640.2	8.6	0.2%
ME 1	47 60 29	2006	Wet	June	--	562.7	547.9	14.8	2.6%	545.0	17.7	3.1%	536.6	26.1	4.6%
ME 1	47 60 29	2006	Wet	July	--	75.4	66.4	8.9	11.9%	64.7	10.6	14.1%	59.7	15.6	20.7%
ME 1	47 60 29	2006	Wet	August	--	61.6	52.9	8.7	14.1%	51.2	10.4	16.8%	46.1	15.5	25.1%
ME 1	47 60 29	2006	Wet	September	Used in Summary Table Analysis	54.2	46.7	7.5	13.8%	45.3	9.0	16.5%	40.7	13.5	24.9%
ME 1	47 60 29	2007	Above Normal	October	Used in Summary Table Analysis	44.9	37.2	7.7	17.2%	35.6	9.3	20.7%	30.7	14.2	31.6%
ME 1	47 60 29	2007	Above Normal	November	Used in Summary Table Analysis	5,908.3	5,901.9	6.5	0.1%	5,900.5	7.9	0.1%	5,896.3	12.0	0.2%
ME 1	47 60 29	2007	Above Normal	December	--	10,912.5	10,906.7	5.8	0.1%	10,905.6	6.9	0.1%	10,901.9	10.6	0.1%
ME 1	47 60 29	2007	Above Normal	January	--	2,475.0	2,470.6	4.4	0.2%	2,469.7	5.3	0.2%	2,466.8	8.2	0.3%
ME 1	47 60 29	2007	Above Normal	February	--	17,673.6	17,670.1	3.5	0.0%	17,669.0	4.6	0.0%	17,665.5	8.1	0.0%
ME 1	47 60 29	2007	Above Normal	March	--	5,064.0	5,060.9	3.1	0.1%	5,060.2	3.8	0.1%	5,058.1	5.9	0.1%
ME 1	47 60 29	2007	Above Normal	April	--	6,507.9	6,494.2	13.7	0.2%	6,491.6	16.3	0.3%	6,483.2	24.7	0.4%
ME 1	47 60 29	2007	Above Normal	May	--	1,273.0	1,262.0	11.0	0.9%	1,259.7	13.3	1.0%	1,253.0	20.0	1.6%
ME 1	47 60 29	2007	Above Normal	June	--	459.6	443.6	16.0	3.5%	440.5	19.1	4.2%	431.2	28.4	6.2%
ME 1	47 60 29	2007	Above Normal	July	--	107.7	96.1	11.6	10.7%	93.9	13.9	12.9%	87.1	20.7	19.2%
ME 1	47 60 29	2007	Above Normal	August	--	54.2	45.2	9.0	16.6%	43.4	10.8	19.9%	38.0	16.2	29.8%
ME 1	47 60 29	2007	Above Normal	September	Used in Summary Table Analysis	49.5	41.2	8.3	16.7%	39.5	9.9	20.1%	34.5	15.0	30.3%
ME 1	47 60 29	2008	Dry	October	Used in Summary Table Analysis	2,928.9	2,920.3	8.7	0.3%	2,918.4	10.5	0.4%	2,913.1	15.9	0.5%
ME 1	47 60 29	2008	Dry	November	Used in Summary Table Analysis	2,163.1	2,156.5	6.6	0.3%	2,155.1	8.0	0.4%	2,151.0	12.0	0.6%
ME 1	47 60 29	2008	Dry	December	--	14,252.3	14,246.5	5.8	0.0%	14,245.4	6.9	0.0%	14,241.9	10.4	0.1%
ME 1	47 60 29	2008	Dry	January	--	15,944.4	15,938.7	5.8	0.0%	15,937.5	6.9	0.0%	15,935.2	9.3	0.1%
ME 1	47 60 29	2008	Dry	February	--	6,515.0	6,511.2	3.8	0.1%	6,510.4	4.6	0.1%	6,507.9	7.2	0.1%
ME 1	47 60 29	2008	Dry	March	--	3,178.0	3,174.8	3.2	0.1%	3,174.2	3.8	0.1%	3,172.1	5.9	0.2%
ME 1	47 60 29	2008	Dry	April	--	4,335.1	4,319.3	15.7	0.4%	4,316.2	18.9	0.4%	4,306.7	28.4	0.7%
ME 1	47 60 29	2008	Dry	May	--	74.7	67.6	7.0	9.4%	66.5	8.2	11.0%	63.0	11.7	15.7%
ME 1	47 60 29	2008	Dry	June	--	76.1	59.7	16.4	21.5%	56.4	19.6	25.8%	46.6	29.5	38.7%
ME 1	47 60 29	2008	Dry	July	--	48.6	37.0	11.6	23.9%	34.7	13.9	28.6%	27.8	20.8	42.8%
ME 1	47 60 29	2008	Dry	August	--	45.4	33.9	11.5	25.3%	31.6	13.8	30.4%	21.7	23.6	52.1%
ME 1	47 60 29	2008	Dry	September	Used in Summary Table Analysis	34.2	19.8	14.4	42.2%	16.9	17.3	50.7%	8.2	26.0	75.9%
ME 1	47 60 29	2009	Critical	October	Used in Summary Table Analysis	654.2	643.4	10.8	1.6%	641.2	13.0	2.0%	634.3	19.9	3.0%
ME 1	47 60 29	2009	Critical	November	Used in Summary Table Analysis	3,884.1	3,876.2	8.0	0.2%	3,874.4	9.7	0.3%	3,869.4	14.7	0.4%
ME 1	47 60 29	2009	Critical	December	--	7,202.3	7,195.3	7.1	0.1%	7,193.9	8.4	0.1%	7,189.8	12.5	0.2%
ME 1	47 60 29	2009	Critical	January	--	4,440.2	4,434.5	5.7	0.1%	4,433.3	6.8	0.2%	4,430.0	10.2	0.2%
ME 1	47 60 29	2009	Critical	February	--	13,567.1	13,562.5	4.6	0.0%	13,561.3	5.8	0.0%	13,559.0	8.1	0.1%
ME 1	47 60 29	2009	Critical	March	--	11,032.2	11,028.1	4.1	0.0%	11,027.3	4.9	0.0%	11,024.8	7.4	0.1%
ME 1	47 60 29	2009	Critical	April	--	4,806.3	4,789.9	16.3	0.3%	4,786.8	19.4	0.4%	4,777.0	29.3	0.6%
ME 1	47 60 29	2009	Critical	May	--	10,380.1	10,365.3	14.8	0.1%	10,362.4	17.7	0.2%	10,353.5	26.6	0.3%
ME 1	47 60 29	2009	Critical	June	--	336.2	316.8	19.4	5.8%	313.1	23.1	6.9%	301.9	34.4	10.2%
ME 1	47 60 29	2009	Critical	July	--	68.9	57.5	11.4	16.6%	55.3	13.6	19.7%	48.7	20.2	29.3%
ME 1	47 60 29	2009	Critical	August	--	55.2	43.9	11.3	20.5%	41.6	13.6	24.6%	34.9	20.4	36.9%
ME 1	47 60 29	2009	Critical	September	Used in Summary Table Analysis	49.3	39.1	10.2	20.7%	37.0	12.3	24.9%	30.8	18.5	37.5%
ME 1	47 60 29	2010	Below Normal	October	Used in Summary Table Analysis	5,093.2	5,082.8	10.4	0.2%	5,080.6	12.6	0.2%	5,073.1	20.0	0.4%
ME 1	47 60 29	2010	Below Normal	November	Used in Summary Table Analysis	6,075.7	6,067.5	8.2	0.1%	6,065.7	10.0	0.2%	6,060.6	15.0	0.2%
ME 1	47 60 29	2010	Below Normal	December	--	6,286.1	6,279.3	6.8	0.1%	6,277.9	8.2	0.1%	6,273.7	12.4	0.2%
ME 1	47 60 29	2010	Below Normal	January	--	18,079.9	18,074.1	5.8	0.0%	18,072.9	6.9	0.0%	18,069.4	10.4	0.1%
ME 1	47 60 29	2010	Below Normal	February	--	11,642.4	11,637.7	4.6	0.0%	11,636.6	5.8	0.0%	11,634.3	8.1	0.1%
ME 1	47 60 29	2010	Below Normal	March	--	15,990.7	15,986.1	4.6	0.0%	15,986.1	4.6	0.0%	15,982.6	8.1	0.1%
ME 1	47 60 29	2010	Below Normal	April	--	22,825.2	22,821.8	3.5	0.0%	22,820.6	4.6	0.0%	22,818.3	6.9	0.0%
ME 1	47 60 29	2010	Below Normal	May	--	6,427.2	6,412.3	14.9	0.2%	6,409.4	17.8	0.3%	6,400.7	26.5	0.4%
ME 1	47 60 29	2010	Below Normal	June	--	3,625.6	3,607.4	18.2	0.5%	3,603.8	21.8	0.6%	3,593.2	32.4	0.9%
ME 1	47 60 29	2010	Below Normal	July	--	87.7	77.1	10.6	12.1%	75.3	12.4	14.2%	70.0	17.7	20.2%
ME 1	47 60 29	2010	Below Normal	August	--	67.1	58.1	9.0	13.4%	56.3	10.7	16.0%	51.1	16.0	23.8%
ME 1	47 60 29	2010	Below Normal	September	Used in Summary Table Analysis	321.7	309.9	11.8	3.7%	307.5	14.2	4.4%	300.4	21.3	6.6%
ME 1	47 60 29	2011	Wet	October	Used in Summary Table Analysis	7,149.9	7,141.9	8.0	0.1%	7,140.3	9.6	0.1%	7,135.4	14.5	0.2%
ME 1	47 60 29	2011	Wet	November	Used in Summary Table Analysis	6,166.7	6,160.3	6.4	0.1%	6,159.0	7.6	0.1%	6,155.1	11.6	0.2%
ME 1	47 60 29	2011	Wet	December	--	17,496.5	17,491.9	4.6	0.0%	17,489.6	6.9	0.0%	17,486.1	10.4	0.1%
ME 1	47 60 29	2011	Wet	January	--	3,467.6	3,463.8	3.8	0.1%	3,463.0	4.6	0.1%	3,460.3	7.3	0.2%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 60 29	2011	Wet	February	--	10,707.8	10,704.1	3.7	0.0%	10,703.2	4.5	0.0%	10,700.6	7.2	0.1%
ME 1	47 60 29	2011	Wet	March	--	28,659.7	28,656.3	3.5	0.0%	28,656.3	3.5	0.0%	28,653.9	5.8	0.0%
ME 1	47 60 29	2011	Wet	April	--	11,067.4	11,064.5	2.9	0.0%	11,063.9	3.5	0.0%	11,062.0	5.3	0.0%
ME 1	47 60 29	2011	Wet	May	--	4,810.9	4,796.9	14.0	0.3%	4,794.1	16.8	0.3%	4,785.8	25.1	0.5%
ME 1	47 60 29	2011	Wet	June	--	3,138.3	3,120.5	17.8	0.6%	3,117.0	21.3	0.7%	3,106.5	31.8	1.0%
ME 1	47 60 29	2011	Wet	July	--	214.8	199.2	15.6	7.3%	196.2	18.6	8.7%	188.6	26.2	12.2%
ME 1	47 60 29	2011	Wet	August	--	65.8	57.3	8.5	13.0%	55.6	10.2	15.5%	50.5	15.3	23.2%
ME 1	47 60 29	2011	Wet	September	Used in Summary Table Analysis	55.7	48.2	7.5	13.4%	46.7	9.0	16.2%	42.2	13.6	24.4%
ME 1	47 60 29	2012	Below Normal	October	Used in Summary Table Analysis	3,528.2	3,520.6	7.6	0.2%	3,519.1	9.1	0.3%	3,514.2	14.0	0.4%
ME 1	47 60 29	2012	Below Normal	November	Used in Summary Table Analysis	4,817.9	4,811.8	6.1	0.1%	4,810.5	7.4	0.2%	4,806.6	11.3	0.2%
ME 1	47 60 29	2012	Below Normal	December	--	1,959.7	1,954.7	5.0	0.3%	1,953.7	6.0	0.3%	1,950.5	9.3	0.5%
ME 1	47 60 29	2012	Below Normal	January	--	11,440.7	11,436.5	4.3	0.0%	11,435.4	5.3	0.0%	11,432.5	8.2	0.1%
ME 1	47 60 29	2012	Below Normal	February	--	6,660.1	6,656.6	3.5	0.1%	6,655.8	4.3	0.1%	6,653.5	6.6	0.1%
ME 1	47 60 29	2012	Below Normal	March	--	25,149.3	25,145.8	3.5	0.0%	25,145.8	3.5	0.0%	25,143.5	5.8	0.0%
ME 1	47 60 29	2012	Below Normal	April	--	12,517.4	12,513.9	3.5	0.0%	12,513.9	3.5	0.0%	12,511.6	5.8	0.0%
ME 1	47 60 29	2012	Below Normal	May	--	2,049.2	2,035.1	14.1	0.7%	2,032.3	16.9	0.8%	2,024.1	25.1	1.2%
ME 1	47 60 29	2012	Below Normal	June	--	3,039.6	3,021.6	17.9	0.6%	3,018.1	21.5	0.7%	3,007.8	31.8	1.0%
ME 1	47 60 29	2012	Below Normal	July	--	1,082.5	1,066.6	15.9	1.5%	1,063.5	19.0	1.8%	1,054.4	28.1	2.6%
ME 1	47 60 29	2012	Below Normal	August	--	72.2	63.8	8.4	11.6%	62.1	10.0	13.9%	57.2	14.9	20.7%
ME 1	47 60 29	2012	Below Normal	September	Used in Summary Table Analysis	59.4	51.8	7.6	12.7%	50.3	9.1	15.3%	45.8	13.6	22.9%
ME 1	47 60 29	2013	Below Normal	October	Used in Summary Table Analysis	1,483.2	1,474.9	8.3	0.6%	1,473.1	10.1	0.7%	1,468.1	15.2	1.0%
ME 1	47 60 29	2013	Below Normal	November	Used in Summary Table Analysis	9,489.9	9,483.4	6.5	0.1%	9,482.1	7.9	0.1%	9,478.0	11.9	0.1%
ME 1	47 60 29	2013	Below Normal	December	--	32,099.5	32,092.6	6.9	0.0%	32,091.4	8.1	0.0%	32,088.0	11.6	0.0%
ME 1	47 60 29	2013	Below Normal	January	--	4,825.1	4,820.7	4.4	0.1%	4,819.7	5.4	0.1%	4,817.0	8.1	0.2%
ME 1	47 60 29	2013	Below Normal	February	--	3,069.7	3,065.7	3.9	0.1%	3,064.9	4.7	0.2%	3,062.4	7.3	0.2%
ME 1	47 60 29	2013	Below Normal	March	--	5,639.9	5,636.7	3.2	0.1%	5,636.0	3.9	0.1%	5,633.9	6.0	0.1%
ME 1	47 60 29	2013	Below Normal	April	--	4,397.9	4,384.6	13.3	0.3%	4,381.9	16.0	0.4%	4,373.8	24.1	0.5%
ME 1	47 60 29	2013	Below Normal	May	--	2,272.6	2,261.3	11.2	0.5%	2,259.0	13.5	0.6%	2,252.3	20.3	0.9%
ME 1	47 60 29	2013	Below Normal	June	--	1,010.6	994.7	15.9	1.6%	991.6	19.0	1.9%	982.2	28.4	2.8%
ME 1	47 60 29	2013	Below Normal	July	--	68.2	59.0	9.1	13.4%	57.3	10.9	16.0%	51.9	16.3	23.9%
ME 1	47 60 29	2013	Below Normal	August	--	55.8	46.6	9.2	16.4%	44.8	11.0	19.7%	39.3	16.5	29.6%
ME 1	47 60 29	2013	Below Normal	September	Used in Summary Table Analysis	3,832.8	3,819.9	12.8	0.3%	3,817.4	15.4	0.4%	3,809.5	23.3	0.6%
ME 1	47 60 29	2014	Critical	October	Used in Summary Table Analysis	88.4	80.0	8.4	9.5%	78.3	10.1	11.4%	74.0	14.4	16.3%
ME 1	47 60 29	2014	Critical	November	Used in Summary Table Analysis	1,147.7	1,141.1	6.6	0.6%	1,139.8	7.9	0.7%	1,135.7	12.0	1.0%
ME 1	47 60 29	2014	Critical	December	--	916.9	911.7	5.3	0.6%	910.6	6.4	0.7%	907.3	9.7	1.1%
ME 1	47 60 29	2014	Critical	January	--	1,815.4	1,811.0	4.4	0.2%	1,810.1	5.3	0.3%	1,807.3	8.1	0.4%
ME 1	47 60 29	2014	Critical	February	--	9,880.3	9,876.4	3.9	0.0%	9,875.6	4.7	0.0%	9,872.8	7.5	0.1%
ME 1	47 60 29	2014	Critical	March	--	14,849.5	14,846.1	3.5	0.0%	14,844.9	4.6	0.0%	14,842.6	6.9	0.0%
ME 1	47 60 29	2014	Critical	April	--	3,630.9	3,615.4	15.5	0.4%	3,612.3	18.6	0.5%	3,602.9	28.0	0.8%
ME 1	47 60 29	2014	Critical	May	--	1,853.6	1,840.3	13.3	0.7%	1,837.6	16.0	0.9%	1,829.6	24.0	1.3%
ME 1	47 60 29	2014	Critical	June	--	121.0	102.0	19.0	15.7%	98.3	22.7	18.8%	87.8	33.1	27.4%
ME 1	47 60 29	2014	Critical	July	--	57.5	46.2	11.3	19.6%	44.0	13.5	23.5%	37.2	20.3	35.3%
ME 1	47 60 29	2014	Critical	August	--	50.5	39.2	11.3	22.4%	37.0	13.6	26.9%	30.2	20.4	40.3%
ME 1	47 60 29	2014	Critical	September	Used in Summary Table Analysis	2,101.6	2,086.0	15.6	0.7%	2,083.1	18.5	0.9%	2,073.5	28.1	1.3%
ME 1	47 60 29	2015	Dry	October	Used in Summary Table Analysis	8,253.8	8,242.1	11.7	0.1%	8,240.0	13.8	0.2%	8,233.8	20.0	0.2%
ME 1	47 60 29	2015	Dry	November	Used in Summary Table Analysis	4,164.4	4,156.3	8.1	0.2%	4,154.6	9.7	0.2%	4,149.8	14.6	0.4%
ME 1	47 60 29	2015	Dry	December	--	15,281.3	15,274.3	6.9	0.0%	15,272.0	9.3	0.1%	15,268.5	12.7	0.1%
ME 1	47 60 29	2015	Dry	January	--	2,401.7	2,396.4	5.3	0.2%	2,395.3	6.5	0.3%	2,391.8	10.0	0.4%
ME 1	47 60 29	2015	Dry	February	--	15,079.9	15,075.2	4.6	0.0%	15,074.1	5.8	0.0%	15,071.8	8.1	0.1%
ME 1	47 60 29	2015	Dry	March	--	4,145.3	4,141.6	3.7	0.1%	4,140.7	4.5	0.1%	4,138.4	6.8	0.2%
ME 1	47 60 29	2015	Dry	April	--	4,497.0	4,480.9	16.1	0.4%	4,477.5	19.4	0.4%	4,467.9	29.1	0.6%
ME 1	47 60 29	2015	Dry	May	--	141.4	128.1	13.3	9.4%	125.6	15.8	11.2%	118.9	22.5	15.9%
ME 1	47 60 29	2015	Dry	June	--	175.5	158.8	16.7	9.5%	155.4	20.1	11.4%	145.4	30.1	17.2%
ME 1	47 60 29	2015	Dry	July	--	53.6	41.8	11.8	22.0%	39.5	14.1	26.3%	32.5	21.1	39.4%
ME 1	47 60 29	2015	Dry	August	--	48.2	36.6	11.5	24.0%	34.3	13.9	28.8%	27.3	20.8	43.2%
ME 1	47 60 29	2015	Dry	September	Used in Summary Table Analysis	46.7	33.6	13.0	28.0%	30.6	16.0	34.3%	21.8	24.9	53.4%
ME 1	47 60 29	2016	Above Normal	October	Used in Summary Table Analysis	38.5	25.3	13.2	34.2%	23.1	15.4	40.1%	16.2	22.3	57.8%
ME 1	47 60 29	2016	Above Normal	November	Used in Summary Table Analysis	2,988.9	2,980.7	8.2	0.3%	2,978.9	10.0	0.3%	2,973.8	15.0	0.5%
ME 1	47 60 29	2016	Above Normal	December	--	19,850.7	19,843.8	6.9	0.0%	19,841.4	9.3	0.0%	19,838.0	12.7	0.1%
ME 1	47 60 29	2016	Above Normal	January	--	20,939.8	20,932.9	6.9	0.0%	20,931.7	8.1	0.0%	20,928.2	11.6	0.1%
ME 1	47 60 29	2016	Above Normal	February	--	5,507.6	5,503.2	4.4	0.1%	5,502.2	5.4	0.1%	5,499.3	8.3	0.2%
ME 1	47 60 29	2016	Above Normal	March	--	20,275.5	20,270.8	4.6	0.0%	20,269.7	5.8	0.0%	20,267.4	8.1	0.0%
ME 1	47 60 29	2016	Above Normal	April	--	5,690.6	5,687.3	3.4	0.1%	5,686.6	4.1	0.1%	5,684.5	6.1	0.1%
ME 1	47 60 29	2016	Above Normal	May	--	1,249.2	1,244.1	5.1	0.4%	1,243.1	6.1	0.5%	1,239.9	9.3	0.7%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 60 29	2016	Above Normal	June	--	80.5	69.2	11.3	14.1%	68.0	12.5	15.6%	64.6	15.9	19.8%
ME 1	47 60 29	2016	Above Normal	July	--	60.7	51.5	9.3	15.3%	49.6	11.1	18.3%	44.3	16.4	27.1%
ME 1	47 60 29	2016	Above Normal	August	--	52.1	43.1	9.0	17.2%	41.4	10.8	20.7%	36.1	16.1	30.8%
ME 1	47 60 29	2016	Above Normal	September	Used in Summary Table Analysis	48.4	38.2	10.3	21.2%	35.9	12.5	25.9%	29.2	19.2	39.7%
ME 1	47 60 29	2017	Wet	October	Used in Summary Table Analysis	12,881.9	12,871.5	10.4	0.1%	12,870.4	11.6	0.1%	12,864.6	17.4	0.1%
ME 1	47 60 29	2017	Wet	November	Used in Summary Table Analysis	7,415.7	7,409.0	6.7	0.1%	7,407.8	8.0	0.1%	7,403.8	11.9	0.2%
ME 1	47 60 29	2017	Wet	December	--	9,472.5	9,467.0	5.4	0.1%	9,465.9	6.6	0.1%	9,462.3	10.2	0.1%
ME 1	47 60 29	2017	Wet	January	--	35,149.3	35,144.7	4.6	0.0%	35,143.5	5.8	0.0%	35,141.2	8.1	0.0%
ME 1	47 60 29	2017	Wet	February	--	33,871.5	33,866.9	4.6	0.0%	33,865.7	5.8	0.0%	33,863.4	8.1	0.0%
ME 1	47 60 29	2017	Wet	March	--	6,459.0	6,455.8	3.2	0.1%	6,455.1	3.9	0.1%	6,453.0	6.0	0.1%
ME 1	47 60 29	2017	Wet	April	--	8,178.0	8,175.5	2.5	0.0%	8,174.9	3.1	0.0%	8,173.1	4.9	0.1%
ME 1	47 60 29	2017	Wet	May	--	193.8	189.1	4.7	2.4%	188.2	5.6	2.9%	185.3	8.5	4.4%
ME 1	47 60 29	2017	Wet	June	--	183.3	168.9	14.5	7.9%	166.0	17.4	9.5%	157.4	25.9	14.1%
ME 1	47 60 29	2017	Wet	July	--	56.8	47.9	8.8	15.6%	46.2	10.6	18.6%	41.1	15.6	27.5%
ME 1	47 60 29	2017	Wet	August	--	52.3	43.6	8.7	16.6%	41.9	10.5	20.0%	36.7	15.6	29.9%
ME 1	47 60 29	2017	Wet	September	Used in Summary Table Analysis	47.6	36.7	10.9	22.9%	34.5	13.1	27.6%	27.9	19.8	41.5%
ME 1	47 60 29	2018	Above Normal	October	Used in Summary Table Analysis	56.0	47.7	8.3	14.8%	46.0	10.0	17.8%	41.0	15.0	26.8%
ME 1	47 60 29	2018	Above Normal	November	Used in Summary Table Analysis	7,167.2	7,161.1	6.1	0.1%	7,159.8	7.4	0.1%	7,156.0	11.2	0.2%
ME 1	47 60 29	2018	Above Normal	December	--	616.5	611.7	4.8	0.8%	610.7	5.8	0.9%	607.7	8.9	1.4%
ME 1	47 60 29	2018	Above Normal	January	--	9,083.1	9,078.8	4.3	0.0%	9,077.9	5.2	0.1%	9,075.3	7.8	0.1%
ME 1	47 60 29	2018	Above Normal	February	--	730.9	727.6	3.3	0.5%	726.8	4.1	0.6%	724.6	6.3	0.9%
ME 1	47 60 29	2018	Above Normal	March	--	9,610.9	9,607.9	3.0	0.0%	9,607.2	3.7	0.0%	9,605.2	5.7	0.1%
ME 1	47 60 29	2018	Above Normal	April	--	17,443.3	17,441.0	2.3	0.0%	17,439.8	3.5	0.0%	17,438.7	4.6	0.0%
ME 1	47 60 29	2018	Above Normal	May	--	726.7	713.5	13.2	1.8%	710.9	15.8	2.2%	702.8	23.9	3.3%
ME 1	47 60 29	2018	Above Normal	June	--	64.6	57.0	7.7	11.8%	55.5	9.1	14.1%	51.2	13.4	20.8%
ME 1	47 60 29	2018	Above Normal	July	--	54.4	45.1	9.3	17.0%	43.3	11.1	20.4%	37.8	16.6	30.5%
ME 1	47 60 29	2018	Above Normal	August	--	50.4	41.7	8.8	17.4%	39.9	10.5	20.8%	34.6	15.8	31.3%
ME 1	47 60 29	2018	Above Normal	September	Used in Summary Table Analysis	44.1	33.0	11.1	25.1%	30.8	13.3	30.2%	24.0	20.0	45.4%
ME 1	47 60 29	2019	Below Normal	October	Used in Summary Table Analysis	59.0	49.9	9.1	15.4%	48.1	11.0	18.6%	42.4	16.6	28.2%
ME 1	47 60 29	2019	Below Normal	November	Used in Summary Table Analysis	4,586.3	4,579.7	6.6	0.1%	4,578.5	7.9	0.2%	4,574.3	12.0	0.3%
ME 1	47 60 29	2019	Below Normal	December	--	7,123.7	7,118.3	5.4	0.1%	7,117.2	6.5	0.1%	7,113.8	10.0	0.1%
ME 1	47 60 29	2019	Below Normal	January	--	16,265.0	16,260.4	4.6	0.0%	16,259.3	5.8	0.0%	16,255.8	9.3	0.1%
ME 1	47 60 29	2019	Below Normal	February	--	44,833.3	44,829.9	3.5	0.0%	44,828.7	4.6	0.0%	44,826.4	6.9	0.0%
ME 1	47 60 29	2019	Below Normal	March	--	10,433.1	10,429.7	3.4	0.0%	10,429.1	4.1	0.0%	10,426.9	6.3	0.1%
ME 1	47 60 29	2019	Below Normal	April	--	3,511.5	3,508.7	2.8	0.1%	3,508.1	3.4	0.1%	3,506.5	5.0	0.1%
ME 1	47 60 29	2019	Below Normal	May	--	6,669.3	6,655.2	14.1	0.2%	6,652.4	16.9	0.3%	6,644.0	25.3	0.4%
ME 1	47 60 29	2019	Below Normal	June	--	80.3	71.4	8.9	11.1%	70.0	10.3	12.9%	65.9	14.5	18.0%
ME 1	47 60 29	2019	Below Normal	July	--	64.8	55.5	9.3	14.3%	53.7	11.1	17.1%	48.4	16.4	25.4%
ME 1	47 60 29	2019	Below Normal	August	--	54.9	46.2	8.7	15.8%	44.5	10.5	19.0%	39.3	15.6	28.4%
ME 1	47 60 29	2019	Below Normal	September	Used in Summary Table Analysis	127.1	116.1	11.0	8.7%	113.9	13.3	10.4%	107.2	20.0	15.7%
ME 1	47 60 29	2020	Dry	October	Used in Summary Table Analysis	159.5	151.7	7.8	4.9%	150.0	9.5	5.9%	145.1	14.4	9.0%
ME 1	47 60 29	2020	Dry	November	Used in Summary Table Analysis	86.3	81.5	4.8	5.5%	80.5	5.8	6.7%	77.5	8.8	10.2%
ME 1	47 60 29	2020	Dry	December	--	7,889.2	7,884.3	5.0	0.1%	7,883.1	6.1	0.1%	7,880.0	9.3	0.1%
ME 1	47 60 29	2020	Dry	January	--	9,018.1	9,013.5	4.5	0.1%	9,012.6	5.4	0.1%	9,010.0	8.1	0.1%
ME 1	47 60 29	2020	Dry	February	--	255.2	251.7	3.5	1.4%	250.9	4.2	1.7%	248.7	6.4	2.5%
ME 1	47 60 29	2020	Dry	March	--	2,675.6	2,672.5	3.1	0.1%	2,671.8	3.8	0.1%	2,669.9	5.7	0.2%
ME 1	47 60 29	2020	Dry	April	--	2,164.0	2,148.7	15.3	0.7%	2,145.6	18.4	0.9%	2,136.5	27.5	1.3%
ME 1	47 60 29	2020	Dry	May	--	3,785.1	3,771.9	13.2	0.3%	3,769.3	15.7	0.4%	3,761.5	23.6	0.6%
ME 1	47 60 29	2020	Dry	June	--	90.4	74.1	16.3	18.0%	71.1	19.3	21.4%	62.0	28.3	31.4%
ME 1	47 60 29	2020	Dry	July	--	54.2	43.0	11.2	20.7%	40.7	13.5	24.9%	34.0	20.2	37.3%
ME 1	47 60 29	2020	Dry	August	--	47.7	36.4	11.3	23.6%	34.2	13.5	28.4%	27.4	20.3	42.6%
ME 1	47 60 29	2020	Dry	September	Used in Summary Table Analysis	45.6	32.4	13.2	28.9%	29.5	16.1	35.3%	20.8	24.9	54.5%
ME 1	48 59 42	2000	Above Normal	October	Used in Summary Table Analysis	413.2	403.0	10.3	2.5%	400.9	12.3	3.0%	394.6	18.6	4.5%
ME 1	48 59 42	2000	Above Normal	November	Used in Summary Table Analysis	3,551.2	3,543.6	7.5	0.2%	3,542.1	9.0	0.3%	3,537.5	13.7	0.4%
ME 1	48 59 42	2000	Above Normal	December	--	5,814.5	5,808.0	6.5	0.1%	5,806.6	7.9	0.1%	5,802.7	11.8	0.2%
ME 1	48 59 42	2000	Above Normal	January	--	12,915.5	12,909.7	5.8	0.0%	12,908.6	6.9	0.1%	12,903.9	11.6	0.1%
ME 1	48 59 42	2000	Above Normal	February	--	20,267.4	20,261.6	5.8	0.0%	20,259.3	8.1	0.0%	20,255.8	11.6	0.1%
ME 1	48 59 42	2000	Above Normal	March	--	12,425.9	12,420.1	5.8	0.0%	12,419.0	6.9	0.1%	12,415.5	10.4	0.1%
ME 1	48 59 42	2000	Above Normal	April	--	6,819.9	6,813.7	6.3	0.1%	6,812.4	7.5	0.1%	6,808.8	11.1	0.2%
ME 1	48 59 42	2000	Above Normal	May	--	4,235.3	4,223.6	11.7	0.3%	4,221.3	14.0	0.3%	4,214.6	20.7	0.5%
ME 1	48 59 42	2000	Above Normal	June	--	1,972.7	1,951.0	21.6	1.1%	1,946.9	25.8	1.3%	1,934.6	38.1	1.9%
ME 1	48 59 42	2000	Above Normal	July	--	909.7	888.8	20.8	2.3%	884.7	25.0	2.7%	872.2	37.5	4.1%
ME 1	48 59 42	2000	Above Normal	August	--	451.8	434.6	17.2	3.8%	431.1	20.7	4.6%	420.6	31.2	6.9%
ME 1	48 59 42	2000	Above Normal	September	Used in Summary Table Analysis	233.5	219.5	14.1	6.0%	216.6	16.9	7.2%	208.1	25.5	10.9%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 59 42	2001	Dry	October	Used in Summary Table Analysis	947.8	938.2	9.5	1.0%	936.3	11.5	1.2%	930.5	17.3	1.8%
ME 1	48 59 42	2001	Dry	November	Used in Summary Table Analysis	2,655.2	2,647.9	7.3	0.3%	2,646.4	8.8	0.3%	2,641.9	13.3	0.5%
ME 1	48 59 42	2001	Dry	December	--	3,750.0	3,743.5	6.5	0.2%	3,742.1	7.9	0.2%	3,738.2	11.8	0.3%
ME 1	48 59 42	2001	Dry	January	--	5,975.1	5,969.0	6.1	0.1%	5,967.7	7.4	0.1%	5,964.0	11.1	0.2%
ME 1	48 59 42	2001	Dry	February	--	8,662.7	8,656.9	5.8	0.1%	8,655.8	6.9	0.1%	8,652.3	10.4	0.1%
ME 1	48 59 42	2001	Dry	March	--	7,035.8	7,030.0	5.8	0.1%	7,028.8	6.9	0.1%	7,025.3	10.4	0.1%
ME 1	48 59 42	2001	Dry	April	--	5,758.9	5,748.1	10.8	0.2%	5,746.1	12.8	0.2%	5,739.9	19.0	0.3%
ME 1	48 59 42	2001	Dry	May	--	2,029.2	2,013.3	15.9	0.8%	2,010.2	19.0	0.9%	2,000.7	28.5	1.4%
ME 1	48 59 42	2001	Dry	June	--	1,247.6	1,224.0	23.6	1.9%	1,219.4	28.1	2.3%	1,206.3	41.3	3.3%
ME 1	48 59 42	2001	Dry	July	--	647.4	623.8	23.6	3.6%	619.1	28.3	4.4%	609.8	37.6	5.8%
ME 1	48 59 42	2001	Dry	August	--	109.5	89.6	19.9	18.1%	85.6	23.9	21.8%	75.6	33.9	31.0%
ME 1	48 59 42	2001	Dry	September	Used in Summary Table Analysis	36.8	20.7	16.1	43.8%	17.4	19.4	52.7%	8.4	28.4	77.2%
ME 1	48 59 42	2002	Below Normal	October	Used in Summary Table Analysis	116.0	104.5	11.5	9.9%	102.2	13.8	11.9%	94.9	21.2	18.2%
ME 1	48 59 42	2002	Below Normal	November	Used in Summary Table Analysis	4,539.1	4,530.9	8.2	0.2%	4,529.3	9.8	0.2%	4,521.2	17.9	0.4%
ME 1	48 59 42	2002	Below Normal	December	--	21,186.3	21,179.4	6.9	0.0%	21,177.1	9.3	0.0%	21,172.5	13.9	0.1%
ME 1	48 59 42	2002	Below Normal	January	--	20,819.4	20,813.7	5.8	0.0%	20,811.3	8.1	0.0%	20,807.9	11.6	0.1%
ME 1	48 59 42	2002	Below Normal	February	--	16,041.7	16,034.7	6.9	0.0%	16,033.6	8.1	0.1%	16,028.9	12.7	0.1%
ME 1	48 59 42	2002	Below Normal	March	--	10,325.0	10,318.2	6.8	0.1%	10,316.8	8.2	0.1%	10,312.7	12.3	0.1%
ME 1	48 59 42	2002	Below Normal	April	--	5,556.9	5,545.5	11.5	0.2%	5,543.3	13.7	0.2%	5,536.6	20.4	0.4%
ME 1	48 59 42	2002	Below Normal	May	--	2,148.6	2,132.1	16.6	0.8%	2,128.7	19.9	0.9%	2,118.9	29.7	1.4%
ME 1	48 59 42	2002	Below Normal	June	--	651.1	630.9	20.1	3.1%	627.0	24.0	3.7%	615.6	35.5	5.4%
ME 1	48 59 42	2002	Below Normal	July	--	295.6	274.4	21.2	7.2%	270.2	25.4	8.6%	258.1	37.5	12.7%
ME 1	48 59 42	2002	Below Normal	August	--	163.7	146.5	17.2	10.5%	143.0	20.7	12.7%	132.0	31.7	19.4%
ME 1	48 59 42	2002	Below Normal	September	Used in Summary Table Analysis	105.1	89.4	15.7	15.0%	86.2	18.9	18.0%	76.5	28.6	27.2%
ME 1	48 59 42	2003	Wet	October	Used in Summary Table Analysis	81.9	71.4	10.6	12.9%	69.2	12.7	15.5%	62.7	19.2	23.5%
ME 1	48 59 42	2003	Wet	November	Used in Summary Table Analysis	258.7	250.9	7.8	3.0%	249.4	9.4	3.6%	244.5	14.2	5.5%
ME 1	48 59 42	2003	Wet	December	--	25,631.9	25,625.0	6.9	0.0%	25,623.8	8.1	0.0%	25,619.2	12.7	0.0%
ME 1	48 59 42	2003	Wet	January	--	23,622.7	23,615.7	6.9	0.0%	23,614.6	8.1	0.0%	23,611.1	11.6	0.0%
ME 1	48 59 42	2003	Wet	February	--	14,653.9	14,648.1	5.8	0.0%	14,645.8	8.1	0.1%	14,642.4	11.6	0.1%
ME 1	48 59 42	2003	Wet	March	--	12,693.3	12,686.3	6.9	0.1%	12,685.2	8.1	0.1%	12,681.7	11.6	0.1%
ME 1	48 59 42	2003	Wet	April	--	20,488.4	20,482.6	5.8	0.0%	20,481.5	6.9	0.0%	20,476.9	11.6	0.1%
ME 1	48 59 42	2003	Wet	May	--	10,054.3	10,042.5	11.8	0.1%	10,040.2	14.1	0.1%	10,033.3	20.9	0.2%
ME 1	48 59 42	2003	Wet	June	--	3,072.5	3,050.3	22.1	0.7%	3,046.1	26.4	0.9%	3,033.6	38.9	1.3%
ME 1	48 59 42	2003	Wet	July	--	1,393.8	1,372.7	21.1	1.5%	1,368.5	25.2	1.8%	1,356.0	37.7	2.7%
ME 1	48 59 42	2003	Wet	August	--	679.4	662.0	17.4	2.6%	658.5	20.9	3.1%	648.0	31.4	4.6%
ME 1	48 59 42	2003	Wet	September	Used in Summary Table Analysis	394.0	379.8	14.2	3.6%	376.9	17.1	4.3%	368.4	25.6	6.5%
ME 1	48 59 42	2004	Wet	October	Used in Summary Table Analysis	274.1	263.9	10.2	3.7%	261.9	12.2	4.5%	255.7	18.4	6.7%
ME 1	48 59 42	2004	Wet	November	Used in Summary Table Analysis	1,518.6	1,511.0	7.6	0.5%	1,509.5	9.1	0.6%	1,504.9	13.8	0.9%
ME 1	48 59 42	2004	Wet	December	--	17,524.3	17,517.4	6.9	0.0%	17,516.2	8.1	0.0%	17,512.7	11.6	0.1%
ME 1	48 59 42	2004	Wet	January	--	20,762.7	20,755.8	6.9	0.0%	20,754.6	8.1	0.0%	20,751.2	11.6	0.1%
ME 1	48 59 42	2004	Wet	February	--	20,275.5	20,269.7	5.8	0.0%	20,268.5	6.9	0.0%	20,265.0	10.4	0.1%
ME 1	48 59 42	2004	Wet	March	--	12,274.3	12,268.5	5.8	0.0%	12,267.4	6.9	0.1%	12,263.9	10.4	0.1%
ME 1	48 59 42	2004	Wet	April	--	5,833.9	5,827.7	6.3	0.1%	5,826.4	7.5	0.1%	5,822.8	11.1	0.2%
ME 1	48 59 42	2004	Wet	May	--	2,310.4	2,298.7	11.7	0.5%	2,296.5	13.9	0.6%	2,289.8	20.6	0.9%
ME 1	48 59 42	2004	Wet	June	--	614.6	593.1	21.5	3.5%	589.0	25.7	4.2%	576.7	37.9	6.2%
ME 1	48 59 42	2004	Wet	July	--	287.2	266.4	20.8	7.2%	262.3	25.0	8.7%	249.8	37.4	13.0%
ME 1	48 59 42	2004	Wet	August	--	163.5	146.3	17.2	10.5%	142.8	20.7	12.7%	132.2	31.3	19.2%
ME 1	48 59 42	2004	Wet	September	Used in Summary Table Analysis	107.6	93.5	14.1	13.1%	90.7	17.0	15.8%	82.0	25.6	23.8%
ME 1	48 59 42	2005	Above Normal	October	Used in Summary Table Analysis	1,664.0	1,653.8	10.2	0.6%	1,651.9	12.2	0.7%	1,645.6	18.4	1.1%
ME 1	48 59 42	2005	Above Normal	November	Used in Summary Table Analysis	1,265.3	1,257.8	7.5	0.6%	1,256.3	9.0	0.7%	1,251.6	13.7	1.1%
ME 1	48 59 42	2005	Above Normal	December	--	8,586.8	8,580.2	6.6	0.1%	8,578.9	7.9	0.1%	8,574.9	11.9	0.1%
ME 1	48 59 42	2005	Above Normal	January	--	13,535.9	13,530.1	5.8	0.0%	13,528.9	6.9	0.1%	13,525.5	10.4	0.1%
ME 1	48 59 42	2005	Above Normal	February	--	9,280.3	9,274.3	6.0	0.1%	9,273.1	7.2	0.1%	9,269.6	10.8	0.1%
ME 1	48 59 42	2005	Above Normal	March	--	13,944.4	13,938.7	5.8	0.0%	13,937.5	6.9	0.0%	13,934.0	10.4	0.1%
ME 1	48 59 42	2005	Above Normal	April	--	11,990.7	11,985.0	5.8	0.0%	11,983.8	6.9	0.1%	11,980.3	10.4	0.1%
ME 1	48 59 42	2005	Above Normal	May	--	10,761.3	10,749.5	11.8	0.1%	10,747.3	14.0	0.1%	10,740.5	20.8	0.2%
ME 1	48 59 42	2005	Above Normal	June	--	9,164.4	9,142.4	22.0	0.2%	9,138.1	26.3	0.3%	9,125.5	38.9	0.4%
ME 1	48 59 42	2005	Above Normal	July	--	2,770.5	2,749.5	20.9	0.8%	2,745.4	25.1	0.9%	2,732.8	37.7	1.4%
ME 1	48 59 42	2005	Above Normal	August	--	901.6	884.3	17.2	1.9%	880.9	20.7	2.3%	870.4	31.1	3.5%
ME 1	48 59 42	2005	Above Normal	September	Used in Summary Table Analysis	453.2	439.1	14.1	3.1%	436.2	16.9	3.7%	427.7	25.5	5.6%
ME 1	48 59 42	2006	Wet	October	Used in Summary Table Analysis	365.9	356.3	9.6	2.6%	354.4	11.6	3.2%	348.5	17.4	4.8%
ME 1	48 59 42	2006	Wet	November	Used in Summary Table Analysis	2,520.1	2,512.8	7.3	0.3%	2,511.3	8.8	0.3%	2,506.9	13.2	0.5%
ME 1	48 59 42	2006	Wet	December	--	22,588.0	22,581.0	6.9	0.0%	22,579.9	8.1	0.0%	22,576.4	11.6	0.1%
ME 1	48 59 42	2006	Wet	January	--	28,590.3	28,583.3	6.9	0.0%	28,582.2	8.1	0.0%	28,578.7	11.6	0.0%

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Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 59 42	2006	Wet	February	--	16,953.7	16,947.9	5.8	0.0%	16,946.8	6.9	0.0%	16,943.3	10.4	0.1%
ME 1	48 59 42	2006	Wet	March	--	23,273.1	23,267.4	5.8	0.0%	23,266.2	6.9	0.0%	23,262.7	10.4	0.0%
ME 1	48 59 42	2006	Wet	April	--	18,674.8	18,669.0	5.8	0.0%	18,667.8	6.9	0.0%	18,664.4	10.4	0.1%
ME 1	48 59 42	2006	Wet	May	--	9,409.4	9,400.9	8.4	0.1%	9,399.2	10.2	0.1%	9,394.3	15.0	0.2%
ME 1	48 59 42	2006	Wet	June	--	2,969.8	2,951.4	18.4	0.6%	2,947.8	22.0	0.7%	2,937.4	32.4	1.1%
ME 1	48 59 42	2006	Wet	July	--	1,184.7	1,163.7	21.1	1.8%	1,159.5	25.2	2.1%	1,147.3	37.5	3.2%
ME 1	48 59 42	2006	Wet	August	--	585.1	566.9	18.2	3.1%	563.3	21.8	3.7%	552.3	32.8	5.6%
ME 1	48 59 42	2006	Wet	September	Used in Summary Table Analysis	355.3	340.7	14.6	4.1%	337.8	17.5	4.9%	329.0	26.3	7.4%
ME 1	48 59 42	2007	Above Normal	October	Used in Summary Table Analysis	216.0	205.8	10.2	4.7%	203.8	12.2	5.6%	197.5	18.4	8.5%
ME 1	48 59 42	2007	Above Normal	November	Used in Summary Table Analysis	2,527.9	2,520.4	7.5	0.3%	2,518.9	9.0	0.4%	2,514.2	13.7	0.5%
ME 1	48 59 42	2007	Above Normal	December	--	9,032.8	9,026.0	6.7	0.1%	9,024.7	8.1	0.1%	9,020.5	12.3	0.1%
ME 1	48 59 42	2007	Above Normal	January	--	7,656.0	7,649.7	6.4	0.1%	7,648.4	7.6	0.1%	7,644.4	11.6	0.2%
ME 1	48 59 42	2007	Above Normal	February	--	12,370.4	12,364.6	5.8	0.0%	12,363.4	6.9	0.1%	12,358.8	11.6	0.1%
ME 1	48 59 42	2007	Above Normal	March	--	7,943.5	7,936.8	6.7	0.1%	7,935.5	8.0	0.1%	7,931.6	11.9	0.2%
ME 1	48 59 42	2007	Above Normal	April	--	4,932.3	4,920.9	11.3	0.2%	4,918.8	13.5	0.3%	4,912.2	20.1	0.4%
ME 1	48 59 42	2007	Above Normal	May	--	2,825.6	2,809.0	16.6	0.6%	2,805.8	19.8	0.7%	2,795.9	29.6	1.0%
ME 1	48 59 42	2007	Above Normal	June	--	1,014.2	994.1	20.1	2.0%	990.2	24.0	2.4%	978.8	35.4	3.5%
ME 1	48 59 42	2007	Above Normal	July	--	379.3	358.1	21.1	5.6%	353.9	25.4	6.7%	341.7	37.5	9.9%
ME 1	48 59 42	2007	Above Normal	August	--	156.8	139.7	17.1	10.9%	136.2	20.6	13.1%	125.3	31.5	20.1%
ME 1	48 59 42	2007	Above Normal	September	Used in Summary Table Analysis	89.2	73.6	15.7	17.5%	70.4	18.8	21.1%	60.7	28.5	31.9%
ME 1	48 59 42	2008	Dry	October	Used in Summary Table Analysis	427.2	416.9	10.3	2.4%	414.8	12.4	2.9%	408.4	18.8	4.4%
ME 1	48 59 42	2008	Dry	November	Used in Summary Table Analysis	1,034.7	1,027.2	7.5	0.7%	1,025.6	9.1	0.9%	1,021.0	13.7	1.3%
ME 1	48 59 42	2008	Dry	December	--	8,263.9	8,257.4	6.5	0.1%	8,256.1	7.8	0.1%	8,252.1	11.8	0.1%
ME 1	48 59 42	2008	Dry	January	--	21,000.0	20,993.1	6.9	0.0%	20,991.9	8.1	0.0%	20,987.3	12.7	0.1%
ME 1	48 59 42	2008	Dry	February	--	19,610.0	19,604.2	5.8	0.0%	19,603.0	6.9	0.0%	19,599.5	10.4	0.1%
ME 1	48 59 42	2008	Dry	March	--	8,549.5	8,543.6	5.9	0.1%	8,542.5	7.1	0.1%	8,539.0	10.5	0.1%
ME 1	48 59 42	2008	Dry	April	--	4,623.7	4,613.2	10.5	0.2%	4,611.2	12.5	0.3%	4,605.2	18.5	0.4%
ME 1	48 59 42	2008	Dry	May	--	1,289.7	1,273.8	15.9	1.2%	1,270.7	19.0	1.5%	1,261.3	28.4	2.2%
ME 1	48 59 42	2008	Dry	June	--	351.6	328.7	22.9	6.5%	324.3	27.3	7.8%	311.6	40.0	11.4%
ME 1	48 59 42	2008	Dry	July	--	198.2	175.3	22.9	11.5%	170.8	27.4	13.8%	161.9	36.3	18.3%
ME 1	48 59 42	2008	Dry	August	--	124.1	104.7	19.4	15.7%	100.7	23.4	18.9%	91.0	33.1	26.7%
ME 1	48 59 42	2008	Dry	September	Used in Summary Table Analysis	97.1	81.2	15.9	16.4%	77.9	19.1	19.7%	69.0	28.0	28.9%
ME 1	48 59 42	2009	Critical	October	Used in Summary Table Analysis	254.0	242.7	11.3	4.4%	240.4	13.6	5.3%	233.0	20.9	8.2%
ME 1	48 59 42	2009	Critical	November	Used in Summary Table Analysis	1,477.0	1,469.0	8.0	0.5%	1,467.2	9.7	0.7%	1,459.4	17.6	1.2%
ME 1	48 59 42	2009	Critical	December	--	4,650.5	4,643.6	6.8	0.1%	4,642.2	8.2	0.2%	4,637.2	13.3	0.3%
ME 1	48 59 42	2009	Critical	January	--	4,262.2	4,255.2	6.9	0.2%	4,253.8	8.3	0.2%	4,249.3	12.8	0.3%
ME 1	48 59 42	2009	Critical	February	--	8,764.1	8,758.0	6.1	0.1%	8,756.8	7.3	0.1%	8,753.0	11.1	0.1%
ME 1	48 59 42	2009	Critical	March	--	9,882.4	9,876.5	5.9	0.1%	9,875.3	7.1	0.1%	9,871.8	10.6	0.1%
ME 1	48 59 42	2009	Critical	April	--	5,261.8	5,251.3	10.5	0.2%	5,249.2	12.6	0.2%	5,243.1	18.8	0.4%
ME 1	48 59 42	2009	Critical	May	--	5,086.0	5,069.9	16.1	0.3%	5,066.8	19.2	0.4%	5,057.2	28.8	0.6%
ME 1	48 59 42	2009	Critical	June	--	2,809.6	2,786.3	23.3	0.8%	2,781.8	27.8	1.0%	2,768.9	40.7	1.5%
ME 1	48 59 42	2009	Critical	July	--	1,181.8	1,158.8	23.0	1.9%	1,154.2	27.7	2.3%	1,145.1	36.7	3.1%
ME 1	48 59 42	2009	Critical	August	--	600.9	581.4	19.5	3.2%	577.5	23.4	3.9%	567.6	33.3	5.5%
ME 1	48 59 42	2009	Critical	September	Used in Summary Table Analysis	329.5	313.6	15.9	4.8%	310.3	19.1	5.8%	301.4	28.1	8.5%
ME 1	48 59 42	2010	Below Normal	October	Used in Summary Table Analysis	973.2	961.7	11.5	1.2%	959.4	13.9	1.4%	951.9	21.3	2.2%
ME 1	48 59 42	2010	Below Normal	November	Used in Summary Table Analysis	2,112.2	2,103.8	8.3	0.4%	2,102.2	10.0	0.5%	2,094.1	18.1	0.9%
ME 1	48 59 42	2010	Below Normal	December	--	5,849.7	5,842.7	6.9	0.1%	5,841.2	8.4	0.1%	5,836.1	13.5	0.2%
ME 1	48 59 42	2010	Below Normal	January	--	17,463.0	17,456.0	6.9	0.0%	17,454.9	8.1	0.0%	17,450.2	12.7	0.1%
ME 1	48 59 42	2010	Below Normal	February	--	15,397.0	15,390.0	6.9	0.0%	15,388.9	8.1	0.1%	15,385.4	11.6	0.1%
ME 1	48 59 42	2010	Below Normal	March	--	12,664.4	12,657.4	6.9	0.1%	12,656.3	8.1	0.1%	12,652.8	11.6	0.1%
ME 1	48 59 42	2010	Below Normal	April	--	16,857.6	16,850.7	6.9	0.0%	16,849.5	8.1	0.0%	16,846.1	11.6	0.1%
ME 1	48 59 42	2010	Below Normal	May	--	13,597.2	13,585.6	11.6	0.1%	13,583.3	13.9	0.1%	13,576.4	20.8	0.2%
ME 1	48 59 42	2010	Below Normal	June	--	5,529.2	5,507.1	22.1	0.4%	5,502.8	26.4	0.5%	5,490.2	39.0	0.7%
ME 1	48 59 42	2010	Below Normal	July	--	1,355.6	1,334.6	20.9	1.5%	1,330.3	25.2	1.9%	1,317.8	37.7	2.8%
ME 1	48 59 42	2010	Below Normal	August	--	485.5	468.1	17.4	3.6%	464.6	20.9	4.3%	454.1	31.4	6.5%
ME 1	48 59 42	2010	Below Normal	September	Used in Summary Table Analysis	312.0	297.8	14.3	4.6%	294.9	17.1	5.5%	286.3	25.7	8.2%
ME 1	48 59 42	2011	Wet	October	Used in Summary Table Analysis	2,333.4	2,323.5	10.0	0.4%	2,321.4	12.0	0.5%	2,315.4	18.1	0.8%
ME 1	48 59 42	2011	Wet	November	Used in Summary Table Analysis	7,879.3	7,871.8	7.5	0.1%	7,870.4	8.9	0.1%	7,865.7	13.5	0.2%
ME 1	48 59 42	2011	Wet	December	--	15,506.9	15,501.2	5.8	0.0%	15,498.8	8.1	0.1%	15,495.4	11.6	0.1%
ME 1	48 59 42	2011	Wet	January	--	10,557.5	10,551.2	6.4	0.1%	10,550.0	7.5	0.1%	10,546.2	11.3	0.1%
ME 1	48 59 42	2011	Wet	February	--	9,919.1	9,913.0	6.1	0.1%	9,911.8	7.3	0.1%	9,908.2	10.9	0.1%
ME 1	48 59 42	2011	Wet	March	--	22,855.3	22,848.4	6.9	0.0%	22,847.2	8.1	0.0%	22,843.8	11.6	0.1%
ME 1	48 59 42	2011	Wet	April	--	13,566.0	13,560.2	5.8	0.0%	13,559.0	6.9	0.1%	13,554.4	11.6	0.1%
ME 1	48 59 42	2011	Wet	May	--	6,486.5	6,474.4	12.0	0.2%	6,472.0	14.5	0.2%	6,465.2	21.3	0.3%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 59 42	2011	Wet	June	--	3,838.4	3,816.4	22.0	0.6%	3,812.2	26.3	0.7%	3,799.7	38.8	1.0%
ME 1	48 59 42	2011	Wet	July	--	1,607.1	1,585.9	21.2	1.3%	1,581.7	25.3	1.6%	1,569.1	38.0	2.4%
ME 1	48 59 42	2011	Wet	August	--	697.9	680.2	17.7	2.5%	676.7	21.2	3.0%	665.9	32.0	4.6%
ME 1	48 59 42	2011	Wet	September	Used in Summary Table Analysis	364.6	349.5	15.1	4.1%	346.5	18.1	5.0%	337.4	27.2	7.5%
ME 1	48 59 42	2012	Below Normal	October	Used in Summary Table Analysis	937.1	926.5	10.6	1.1%	924.3	12.8	1.4%	917.8	19.3	2.1%
ME 1	48 59 42	2012	Below Normal	November	Used in Summary Table Analysis	3,262.0	3,254.1	8.0	0.2%	3,252.4	9.6	0.3%	3,247.6	14.5	0.4%
ME 1	48 59 42	2012	Below Normal	December	--	3,152.4	3,145.4	7.1	0.2%	3,143.9	8.6	0.3%	3,139.6	12.8	0.4%
ME 1	48 59 42	2012	Below Normal	January	--	8,226.9	8,220.1	6.7	0.1%	8,218.8	8.1	0.1%	8,214.7	12.2	0.1%
ME 1	48 59 42	2012	Below Normal	February	--	11,417.8	11,411.3	6.5	0.1%	11,410.0	7.9	0.1%	11,406.1	11.7	0.1%
ME 1	48 59 42	2012	Below Normal	March	--	19,726.9	19,719.9	6.9	0.0%	19,718.8	8.1	0.0%	19,715.3	11.6	0.1%
ME 1	48 59 42	2012	Below Normal	April	--	14,141.2	14,134.3	6.9	0.0%	14,133.1	8.1	0.1%	14,128.5	12.7	0.1%
ME 1	48 59 42	2012	Below Normal	May	--	5,384.5	5,372.6	11.9	0.2%	5,370.1	14.4	0.3%	5,363.3	21.2	0.4%
ME 1	48 59 42	2012	Below Normal	June	--	2,398.5	2,375.7	22.8	1.0%	2,371.3	27.2	1.1%	2,358.4	40.0	1.7%
ME 1	48 59 42	2012	Below Normal	July	--	1,095.7	1,075.7	20.0	1.8%	1,071.7	24.0	2.2%	1,059.8	36.0	3.3%
ME 1	48 59 42	2012	Below Normal	August	--	307.0	291.2	15.9	5.2%	288.0	19.1	6.2%	278.3	28.8	9.4%
ME 1	48 59 42	2012	Below Normal	September	Used in Summary Table Analysis	177.2	164.1	13.1	7.4%	161.5	15.8	8.9%	153.5	23.8	13.4%
ME 1	48 59 42	2013	Below Normal	October	Used in Summary Table Analysis	383.0	372.9	10.1	2.6%	370.9	12.1	3.2%	364.7	18.3	4.8%
ME 1	48 59 42	2013	Below Normal	November	Used in Summary Table Analysis	4,894.1	4,886.7	7.4	0.2%	4,885.2	8.9	0.2%	4,880.6	13.5	0.3%
ME 1	48 59 42	2013	Below Normal	December	--	27,238.4	27,231.5	6.9	0.0%	27,230.3	8.1	0.0%	27,225.7	12.7	0.0%
ME 1	48 59 42	2013	Below Normal	January	--	17,191.0	17,184.0	6.9	0.0%	17,182.9	8.1	0.0%	17,179.4	11.6	0.1%
ME 1	48 59 42	2013	Below Normal	February	--	5,690.4	5,683.8	6.6	0.1%	5,682.5	7.9	0.1%	5,678.7	11.7	0.2%
ME 1	48 59 42	2013	Below Normal	March	--	4,554.6	4,547.8	6.8	0.1%	4,546.5	8.1	0.2%	4,542.6	12.0	0.3%
ME 1	48 59 42	2013	Below Normal	April	--	3,843.3	3,832.1	11.2	0.3%	3,829.9	13.4	0.3%	3,823.4	19.9	0.5%
ME 1	48 59 42	2013	Below Normal	May	--	2,103.9	2,087.5	16.4	0.8%	2,084.3	19.7	0.9%	2,074.4	29.5	1.4%
ME 1	48 59 42	2013	Below Normal	June	--	1,083.1	1,063.1	20.0	1.8%	1,059.2	23.9	2.2%	1,047.8	35.3	3.3%
ME 1	48 59 42	2013	Below Normal	July	--	643.4	622.2	21.1	3.3%	618.0	25.4	3.9%	606.0	37.4	5.8%
ME 1	48 59 42	2013	Below Normal	August	--	274.0	256.8	17.2	6.3%	253.3	20.6	7.5%	242.3	31.6	11.5%
ME 1	48 59 42	2013	Below Normal	September	Used in Summary Table Analysis	874.8	859.1	15.7	1.8%	855.9	18.9	2.2%	846.2	28.6	3.3%
ME 1	48 59 42	2014	Critical	October	Used in Summary Table Analysis	191.3	181.2	10.1	5.3%	179.1	12.2	6.4%	172.8	18.4	9.6%
ME 1	48 59 42	2014	Critical	November	Used in Summary Table Analysis	353.9	346.2	7.7	2.2%	344.6	9.3	2.6%	339.9	14.0	4.0%
ME 1	48 59 42	2014	Critical	December	--	649.6	642.6	7.0	1.1%	641.2	8.4	1.3%	636.9	12.7	2.0%
ME 1	48 59 42	2014	Critical	January	--	963.2	956.7	6.4	0.7%	955.4	7.8	0.8%	951.5	11.7	1.2%
ME 1	48 59 42	2014	Critical	February	--	5,726.6	5,720.6	6.0	0.1%	5,719.3	7.3	0.1%	5,715.6	11.0	0.2%
ME 1	48 59 42	2014	Critical	March	--	16,438.7	16,432.9	5.8	0.0%	16,431.7	6.9	0.0%	16,428.2	10.4	0.1%
ME 1	48 59 42	2014	Critical	April	--	9,298.5	9,287.6	10.9	0.1%	9,285.5	13.0	0.1%	9,279.2	19.3	0.2%
ME 1	48 59 42	2014	Critical	May	--	3,299.0	3,282.9	16.1	0.5%	3,279.6	19.3	0.6%	3,269.9	29.1	0.9%
ME 1	48 59 42	2014	Critical	June	--	1,064.5	1,040.3	24.2	2.3%	1,035.6	28.9	2.7%	1,022.0	42.5	4.0%
ME 1	48 59 42	2014	Critical	July	--	480.9	457.6	23.3	4.8%	452.9	27.9	5.8%	443.8	37.1	7.7%
ME 1	48 59 42	2014	Critical	August	--	286.9	267.6	19.3	6.7%	263.7	23.3	8.1%	254.0	33.0	11.5%
ME 1	48 59 42	2014	Critical	September	Used in Summary Table Analysis	437.7	422.0	15.7	3.6%	418.8	18.9	4.3%	410.0	27.7	6.3%
ME 1	48 59 42	2015	Dry	October	Used in Summary Table Analysis	2,948.5	2,937.3	11.2	0.4%	2,935.0	13.5	0.5%	2,927.5	20.9	0.7%
ME 1	48 59 42	2015	Dry	November	Used in Summary Table Analysis	4,721.2	4,713.2	8.0	0.2%	4,711.6	9.6	0.2%	4,703.7	17.5	0.4%
ME 1	48 59 42	2015	Dry	December	--	16,760.4	16,753.5	6.9	0.0%	16,752.3	8.1	0.0%	16,747.7	12.7	0.1%
ME 1	48 59 42	2015	Dry	January	--	12,089.1	12,082.2	6.9	0.1%	12,081.0	8.1	0.1%	12,076.4	12.7	0.1%
ME 1	48 59 42	2015	Dry	February	--	11,914.4	11,908.6	5.8	0.0%	11,907.4	6.9	0.1%	11,903.9	10.4	0.1%
ME 1	48 59 42	2015	Dry	March	--	7,366.3	7,360.4	5.9	0.1%	7,359.3	7.1	0.1%	7,355.7	10.6	0.1%
ME 1	48 59 42	2015	Dry	April	--	3,743.2	3,732.6	10.5	0.3%	3,730.7	12.5	0.3%	3,724.7	18.5	0.5%
ME 1	48 59 42	2015	Dry	May	--	1,363.3	1,347.5	15.9	1.2%	1,344.2	19.1	1.4%	1,334.8	28.5	2.1%
ME 1	48 59 42	2015	Dry	June	--	470.7	447.8	23.0	4.9%	443.3	27.4	5.8%	430.6	40.1	8.5%
ME 1	48 59 42	2015	Dry	July	--	208.0	185.1	22.9	11.0%	180.5	27.5	13.2%	171.7	36.4	17.5%
ME 1	48 59 42	2015	Dry	August	--	108.6	89.2	19.5	17.9%	85.2	23.4	21.6%	75.5	33.1	30.5%
ME 1	48 59 42	2015	Dry	September	Used in Summary Table Analysis	66.3	50.3	15.9	24.1%	47.1	19.2	28.9%	38.2	28.1	42.4%
ME 1	48 59 42	2016	Above Normal	October	Used in Summary Table Analysis	40.4	29.3	11.1	27.5%	27.0	13.4	33.1%	19.8	20.6	50.9%
ME 1	48 59 42	2016	Above Normal	November	Used in Summary Table Analysis	750.2	742.0	8.3	1.1%	740.3	10.0	1.3%	732.0	18.2	2.4%
ME 1	48 59 42	2016	Above Normal	December	--	16,076.4	16,069.4	6.9	0.0%	16,068.3	8.1	0.1%	16,062.5	13.9	0.1%
ME 1	48 59 42	2016	Above Normal	January	--	35,657.4	35,650.5	6.9	0.0%	35,649.3	8.1	0.0%	35,644.7	12.7	0.0%
ME 1	48 59 42	2016	Above Normal	February	--	18,644.7	18,637.7	6.9	0.0%	18,636.6	8.1	0.0%	18,633.1	11.6	0.1%
ME 1	48 59 42	2016	Above Normal	March	--	21,141.2	21,135.4	5.8	0.0%	21,133.1	8.1	0.0%	21,129.6	11.6	0.1%
ME 1	48 59 42	2016	Above Normal	April	--	12,746.5	12,740.7	5.8	0.0%	12,739.6	6.9	0.1%	12,736.1	10.4	0.1%
ME 1	48 59 42	2016	Above Normal	May	--	3,929.9	3,921.6	8.2	0.2%	3,920.0	9.8	0.3%	3,915.3	14.6	0.4%
ME 1	48 59 42	2016	Above Normal	June	--	1,416.8	1,398.4	18.4	1.3%	1,394.8	22.0	1.6%	1,384.4	32.4	2.3%
ME 1	48 59 42	2016	Above Normal	July	--	748.9	728.3	20.6	2.8%	724.2	24.7	3.3%	712.2	36.7	4.9%
ME 1	48 59 42	2016	Above Normal	August	--	425.6	407.5	18.1	4.2%	403.9	21.7	5.1%	392.9	32.7	7.7%
ME 1	48 59 42	2016	Above Normal	September	Used in Summary Table Analysis	266.6	251.7	14.8	5.6%	248.7	17.8	6.7%	239.7	26.9	10.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	48 59 42	2017	Wet	October	Used in Summary Table Analysis	5,119.6	5,110.0	9.6	0.2%	5,108.0	11.6	0.2%	5,102.0	17.6	0.3%
ME 1	48 59 42	2017	Wet	November	Used in Summary Table Analysis	11,107.6	11,100.5	7.2	0.1%	11,099.0	8.7	0.1%	11,094.6	13.1	0.1%
ME 1	48 59 42	2017	Wet	December	--	14,188.7	14,181.7	6.9	0.0%	14,180.6	8.1	0.1%	14,177.1	11.6	0.1%
ME 1	48 59 42	2017	Wet	January	--	70,483.8	70,476.9	6.9	0.0%	70,475.7	8.1	0.0%	70,472.2	11.6	0.0%
ME 1	48 59 42	2017	Wet	February	--	47,223.4	47,216.4	6.9	0.0%	47,215.3	8.1	0.0%	47,211.8	11.6	0.0%
ME 1	48 59 42	2017	Wet	March	--	20,575.2	20,569.4	5.8	0.0%	20,568.3	6.9	0.0%	20,564.8	10.4	0.1%
ME 1	48 59 42	2017	Wet	April	--	14,496.5	14,489.6	6.9	0.0%	14,488.4	8.1	0.1%	14,485.0	11.6	0.1%
ME 1	48 59 42	2017	Wet	May	--	6,069.6	6,060.5	9.0	0.1%	6,058.8	10.8	0.2%	6,053.7	15.9	0.3%
ME 1	48 59 42	2017	Wet	June	--	1,903.5	1,885.3	18.2	1.0%	1,881.8	21.6	1.1%	1,871.9	31.6	1.7%
ME 1	48 59 42	2017	Wet	July	--	859.1	837.9	21.3	2.5%	833.7	25.5	3.0%	821.3	37.9	4.4%
ME 1	48 59 42	2017	Wet	August	--	436.1	417.9	18.3	4.2%	414.2	21.9	5.0%	403.2	32.9	7.6%
ME 1	48 59 42	2017	Wet	September	Used in Summary Table Analysis	260.1	245.8	14.3	5.5%	242.9	17.2	6.6%	234.2	25.9	9.9%
ME 1	48 59 42	2018	Above Normal	October	Used in Summary Table Analysis	204.5	194.0	10.5	5.1%	191.9	12.6	6.2%	185.5	19.0	9.3%
ME 1	48 59 42	2018	Above Normal	November	Used in Summary Table Analysis	3,327.1	3,319.6	7.5	0.2%	3,317.9	9.1	0.3%	3,313.3	13.8	0.4%
ME 1	48 59 42	2018	Above Normal	December	--	4,802.0	4,795.4	6.6	0.1%	4,794.1	7.9	0.2%	4,790.0	11.9	0.2%
ME 1	48 59 42	2018	Above Normal	January	--	8,196.1	8,189.9	6.1	0.1%	8,188.7	7.4	0.1%	8,185.0	11.1	0.1%
ME 1	48 59 42	2018	Above Normal	February	--	6,842.5	6,836.6	5.9	0.1%	6,835.4	7.1	0.1%	6,831.8	10.6	0.2%
ME 1	48 59 42	2018	Above Normal	March	--	10,756.9	10,751.2	5.8	0.1%	10,749.9	7.1	0.1%	10,746.5	10.4	0.1%
ME 1	48 59 42	2018	Above Normal	April	--	14,372.7	14,366.9	5.8	0.0%	14,365.7	6.9	0.0%	14,362.3	10.4	0.1%
ME 1	48 59 42	2018	Above Normal	May	--	6,248.8	6,237.7	11.1	0.2%	6,235.5	13.3	0.2%	6,229.1	19.8	0.3%
ME 1	48 59 42	2018	Above Normal	June	--	1,836.6	1,815.2	21.4	1.2%	1,811.0	25.6	1.4%	1,798.8	37.7	2.1%
ME 1	48 59 42	2018	Above Normal	July	--	712.4	691.3	21.0	3.0%	687.1	25.2	3.5%	674.5	37.9	5.3%
ME 1	48 59 42	2018	Above Normal	August	--	377.6	360.5	17.1	4.5%	357.0	20.5	5.4%	346.6	31.0	8.2%
ME 1	48 59 42	2018	Above Normal	September	Used in Summary Table Analysis	242.6	228.2	14.3	5.9%	225.3	17.2	7.1%	216.6	25.9	10.7%
ME 1	48 59 42	2019	Below Normal	October	Used in Summary Table Analysis	138.6	129.0	9.6	6.9%	127.1	11.5	8.3%	121.2	17.4	12.6%
ME 1	48 59 42	2019	Below Normal	November	Used in Summary Table Analysis	1,844.0	1,836.6	7.4	0.4%	1,835.1	8.9	0.5%	1,830.6	13.4	0.7%
ME 1	48 59 42	2019	Below Normal	December	--	7,209.6	7,203.2	6.4	0.1%	7,202.0	7.6	0.1%	7,198.1	11.5	0.2%
ME 1	48 59 42	2019	Below Normal	January	--	18,292.8	18,287.0	5.8	0.0%	18,285.9	6.9	0.0%	18,282.4	10.4	0.1%
ME 1	48 59 42	2019	Below Normal	February	--	96,401.6	96,395.8	5.8	0.0%	96,394.7	6.9	0.0%	96,392.4	9.3	0.0%
ME 1	48 59 42	2019	Below Normal	March	--	31,516.2	31,511.6	4.6	0.0%	31,510.4	5.8	0.0%	31,506.9	9.3	0.0%
ME 1	48 59 42	2019	Below Normal	April	--	11,655.1	11,649.3	5.8	0.0%	11,648.1	6.9	0.1%	11,644.7	10.4	0.1%
ME 1	48 59 42	2019	Below Normal	May	--	9,765.9	9,753.6	12.3	0.1%	9,751.3	14.6	0.1%	9,744.3	21.5	0.2%
ME 1	48 59 42	2019	Below Normal	June	--	4,163.0	4,141.0	22.0	0.5%	4,136.7	26.3	0.6%	4,124.2	38.8	0.9%
ME 1	48 59 42	2019	Below Normal	July	--	1,277.9	1,256.9	20.9	1.6%	1,252.8	25.1	2.0%	1,240.3	37.6	2.9%
ME 1	48 59 42	2019	Below Normal	August	--	524.3	506.6	17.7	3.4%	503.1	21.3	4.1%	492.4	32.0	6.1%
ME 1	48 59 42	2019	Below Normal	September	Used in Summary Table Analysis	320.9	306.9	14.0	4.4%	304.1	16.8	5.2%	295.7	25.2	7.9%
ME 1	48 59 42	2020	Dry	October	Used in Summary Table Analysis	185.8	176.5	9.3	5.0%	174.6	11.2	6.0%	168.9	16.9	9.1%
ME 1	48 59 42	2020	Dry	November	Used in Summary Table Analysis	211.2	203.9	7.3	3.5%	202.4	8.8	4.2%	197.9	13.3	6.3%
ME 1	48 59 42	2020	Dry	December	--	4,921.1	4,914.8	6.3	0.1%	4,913.7	7.4	0.2%	4,909.8	11.2	0.2%
ME 1	48 59 42	2020	Dry	January	--	12,928.2	12,922.5	5.8	0.0%	12,921.3	6.9	0.1%	12,917.8	10.4	0.1%
ME 1	48 59 42	2020	Dry	February	--	7,144.3	7,138.7	5.7	0.1%	7,137.5	6.8	0.1%	7,134.0	10.3	0.1%
ME 1	48 59 42	2020	Dry	March	--	4,494.1	4,488.4	5.7	0.1%	4,487.4	6.7	0.1%	4,484.0	10.1	0.2%
ME 1	48 59 42	2020	Dry	April	--	3,241.8	3,231.3	10.5	0.3%	3,229.2	12.6	0.4%	3,223.0	18.8	0.6%
ME 1	48 59 42	2020	Dry	May	--	3,483.7	3,467.9	15.7	0.5%	3,464.8	18.9	0.5%	3,455.4	28.2	0.8%
ME 1	48 59 42	2020	Dry	June	--	2,012.3	1,989.4	22.9	1.1%	1,984.8	27.4	1.4%	1,972.1	40.2	2.0%
ME 1	48 59 42	2020	Dry	July	--	731.9	708.1	23.9	3.3%	703.3	28.7	3.9%	693.7	38.2	5.2%
ME 1	48 59 42	2020	Dry	August	--	340.2	319.6	20.6	6.0%	315.4	24.8	7.3%	304.9	35.2	10.4%
ME 1	48 59 42	2020	Dry	September	Used in Summary Table Analysis	192.0	175.3	16.7	8.7%	171.9	20.1	10.5%	162.4	29.5	15.4%
ME 1	47 59 1	2000	Above Normal	October	Used in Summary Table Analysis	793.6	774.4	19.2	2.4%	770.5	23.1	2.9%	758.7	34.9	4.4%
ME 1	47 59 1	2000	Above Normal	November	Used in Summary Table Analysis	11,782.4	11,767.4	15.0	0.1%	11,763.9	18.5	0.2%	11,755.8	26.6	0.2%
ME 1	47 59 1	2000	Above Normal	December	--	10,629.5	10,617.2	12.3	0.1%	10,614.8	14.7	0.1%	10,607.3	22.2	0.2%
ME 1	47 59 1	2000	Above Normal	January	--	28,012.7	28,002.3	10.4	0.0%	28,000.0	12.7	0.0%	27,993.1	19.7	0.1%
ME 1	47 59 1	2000	Above Normal	February	--	36,671.3	36,660.9	10.4	0.0%	36,659.7	11.6	0.0%	36,652.8	18.5	0.1%
ME 1	47 59 1	2000	Above Normal	March	--	18,199.1	18,188.7	10.4	0.1%	18,187.5	11.6	0.1%	18,181.7	17.4	0.1%
ME 1	47 59 1	2000	Above Normal	April	--	12,224.5	12,215.3	9.3	0.1%	12,213.0	11.6	0.1%	12,207.2	17.4	0.1%
ME 1	47 59 1	2000	Above Normal	May	--	7,019.1	6,993.2	25.9	0.4%	6,988.0	31.1	0.4%	6,972.6	46.5	0.7%
ME 1	47 59 1	2000	Above Normal	June	--	2,579.7	2,539.7	40.0	1.6%	2,531.8	47.9	1.9%	2,508.6	71.2	2.8%
ME 1	47 59 1	2000	Above Normal	July	--	975.2	943.8	31.3	3.2%	937.6	37.5	3.8%	919.1	56.1	5.8%
ME 1	47 59 1	2000	Above Normal	August	--	504.5	477.1	27.3	5.4%	471.7	32.8	6.5%	455.1	49.4	9.8%
ME 1	47 59 1	2000	Above Normal	September	Used in Summary Table Analysis	279.8	256.6	23.1	8.3%	252.0	27.8	9.9%	237.9	41.8	15.0%
ME 1	47 59 1	2001	Dry	October	Used in Summary Table Analysis	3,734.6	3,715.7	18.9	0.5%	3,711.9	22.7	0.6%	3,700.3	34.3	0.9%
ME 1	47 59 1	2001	Dry	November	Used in Summary Table Analysis	5,995.5	5,981.1	14.4	0.2%	5,978.2	17.2	0.3%	5,969.4	26.0	0.4%
ME 1	47 59 1	2001	Dry	December	--	8,709.3	8,697.1	12.2	0.1%	8,694.6	14.7	0.2%	8,687.2	22.1	0.3%
ME 1	47 59 1	2001	Dry	January	--	12,547.5	12,537.0	10.4	0.1%	12,534.7	12.7	0.1%	12,527.8	19.7	0.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 59 1	2001	Dry	February	--	17,317.1	17,306.7	10.4	0.1%	17,304.4	12.7	0.1%	17,298.6	18.5	0.1%
ME 1	47 59 1	2001	Dry	March	--	12,215.3	12,206.0	9.3	0.1%	12,203.7	11.6	0.1%	12,197.9	17.4	0.1%
ME 1	47 59 1	2001	Dry	April	--	10,886.3	10,859.4	27.0	0.2%	10,853.9	32.4	0.3%	10,838.1	48.3	0.4%
ME 1	47 59 1	2001	Dry	May	--	2,631.4	2,601.4	30.0	1.1%	2,595.5	35.9	1.4%	2,577.7	53.7	2.0%
ME 1	47 59 1	2001	Dry	June	--	2,592.8	2,548.6	44.2	1.7%	2,540.0	52.8	2.0%	2,514.8	78.0	3.0%
ME 1	47 59 1	2001	Dry	July	--	709.8	673.8	36.0	5.1%	666.6	43.2	6.1%	649.8	60.0	8.4%
ME 1	47 59 1	2001	Dry	August	--	159.5	126.6	32.9	20.6%	119.9	39.5	24.8%	102.2	57.2	35.9%
ME 1	47 59 1	2001	Dry	September	Used in Summary Table Analysis	81.6	53.5	28.0	34.4%	47.9	33.7	41.3%	31.7	49.8	61.1%
ME 1	47 59 1	2002	Below Normal	October	Used in Summary Table Analysis	249.6	225.9	23.7	9.5%	221.0	28.6	11.5%	206.1	43.4	17.4%
ME 1	47 59 1	2002	Below Normal	November	Used in Summary Table Analysis	11,855.3	11,836.8	18.5	0.2%	11,833.3	22.0	0.2%	11,819.4	35.9	0.3%
ME 1	47 59 1	2002	Below Normal	December	--	35,173.6	35,158.6	15.0	0.0%	35,155.1	18.5	0.1%	35,144.7	28.9	0.1%
ME 1	47 59 1	2002	Below Normal	January	--	30,553.2	30,539.4	13.9	0.0%	30,537.0	16.2	0.1%	30,528.9	24.3	0.1%
ME 1	47 59 1	2002	Below Normal	February	--	24,481.5	24,468.8	12.7	0.1%	24,466.4	15.0	0.1%	24,458.3	23.1	0.1%
ME 1	47 59 1	2002	Below Normal	March	--	17,626.2	17,614.6	11.6	0.1%	17,612.3	13.9	0.1%	17,605.3	20.8	0.1%
ME 1	47 59 1	2002	Below Normal	April	--	9,863.8	9,837.5	26.3	0.3%	9,832.4	31.4	0.3%	9,816.9	46.9	0.5%
ME 1	47 59 1	2002	Below Normal	May	--	3,295.0	3,265.7	29.3	0.9%	3,259.8	35.2	1.1%	3,242.4	52.7	1.6%
ME 1	47 59 1	2002	Below Normal	June	--	840.9	805.8	35.1	4.2%	799.0	42.0	5.0%	778.8	62.2	7.4%
ME 1	47 59 1	2002	Below Normal	July	--	349.0	316.4	32.6	9.3%	309.8	39.1	11.2%	291.1	57.9	16.6%
ME 1	47 59 1	2002	Below Normal	August	--	211.5	183.0	28.5	13.5%	177.3	34.2	16.2%	159.5	51.9	24.6%
ME 1	47 59 1	2002	Below Normal	September	Used in Summary Table Analysis	148.9	123.0	26.0	17.4%	117.7	31.2	20.9%	100.9	48.0	32.2%
ME 1	47 59 1	2003	Wet	October	Used in Summary Table Analysis	114.2	93.4	20.8	18.2%	89.2	25.0	21.9%	76.4	37.8	33.1%
ME 1	47 59 1	2003	Wet	November	Used in Summary Table Analysis	877.3	861.5	15.8	1.8%	858.2	19.1	2.2%	848.3	29.0	3.3%
ME 1	47 59 1	2003	Wet	December	--	55,627.3	55,614.6	12.7	0.0%	55,611.1	16.2	0.0%	55,603.0	24.3	0.0%
ME 1	47 59 1	2003	Wet	January	--	31,280.1	31,268.5	11.6	0.0%	31,266.2	13.9	0.0%	31,259.3	20.8	0.1%
ME 1	47 59 1	2003	Wet	February	--	20,219.9	20,208.3	11.6	0.1%	20,206.0	13.9	0.1%	20,200.2	19.7	0.1%
ME 1	47 59 1	2003	Wet	March	--	23,829.9	23,819.4	10.4	0.0%	23,818.3	11.6	0.0%	23,811.3	18.5	0.1%
ME 1	47 59 1	2003	Wet	April	--	42,415.5	42,406.3	9.3	0.0%	42,403.9	11.6	0.0%	42,398.1	17.4	0.0%
ME 1	47 59 1	2003	Wet	May	--	12,153.9	12,127.3	26.6	0.2%	12,121.5	32.4	0.3%	12,106.5	47.5	0.4%
ME 1	47 59 1	2003	Wet	June	--	3,147.1	3,115.5	31.6	1.0%	3,109.5	37.6	1.2%	3,091.7	55.4	1.8%
ME 1	47 59 1	2003	Wet	July	--	1,453.8	1,421.6	32.2	2.2%	1,415.3	38.5	2.7%	1,396.3	57.5	4.0%
ME 1	47 59 1	2003	Wet	August	--	741.2	710.9	30.3	4.1%	704.4	36.8	5.0%	683.5	57.7	7.8%
ME 1	47 59 1	2003	Wet	September	Used in Summary Table Analysis	440.5	417.2	23.3	5.3%	412.5	28.0	6.4%	397.3	43.2	9.8%
ME 1	47 59 1	2004	Wet	October	Used in Summary Table Analysis	307.9	288.8	19.1	6.2%	284.9	23.0	7.5%	273.2	34.7	11.3%
ME 1	47 59 1	2004	Wet	November	Used in Summary Table Analysis	5,665.9	5,651.2	14.7	0.3%	5,648.1	17.7	0.3%	5,638.9	27.0	0.5%
ME 1	47 59 1	2004	Wet	December	--	35,709.5	35,696.8	12.7	0.0%	35,694.4	15.0	0.0%	35,686.3	23.1	0.1%
ME 1	47 59 1	2004	Wet	January	--	31,063.7	31,052.1	11.6	0.0%	31,049.8	13.9	0.0%	31,042.8	20.8	0.1%
ME 1	47 59 1	2004	Wet	February	--	37,842.6	37,832.2	10.4	0.0%	37,829.9	12.7	0.0%	37,822.9	19.7	0.1%
ME 1	47 59 1	2004	Wet	March	--	16,450.2	16,441.0	9.3	0.1%	16,438.7	11.6	0.1%	16,432.9	17.4	0.1%
ME 1	47 59 1	2004	Wet	April	--	9,395.1	9,386.0	9.1	0.1%	9,384.1	11.0	0.1%	9,378.6	16.6	0.2%
ME 1	47 59 1	2004	Wet	May	--	3,375.2	3,349.2	26.0	0.8%	3,344.1	31.1	0.9%	3,328.8	46.4	1.4%
ME 1	47 59 1	2004	Wet	June	--	679.7	649.5	30.2	4.4%	643.6	36.0	5.3%	626.4	53.2	7.8%
ME 1	47 59 1	2004	Wet	July	--	340.2	308.6	31.6	9.3%	302.3	37.9	11.1%	283.5	56.8	16.7%
ME 1	47 59 1	2004	Wet	August	--	210.1	182.5	27.5	13.1%	177.0	33.1	15.7%	160.2	49.9	23.7%
ME 1	47 59 1	2004	Wet	September	Used in Summary Table Analysis	148.1	121.4	26.7	18.0%	116.0	32.1	21.7%	99.8	48.4	32.7%
ME 1	47 59 1	2005	Above Normal	October	Used in Summary Table Analysis	7,505.3	7,485.4	19.9	0.3%	7,481.5	23.8	0.3%	7,469.3	36.0	0.5%
ME 1	47 59 1	2005	Above Normal	November	Used in Summary Table Analysis	2,229.1	2,214.4	14.7	0.7%	2,211.3	17.7	0.8%	2,202.3	26.7	1.2%
ME 1	47 59 1	2005	Above Normal	December	--	20,525.5	20,512.7	12.7	0.1%	20,510.4	15.0	0.1%	20,502.3	23.1	0.1%
ME 1	47 59 1	2005	Above Normal	January	--	21,989.6	21,978.0	11.6	0.1%	21,975.7	13.9	0.1%	21,968.8	20.8	0.1%
ME 1	47 59 1	2005	Above Normal	February	--	13,937.5	13,927.1	10.4	0.1%	13,924.8	12.7	0.1%	13,919.0	18.5	0.1%
ME 1	47 59 1	2005	Above Normal	March	--	28,265.0	28,255.8	9.3	0.0%	28,253.5	11.6	0.0%	28,247.7	17.4	0.1%
ME 1	47 59 1	2005	Above Normal	April	--	21,245.4	21,236.1	9.3	0.0%	21,235.0	10.4	0.0%	21,229.2	16.2	0.1%
ME 1	47 59 1	2005	Above Normal	May	--	19,332.2	19,305.6	26.6	0.1%	19,299.8	32.4	0.2%	19,284.7	47.5	0.2%
ME 1	47 59 1	2005	Above Normal	June	--	15,591.4	15,549.8	41.7	0.3%	15,541.7	49.8	0.3%	15,517.4	74.1	0.5%
ME 1	47 59 1	2005	Above Normal	July	--	2,856.3	2,822.8	33.4	1.2%	2,816.7	39.6	1.4%	2,798.1	58.1	2.0%
ME 1	47 59 1	2005	Above Normal	August	--	963.7	936.2	27.4	2.8%	930.8	32.8	3.4%	914.5	49.2	5.1%
ME 1	47 59 1	2005	Above Normal	September	Used in Summary Table Analysis	505.8	482.6	23.2	4.6%	478.0	27.8	5.5%	464.1	41.7	8.2%
ME 1	47 59 1	2006	Wet	October	Used in Summary Table Analysis	613.2	594.6	18.6	3.0%	590.8	22.3	3.6%	579.4	33.8	5.5%
ME 1	47 59 1	2006	Wet	November	Used in Summary Table Analysis	9,074.4	9,060.4	14.0	0.2%	9,057.6	16.8	0.2%	9,049.1	25.3	0.3%
ME 1	47 59 1	2006	Wet	December	--	42,744.2	42,731.5	12.7	0.0%	42,729.2	15.0	0.0%	42,721.1	23.1	0.1%
ME 1	47 59 1	2006	Wet	January	--	45,614.6	45,603.0	11.6	0.0%	45,600.7	13.9	0.0%	45,593.8	20.8	0.0%
ME 1	47 59 1	2006	Wet	February	--	26,324.1	26,313.7	10.4	0.0%	26,311.3	12.7	0.0%	26,305.6	18.5	0.1%
ME 1	47 59 1	2006	Wet	March	--	46,618.1	46,608.8	9.3	0.0%	46,606.5	11.6	0.0%	46,600.7	17.4	0.0%
ME 1	47 59 1	2006	Wet	April	--	30,211.8	30,202.5	9.3	0.0%	30,201.4	10.4	0.0%	30,195.6	16.2	0.1%
ME 1	47 59 1	2006	Wet	May	--	14,079.9	14,066.0	13.9	0.1%	14,063.7	16.2	0.1%	14,055.6	24.3	0.2%

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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 59 1	2006	Wet	June	--	3,529.6	3,495.3	34.4	1.0%	3,488.5	41.1	1.2%	3,469.1	60.5	1.7%
ME 1	47 59 1	2006	Wet	July	--	1,256.9	1,225.3	31.6	2.5%	1,219.2	37.7	3.0%	1,201.0	55.9	4.4%
ME 1	47 59 1	2006	Wet	August	--	643.6	615.1	28.5	4.4%	609.5	34.1	5.3%	592.4	51.2	7.9%
ME 1	47 59 1	2006	Wet	September	Used in Summary Table Analysis	406.3	382.8	23.5	5.8%	378.1	28.2	6.9%	363.9	42.5	10.5%
ME 1	47 59 1	2007	Above Normal	October	Used in Summary Table Analysis	257.4	238.4	19.0	7.4%	234.5	22.9	8.9%	222.8	34.6	13.5%
ME 1	47 59 1	2007	Above Normal	November	Used in Summary Table Analysis	8,462.5	8,447.6	14.9	0.2%	8,444.6	17.9	0.2%	8,435.3	27.2	0.3%
ME 1	47 59 1	2007	Above Normal	December	--	19,998.8	19,985.0	13.9	0.1%	19,982.6	16.2	0.1%	19,974.5	24.3	0.1%
ME 1	47 59 1	2007	Above Normal	January	--	10,139.1	10,127.9	11.2	0.1%	10,125.6	13.5	0.1%	10,118.4	20.7	0.2%
ME 1	47 59 1	2007	Above Normal	February	--	30,110.0	30,099.5	10.4	0.0%	30,097.2	12.7	0.0%	30,090.3	19.7	0.1%
ME 1	47 59 1	2007	Above Normal	March	--	13,019.7	13,009.3	10.4	0.1%	13,006.9	12.7	0.1%	13,001.2	18.5	0.1%
ME 1	47 59 1	2007	Above Normal	April	--	11,457.1	11,431.5	25.6	0.2%	11,426.4	30.7	0.3%	11,411.3	45.7	0.4%
ME 1	47 59 1	2007	Above Normal	May	--	4,102.7	4,074.1	28.6	0.7%	4,068.3	34.4	0.8%	4,051.2	51.5	1.3%
ME 1	47 59 1	2007	Above Normal	June	--	1,472.0	1,434.5	37.5	2.5%	1,427.1	44.9	3.1%	1,405.6	66.4	4.5%
ME 1	47 59 1	2007	Above Normal	July	--	483.1	448.8	34.3	7.1%	442.0	41.2	8.5%	422.1	61.0	12.6%
ME 1	47 59 1	2007	Above Normal	August	--	207.4	179.6	27.8	13.4%	174.0	33.4	16.1%	156.8	50.6	24.4%
ME 1	47 59 1	2007	Above Normal	September	Used in Summary Table Analysis	135.1	109.6	25.5	18.9%	104.5	30.6	22.7%	88.9	46.2	34.2%
ME 1	47 59 1	2008	Dry	October	Used in Summary Table Analysis	3,357.8	3,337.5	20.3	0.6%	3,333.3	24.4	0.7%	3,320.8	36.9	1.1%
ME 1	47 59 1	2008	Dry	November	Used in Summary Table Analysis	3,202.0	3,187.0	14.9	0.5%	3,184.0	17.9	0.6%	3,174.8	27.2	0.8%
ME 1	47 59 1	2008	Dry	December	--	22,591.4	22,577.5	13.9	0.1%	22,575.2	16.2	0.1%	22,567.1	24.3	0.1%
ME 1	47 59 1	2008	Dry	January	--	37,017.4	37,004.6	12.7	0.0%	37,002.3	15.0	0.0%	36,995.4	22.0	0.1%
ME 1	47 59 1	2008	Dry	February	--	26,142.4	26,131.9	10.4	0.0%	26,129.6	12.7	0.0%	26,123.8	18.5	0.1%
ME 1	47 59 1	2008	Dry	March	--	11,732.6	11,723.4	9.3	0.1%	11,721.1	11.6	0.1%	11,715.3	17.4	0.1%
ME 1	47 59 1	2008	Dry	April	--	8,967.2	8,940.4	26.9	0.3%	8,935.1	32.2	0.4%	8,919.2	48.0	0.5%
ME 1	47 59 1	2008	Dry	May	--	1,359.6	1,335.5	24.1	1.8%	1,331.0	28.6	2.1%	1,317.4	42.2	3.1%
ME 1	47 59 1	2008	Dry	June	--	424.0	383.1	41.0	9.7%	375.1	48.9	11.5%	351.6	72.4	17.1%
ME 1	47 59 1	2008	Dry	July	--	243.1	206.6	36.4	15.0%	199.4	43.6	18.0%	182.6	60.5	24.9%
ME 1	47 59 1	2008	Dry	August	--	165.8	132.9	32.9	19.8%	126.2	39.5	23.9%	105.6	60.2	36.3%
ME 1	47 59 1	2008	Dry	September	Used in Summary Table Analysis	127.6	95.4	32.2	25.2%	88.9	38.7	30.3%	70.3	57.3	44.9%
ME 1	47 59 1	2009	Critical	October	Used in Summary Table Analysis	905.3	881.7	23.5	2.6%	876.9	28.4	3.1%	861.9	43.4	4.8%
ME 1	47 59 1	2009	Critical	November	Used in Summary Table Analysis	5,378.0	5,360.9	17.1	0.3%	5,357.3	20.7	0.4%	5,343.9	34.1	0.6%
ME 1	47 59 1	2009	Critical	December	--	11,888.9	11,873.8	15.0	0.1%	11,871.5	17.4	0.1%	11,862.3	26.6	0.2%
ME 1	47 59 1	2009	Critical	January	--	8,714.7	8,701.4	13.3	0.2%	8,698.7	16.0	0.2%	8,690.5	24.2	0.3%
ME 1	47 59 1	2009	Critical	February	--	22,383.1	22,371.5	11.6	0.1%	22,369.2	13.9	0.1%	22,362.3	20.8	0.1%
ME 1	47 59 1	2009	Critical	March	--	20,946.8	20,936.3	10.4	0.0%	20,934.0	12.7	0.1%	20,928.2	18.5	0.1%
ME 1	47 59 1	2009	Critical	April	--	10,072.0	10,044.4	27.5	0.3%	10,039.0	33.0	0.3%	10,022.8	49.2	0.5%
ME 1	47 59 1	2009	Critical	May	--	15,491.9	15,460.6	31.3	0.2%	15,453.7	38.2	0.2%	15,435.2	56.7	0.4%
ME 1	47 59 1	2009	Critical	June	--	3,142.4	3,097.8	44.6	1.4%	3,089.4	53.0	1.7%	3,064.1	78.2	2.5%
ME 1	47 59 1	2009	Critical	July	--	1,247.0	1,210.5	36.5	2.9%	1,203.4	43.6	3.5%	1,186.6	60.4	4.8%
ME 1	47 59 1	2009	Critical	August	--	652.6	619.7	32.9	5.0%	613.1	39.4	6.0%	595.4	57.2	8.8%
ME 1	47 59 1	2009	Critical	September	Used in Summary Table Analysis	375.1	347.1	28.0	7.5%	341.4	33.7	9.0%	325.2	49.9	13.3%
ME 1	47 59 1	2010	Below Normal	October	Used in Summary Table Analysis	6,065.5	6,042.0	23.5	0.4%	6,037.2	28.4	0.5%	6,021.4	44.1	0.7%
ME 1	47 59 1	2010	Below Normal	November	Used in Summary Table Analysis	8,198.1	8,180.6	17.6	0.2%	8,177.0	21.2	0.3%	8,163.1	35.1	0.4%
ME 1	47 59 1	2010	Below Normal	December	--	12,172.5	12,158.6	13.9	0.1%	12,155.1	17.4	0.1%	12,145.8	26.6	0.2%
ME 1	47 59 1	2010	Below Normal	January	--	35,635.4	35,621.5	13.9	0.0%	35,619.2	16.2	0.0%	35,611.1	24.3	0.1%
ME 1	47 59 1	2010	Below Normal	February	--	27,071.8	27,060.2	11.6	0.0%	27,057.9	13.9	0.1%	27,050.9	20.8	0.1%
ME 1	47 59 1	2010	Below Normal	March	--	28,687.5	28,675.9	11.6	0.0%	28,673.6	13.9	0.0%	28,667.8	19.7	0.1%
ME 1	47 59 1	2010	Below Normal	April	--	39,739.6	39,729.2	10.4	0.0%	39,726.9	12.7	0.0%	39,719.9	19.7	0.0%
ME 1	47 59 1	2010	Below Normal	May	--	20,054.4	20,026.6	27.8	0.1%	20,022.0	32.4	0.2%	20,005.8	48.6	0.2%
ME 1	47 59 1	2010	Below Normal	June	--	9,180.8	9,139.0	41.8	0.5%	9,130.8	50.0	0.5%	9,106.7	74.1	0.8%
ME 1	47 59 1	2010	Below Normal	July	--	1,439.2	1,405.9	33.3	2.3%	1,399.5	39.7	2.8%	1,380.8	58.4	4.1%
ME 1	47 59 1	2010	Below Normal	August	--	549.2	521.2	28.0	5.1%	515.7	33.6	6.1%	499.0	50.2	9.1%
ME 1	47 59 1	2010	Below Normal	September	Used in Summary Table Analysis	630.9	603.4	27.5	4.4%	597.8	33.1	5.2%	581.3	49.6	7.9%
ME 1	47 59 1	2011	Wet	October	Used in Summary Table Analysis	9,501.4	9,482.3	19.1	0.2%	9,478.5	22.9	0.2%	9,466.9	34.5	0.4%
ME 1	47 59 1	2011	Wet	November	Used in Summary Table Analysis	14,069.4	14,055.6	13.9	0.1%	14,052.1	17.4	0.1%	14,042.8	26.6	0.2%
ME 1	47 59 1	2011	Wet	December	--	33,103.0	33,090.3	12.7	0.0%	33,088.0	15.0	0.0%	33,079.9	23.1	0.1%
ME 1	47 59 1	2011	Wet	January	--	14,039.4	14,028.9	10.4	0.1%	14,026.6	12.7	0.1%	14,019.7	19.7	0.1%
ME 1	47 59 1	2011	Wet	February	--	20,652.8	20,642.4	10.4	0.1%	20,640.0	12.7	0.1%	20,634.3	18.5	0.1%
ME 1	47 59 1	2011	Wet	March	--	51,612.3	51,601.9	10.4	0.0%	51,599.5	12.7	0.0%	51,593.8	18.5	0.0%
ME 1	47 59 1	2011	Wet	April	--	24,660.9	24,650.5	10.4	0.0%	24,649.3	11.6	0.0%	24,642.4	18.5	0.1%
ME 1	47 59 1	2011	Wet	May	--	11,313.8	11,287.2	26.6	0.2%	11,281.8	31.9	0.3%	11,266.2	47.6	0.4%
ME 1	47 59 1	2011	Wet	June	--	6,988.4	6,947.2	41.2	0.6%	6,939.1	49.3	0.7%	6,915.4	73.0	1.0%
ME 1	47 59 1	2011	Wet	July	--	1,817.7	1,779.4	38.3	2.1%	1,771.9	45.8	2.5%	1,750.8	66.9	3.7%
ME 1	47 59 1	2011	Wet	August	--	760.0	732.2	27.8	3.7%	726.7	33.3	4.4%	710.0	50.0	6.6%
ME 1	47 59 1	2011	Wet	September	Used in Summary Table Analysis	416.8	392.8	24.0	5.8%	388.0	28.8	6.9%	373.5	43.4	10.4%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 59 1	2012	Below Normal	October	Used in Summary Table Analysis	4,472.1	4,452.8	19.3	0.4%	4,448.8	23.3	0.5%	4,436.8	35.3	0.8%
ME 1	47 59 1	2012	Below Normal	November	Used in Summary Table Analysis	8,100.0	8,085.1	14.9	0.2%	8,081.9	18.1	0.2%	8,072.7	27.3	0.3%
ME 1	47 59 1	2012	Below Normal	December	--	5,120.1	5,107.4	12.7	0.2%	5,104.9	15.3	0.3%	5,096.9	23.3	0.5%
ME 1	47 59 1	2012	Below Normal	January	--	19,726.9	19,715.3	11.6	0.1%	19,713.0	13.9	0.1%	19,706.0	20.8	0.1%
ME 1	47 59 1	2012	Below Normal	February	--	18,097.2	18,086.8	10.4	0.1%	18,085.6	11.6	0.1%	18,078.7	18.5	0.1%
ME 1	47 59 1	2012	Below Normal	March	--	44,967.6	44,957.2	10.4	0.0%	44,954.9	12.7	0.0%	44,947.9	19.7	0.0%
ME 1	47 59 1	2012	Below Normal	April	--	26,689.8	26,680.6	9.3	0.0%	26,678.2	11.6	0.0%	26,672.5	17.4	0.1%
ME 1	47 59 1	2012	Below Normal	May	--	7,438.3	7,411.6	26.7	0.4%	7,406.3	32.1	0.4%	7,390.7	47.6	0.6%
ME 1	47 59 1	2012	Below Normal	June	--	5,448.8	5,406.7	42.1	0.8%	5,398.5	50.3	0.9%	5,374.4	74.4	1.4%
ME 1	47 59 1	2012	Below Normal	July	--	2,181.0	2,143.5	37.5	1.7%	2,136.1	44.9	2.1%	2,114.2	66.8	3.1%
ME 1	47 59 1	2012	Below Normal	August	--	375.4	349.6	25.8	6.9%	344.4	31.0	8.3%	329.0	46.5	12.4%
ME 1	47 59 1	2012	Below Normal	September	Used in Summary Table Analysis	233.2	211.0	22.1	9.5%	206.6	26.6	11.4%	193.3	39.9	17.1%
ME 1	47 59 1	2013	Below Normal	October	Used in Summary Table Analysis	1,865.0	1,845.6	19.4	1.0%	1,841.6	23.5	1.3%	1,829.6	35.4	1.9%
ME 1	47 59 1	2013	Below Normal	November	Used in Summary Table Analysis	14,435.2	14,420.1	15.0	0.1%	14,417.8	17.4	0.1%	14,408.6	26.6	0.2%
ME 1	47 59 1	2013	Below Normal	December	--	59,436.3	59,422.5	13.9	0.0%	59,420.1	16.2	0.0%	59,412.0	24.3	0.0%
ME 1	47 59 1	2013	Below Normal	January	--	22,034.7	22,024.3	10.4	0.0%	22,022.0	12.7	0.1%	22,015.0	19.7	0.1%
ME 1	47 59 1	2013	Below Normal	February	--	8,765.3	8,754.5	10.8	0.1%	8,752.2	13.1	0.1%	8,745.6	19.7	0.2%
ME 1	47 59 1	2013	Below Normal	March	--	10,211.0	10,200.7	10.3	0.1%	10,198.6	12.4	0.1%	10,192.2	18.8	0.2%
ME 1	47 59 1	2013	Below Normal	April	--	8,251.7	8,226.9	24.9	0.3%	8,221.8	30.0	0.4%	8,206.9	44.8	0.5%
ME 1	47 59 1	2013	Below Normal	May	--	4,381.4	4,352.8	28.6	0.7%	4,347.0	34.4	0.8%	4,330.0	51.4	1.2%
ME 1	47 59 1	2013	Below Normal	June	--	2,091.2	2,053.8	37.4	1.8%	2,046.5	44.7	2.1%	2,025.0	66.2	3.2%
ME 1	47 59 1	2013	Below Normal	July	--	707.4	675.6	31.9	4.5%	669.2	38.2	5.4%	650.9	56.5	8.0%
ME 1	47 59 1	2013	Below Normal	August	--	326.0	298.1	28.0	8.6%	292.5	33.6	10.3%	275.0	51.0	15.7%
ME 1	47 59 1	2013	Below Normal	September	Used in Summary Table Analysis	4,714.8	4,684.7	30.1	0.6%	4,678.6	36.2	0.8%	4,660.2	54.6	1.2%
ME 1	47 59 1	2014	Critical	October	Used in Summary Table Analysis	275.3	255.6	19.7	7.1%	251.6	23.7	8.6%	240.3	35.0	12.7%
ME 1	47 59 1	2014	Critical	November	Used in Summary Table Analysis	1,498.4	1,483.2	15.2	1.0%	1,480.2	18.2	1.2%	1,470.8	27.5	1.8%
ME 1	47 59 1	2014	Critical	December	--	1,564.7	1,551.7	13.0	0.8%	1,549.2	15.5	1.0%	1,541.1	23.6	1.5%
ME 1	47 59 1	2014	Critical	January	--	2,780.2	2,768.9	11.3	0.4%	2,766.6	13.7	0.5%	2,759.5	20.7	0.7%
ME 1	47 59 1	2014	Critical	February	--	15,637.7	15,627.3	10.4	0.1%	15,625.0	12.7	0.1%	15,618.1	19.7	0.1%
ME 1	47 59 1	2014	Critical	March	--	31,338.0	31,327.5	10.4	0.0%	31,325.2	12.7	0.0%	31,319.4	18.5	0.1%
ME 1	47 59 1	2014	Critical	April	--	12,936.3	12,908.6	27.8	0.2%	12,903.9	32.4	0.3%	12,887.7	48.6	0.4%
ME 1	47 59 1	2014	Critical	May	--	5,153.1	5,122.6	30.6	0.6%	5,116.6	36.6	0.7%	5,098.1	55.0	1.1%
ME 1	47 59 1	2014	Critical	June	--	1,181.7	1,136.8	44.9	3.8%	1,128.0	53.7	4.5%	1,103.0	78.7	6.7%
ME 1	47 59 1	2014	Critical	July	--	534.5	498.0	36.5	6.8%	490.7	43.7	8.2%	473.7	60.8	11.4%
ME 1	47 59 1	2014	Critical	August	--	333.8	301.2	32.6	9.8%	294.6	39.2	11.7%	277.0	56.8	17.0%
ME 1	47 59 1	2014	Critical	September	Used in Summary Table Analysis	2,537.0	2,503.9	33.1	1.3%	2,497.3	39.7	1.6%	2,478.0	59.0	2.3%
ME 1	47 59 1	2015	Dry	October	Used in Summary Table Analysis	11,234.4	11,210.0	24.4	0.2%	11,205.2	29.2	0.3%	11,190.9	43.5	0.4%
ME 1	47 59 1	2015	Dry	November	Used in Summary Table Analysis	8,906.5	8,889.2	17.2	0.2%	8,885.8	20.7	0.2%	8,872.5	34.0	0.4%
ME 1	47 59 1	2015	Dry	December	--	32,133.1	32,119.2	13.9	0.0%	32,115.7	17.4	0.1%	32,106.5	26.6	0.1%
ME 1	47 59 1	2015	Dry	January	--	14,500.0	14,486.1	13.9	0.1%	14,483.8	16.2	0.1%	14,475.7	24.3	0.2%
ME 1	47 59 1	2015	Dry	February	--	27,040.5	27,028.9	11.6	0.0%	27,026.6	13.9	0.1%	27,019.7	20.8	0.1%
ME 1	47 59 1	2015	Dry	March	--	11,520.9	11,510.9	10.1	0.1%	11,508.9	12.0	0.1%	11,502.8	18.2	0.2%
ME 1	47 59 1	2015	Dry	April	--	8,258.6	8,231.3	27.3	0.3%	8,225.8	32.8	0.4%	8,209.7	48.8	0.6%
ME 1	47 59 1	2015	Dry	May	--	1,501.9	1,471.4	30.4	2.0%	1,465.5	36.3	2.4%	1,448.6	53.2	3.5%
ME 1	47 59 1	2015	Dry	June	--	642.3	600.9	41.4	6.4%	592.8	49.5	7.7%	569.0	73.3	11.4%
ME 1	47 59 1	2015	Dry	July	--	257.8	221.2	36.6	14.2%	213.9	43.9	17.0%	196.9	60.9	23.6%
ME 1	47 59 1	2015	Dry	August	--	153.1	120.1	33.0	21.6%	113.4	39.7	25.9%	95.6	57.4	37.5%
ME 1	47 59 1	2015	Dry	September	Used in Summary Table Analysis	109.1	78.2	30.9	28.3%	71.6	37.5	34.3%	52.8	56.3	51.6%
ME 1	47 59 1	2016	Above Normal	October	Used in Summary Table Analysis	75.0	49.3	25.8	34.3%	44.5	30.6	40.7%	29.6	45.4	60.5%
ME 1	47 59 1	2016	Above Normal	November	Used in Summary Table Analysis	3,750.6	3,732.9	17.7	0.5%	3,729.3	21.3	0.6%	3,715.2	35.4	0.9%
ME 1	47 59 1	2016	Above Normal	December	--	36,049.8	36,034.7	15.0	0.0%	36,032.4	17.4	0.0%	36,022.0	27.8	0.1%
ME 1	47 59 1	2016	Above Normal	January	--	56,723.4	56,708.3	15.0	0.0%	56,706.0	17.4	0.0%	56,696.8	26.6	0.0%
ME 1	47 59 1	2016	Above Normal	February	--	24,166.7	24,156.3	10.4	0.0%	24,153.9	12.7	0.1%	24,147.0	19.7	0.1%
ME 1	47 59 1	2016	Above Normal	March	--	41,497.7	41,486.1	11.6	0.0%	41,483.8	13.9	0.0%	41,476.9	20.8	0.1%
ME 1	47 59 1	2016	Above Normal	April	--	18,454.9	18,445.6	9.3	0.1%	18,443.3	11.6	0.1%	18,437.5	17.4	0.1%
ME 1	47 59 1	2016	Above Normal	May	--	5,183.2	5,169.4	13.8	0.3%	5,166.7	16.6	0.3%	5,158.4	24.8	0.5%
ME 1	47 59 1	2016	Above Normal	June	--	1,493.6	1,462.7	30.9	2.1%	1,457.8	35.9	2.4%	1,443.3	50.3	3.4%
ME 1	47 59 1	2016	Above Normal	July	--	806.3	774.8	31.5	3.9%	768.5	37.7	4.7%	750.2	56.1	7.0%
ME 1	47 59 1	2016	Above Normal	August	--	474.4	445.6	28.8	6.1%	439.9	34.5	7.3%	422.6	51.8	10.9%
ME 1	47 59 1	2016	Above Normal	September	Used in Summary Table Analysis	311.6	285.0	26.7	8.6%	279.4	32.2	10.3%	262.8	48.8	15.7%
ME 1	47 59 1	2017	Wet	October	Used in Summary Table Analysis	18,057.9	18,037.0	20.8	0.1%	18,033.6	24.3	0.1%	18,022.0	35.9	0.2%
ME 1	47 59 1	2017	Wet	November	Used in Summary Table Analysis	18,574.1	18,559.0	15.0	0.1%	18,555.6	18.5	0.1%	18,547.5	26.6	0.1%
ME 1	47 59 1	2017	Wet	December	--	23,725.7	23,713.0	12.7	0.1%	23,710.6	15.0	0.1%	23,702.5	23.1	0.1%
ME 1	47 59 1	2017	Wet	January	--	105,772.0	105,760.4	11.6	0.0%	105,758.1	13.9	0.0%	105,751.2	20.8	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 1	47 59 1	2017	Wet	February	--	81,173.6	81,163.2	10.4	0.0%	81,160.9	12.7	0.0%	81,153.9	19.7	0.0%
ME 1	47 59 1	2017	Wet	March	--	27,061.3	27,052.1	9.3	0.0%	27,049.8	11.6	0.0%	27,044.0	17.4	0.1%
ME 1	47 59 1	2017	Wet	April	--	22,710.6	22,701.4	9.3	0.0%	22,700.2	10.4	0.0%	22,694.4	16.2	0.1%
ME 1	47 59 1	2017	Wet	May	--	6,260.2	6,246.1	14.1	0.2%	6,243.3	16.9	0.3%	6,235.1	25.1	0.4%
ME 1	47 59 1	2017	Wet	June	--	2,083.7	2,050.0	33.7	1.6%	2,043.4	40.3	1.9%	2,024.2	59.5	2.9%
ME 1	47 59 1	2017	Wet	July	--	912.9	881.2	31.7	3.5%	874.9	38.0	4.2%	856.6	56.3	6.2%
ME 1	47 59 1	2017	Wet	August	--	485.4	456.8	28.6	5.9%	451.1	34.3	7.1%	433.9	51.5	10.6%
ME 1	47 59 1	2017	Wet	September	Used in Summary Table Analysis	304.5	277.8	26.7	8.8%	272.4	32.1	10.5%	256.2	48.2	15.8%
ME 1	47 59 1	2018	Above Normal	October	Used in Summary Table Analysis	257.4	237.5	19.9	7.7%	233.4	24.0	9.3%	221.3	36.1	14.0%
ME 1	47 59 1	2018	Above Normal	November	Used in Summary Table Analysis	10,529.1	10,514.6	14.5	0.1%	10,511.6	17.5	0.2%	10,502.7	26.4	0.3%
ME 1	47 59 1	2018	Above Normal	December	--	5,417.0	5,405.0	12.0	0.2%	5,402.5	14.5	0.3%	5,395.1	21.9	0.4%
ME 1	47 59 1	2018	Above Normal	January	--	17,332.2	17,321.8	10.4	0.1%	17,319.4	12.7	0.1%	17,312.5	19.7	0.1%
ME 1	47 59 1	2018	Above Normal	February	--	7,571.5	7,561.9	9.6	0.1%	7,559.8	11.7	0.2%	7,553.8	17.7	0.2%
ME 1	47 59 1	2018	Above Normal	March	--	20,409.7	20,400.5	9.3	0.0%	20,399.3	10.4	0.1%	20,393.5	16.2	0.1%
ME 1	47 59 1	2018	Above Normal	April	--	31,861.1	31,851.9	9.3	0.0%	31,850.7	10.4	0.0%	31,844.9	16.2	0.1%
ME 1	47 59 1	2018	Above Normal	May	--	6,972.1	6,947.1	25.0	0.4%	6,942.1	30.0	0.4%	6,927.2	44.9	0.6%
ME 1	47 59 1	2018	Above Normal	June	--	1,897.3	1,866.8	30.6	1.6%	1,861.0	36.3	1.9%	1,843.6	53.7	2.8%
ME 1	47 59 1	2018	Above Normal	July	--	763.4	731.5	31.9	4.2%	725.1	38.3	5.0%	706.1	57.3	7.5%
ME 1	47 59 1	2018	Above Normal	August	--	424.6	397.2	27.4	6.5%	391.7	32.9	7.8%	375.1	49.6	11.7%
ME 1	47 59 1	2018	Above Normal	September	Used in Summary Table Analysis	283.2	256.4	26.8	9.5%	251.0	32.2	11.4%	234.7	48.5	17.1%
ME 1	47 59 1	2019	Below Normal	October	Used in Summary Table Analysis	194.0	174.2	19.8	10.2%	170.1	23.9	12.3%	157.9	36.0	18.6%
ME 1	47 59 1	2019	Below Normal	November	Used in Summary Table Analysis	6,449.5	6,434.7	14.8	0.2%	6,431.7	17.8	0.3%	6,422.6	27.0	0.4%
ME 1	47 59 1	2019	Below Normal	December	--	14,372.7	14,360.0	12.7	0.1%	14,357.6	15.0	0.1%	14,350.7	22.0	0.2%
ME 1	47 59 1	2019	Below Normal	January	--	34,631.9	34,620.4	11.6	0.0%	34,618.1	13.9	0.0%	34,611.1	20.8	0.1%
ME 1	47 59 1	2019	Below Normal	February	--	141,296.3	141,284.7	11.6	0.0%	141,284.7	11.6	0.0%	141,273.1	23.1	0.0%
ME 1	47 59 1	2019	Below Normal	March	--	41,994.2	41,985.0	9.3	0.0%	41,982.6	11.6	0.0%	41,976.9	17.4	0.0%
ME 1	47 59 1	2019	Below Normal	April	--	15,179.4	15,170.1	9.3	0.1%	15,167.8	11.6	0.1%	15,163.2	16.2	0.1%
ME 1	47 59 1	2019	Below Normal	May	--	16,493.1	16,465.3	27.8	0.2%	16,460.6	32.4	0.2%	16,444.4	48.6	0.3%
ME 1	47 59 1	2019	Below Normal	June	--	4,238.2	4,205.8	32.4	0.8%	4,199.8	38.4	0.9%	4,182.4	55.8	1.3%
ME 1	47 59 1	2019	Below Normal	July	--	1,339.5	1,307.6	31.8	2.4%	1,301.4	38.1	2.8%	1,282.6	56.8	4.2%
ME 1	47 59 1	2019	Below Normal	August	--	576.2	548.2	28.0	4.9%	542.6	33.6	5.8%	525.8	50.4	8.7%
ME 1	47 59 1	2019	Below Normal	September	Used in Summary Table Analysis	445.1	418.7	26.4	5.9%	413.3	31.8	7.1%	397.4	47.8	10.7%
ME 1	47 59 1	2020	Dry	October	Used in Summary Table Analysis	342.0	323.7	18.3	5.3%	319.9	22.0	6.4%	308.7	33.3	9.7%
ME 1	47 59 1	2020	Dry	November	Used in Summary Table Analysis	294.1	281.2	12.9	4.4%	278.5	15.6	5.3%	270.5	23.6	8.0%
ME 1	47 59 1	2020	Dry	December	--	12,858.8	12,847.2	11.6	0.1%	12,844.9	13.9	0.1%	12,838.0	20.8	0.2%
ME 1	47 59 1	2020	Dry	January	--	21,993.1	21,982.6	10.4	0.0%	21,980.3	12.7	0.1%	21,973.4	19.7	0.1%
ME 1	47 59 1	2020	Dry	February	--	7,395.5	7,386.0	9.5	0.1%	7,383.9	11.6	0.2%	7,378.1	17.4	0.2%
ME 1	47 59 1	2020	Dry	March	--	7,179.4	7,170.3	9.1	0.1%	7,168.4	11.0	0.2%	7,163.0	16.4	0.2%
ME 1	47 59 1	2020	Dry	April	--	5,411.9	5,385.4	26.5	0.5%	5,380.2	31.7	0.6%	5,364.6	47.3	0.9%
ME 1	47 59 1	2020	Dry	May	--	7,286.8	7,256.7	30.1	0.4%	7,250.7	36.1	0.5%	7,232.9	53.9	0.7%
ME 1	47 59 1	2020	Dry	June	--	2,097.8	2,056.8	41.0	2.0%	2,049.1	48.7	2.3%	2,026.2	71.6	3.4%
ME 1	47 59 1	2020	Dry	July	--	782.2	745.1	37.0	4.7%	737.7	44.5	5.7%	720.3	61.8	7.9%
ME 1	47 59 1	2020	Dry	August	--	384.2	350.4	33.8	8.8%	343.5	40.7	10.6%	325.2	59.0	15.4%
ME 1	47 59 1	2020	Dry	September	Used in Summary Table Analysis	234.0	202.2	31.7	13.6%	195.5	38.4	16.4%	176.3	57.6	24.6%
ME 2	44 58 4	2000	Above Normal	October	Used in Summary Table Analysis	803.0	780.2	22.8	2.8%	775.6	27.5	3.4%	761.7	41.4	5.2%
ME 2	44 58 4	2000	Above Normal	November	Used in Summary Table Analysis	11,866.9	11,849.5	17.4	0.1%	11,846.1	20.8	0.2%	11,835.6	31.3	0.3%
ME 2	44 58 4	2000	Above Normal	December	--	10,676.9	10,662.4	14.5	0.1%	10,659.4	17.5	0.2%	10,650.6	26.3	0.2%
ME 2	44 58 4	2000	Above Normal	January	--	28,152.8	28,138.9	13.9	0.0%	28,136.6	16.2	0.1%	28,128.5	24.3	0.1%
ME 2	44 58 4	2000	Above Normal	February	--	36,763.9	36,752.3	11.6	0.0%	36,750.0	13.9	0.0%	36,743.1	20.8	0.1%
ME 2	44 58 4	2000	Above Normal	March	--	18,230.3	18,219.9	10.4	0.1%	18,217.6	12.7	0.1%	18,210.6	19.7	0.1%
ME 2	44 58 4	2000	Above Normal	April	--	12,250.0	12,239.6	10.4	0.1%	12,237.3	12.7	0.1%	12,231.5	18.5	0.2%
ME 2	44 58 4	2000	Above Normal	May	--	7,041.3	7,012.5	28.8	0.4%	7,006.6	34.7	0.5%	6,989.5	51.9	0.7%
ME 2	44 58 4	2000	Above Normal	June	--	2,591.3	2,546.4	44.9	1.7%	2,537.6	53.7	2.1%	2,511.5	79.9	3.1%
ME 2	44 58 4	2000	Above Normal	July	--	983.1	946.8	36.4	3.7%	939.6	43.6	4.4%	918.1	65.1	6.6%
ME 2	44 58 4	2000	Above Normal	August	--	512.6	480.2	32.4	6.3%	473.7	38.9	7.6%	454.2	58.4	11.4%
ME 2	44 58 4	2000	Above Normal	September	Used in Summary Table Analysis	287.4	259.6	27.8	9.7%	254.1	33.3	11.6%	237.3	50.1	17.4%
ME 2	44 58 4	2001	Dry	October	Used in Summary Table Analysis	3,758.0	3,735.5	22.5	0.6%	3,730.9	27.1	0.7%	3,717.2	40.7	1.1%
ME 2	44 58 4	2001	Dry	November	Used in Summary Table Analysis	6,030.4	6,013.3	17.1	0.3%	6,009.8	20.6	0.3%	5,999.4	31.0	0.5%
ME 2	44 58 4	2001	Dry	December	--	8,744.2	8,729.7	14.5	0.2%	8,726.9	17.4	0.2%	8,717.9	26.3	0.3%
ME 2	44 58 4	2001	Dry	January	--	12,610.0	12,597.2	12.7	0.1%	12,594.9	15.0	0.1%	12,586.8	23.1	0.2%
ME 2	44 58 4	2001	Dry	February	--	17,357.6	17,346.1	11.6	0.1%	17,343.8	13.9	0.1%	17,336.8	20.8	0.1%
ME 2	44 58 4	2001	Dry	March	--	12,238.4	12,228.0	10.4	0.1%	12,225.7	12.7	0.1%	12,219.9	18.5	0.2%
ME 2	44 58 4	2001	Dry	April	--	10,910.9	10,880.9	30.0	0.3%	10,875.0	35.9	0.3%	10,857.3	53.6	0.5%
ME 2	44 58 4	2001	Dry	May	--	2,636.5	2,601.9	34.6	1.3%	2,595.0	41.4	1.6%	2,574.4	62.0	2.4%

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Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	44 58 4	2001	Dry	June	--	2,610.1	2,560.5	49.5	1.9%	2,550.9	59.1	2.3%	2,522.6	87.5	3.4%
ME 2	44 58 4	2001	Dry	July	--	715.8	673.8	42.0	5.9%	665.4	50.4	7.0%	645.2	70.5	9.9%
ME 2	44 58 4	2001	Dry	August	--	166.5	127.1	39.3	23.6%	119.2	47.2	28.4%	97.9	68.6	41.2%
ME 2	44 58 4	2001	Dry	September	Used in Summary Table Analysis	88.8	54.8	34.0	38.3%	48.0	40.8	46.0%	28.4	60.3	68.0%
ME 2	44 58 4	2002	Below Normal	October	Used in Summary Table Analysis	257.2	228.8	28.4	11.0%	223.1	34.1	13.3%	205.6	51.6	20.1%
ME 2	44 58 4	2002	Below Normal	November	Used in Summary Table Analysis	11,900.5	11,878.5	22.0	0.2%	11,875.0	25.5	0.2%	11,858.8	41.7	0.4%
ME 2	44 58 4	2002	Below Normal	December	--	35,300.9	35,282.4	18.5	0.1%	35,277.8	23.1	0.1%	35,266.2	34.7	0.1%
ME 2	44 58 4	2002	Below Normal	January	--	30,635.4	30,619.2	16.2	0.1%	30,615.7	19.7	0.1%	30,605.3	30.1	0.1%
ME 2	44 58 4	2002	Below Normal	February	--	24,532.4	24,517.4	15.0	0.1%	24,515.0	17.4	0.1%	24,505.8	26.6	0.1%
ME 2	44 58 4	2002	Below Normal	March	--	17,666.7	17,652.8	13.9	0.1%	17,650.5	16.2	0.1%	17,642.4	24.3	0.1%
ME 2	44 58 4	2002	Below Normal	April	--	9,882.3	9,853.1	29.2	0.3%	9,847.5	34.8	0.4%	9,830.1	52.2	0.5%
ME 2	44 58 4	2002	Below Normal	May	--	3,304.7	3,271.2	33.6	1.0%	3,264.5	40.3	1.2%	3,244.3	60.4	1.8%
ME 2	44 58 4	2002	Below Normal	June	--	848.0	808.1	39.9	4.7%	800.3	47.7	5.6%	777.3	70.7	8.3%
ME 2	44 58 4	2002	Below Normal	July	--	356.2	318.3	37.9	10.6%	310.8	45.4	12.8%	289.0	67.2	18.9%
ME 2	44 58 4	2002	Below Normal	August	--	219.2	185.1	34.1	15.5%	178.3	40.9	18.7%	157.3	61.9	28.2%
ME 2	44 58 4	2002	Below Normal	September	Used in Summary Table Analysis	156.5	125.4	31.1	19.9%	119.1	37.4	23.9%	99.3	57.1	36.5%
ME 2	44 58 4	2003	Wet	October	Used in Summary Table Analysis	121.7	96.9	24.8	20.4%	91.8	29.8	24.5%	76.7	45.0	37.0%
ME 2	44 58 4	2003	Wet	November	Used in Summary Table Analysis	885.8	866.9	18.9	2.1%	863.0	22.8	2.6%	851.2	34.6	3.9%
ME 2	44 58 4	2003	Wet	December	--	55,917.8	55,901.6	16.2	0.0%	55,899.3	18.5	0.0%	55,888.9	28.9	0.1%
ME 2	44 58 4	2003	Wet	January	--	31,344.9	31,329.9	15.0	0.0%	31,327.5	17.4	0.1%	31,318.3	26.6	0.1%
ME 2	44 58 4	2003	Wet	February	--	20,255.8	20,243.1	12.7	0.1%	20,240.7	15.0	0.1%	20,232.6	23.1	0.1%
ME 2	44 58 4	2003	Wet	March	--	23,883.1	23,871.5	11.6	0.0%	23,869.2	13.9	0.1%	23,862.3	20.8	0.1%
ME 2	44 58 4	2003	Wet	April	--	42,539.4	42,527.8	11.6	0.0%	42,525.5	13.9	0.0%	42,518.5	20.8	0.0%
ME 2	44 58 4	2003	Wet	May	--	12,173.6	12,144.7	28.9	0.2%	12,138.9	34.7	0.3%	12,120.4	53.2	0.4%
ME 2	44 58 4	2003	Wet	June	--	3,155.8	3,119.2	36.6	1.2%	3,112.2	43.6	1.4%	3,091.3	64.5	2.0%
ME 2	44 58 4	2003	Wet	July	--	1,462.8	1,425.5	37.4	2.6%	1,418.1	44.8	3.1%	1,395.9	66.9	4.6%
ME 2	44 58 4	2003	Wet	August	--	749.9	714.3	35.6	4.7%	706.8	43.1	5.7%	682.9	67.0	8.9%
ME 2	44 58 4	2003	Wet	September	Used in Summary Table Analysis	448.8	420.7	28.1	6.3%	415.1	33.7	7.5%	397.1	51.7	11.5%
ME 2	44 58 4	2004	Wet	October	Used in Summary Table Analysis	316.0	293.3	22.8	7.2%	288.6	27.4	8.7%	274.7	41.3	13.1%
ME 2	44 58 4	2004	Wet	November	Used in Summary Table Analysis	5,703.2	5,685.6	17.6	0.3%	5,681.9	21.3	0.4%	5,671.1	32.2	0.6%
ME 2	44 58 4	2004	Wet	December	--	35,861.1	35,844.9	16.2	0.0%	35,842.6	18.5	0.1%	35,833.3	27.8	0.1%
ME 2	44 58 4	2004	Wet	January	--	31,166.7	31,153.9	12.7	0.0%	31,150.5	16.2	0.1%	31,143.5	23.1	0.1%
ME 2	44 58 4	2004	Wet	February	--	37,942.1	37,929.4	12.7	0.0%	37,927.1	15.0	0.0%	37,920.1	22.0	0.1%
ME 2	44 58 4	2004	Wet	March	--	16,472.2	16,460.6	11.6	0.1%	16,458.3	13.9	0.1%	16,451.4	20.8	0.1%
ME 2	44 58 4	2004	Wet	April	--	9,412.6	9,402.3	10.3	0.1%	9,400.1	12.5	0.1%	9,393.9	18.8	0.2%
ME 2	44 58 4	2004	Wet	May	--	3,390.0	3,361.1	28.9	0.9%	3,355.3	34.7	1.0%	3,338.3	51.7	1.5%
ME 2	44 58 4	2004	Wet	June	--	686.6	651.6	35.0	5.1%	644.8	41.8	6.1%	624.7	61.9	9.0%
ME 2	44 58 4	2004	Wet	July	--	348.1	311.4	36.7	10.5%	304.1	44.0	12.6%	282.3	65.8	18.9%
ME 2	44 58 4	2004	Wet	August	--	217.7	185.0	32.7	15.0%	178.5	39.2	18.0%	158.7	59.0	27.1%
ME 2	44 58 4	2004	Wet	September	Used in Summary Table Analysis	155.5	124.1	31.4	20.2%	117.8	37.7	24.3%	98.8	56.7	36.4%
ME 2	44 58 4	2005	Above Normal	October	Used in Summary Table Analysis	7,552.3	7,528.8	23.5	0.3%	7,524.1	28.2	0.4%	7,509.7	42.6	0.6%
ME 2	44 58 4	2005	Above Normal	November	Used in Summary Table Analysis	2,239.5	2,222.0	17.5	0.8%	2,218.4	21.1	0.9%	2,207.8	31.7	1.4%
ME 2	44 58 4	2005	Above Normal	December	--	20,651.6	20,636.6	15.0	0.1%	20,633.1	18.5	0.1%	20,623.8	27.8	0.1%
ME 2	44 58 4	2005	Above Normal	January	--	22,089.1	22,076.4	12.7	0.1%	22,074.1	15.0	0.1%	22,066.0	23.1	0.1%
ME 2	44 58 4	2005	Above Normal	February	--	13,959.5	13,947.9	11.6	0.1%	13,945.6	13.9	0.1%	13,937.5	22.0	0.2%
ME 2	44 58 4	2005	Above Normal	March	--	28,343.8	28,332.2	11.6	0.0%	28,329.9	13.9	0.0%	28,322.9	20.8	0.1%
ME 2	44 58 4	2005	Above Normal	April	--	21,297.5	21,287.0	10.4	0.0%	21,285.9	11.6	0.1%	21,278.9	18.5	0.1%
ME 2	44 58 4	2005	Above Normal	May	--	19,394.7	19,364.6	30.1	0.2%	19,358.8	35.9	0.2%	19,341.4	53.2	0.3%
ME 2	44 58 4	2005	Above Normal	June	--	15,663.2	15,616.9	46.3	0.3%	15,607.6	55.6	0.4%	15,581.0	82.2	0.5%
ME 2	44 58 4	2005	Above Normal	July	--	2,862.0	2,823.4	38.7	1.4%	2,816.3	45.7	1.6%	2,794.9	67.1	2.3%
ME 2	44 58 4	2005	Above Normal	August	--	972.3	939.8	32.6	3.3%	933.4	39.0	4.0%	914.0	58.3	6.0%
ME 2	44 58 4	2005	Above Normal	September	Used in Summary Table Analysis	514.3	486.5	27.8	5.4%	481.0	33.3	6.5%	464.4	49.9	9.7%
ME 2	44 58 4	2006	Wet	October	Used in Summary Table Analysis	622.3	600.1	22.2	3.6%	595.7	26.6	4.3%	582.1	40.2	6.5%
ME 2	44 58 4	2006	Wet	November	Used in Summary Table Analysis	9,134.8	9,118.2	16.7	0.2%	9,114.8	20.0	0.2%	9,104.5	30.3	0.3%
ME 2	44 58 4	2006	Wet	December	--	42,932.9	42,917.8	15.0	0.0%	42,915.5	17.4	0.0%	42,905.1	27.8	0.1%
ME 2	44 58 4	2006	Wet	January	--	45,784.7	45,772.0	12.7	0.0%	45,768.5	16.2	0.0%	45,760.4	24.3	0.1%
ME 2	44 58 4	2006	Wet	February	--	26,399.3	26,387.7	11.6	0.0%	26,385.4	13.9	0.1%	26,378.5	20.8	0.1%
ME 2	44 58 4	2006	Wet	March	--	46,754.6	46,743.1	11.6	0.0%	46,740.7	13.9	0.0%	46,733.8	20.8	0.0%
ME 2	44 58 4	2006	Wet	April	--	30,268.5	30,258.1	10.4	0.0%	30,255.8	12.7	0.0%	30,250.0	18.5	0.1%
ME 2	44 58 4	2006	Wet	May	--	14,114.6	14,099.5	15.0	0.1%	14,096.1	18.5	0.1%	14,086.8	27.8	0.2%
ME 2	44 58 4	2006	Wet	June	--	3,538.1	3,500.1	38.0	1.1%	3,492.7	45.4	1.3%	3,471.2	66.9	1.9%
ME 2	44 58 4	2006	Wet	July	--	1,266.4	1,229.9	36.6	2.9%	1,222.8	43.6	3.4%	1,201.6	64.8	5.1%
ME 2	44 58 4	2006	Wet	August	--	653.0	619.2	33.8	5.2%	612.5	40.5	6.2%	592.4	60.5	9.3%
ME 2	44 58 4	2006	Wet	September	Used in Summary Table Analysis	415.2	387.0	28.2	6.8%	381.4	33.8	8.2%	364.4	50.8	12.2%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	44 58 4	2007	Above Normal	October	Used in Summary Table Analysis	265.5	242.9	22.6	8.5%	238.4	27.2	10.2%	224.5	41.0	15.5%
ME 2	44 58 4	2007	Above Normal	November	Used in Summary Table Analysis	8,516.3	8,498.6	17.7	0.2%	8,495.0	21.3	0.3%	8,484.0	32.3	0.4%
ME 2	44 58 4	2007	Above Normal	December	--	20,103.0	20,086.8	16.2	0.1%	20,084.5	18.5	0.1%	20,074.1	28.9	0.1%
ME 2	44 58 4	2007	Above Normal	January	--	10,170.1	10,157.1	13.1	0.1%	10,154.3	15.9	0.2%	10,146.1	24.1	0.2%
ME 2	44 58 4	2007	Above Normal	February	--	30,226.9	30,214.1	12.7	0.0%	30,211.8	15.0	0.0%	30,203.7	23.1	0.1%
ME 2	44 58 4	2007	Above Normal	March	--	13,042.8	13,031.3	11.6	0.1%	13,028.9	13.9	0.1%	13,022.0	20.8	0.2%
ME 2	44 58 4	2007	Above Normal	April	--	11,479.9	11,451.6	28.2	0.2%	11,446.1	33.8	0.3%	11,429.3	50.6	0.4%
ME 2	44 58 4	2007	Above Normal	May	--	4,115.5	4,082.9	32.6	0.8%	4,076.4	39.1	1.0%	4,056.8	58.7	1.4%
ME 2	44 58 4	2007	Above Normal	June	--	1,482.4	1,440.3	42.1	2.8%	1,432.1	50.3	3.4%	1,407.9	74.5	5.0%
ME 2	44 58 4	2007	Above Normal	July	--	490.2	450.8	39.4	8.0%	443.0	47.2	9.6%	420.1	70.1	14.3%
ME 2	44 58 4	2007	Above Normal	August	--	215.1	181.9	33.3	15.5%	175.2	39.9	18.5%	154.9	60.3	28.0%
ME 2	44 58 4	2007	Above Normal	September	Used in Summary Table Analysis	142.8	112.3	30.5	21.4%	106.2	36.6	25.6%	87.7	55.1	38.6%
ME 2	44 58 4	2008	Dry	October	Used in Summary Table Analysis	3,380.1	3,355.9	24.2	0.7%	3,350.9	29.2	0.9%	3,336.1	44.0	1.3%
ME 2	44 58 4	2008	Dry	November	Used in Summary Table Analysis	3,223.5	3,205.6	17.9	0.6%	3,201.9	21.6	0.7%	3,190.9	32.6	1.0%
ME 2	44 58 4	2008	Dry	December	--	22,725.7	22,709.5	16.2	0.1%	22,706.0	19.7	0.1%	22,696.8	28.9	0.1%
ME 2	44 58 4	2008	Dry	January	--	37,147.0	37,131.9	15.0	0.0%	37,129.6	17.4	0.0%	37,120.4	26.6	0.1%
ME 2	44 58 4	2008	Dry	February	--	26,178.2	26,165.5	12.7	0.0%	26,163.2	15.0	0.1%	26,156.3	22.0	0.1%
ME 2	44 58 4	2008	Dry	March	--	11,752.3	11,740.7	11.6	0.1%	11,738.4	13.9	0.1%	11,731.5	20.8	0.2%
ME 2	44 58 4	2008	Dry	April	--	8,983.3	8,953.5	29.9	0.3%	8,947.6	35.8	0.4%	8,929.9	53.5	0.6%
ME 2	44 58 4	2008	Dry	May	--	1,363.4	1,334.7	28.7	2.1%	1,329.3	34.1	2.5%	1,312.8	50.6	3.7%
ME 2	44 58 4	2008	Dry	June	--	431.4	385.1	46.3	10.7%	376.1	55.3	12.8%	349.4	81.9	19.0%
ME 2	44 58 4	2008	Dry	July	--	250.2	207.8	42.4	17.0%	199.4	50.8	20.3%	179.1	71.1	28.4%
ME 2	44 58 4	2008	Dry	August	--	173.1	133.7	39.4	22.8%	125.8	47.3	27.3%	101.5	71.6	41.4%
ME 2	44 58 4	2008	Dry	September	Used in Summary Table Analysis	134.8	96.6	38.2	28.3%	89.0	45.9	34.0%	67.0	67.8	50.3%
ME 2	44 58 4	2009	Critical	October	Used in Summary Table Analysis	913.8	885.6	28.2	3.1%	879.9	33.9	3.7%	862.2	51.7	5.7%
ME 2	44 58 4	2009	Critical	November	Used in Summary Table Analysis	5,414.5	5,393.8	20.7	0.4%	5,389.5	25.0	0.5%	5,373.8	40.6	0.8%
ME 2	44 58 4	2009	Critical	December	--	11,960.6	11,943.3	17.4	0.1%	11,939.8	20.8	0.2%	11,928.2	32.4	0.3%
ME 2	44 58 4	2009	Critical	January	--	8,738.3	8,722.6	15.7	0.2%	8,719.4	18.9	0.2%	8,709.7	28.6	0.3%
ME 2	44 58 4	2009	Critical	February	--	22,443.3	22,429.4	13.9	0.1%	22,427.1	16.2	0.1%	22,419.0	24.3	0.1%
ME 2	44 58 4	2009	Critical	March	--	20,993.1	20,981.5	11.6	0.1%	20,978.0	15.0	0.1%	20,971.1	22.0	0.1%
ME 2	44 58 4	2009	Critical	April	--	10,081.7	10,050.9	30.8	0.3%	10,044.9	36.8	0.4%	10,026.6	55.1	0.5%
ME 2	44 58 4	2009	Critical	May	--	15,518.5	15,481.5	37.0	0.2%	15,474.5	44.0	0.3%	15,452.5	66.0	0.4%
ME 2	44 58 4	2009	Critical	June	--	3,150.5	3,100.5	50.0	1.6%	3,090.9	59.6	1.9%	3,062.3	88.2	2.8%
ME 2	44 58 4	2009	Critical	July	--	1,254.9	1,212.3	42.6	3.4%	1,203.8	51.0	4.1%	1,183.6	71.3	5.7%
ME 2	44 58 4	2009	Critical	August	--	660.6	621.1	39.5	6.0%	613.2	47.4	7.2%	591.7	68.9	10.4%
ME 2	44 58 4	2009	Critical	September	Used in Summary Table Analysis	382.7	348.6	34.1	8.9%	341.8	41.0	10.7%	322.1	60.6	15.8%
ME 2	44 58 4	2010	Below Normal	October	Used in Summary Table Analysis	6,075.0	6,046.8	28.2	0.5%	6,041.1	33.9	0.6%	6,022.6	52.4	0.9%
ME 2	44 58 4	2010	Below Normal	November	Used in Summary Table Analysis	8,224.4	8,203.1	21.3	0.3%	8,198.8	25.6	0.3%	8,182.9	41.6	0.5%
ME 2	44 58 4	2010	Below Normal	December	--	12,222.2	12,203.7	18.5	0.2%	12,200.2	22.0	0.2%	12,188.7	33.6	0.3%
ME 2	44 58 4	2010	Below Normal	January	--	35,787.0	35,772.0	15.0	0.0%	35,768.5	18.5	0.1%	35,758.1	28.9	0.1%
ME 2	44 58 4	2010	Below Normal	February	--	27,118.1	27,105.3	12.7	0.0%	27,101.9	16.2	0.1%	27,093.8	24.3	0.1%
ME 2	44 58 4	2010	Below Normal	March	--	28,728.0	28,715.3	12.7	0.0%	28,713.0	15.0	0.1%	28,704.9	23.1	0.1%
ME 2	44 58 4	2010	Below Normal	April	--	39,811.3	39,799.8	11.6	0.0%	39,796.3	15.0	0.0%	39,789.4	22.0	0.1%
ME 2	44 58 4	2010	Below Normal	May	--	20,112.3	20,081.0	31.3	0.2%	20,075.2	37.0	0.2%	20,056.7	55.6	0.3%
ME 2	44 58 4	2010	Below Normal	June	--	9,227.0	9,180.0	47.0	0.5%	9,170.8	56.1	0.6%	9,143.6	83.3	0.9%
ME 2	44 58 4	2010	Below Normal	July	--	1,447.0	1,408.3	38.7	2.7%	1,400.9	46.1	3.2%	1,378.9	68.1	4.7%
ME 2	44 58 4	2010	Below Normal	August	--	558.2	524.8	33.4	6.0%	518.2	40.0	7.2%	498.5	59.7	10.7%
ME 2	44 58 4	2010	Below Normal	September	Used in Summary Table Analysis	639.9	607.5	32.4	5.1%	601.0	38.9	6.1%	581.7	58.2	9.1%
ME 2	44 58 4	2011	Wet	October	Used in Summary Table Analysis	9,538.7	9,515.9	22.8	0.2%	9,511.2	27.4	0.3%	9,497.5	41.2	0.4%
ME 2	44 58 4	2011	Wet	November	Used in Summary Table Analysis	14,111.1	14,093.8	17.4	0.1%	14,090.3	20.8	0.1%	14,079.9	31.3	0.2%
ME 2	44 58 4	2011	Wet	December	--	33,258.1	33,243.1	15.0	0.0%	33,238.4	19.7	0.1%	33,229.2	28.9	0.1%
ME 2	44 58 4	2011	Wet	January	--	14,071.8	14,059.0	12.7	0.1%	14,056.7	15.0	0.1%	14,048.6	23.1	0.2%
ME 2	44 58 4	2011	Wet	February	--	20,686.3	20,673.6	12.7	0.1%	20,671.3	15.0	0.1%	20,664.4	22.0	0.1%
ME 2	44 58 4	2011	Wet	March	--	51,715.3	51,703.7	11.6	0.0%	51,701.4	13.9	0.0%	51,694.4	20.8	0.0%
ME 2	44 58 4	2011	Wet	April	--	24,699.1	24,688.7	10.4	0.0%	24,686.3	12.7	0.1%	24,679.4	19.7	0.1%
ME 2	44 58 4	2011	Wet	May	--	11,335.2	11,305.6	29.6	0.3%	11,299.8	35.4	0.3%	11,282.3	52.9	0.5%
ME 2	44 58 4	2011	Wet	June	--	7,009.7	6,963.7	46.1	0.7%	6,954.6	55.1	0.8%	6,927.9	81.8	1.2%
ME 2	44 58 4	2011	Wet	July	--	1,824.5	1,781.1	43.4	2.4%	1,772.6	52.0	2.8%	1,748.5	76.0	4.2%
ME 2	44 58 4	2011	Wet	August	--	768.3	735.3	32.9	4.3%	728.8	39.5	5.1%	709.1	59.1	7.7%
ME 2	44 58 4	2011	Wet	September	Used in Summary Table Analysis	425.0	396.3	28.7	6.7%	390.6	34.4	8.1%	373.3	51.6	12.2%
ME 2	44 58 4	2012	Below Normal	October	Used in Summary Table Analysis	4,493.5	4,470.6	22.9	0.5%	4,466.0	27.5	0.6%	4,451.9	41.7	0.9%
ME 2	44 58 4	2012	Below Normal	November	Used in Summary Table Analysis	8,138.7	8,120.9	17.7	0.2%	8,117.4	21.3	0.3%	8,106.4	32.3	0.4%
ME 2	44 58 4	2012	Below Normal	December	--	5,139.9	5,125.0	14.9	0.3%	5,121.9	18.1	0.4%	5,112.6	27.3	0.5%
ME 2	44 58 4	2012	Below Normal	January	--	19,828.7	19,816.0	12.7	0.1%	19,812.5	16.2	0.1%	19,804.4	24.3	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	44 58 4	2012	Below Normal	February	--	18,130.8	18,119.2	11.6	0.1%	18,115.7	15.0	0.1%	18,108.8	22.0	0.1%
ME 2	44 58 4	2012	Below Normal	March	--	45,086.8	45,075.2	11.6	0.0%	45,072.9	13.9	0.0%	45,064.8	22.0	0.0%
ME 2	44 58 4	2012	Below Normal	April	--	26,736.1	26,725.7	10.4	0.0%	26,723.4	12.7	0.0%	26,716.4	19.7	0.1%
ME 2	44 58 4	2012	Below Normal	May	--	7,453.4	7,423.7	29.6	0.4%	7,417.8	35.5	0.5%	7,400.6	52.8	0.7%
ME 2	44 58 4	2012	Below Normal	June	--	5,469.8	5,422.8	47.0	0.9%	5,413.7	56.1	1.0%	5,386.7	83.1	1.5%
ME 2	44 58 4	2012	Below Normal	July	--	2,195.8	2,153.2	42.6	1.9%	2,144.8	51.0	2.3%	2,119.9	75.9	3.5%
ME 2	44 58 4	2012	Below Normal	August	--	382.6	351.7	30.9	8.1%	345.5	37.0	9.7%	327.1	55.5	14.5%
ME 2	44 58 4	2012	Below Normal	September	Used in Summary Table Analysis	241.1	214.3	26.7	11.1%	209.0	32.1	13.3%	193.0	48.1	19.9%
ME 2	44 58 4	2013	Below Normal	October	Used in Summary Table Analysis	1,880.8	1,857.8	23.0	1.2%	1,853.1	27.7	1.5%	1,839.0	41.8	2.2%
ME 2	44 58 4	2013	Below Normal	November	Used in Summary Table Analysis	14,502.3	14,485.0	17.4	0.1%	14,481.5	20.8	0.1%	14,469.9	32.4	0.2%
ME 2	44 58 4	2013	Below Normal	December	--	59,579.9	59,563.7	16.2	0.0%	59,561.3	18.5	0.0%	59,550.9	28.9	0.0%
ME 2	44 58 4	2013	Below Normal	January	--	22,079.9	22,067.1	12.7	0.1%	22,064.8	15.0	0.1%	22,056.7	23.1	0.1%
ME 2	44 58 4	2013	Below Normal	February	--	8,789.5	8,777.1	12.4	0.1%	8,774.5	14.9	0.2%	8,766.9	22.6	0.3%
ME 2	44 58 4	2013	Below Normal	March	--	10,245.0	10,233.3	11.7	0.1%	10,231.0	14.0	0.1%	10,223.8	21.2	0.2%
ME 2	44 58 4	2013	Below Normal	April	--	8,265.6	8,238.1	27.5	0.3%	8,232.6	33.0	0.4%	8,216.1	49.5	0.6%
ME 2	44 58 4	2013	Below Normal	May	--	4,397.8	4,365.2	32.6	0.7%	4,358.7	39.1	0.9%	4,339.2	58.6	1.3%
ME 2	44 58 4	2013	Below Normal	June	--	2,100.0	2,058.1	41.9	2.0%	2,049.9	50.1	2.4%	2,025.7	74.3	3.5%
ME 2	44 58 4	2013	Below Normal	July	--	714.1	677.2	36.9	5.2%	669.8	44.2	6.2%	648.6	65.5	9.2%
ME 2	44 58 4	2013	Below Normal	August	--	333.5	300.1	33.4	10.0%	293.5	40.0	12.0%	272.9	60.6	18.2%
ME 2	44 58 4	2013	Below Normal	September	Used in Summary Table Analysis	4,736.7	4,701.5	35.2	0.7%	4,694.4	42.2	0.9%	4,673.1	63.5	1.3%
ME 2	44 58 4	2014	Critical	October	Used in Summary Table Analysis	280.3	256.7	23.5	8.4%	252.0	28.3	10.1%	238.5	41.8	14.9%
ME 2	44 58 4	2014	Critical	November	Used in Summary Table Analysis	1,512.3	1,494.1	18.2	1.2%	1,490.4	21.9	1.4%	1,479.4	32.9	2.2%
ME 2	44 58 4	2014	Critical	December	--	1,574.9	1,559.6	15.3	1.0%	1,556.5	18.4	1.2%	1,547.0	27.9	1.8%
ME 2	44 58 4	2014	Critical	January	--	2,794.4	2,781.1	13.3	0.5%	2,778.4	16.1	0.6%	2,770.1	24.3	0.9%
ME 2	44 58 4	2014	Critical	February	--	15,671.3	15,658.6	12.7	0.1%	15,656.3	15.0	0.1%	15,648.1	23.1	0.1%
ME 2	44 58 4	2014	Critical	March	--	31,378.5	31,368.1	10.4	0.0%	31,365.7	12.7	0.0%	31,357.6	20.8	0.1%
ME 2	44 58 4	2014	Critical	April	--	12,953.7	12,923.6	30.1	0.2%	12,917.8	35.9	0.3%	12,899.3	54.4	0.4%
ME 2	44 58 4	2014	Critical	May	--	5,165.7	5,130.4	35.3	0.7%	5,123.5	42.2	0.8%	5,102.4	63.3	1.2%
ME 2	44 58 4	2014	Critical	June	--	1,189.6	1,139.4	50.2	4.2%	1,129.5	60.0	5.0%	1,101.4	88.1	7.4%
ME 2	44 58 4	2014	Critical	July	--	541.3	498.8	42.5	7.8%	490.4	50.9	9.4%	469.9	71.4	13.2%
ME 2	44 58 4	2014	Critical	August	--	341.3	302.2	39.1	11.5%	294.4	46.9	13.7%	273.1	68.2	20.0%
ME 2	44 58 4	2014	Critical	September	Used in Summary Table Analysis	2,550.2	2,511.0	39.2	1.5%	2,503.2	47.0	1.8%	2,480.4	69.8	2.7%
ME 2	44 58 4	2015	Dry	October	Used in Summary Table Analysis	11,270.4	11,241.2	29.2	0.3%	11,235.6	34.7	0.3%	11,218.5	51.9	0.5%
ME 2	44 58 4	2015	Dry	November	Used in Summary Table Analysis	8,943.8	8,923.0	20.7	0.2%	8,918.9	24.9	0.3%	8,903.4	40.4	0.5%
ME 2	44 58 4	2015	Dry	December	--	32,260.4	32,243.1	17.4	0.1%	32,239.6	20.8	0.1%	32,228.0	32.4	0.1%
ME 2	44 58 4	2015	Dry	January	--	14,523.1	14,508.1	15.0	0.1%	14,504.6	18.5	0.1%	14,494.2	28.9	0.2%
ME 2	44 58 4	2015	Dry	February	--	27,093.8	27,079.9	13.9	0.1%	27,077.5	16.2	0.1%	27,069.4	24.3	0.1%
ME 2	44 58 4	2015	Dry	March	--	11,537.5	11,525.8	11.7	0.1%	11,523.4	14.1	0.1%	11,516.1	21.4	0.2%
ME 2	44 58 4	2015	Dry	April	--	8,295.0	8,264.5	30.6	0.4%	8,258.3	36.7	0.4%	8,240.3	54.7	0.7%
ME 2	44 58 4	2015	Dry	May	--	1,507.6	1,472.3	35.3	2.3%	1,465.5	42.1	2.8%	1,445.7	61.9	4.1%
ME 2	44 58 4	2015	Dry	June	--	649.0	602.1	46.9	7.2%	592.9	56.1	8.6%	565.9	83.1	12.8%
ME 2	44 58 4	2015	Dry	July	--	264.6	221.8	42.8	16.2%	213.3	51.3	19.4%	192.8	71.7	27.1%
ME 2	44 58 4	2015	Dry	August	--	160.4	120.9	39.6	24.7%	112.9	47.5	29.6%	91.5	69.0	43.0%
ME 2	44 58 4	2015	Dry	September	Used in Summary Table Analysis	116.0	79.0	37.0	31.9%	71.3	44.7	38.6%	49.0	67.0	57.8%
ME 2	44 58 4	2016	Above Normal	October	Used in Summary Table Analysis	81.7	51.3	30.4	37.2%	45.6	36.2	44.2%	28.1	53.6	65.6%
ME 2	44 58 4	2016	Above Normal	November	Used in Summary Table Analysis	3,783.7	3,762.3	21.4	0.6%	3,757.9	25.8	0.7%	3,741.6	42.1	1.1%
ME 2	44 58 4	2016	Above Normal	December	--	36,199.1	36,180.6	18.5	0.1%	36,177.1	22.0	0.1%	36,165.5	33.6	0.1%
ME 2	44 58 4	2016	Above Normal	January	--	56,877.3	56,861.1	16.2	0.0%	56,857.6	19.7	0.0%	56,847.2	30.1	0.1%
ME 2	44 58 4	2016	Above Normal	February	--	24,196.8	24,182.9	13.9	0.1%	24,180.6	16.2	0.1%	24,172.5	24.3	0.1%
ME 2	44 58 4	2016	Above Normal	March	--	41,572.9	41,560.2	12.7	0.0%	41,556.7	16.2	0.0%	41,549.8	23.1	0.1%
ME 2	44 58 4	2016	Above Normal	April	--	18,480.3	18,468.8	11.6	0.1%	18,466.4	13.9	0.1%	18,459.5	20.8	0.1%
ME 2	44 58 4	2016	Above Normal	May	--	5,195.6	5,179.9	15.7	0.3%	5,176.6	19.0	0.4%	5,167.1	28.5	0.5%
ME 2	44 58 4	2016	Above Normal	June	--	1,501.9	1,467.1	34.7	2.3%	1,461.3	40.5	2.7%	1,444.6	57.3	3.8%
ME 2	44 58 4	2016	Above Normal	July	--	814.7	777.9	36.7	4.5%	770.6	44.0	5.4%	749.3	65.4	8.0%
ME 2	44 58 4	2016	Above Normal	August	--	482.8	448.6	34.2	7.1%	441.8	41.0	8.5%	421.4	61.4	12.7%
ME 2	44 58 4	2016	Above Normal	September	Used in Summary Table Analysis	319.8	288.3	31.5	9.9%	281.8	38.0	11.9%	262.4	57.4	18.0%
ME 2	44 58 4	2017	Wet	October	Used in Summary Table Analysis	18,119.2	18,094.9	24.3	0.1%	18,090.3	28.9	0.2%	18,076.4	42.8	0.2%
ME 2	44 58 4	2017	Wet	November	Used in Summary Table Analysis	18,641.2	18,622.7	18.5	0.1%	18,619.2	22.0	0.1%	18,608.8	32.4	0.2%
ME 2	44 58 4	2017	Wet	December	--	23,827.5	23,812.5	15.0	0.1%	23,809.0	18.5	0.1%	23,799.8	27.8	0.1%
ME 2	44 58 4	2017	Wet	January	--	106,061.3	106,047.5	13.9	0.0%	106,045.1	16.2	0.0%	106,035.9	25.5	0.0%
ME 2	44 58 4	2017	Wet	February	--	81,344.9	81,332.2	12.7	0.0%	81,329.9	15.0	0.0%	81,321.8	23.1	0.0%
ME 2	44 58 4	2017	Wet	March	--	27,119.2	27,107.6	11.6	0.0%	27,105.3	13.9	0.1%	27,098.4	20.8	0.1%
ME 2	44 58 4	2017	Wet	April	--	22,772.0	22,761.6	10.4	0.0%	22,759.3	12.7	0.1%	22,753.5	18.5	0.1%
ME 2	44 58 4	2017	Wet	May	--	6,267.7	6,252.0	15.7	0.3%	6,248.8	18.9	0.3%	6,239.5	28.2	0.5%

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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	44 58 4	2017	Wet	June	--	2,096.2	2,058.9	37.3	1.8%	2,051.6	44.6	2.1%	2,030.2	66.0	3.1%
ME 2	44 58 4	2017	Wet	July	--	922.5	885.7	36.8	4.0%	878.4	44.1	4.8%	857.1	65.4	7.1%
ME 2	44 58 4	2017	Wet	August	--	494.8	460.9	33.9	6.9%	454.1	40.7	8.2%	433.9	60.9	12.3%
ME 2	44 58 4	2017	Wet	September	Used in Summary Table Analysis	313.1	281.7	31.4	10.0%	275.3	37.8	12.1%	256.4	56.7	18.1%
ME 2	44 58 4	2018	Above Normal	October	Used in Summary Table Analysis	265.9	242.4	23.5	8.8%	237.6	28.3	10.6%	223.3	42.6	16.0%
ME 2	44 58 4	2018	Above Normal	November	Used in Summary Table Analysis	10,598.6	10,581.3	17.4	0.2%	10,577.8	20.8	0.2%	10,567.1	31.5	0.3%
ME 2	44 58 4	2018	Above Normal	December	--	5,428.2	5,413.9	14.4	0.3%	5,411.0	17.2	0.3%	5,402.1	26.2	0.5%
ME 2	44 58 4	2018	Above Normal	January	--	17,447.9	17,435.2	12.7	0.1%	17,432.9	15.0	0.1%	17,424.8	23.1	0.1%
ME 2	44 58 4	2018	Above Normal	February	--	7,581.8	7,570.6	11.2	0.1%	7,568.3	13.5	0.2%	7,561.2	20.6	0.3%
ME 2	44 58 4	2018	Above Normal	March	--	20,486.1	20,475.7	10.4	0.1%	20,473.4	12.7	0.1%	20,466.4	19.7	0.1%
ME 2	44 58 4	2018	Above Normal	April	--	31,949.1	31,939.8	9.3	0.0%	31,937.5	11.6	0.0%	31,931.7	17.4	0.1%
ME 2	44 58 4	2018	Above Normal	May	--	6,980.0	6,952.0	28.0	0.4%	6,946.5	33.4	0.5%	6,929.7	50.2	0.7%
ME 2	44 58 4	2018	Above Normal	June	--	1,905.4	1,870.1	35.3	1.9%	1,863.3	42.1	2.2%	1,843.2	62.3	3.3%
ME 2	44 58 4	2018	Above Normal	July	--	771.9	734.9	36.9	4.8%	727.6	44.3	5.7%	705.6	66.2	8.6%
ME 2	44 58 4	2018	Above Normal	August	--	433.1	400.6	32.5	7.5%	394.1	39.0	9.0%	374.5	58.6	13.5%
ME 2	44 58 4	2018	Above Normal	September	Used in Summary Table Analysis	291.4	259.9	31.5	10.8%	253.6	37.8	13.0%	234.6	56.8	19.5%
ME 2	44 58 4	2019	Below Normal	October	Used in Summary Table Analysis	201.4	178.0	23.4	11.6%	173.3	28.2	14.0%	159.0	42.5	21.1%
ME 2	44 58 4	2019	Below Normal	November	Used in Summary Table Analysis	6,497.0	6,479.4	17.6	0.3%	6,475.8	21.2	0.3%	6,464.9	32.1	0.5%
ME 2	44 58 4	2019	Below Normal	December	--	14,450.2	14,435.2	15.0	0.1%	14,431.7	18.5	0.1%	14,422.5	27.8	0.2%
ME 2	44 58 4	2019	Below Normal	January	--	34,782.4	34,768.5	13.9	0.0%	34,766.2	16.2	0.0%	34,758.1	24.3	0.1%
ME 2	44 58 4	2019	Below Normal	February	--	141,458.3	141,446.8	11.6	0.0%	141,435.2	23.1	0.0%	141,435.2	23.1	0.0%
ME 2	44 58 4	2019	Below Normal	March	--	42,078.7	42,068.3	10.4	0.0%	42,066.0	12.7	0.0%	42,059.0	19.7	0.0%
ME 2	44 58 4	2019	Below Normal	April	--	15,206.0	15,196.8	9.3	0.1%	15,194.4	11.6	0.1%	15,188.7	17.4	0.1%
ME 2	44 58 4	2019	Below Normal	May	--	16,608.8	16,578.7	30.1	0.2%	16,572.9	35.9	0.2%	16,554.4	54.4	0.3%
ME 2	44 58 4	2019	Below Normal	June	--	4,243.5	4,206.1	37.4	0.9%	4,199.2	44.3	1.0%	4,178.9	64.6	1.5%
ME 2	44 58 4	2019	Below Normal	July	--	1,349.0	1,312.0	36.9	2.7%	1,304.6	44.3	3.3%	1,283.0	66.0	4.9%
ME 2	44 58 4	2019	Below Normal	August	--	585.3	552.1	33.1	5.7%	545.5	39.8	6.8%	525.8	59.5	10.2%
ME 2	44 58 4	2019	Below Normal	September	Used in Summary Table Analysis	453.5	422.4	31.1	6.9%	416.1	37.4	8.2%	397.5	56.1	12.4%
ME 2	44 58 4	2020	Dry	October	Used in Summary Table Analysis	349.4	327.6	21.9	6.3%	323.1	26.3	7.5%	309.8	39.7	11.4%
ME 2	44 58 4	2020	Dry	November	Used in Summary Table Analysis	304.4	288.7	15.7	5.2%	285.5	18.9	6.2%	275.8	28.5	9.4%
ME 2	44 58 4	2020	Dry	December	--	12,968.8	12,954.9	13.9	0.1%	12,952.5	16.2	0.1%	12,943.3	25.5	0.2%
ME 2	44 58 4	2020	Dry	January	--	22,081.0	22,068.3	12.7	0.1%	22,066.0	15.0	0.1%	22,057.9	23.1	0.1%
ME 2	44 58 4	2020	Dry	February	--	7,403.9	7,392.8	11.1	0.2%	7,390.5	13.4	0.2%	7,383.6	20.4	0.3%
ME 2	44 58 4	2020	Dry	March	--	7,199.5	7,189.0	10.5	0.1%	7,186.9	12.6	0.2%	7,180.4	19.1	0.3%
ME 2	44 58 4	2020	Dry	April	--	5,433.6	5,404.1	29.5	0.5%	5,398.3	35.3	0.6%	5,380.8	52.8	1.0%
ME 2	44 58 4	2020	Dry	May	--	7,313.2	7,278.5	34.7	0.5%	7,271.5	41.7	0.6%	7,250.8	62.4	0.9%
ME 2	44 58 4	2020	Dry	June	--	2,103.4	2,056.9	46.4	2.2%	2,048.1	55.2	2.6%	2,022.2	81.1	3.9%
ME 2	44 58 4	2020	Dry	July	--	789.6	746.6	43.1	5.5%	738.0	51.7	6.5%	717.1	72.5	9.2%
ME 2	44 58 4	2020	Dry	August	--	391.8	351.5	40.3	10.3%	343.4	48.4	12.4%	321.4	70.4	18.0%
ME 2	44 58 4	2020	Dry	September	Used in Summary Table Analysis	241.5	203.8	37.8	15.6%	195.9	45.6	18.9%	173.3	68.2	28.2%
ME 2	43 58 5	2000	Above Normal	October	Used in Summary Table Analysis	805.3	781.3	24.0	3.0%	776.4	28.9	3.6%	761.8	43.6	5.4%
ME 2	43 58 5	2000	Above Normal	November	Used in Summary Table Analysis	11,893.5	11,875.0	18.5	0.2%	11,870.4	23.1	0.2%	11,860.0	33.6	0.3%
ME 2	43 58 5	2000	Above Normal	December	--	10,691.1	10,675.9	15.2	0.1%	10,672.8	18.3	0.2%	10,663.4	27.7	0.3%
ME 2	43 58 5	2000	Above Normal	January	--	28,195.6	28,181.7	13.9	0.0%	28,179.4	16.2	0.1%	28,170.1	25.5	0.1%
ME 2	43 58 5	2000	Above Normal	February	--	36,792.8	36,780.1	12.7	0.0%	36,777.8	15.0	0.0%	36,770.8	22.0	0.1%
ME 2	43 58 5	2000	Above Normal	March	--	18,239.6	18,229.2	10.4	0.1%	18,226.9	12.7	0.1%	18,219.9	19.7	0.1%
ME 2	43 58 5	2000	Above Normal	April	--	12,256.9	12,246.5	10.4	0.1%	12,244.2	12.7	0.1%	12,238.4	18.5	0.2%
ME 2	43 58 5	2000	Above Normal	May	--	7,047.6	7,017.7	29.9	0.4%	7,011.7	35.9	0.5%	6,993.9	53.7	0.8%
ME 2	43 58 5	2000	Above Normal	June	--	2,594.3	2,547.8	46.5	1.8%	2,538.7	55.7	2.1%	2,511.6	82.8	3.2%
ME 2	43 58 5	2000	Above Normal	July	--	984.9	946.9	38.0	3.9%	939.4	45.5	4.6%	916.9	68.0	6.9%
ME 2	43 58 5	2000	Above Normal	August	--	514.5	480.3	34.1	6.6%	473.6	40.9	8.0%	453.1	61.4	11.9%
ME 2	43 58 5	2000	Above Normal	September	Used in Summary Table Analysis	289.1	259.8	29.3	10.1%	253.9	35.2	12.2%	236.3	52.8	18.3%
ME 2	43 58 5	2001	Dry	October	Used in Summary Table Analysis	3,764.7	3,741.1	23.6	0.6%	3,736.2	28.5	0.8%	3,721.8	42.9	1.1%
ME 2	43 58 5	2001	Dry	November	Used in Summary Table Analysis	6,040.9	6,022.7	18.2	0.3%	6,019.1	21.8	0.4%	6,008.1	32.8	0.5%
ME 2	43 58 5	2001	Dry	December	--	8,754.7	8,739.5	15.3	0.2%	8,736.3	18.4	0.2%	8,727.1	27.7	0.3%
ME 2	43 58 5	2001	Dry	January	--	12,629.6	12,615.7	13.9	0.1%	12,613.4	16.2	0.1%	12,604.2	25.5	0.2%
ME 2	43 58 5	2001	Dry	February	--	17,370.4	17,358.8	11.6	0.1%	17,356.5	13.9	0.1%	17,348.4	22.0	0.1%
ME 2	43 58 5	2001	Dry	March	--	12,245.4	12,233.8	11.6	0.1%	12,232.6	12.7	0.1%	12,225.7	19.7	0.2%
ME 2	43 58 5	2001	Dry	April	--	10,917.9	10,886.9	31.0	0.3%	10,880.8	37.2	0.3%	10,862.4	55.6	0.5%
ME 2	43 58 5	2001	Dry	May	--	2,637.4	2,601.3	36.1	1.4%	2,594.1	43.3	1.6%	2,572.7	64.7	2.5%
ME 2	43 58 5	2001	Dry	June	--	2,614.8	2,563.5	51.3	2.0%	2,553.6	61.2	2.3%	2,524.3	90.5	3.5%
ME 2	43 58 5	2001	Dry	July	--	717.0	673.0	43.9	6.1%	664.3	52.7	7.3%	643.0	74.0	10.3%
ME 2	43 58 5	2001	Dry	August	--	168.0	126.5	41.4	24.7%	118.2	49.7	29.6%	95.7	72.3	43.0%
ME 2	43 58 5	2001	Dry	September	Used in Summary Table Analysis	90.3	54.3	36.0	39.8%	47.2	43.2	47.8%	26.5	63.8	70.6%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	43 58 5	2002	Below Normal	October	Used in Summary Table Analysis	258.9	229.0	29.9	11.6%	222.9	36.0	13.9%	204.6	54.3	21.0%
ME 2	43 58 5	2002	Below Normal	November	Used in Summary Table Analysis	11,914.4	11,891.2	23.1	0.2%	11,886.6	27.8	0.2%	11,870.4	44.0	0.4%
ME 2	43 58 5	2002	Below Normal	December	--	35,339.1	35,320.6	18.5	0.1%	35,316.0	23.1	0.1%	35,303.2	35.9	0.1%
ME 2	43 58 5	2002	Below Normal	January	--	30,659.7	30,643.5	16.2	0.1%	30,640.0	19.7	0.1%	30,629.6	30.1	0.1%
ME 2	43 58 5	2002	Below Normal	February	--	24,547.5	24,532.4	15.0	0.1%	24,528.9	18.5	0.1%	24,519.7	27.8	0.1%
ME 2	43 58 5	2002	Below Normal	March	--	17,678.2	17,664.4	13.9	0.1%	17,662.0	16.2	0.1%	17,652.8	25.5	0.1%
ME 2	43 58 5	2002	Below Normal	April	--	9,887.5	9,857.2	30.3	0.3%	9,851.3	36.2	0.4%	9,833.2	54.3	0.5%
ME 2	43 58 5	2002	Below Normal	May	--	3,307.2	3,272.1	35.1	1.1%	3,265.0	42.1	1.3%	3,244.1	63.1	1.9%
ME 2	43 58 5	2002	Below Normal	June	--	849.5	808.0	41.5	4.9%	799.9	49.6	5.8%	776.0	73.5	8.6%
ME 2	43 58 5	2002	Below Normal	July	--	357.8	318.1	39.6	11.1%	310.3	47.5	13.3%	287.4	70.3	19.7%
ME 2	43 58 5	2002	Below Normal	August	--	220.9	185.0	36.0	16.3%	177.8	43.1	19.5%	155.8	65.2	29.5%
ME 2	43 58 5	2002	Below Normal	September	Used in Summary Table Analysis	158.2	125.3	32.9	20.8%	118.7	39.4	24.9%	98.0	60.2	38.1%
ME 2	43 58 5	2003	Wet	October	Used in Summary Table Analysis	123.3	97.1	26.2	21.2%	91.9	31.5	25.5%	75.9	47.4	38.4%
ME 2	43 58 5	2003	Wet	November	Used in Summary Table Analysis	887.8	867.8	20.0	2.2%	863.7	24.1	2.7%	851.3	36.5	4.1%
ME 2	43 58 5	2003	Wet	December	--	56,009.3	55,991.9	17.4	0.0%	55,988.4	20.8	0.0%	55,978.0	31.3	0.1%
ME 2	43 58 5	2003	Wet	January	--	31,363.4	31,348.4	15.0	0.0%	31,346.1	17.4	0.1%	31,336.8	26.6	0.1%
ME 2	43 58 5	2003	Wet	February	--	20,266.2	20,253.5	12.7	0.1%	20,250.0	16.2	0.1%	20,241.9	24.3	0.1%
ME 2	43 58 5	2003	Wet	March	--	23,899.3	23,886.6	12.7	0.1%	23,884.3	15.0	0.1%	23,877.3	22.0	0.1%
ME 2	43 58 5	2003	Wet	April	--	42,577.5	42,566.0	11.6	0.0%	42,563.7	13.9	0.0%	42,556.7	20.8	0.0%
ME 2	43 58 5	2003	Wet	May	--	12,179.4	12,149.3	30.1	0.2%	12,142.4	37.0	0.3%	12,125.0	54.4	0.4%
ME 2	43 58 5	2003	Wet	June	--	3,157.8	3,119.4	38.3	1.2%	3,112.0	45.7	1.4%	3,090.3	67.5	2.1%
ME 2	43 58 5	2003	Wet	July	--	1,464.9	1,425.8	39.1	2.7%	1,418.1	46.9	3.2%	1,395.0	69.9	4.8%
ME 2	43 58 5	2003	Wet	August	--	751.9	714.6	37.3	5.0%	706.7	45.2	6.0%	681.8	70.1	9.3%
ME 2	43 58 5	2003	Wet	September	Used in Summary Table Analysis	450.7	421.0	29.7	6.6%	415.1	35.6	7.9%	396.1	54.5	12.1%
ME 2	43 58 5	2004	Wet	October	Used in Summary Table Analysis	317.9	293.9	24.0	7.6%	289.0	28.9	9.1%	274.3	43.6	13.7%
ME 2	43 58 5	2004	Wet	November	Used in Summary Table Analysis	5,714.4	5,695.8	18.5	0.3%	5,692.0	22.3	0.4%	5,680.4	33.9	0.6%
ME 2	43 58 5	2004	Wet	December	--	35,907.4	35,891.2	16.2	0.0%	35,887.7	19.7	0.1%	35,878.5	28.9	0.1%
ME 2	43 58 5	2004	Wet	January	--	31,199.1	31,185.2	13.9	0.0%	31,181.7	17.4	0.1%	31,173.6	25.5	0.1%
ME 2	43 58 5	2004	Wet	February	--	37,972.2	37,959.5	12.7	0.0%	37,957.2	15.0	0.0%	37,949.1	23.1	0.1%
ME 2	43 58 5	2004	Wet	March	--	16,478.0	16,466.4	11.6	0.1%	16,464.1	13.9	0.1%	16,457.2	20.8	0.1%
ME 2	43 58 5	2004	Wet	April	--	9,417.4	9,406.6	10.8	0.1%	9,404.4	13.0	0.1%	9,397.8	19.6	0.2%
ME 2	43 58 5	2004	Wet	May	--	3,394.0	3,363.9	30.1	0.9%	3,358.0	36.0	1.1%	3,340.3	53.7	1.6%
ME 2	43 58 5	2004	Wet	June	--	688.1	651.5	36.6	5.3%	644.3	43.7	6.4%	623.3	64.8	9.4%
ME 2	43 58 5	2004	Wet	July	--	349.8	311.5	38.4	11.0%	303.9	46.0	13.1%	281.1	68.8	19.7%
ME 2	43 58 5	2004	Wet	August	--	219.4	185.0	34.4	15.7%	178.2	41.3	18.8%	157.4	62.0	28.3%
ME 2	43 58 5	2004	Wet	September	Used in Summary Table Analysis	157.1	124.1	33.0	21.0%	117.5	39.6	25.2%	97.7	59.5	37.8%
ME 2	43 58 5	2005	Above Normal	October	Used in Summary Table Analysis	7,566.6	7,541.8	24.8	0.3%	7,536.8	29.7	0.4%	7,521.8	44.8	0.6%
ME 2	43 58 5	2005	Above Normal	November	Used in Summary Table Analysis	2,242.1	2,223.7	18.4	0.8%	2,220.0	22.1	1.0%	2,208.7	33.4	1.5%
ME 2	43 58 5	2005	Above Normal	December	--	20,691.0	20,674.8	16.2	0.1%	20,671.3	19.7	0.1%	20,662.0	28.9	0.1%
ME 2	43 58 5	2005	Above Normal	January	--	22,120.4	22,106.5	13.9	0.1%	22,104.2	16.2	0.1%	22,094.9	25.5	0.1%
ME 2	43 58 5	2005	Above Normal	February	--	13,965.3	13,953.7	11.6	0.1%	13,950.2	15.0	0.1%	13,943.3	22.0	0.2%
ME 2	43 58 5	2005	Above Normal	March	--	28,366.9	28,355.3	11.6	0.0%	28,353.0	13.9	0.0%	28,346.1	20.8	0.1%
ME 2	43 58 5	2005	Above Normal	April	--	21,313.7	21,303.2	10.4	0.0%	21,300.9	12.7	0.1%	21,294.0	19.7	0.1%
ME 2	43 58 5	2005	Above Normal	May	--	19,413.2	19,381.9	31.3	0.2%	19,376.2	37.0	0.2%	19,357.6	55.6	0.3%
ME 2	43 58 5	2005	Above Normal	June	--	15,685.2	15,637.7	47.5	0.3%	15,628.5	56.7	0.4%	15,600.7	84.5	0.5%
ME 2	43 58 5	2005	Above Normal	July	--	2,863.1	2,822.8	40.3	1.4%	2,815.3	47.8	1.7%	2,792.9	70.1	2.4%
ME 2	43 58 5	2005	Above Normal	August	--	974.3	940.0	34.3	3.5%	933.3	41.0	4.2%	913.0	61.3	6.3%
ME 2	43 58 5	2005	Above Normal	September	Used in Summary Table Analysis	516.3	486.9	29.4	5.7%	481.1	35.2	6.8%	463.6	52.7	10.2%
ME 2	43 58 5	2006	Wet	October	Used in Summary Table Analysis	624.5	601.1	23.4	3.7%	596.4	28.1	4.5%	582.1	42.3	6.8%
ME 2	43 58 5	2006	Wet	November	Used in Summary Table Analysis	9,153.2	9,135.6	17.6	0.2%	9,132.1	21.2	0.2%	9,121.3	31.9	0.3%
ME 2	43 58 5	2006	Wet	December	--	42,990.7	42,975.7	15.0	0.0%	42,972.2	18.5	0.0%	42,963.0	27.8	0.1%
ME 2	43 58 5	2006	Wet	January	--	45,838.0	45,824.1	13.9	0.0%	45,820.6	17.4	0.0%	45,812.5	25.5	0.1%
ME 2	43 58 5	2006	Wet	February	--	26,422.5	26,409.7	12.7	0.0%	26,407.4	15.0	0.1%	26,400.5	22.0	0.1%
ME 2	43 58 5	2006	Wet	March	--	46,796.3	46,784.7	11.6	0.0%	46,782.4	13.9	0.0%	46,775.5	20.8	0.0%
ME 2	43 58 5	2006	Wet	April	--	30,285.9	30,275.5	10.4	0.0%	30,273.1	12.7	0.0%	30,267.4	18.5	0.1%
ME 2	43 58 5	2006	Wet	May	--	14,125.0	14,108.8	16.2	0.1%	14,105.3	19.7	0.1%	14,096.1	28.9	0.2%
ME 2	43 58 5	2006	Wet	June	--	3,539.9	3,500.8	39.1	1.1%	3,493.3	46.6	1.3%	3,470.9	69.0	1.9%
ME 2	43 58 5	2006	Wet	July	--	1,268.8	1,230.4	38.3	3.0%	1,223.0	45.7	3.6%	1,200.8	67.9	5.4%
ME 2	43 58 5	2006	Wet	August	--	655.2	619.6	35.5	5.4%	612.6	42.5	6.5%	591.5	63.7	9.7%
ME 2	43 58 5	2006	Wet	September	Used in Summary Table Analysis	417.3	387.5	29.8	7.1%	381.6	35.7	8.6%	363.7	53.6	12.8%
ME 2	43 58 5	2007	Above Normal	October	Used in Summary Table Analysis	267.4	243.6	23.8	8.9%	238.8	28.6	10.7%	224.2	43.2	16.2%
ME 2	43 58 5	2007	Above Normal	November	Used in Summary Table Analysis	8,532.6	8,514.0	18.6	0.2%	8,510.2	22.5	0.3%	8,498.7	33.9	0.4%
ME 2	43 58 5	2007	Above Normal	December	--	20,135.4	20,119.2	16.2	0.1%	20,115.7	19.7	0.1%	20,105.3	30.1	0.1%
ME 2	43 58 5	2007	Above Normal	January	--	10,179.3	10,165.4	13.9	0.1%	10,162.6	16.7	0.2%	10,153.9	25.3	0.2%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	43 58 5	2007	Above Normal	February	--	30,262.7	30,250.0	12.7	0.0%	30,246.5	16.2	0.1%	30,238.4	24.3	0.1%
ME 2	43 58 5	2007	Above Normal	March	--	13,049.8	13,037.0	12.7	0.1%	13,034.7	15.0	0.1%	13,027.8	22.0	0.2%
ME 2	43 58 5	2007	Above Normal	April	--	11,486.5	11,457.3	29.2	0.3%	11,451.4	35.1	0.3%	11,434.0	52.4	0.5%
ME 2	43 58 5	2007	Above Normal	May	--	4,118.9	4,085.0	33.9	0.8%	4,078.1	40.7	1.0%	4,057.8	61.1	1.5%
ME 2	43 58 5	2007	Above Normal	June	--	1,485.0	1,441.3	43.6	2.9%	1,432.9	52.1	3.5%	1,407.8	77.2	5.2%
ME 2	43 58 5	2007	Above Normal	July	--	491.7	450.7	41.1	8.4%	442.5	49.2	10.0%	418.7	73.1	14.9%
ME 2	43 58 5	2007	Above Normal	August	--	216.9	181.8	35.1	16.2%	174.8	42.1	19.4%	153.4	63.4	29.3%
ME 2	43 58 5	2007	Above Normal	September	Used in Summary Table Analysis	144.5	112.4	32.2	22.3%	105.9	38.6	26.7%	86.5	58.1	40.2%
ME 2	43 58 5	2008	Dry	October	Used in Summary Table Analysis	3,386.6	3,361.0	25.6	0.8%	3,355.8	30.8	0.9%	3,340.3	46.3	1.4%
ME 2	43 58 5	2008	Dry	November	Used in Summary Table Analysis	3,229.7	3,210.8	19.0	0.6%	3,206.9	22.8	0.7%	3,195.3	34.5	1.1%
ME 2	43 58 5	2008	Dry	December	--	22,767.4	22,751.2	16.2	0.1%	22,747.7	19.7	0.1%	22,737.3	30.1	0.1%
ME 2	43 58 5	2008	Dry	January	--	37,186.3	37,171.3	15.0	0.0%	37,169.0	17.4	0.0%	37,159.7	26.6	0.1%
ME 2	43 58 5	2008	Dry	February	--	26,187.5	26,175.9	11.6	0.0%	26,172.5	15.0	0.1%	26,165.5	22.0	0.1%
ME 2	43 58 5	2008	Dry	March	--	11,756.9	11,745.4	11.6	0.1%	11,743.1	13.9	0.1%	11,736.1	20.8	0.2%
ME 2	43 58 5	2008	Dry	April	--	8,987.8	8,956.8	31.0	0.3%	8,950.7	37.2	0.4%	8,932.3	55.6	0.6%
ME 2	43 58 5	2008	Dry	May	--	1,364.0	1,333.7	30.3	2.2%	1,327.9	36.1	2.6%	1,310.6	53.4	3.9%
ME 2	43 58 5	2008	Dry	June	--	433.0	385.0	48.0	11.1%	375.6	57.4	13.3%	348.0	85.0	19.6%
ME 2	43 58 5	2008	Dry	July	--	251.8	207.3	44.4	17.6%	198.6	53.2	21.1%	177.1	74.6	29.6%
ME 2	43 58 5	2008	Dry	August	--	174.7	133.1	41.5	23.8%	124.8	49.8	28.5%	99.4	75.3	43.1%
ME 2	43 58 5	2008	Dry	September	Used in Summary Table Analysis	136.4	96.2	40.2	29.5%	88.2	48.2	35.4%	65.1	71.3	52.3%
ME 2	43 58 5	2009	Critical	October	Used in Summary Table Analysis	915.8	886.1	29.8	3.3%	880.0	35.8	3.9%	861.4	54.4	5.9%
ME 2	43 58 5	2009	Critical	November	Used in Summary Table Analysis	5,425.5	5,403.5	22.0	0.4%	5,399.0	26.5	0.5%	5,382.6	42.8	0.8%
ME 2	43 58 5	2009	Critical	December	--	11,982.6	11,964.1	18.5	0.2%	11,959.5	23.1	0.2%	11,947.9	34.7	0.3%
ME 2	43 58 5	2009	Critical	January	--	8,745.3	8,728.7	16.6	0.2%	8,725.3	19.9	0.2%	8,715.0	30.2	0.3%
ME 2	43 58 5	2009	Critical	February	--	22,461.8	22,447.9	13.9	0.1%	22,444.4	17.4	0.1%	22,436.3	25.5	0.1%
ME 2	43 58 5	2009	Critical	March	--	21,006.9	20,994.2	12.7	0.1%	20,991.9	15.0	0.1%	20,983.8	23.1	0.1%
ME 2	43 58 5	2009	Critical	April	--	10,084.3	10,052.1	32.2	0.3%	10,045.8	38.4	0.4%	10,026.9	57.4	0.6%
ME 2	43 58 5	2009	Critical	May	--	15,526.6	15,487.3	39.4	0.3%	15,480.3	46.3	0.3%	15,457.2	69.4	0.4%
ME 2	43 58 5	2009	Critical	June	--	3,152.3	3,100.5	51.9	1.6%	3,090.5	61.8	2.0%	3,060.9	91.4	2.9%
ME 2	43 58 5	2009	Critical	July	--	1,256.6	1,211.9	44.7	3.6%	1,203.1	53.5	4.3%	1,181.7	74.9	6.0%
ME 2	43 58 5	2009	Critical	August	--	662.4	620.7	41.7	6.3%	612.4	50.0	7.5%	589.7	72.7	11.0%
ME 2	43 58 5	2009	Critical	September	Used in Summary Table Analysis	384.4	348.3	36.2	9.4%	341.0	43.4	11.3%	320.2	64.2	16.7%
ME 2	43 58 5	2010	Below Normal	October	Used in Summary Table Analysis	6,077.7	6,047.8	29.9	0.5%	6,041.7	36.0	0.6%	6,022.2	55.4	0.9%
ME 2	43 58 5	2010	Below Normal	November	Used in Summary Table Analysis	8,232.3	8,209.7	22.6	0.3%	8,205.2	27.1	0.3%	8,188.5	43.7	0.5%
ME 2	43 58 5	2010	Below Normal	December	--	12,236.1	12,217.6	18.5	0.2%	12,214.1	22.0	0.2%	12,201.4	34.7	0.3%
ME 2	43 58 5	2010	Below Normal	January	--	35,834.5	35,818.3	16.2	0.0%	35,814.8	19.7	0.1%	35,804.4	30.1	0.1%
ME 2	43 58 5	2010	Below Normal	February	--	27,133.1	27,118.1	15.0	0.1%	27,115.7	17.4	0.1%	27,106.5	26.6	0.1%
ME 2	43 58 5	2010	Below Normal	March	--	28,740.7	28,726.9	13.9	0.0%	28,724.5	16.2	0.1%	28,716.4	24.3	0.1%
ME 2	43 58 5	2010	Below Normal	April	--	39,833.3	39,820.6	12.7	0.0%	39,818.3	15.0	0.0%	39,810.2	23.1	0.1%
ME 2	43 58 5	2010	Below Normal	May	--	20,129.6	20,097.2	32.4	0.2%	20,090.3	39.4	0.2%	20,071.8	57.9	0.3%
ME 2	43 58 5	2010	Below Normal	June	--	9,240.6	9,191.9	48.7	0.5%	9,182.4	58.2	0.6%	9,154.3	86.3	0.9%
ME 2	43 58 5	2010	Below Normal	July	--	1,448.6	1,408.2	40.4	2.8%	1,400.5	48.1	3.3%	1,377.5	71.1	4.9%
ME 2	43 58 5	2010	Below Normal	August	--	560.2	525.1	35.2	6.3%	518.2	42.0	7.5%	497.4	62.8	11.2%
ME 2	43 58 5	2010	Below Normal	September	Used in Summary Table Analysis	642.0	608.0	34.0	5.3%	601.2	40.8	6.4%	580.9	61.1	9.5%
ME 2	43 58 5	2011	Wet	October	Used in Summary Table Analysis	9,549.9	9,525.8	24.1	0.3%	9,520.9	28.9	0.3%	9,506.4	43.5	0.5%
ME 2	43 58 5	2011	Wet	November	Used in Summary Table Analysis	14,123.8	14,105.3	18.5	0.1%	14,101.9	22.0	0.2%	14,090.3	33.6	0.2%
ME 2	43 58 5	2011	Wet	December	--	33,305.6	33,289.4	16.2	0.0%	33,285.9	19.7	0.1%	33,276.6	28.9	0.1%
ME 2	43 58 5	2011	Wet	January	--	14,082.2	14,068.3	13.9	0.1%	14,066.0	16.2	0.1%	14,057.9	24.3	0.2%
ME 2	43 58 5	2011	Wet	February	--	20,695.6	20,682.9	12.7	0.1%	20,680.6	15.0	0.1%	20,672.5	23.1	0.1%
ME 2	43 58 5	2011	Wet	March	--	51,747.7	51,735.0	12.7	0.0%	51,732.6	15.0	0.0%	51,725.7	22.0	0.0%
ME 2	43 58 5	2011	Wet	April	--	24,710.6	24,699.1	11.6	0.0%	24,696.8	13.9	0.1%	24,689.8	20.8	0.1%
ME 2	43 58 5	2011	Wet	May	--	11,341.2	11,310.6	30.6	0.3%	11,304.5	36.7	0.3%	11,286.3	54.9	0.5%
ME 2	43 58 5	2011	Wet	June	--	7,015.7	6,968.1	47.7	0.7%	6,958.7	57.1	0.8%	6,931.0	84.7	1.2%
ME 2	43 58 5	2011	Wet	July	--	1,825.9	1,780.9	45.0	2.5%	1,772.0	53.9	3.0%	1,746.9	79.1	4.3%
ME 2	43 58 5	2011	Wet	August	--	770.1	735.5	34.6	4.5%	728.6	41.5	5.4%	708.0	62.1	8.1%
ME 2	43 58 5	2011	Wet	September	Used in Summary Table Analysis	426.8	396.6	30.2	7.1%	390.5	36.3	8.5%	372.4	54.4	12.7%
ME 2	43 58 5	2012	Below Normal	October	Used in Summary Table Analysis	4,499.8	4,475.6	24.2	0.5%	4,470.7	29.1	0.6%	4,455.8	44.0	1.0%
ME 2	43 58 5	2012	Below Normal	November	Used in Summary Table Analysis	8,150.3	8,131.6	18.8	0.2%	8,127.8	22.6	0.3%	8,116.3	34.0	0.4%
ME 2	43 58 5	2012	Below Normal	December	--	5,145.5	5,129.7	15.7	0.3%	5,126.5	19.0	0.4%	5,116.8	28.7	0.6%
ME 2	43 58 5	2012	Below Normal	January	--	19,860.0	19,846.1	13.9	0.1%	19,843.8	16.2	0.1%	19,834.5	25.5	0.1%
ME 2	43 58 5	2012	Below Normal	February	--	18,140.0	18,127.3	12.7	0.1%	18,125.0	15.0	0.1%	18,116.9	23.1	0.1%
ME 2	43 58 5	2012	Below Normal	March	--	45,123.8	45,111.1	12.7	0.0%	45,108.8	15.0	0.0%	45,101.9	22.0	0.0%
ME 2	43 58 5	2012	Below Normal	April	--	26,750.0	26,738.4	11.6	0.0%	26,736.1	13.9	0.1%	26,729.2	20.8	0.1%
ME 2	43 58 5	2012	Below Normal	May	--	7,457.3	7,426.6	30.7	0.4%	7,420.6	36.7	0.5%	7,402.7	54.6	0.7%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	43 58 5	2012	Below Normal	June	--	5,475.7	5,427.2	48.5	0.9%	5,417.7	58.0	1.1%	5,389.7	86.0	1.6%
ME 2	43 58 5	2012	Below Normal	July	--	2,199.8	2,155.6	44.2	2.0%	2,146.8	53.0	2.4%	2,120.9	78.8	3.6%
ME 2	43 58 5	2012	Below Normal	August	--	384.1	351.6	32.6	8.5%	345.1	39.0	10.2%	325.7	58.4	15.2%
ME 2	43 58 5	2012	Below Normal	September	Used in Summary Table Analysis	242.8	214.6	28.3	11.6%	208.9	33.9	14.0%	192.1	50.8	20.9%
ME 2	43 58 5	2013	Below Normal	October	Used in Summary Table Analysis	1,885.2	1,860.9	24.3	1.3%	1,856.0	29.2	1.5%	1,841.2	44.0	2.3%
ME 2	43 58 5	2013	Below Normal	November	Used in Summary Table Analysis	14,523.1	14,504.6	18.5	0.1%	14,501.2	22.0	0.2%	14,489.6	33.6	0.2%
ME 2	43 58 5	2013	Below Normal	December	--	59,625.0	59,607.6	17.4	0.0%	59,604.2	20.8	0.0%	59,594.9	30.1	0.1%
ME 2	43 58 5	2013	Below Normal	January	--	22,093.8	22,079.9	13.9	0.1%	22,077.5	16.2	0.1%	22,068.3	25.5	0.1%
ME 2	43 58 5	2013	Below Normal	February	--	8,796.3	8,783.3	13.0	0.1%	8,780.7	15.6	0.2%	8,772.8	23.5	0.3%
ME 2	43 58 5	2013	Below Normal	March	--	10,255.1	10,242.9	12.2	0.1%	10,240.5	14.6	0.1%	10,233.1	22.0	0.2%
ME 2	43 58 5	2013	Below Normal	April	--	8,269.4	8,240.9	28.6	0.3%	8,235.2	34.3	0.4%	8,218.2	51.3	0.6%
ME 2	43 58 5	2013	Below Normal	May	--	4,402.3	4,368.4	33.9	0.8%	4,361.6	40.7	0.9%	4,341.3	61.0	1.4%
ME 2	43 58 5	2013	Below Normal	June	--	2,102.1	2,058.7	43.4	2.1%	2,050.2	51.9	2.5%	2,025.1	77.0	3.7%
ME 2	43 58 5	2013	Below Normal	July	--	715.5	676.9	38.6	5.4%	669.3	46.2	6.5%	647.1	68.4	9.6%
ME 2	43 58 5	2013	Below Normal	August	--	335.2	300.0	35.2	10.5%	293.0	42.2	12.6%	271.4	63.7	19.0%
ME 2	43 58 5	2013	Below Normal	September	Used in Summary Table Analysis	4,743.1	4,706.3	36.8	0.8%	4,698.7	44.3	0.9%	4,676.5	66.6	1.4%
ME 2	43 58 5	2014	Critical	October	Used in Summary Table Analysis	281.3	256.5	24.8	8.8%	251.4	29.8	10.6%	237.2	44.1	15.7%
ME 2	43 58 5	2014	Critical	November	Used in Summary Table Analysis	1,516.0	1,496.9	19.1	1.3%	1,492.9	23.0	1.5%	1,481.3	34.7	2.3%
ME 2	43 58 5	2014	Critical	December	--	1,577.4	1,561.3	16.1	1.0%	1,558.0	19.4	1.2%	1,548.1	29.3	1.9%
ME 2	43 58 5	2014	Critical	January	--	2,798.4	2,784.4	14.0	0.5%	2,781.5	16.9	0.6%	2,772.8	25.6	0.9%
ME 2	43 58 5	2014	Critical	February	--	15,680.6	15,667.8	12.7	0.1%	15,665.5	15.0	0.1%	15,657.4	23.1	0.1%
ME 2	43 58 5	2014	Critical	March	--	31,391.2	31,379.6	11.6	0.0%	31,377.3	13.9	0.0%	31,370.4	20.8	0.1%
ME 2	43 58 5	2014	Critical	April	--	12,958.3	12,927.1	31.3	0.2%	12,921.3	37.0	0.3%	12,901.6	56.7	0.4%
ME 2	43 58 5	2014	Critical	May	--	5,169.0	5,132.3	36.7	0.7%	5,124.9	44.1	0.9%	5,102.9	66.1	1.3%
ME 2	43 58 5	2014	Critical	June	--	1,191.4	1,139.4	52.0	4.4%	1,129.2	62.2	5.2%	1,100.2	91.3	7.7%
ME 2	43 58 5	2014	Critical	July	--	542.7	498.3	44.4	8.2%	489.5	53.3	9.8%	467.9	74.9	13.8%
ME 2	43 58 5	2014	Critical	August	--	343.0	301.8	41.2	12.0%	293.5	49.5	14.4%	271.1	71.9	21.0%
ME 2	43 58 5	2014	Critical	September	Used in Summary Table Analysis	2,553.7	2,512.5	41.2	1.6%	2,504.4	49.3	1.9%	2,480.4	73.3	2.9%
ME 2	43 58 5	2015	Dry	October	Used in Summary Table Analysis	11,281.3	11,250.7	30.6	0.3%	11,244.7	36.6	0.3%	11,226.7	54.5	0.5%
ME 2	43 58 5	2015	Dry	November	Used in Summary Table Analysis	8,955.0	8,933.0	22.0	0.2%	8,928.6	26.4	0.3%	8,912.4	42.6	0.5%
ME 2	43 58 5	2015	Dry	December	--	32,299.8	32,281.3	18.5	0.1%	32,277.8	22.0	0.1%	32,265.0	34.7	0.1%
ME 2	43 58 5	2015	Dry	January	--	14,530.1	14,513.9	16.2	0.1%	14,510.4	19.7	0.1%	14,500.0	30.1	0.2%
ME 2	43 58 5	2015	Dry	February	--	27,110.0	27,096.1	13.9	0.1%	27,092.6	17.4	0.1%	27,084.5	25.5	0.1%
ME 2	43 58 5	2015	Dry	March	--	11,542.0	11,529.6	12.4	0.1%	11,527.1	14.9	0.1%	11,519.4	22.6	0.2%
ME 2	43 58 5	2015	Dry	April	--	8,305.8	8,274.1	31.7	0.4%	8,267.7	38.1	0.5%	8,248.8	56.9	0.7%
ME 2	43 58 5	2015	Dry	May	--	1,508.7	1,471.9	36.8	2.4%	1,464.7	44.0	2.9%	1,444.0	64.7	4.3%
ME 2	43 58 5	2015	Dry	June	--	650.3	601.7	48.7	7.5%	592.2	58.2	8.9%	564.1	86.2	13.3%
ME 2	43 58 5	2015	Dry	July	--	266.0	221.2	44.8	16.8%	212.4	53.6	20.2%	190.7	75.3	28.3%
ME 2	43 58 5	2015	Dry	August	--	162.0	120.3	41.7	25.8%	111.9	50.1	30.9%	89.3	72.8	44.9%
ME 2	43 58 5	2015	Dry	September	Used in Summary Table Analysis	117.5	78.5	39.0	33.2%	70.3	47.1	40.1%	46.9	70.5	60.0%
ME 2	43 58 5	2016	Above Normal	October	Used in Summary Table Analysis	83.2	51.2	32.0	38.5%	45.1	38.0	45.7%	26.7	56.4	67.9%
ME 2	43 58 5	2016	Above Normal	November	Used in Summary Table Analysis	3,793.5	3,770.8	22.7	0.6%	3,766.2	27.3	0.7%	3,749.1	44.4	1.2%
ME 2	43 58 5	2016	Above Normal	December	--	36,245.4	36,225.7	19.7	0.1%	36,222.2	23.1	0.1%	36,209.5	35.9	0.1%
ME 2	43 58 5	2016	Above Normal	January	--	56,924.8	56,907.4	17.4	0.0%	56,903.9	20.8	0.0%	56,893.5	31.3	0.1%
ME 2	43 58 5	2016	Above Normal	February	--	24,204.9	24,191.0	13.9	0.1%	24,188.7	16.2	0.1%	24,179.4	25.5	0.1%
ME 2	43 58 5	2016	Above Normal	March	--	41,596.1	41,582.2	13.9	0.0%	41,579.9	16.2	0.0%	41,571.8	24.3	0.1%
ME 2	43 58 5	2016	Above Normal	April	--	18,487.3	18,474.5	12.7	0.1%	18,472.2	15.0	0.1%	18,465.3	22.0	0.1%
ME 2	43 58 5	2016	Above Normal	May	--	5,198.7	5,182.3	16.4	0.3%	5,178.9	19.8	0.4%	5,169.0	29.7	0.6%
ME 2	43 58 5	2016	Above Normal	June	--	1,503.7	1,467.7	36.0	2.4%	1,461.7	42.0	2.8%	1,444.1	59.6	4.0%
ME 2	43 58 5	2016	Above Normal	July	--	816.6	778.1	38.5	4.7%	770.5	46.1	5.6%	748.1	68.5	8.4%
ME 2	43 58 5	2016	Above Normal	August	--	484.8	448.7	36.0	7.4%	441.5	43.2	8.9%	420.1	64.7	13.3%
ME 2	43 58 5	2016	Above Normal	September	Used in Summary Table Analysis	321.6	288.5	33.1	10.3%	281.7	40.0	12.4%	261.3	60.3	18.8%
ME 2	43 58 5	2017	Wet	October	Used in Summary Table Analysis	18,137.7	18,112.3	25.5	0.1%	18,107.6	30.1	0.2%	18,092.6	45.1	0.2%
ME 2	43 58 5	2017	Wet	November	Used in Summary Table Analysis	18,660.9	18,642.4	18.5	0.1%	18,638.9	22.0	0.1%	18,627.3	33.6	0.2%
ME 2	43 58 5	2017	Wet	December	--	23,858.8	23,842.6	16.2	0.1%	23,839.1	19.7	0.1%	23,829.9	28.9	0.1%
ME 2	43 58 5	2017	Wet	January	--	106,151.6	106,137.7	13.9	0.0%	106,134.3	17.4	0.0%	106,125.0	26.6	0.0%
ME 2	43 58 5	2017	Wet	February	--	81,398.1	81,384.3	13.9	0.0%	81,381.9	16.2	0.0%	81,373.8	24.3	0.0%
ME 2	43 58 5	2017	Wet	March	--	27,136.6	27,125.0	11.6	0.0%	27,122.7	13.9	0.1%	27,114.6	22.0	0.1%
ME 2	43 58 5	2017	Wet	April	--	22,790.5	22,780.1	10.4	0.0%	22,777.8	12.7	0.1%	22,770.8	19.7	0.1%
ME 2	43 58 5	2017	Wet	May	--	6,269.3	6,252.9	16.4	0.3%	6,249.7	19.7	0.3%	6,239.9	29.4	0.5%
ME 2	43 58 5	2017	Wet	June	--	2,099.4	2,060.9	38.5	1.8%	2,053.4	46.1	2.2%	2,031.3	68.2	3.2%
ME 2	43 58 5	2017	Wet	July	--	924.7	886.2	38.5	4.2%	878.7	46.1	5.0%	856.4	68.4	7.4%
ME 2	43 58 5	2017	Wet	August	--	497.0	461.3	35.7	7.2%	454.2	42.8	8.6%	433.0	64.1	12.9%
ME 2	43 58 5	2017	Wet	September	Used in Summary Table Analysis	315.1	282.1	33.0	10.5%	275.4	39.7	12.6%	255.6	59.5	18.9%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	43 58 5	2018	Above Normal	October	Used in Summary Table Analysis	267.9	243.1	24.8	9.2%	238.1	29.8	11.1%	223.1	44.8	16.7%
ME 2	43 58 5	2018	Above Normal	November	Used in Summary Table Analysis	10,619.9	10,601.6	18.3	0.2%	10,597.9	22.0	0.2%	10,586.7	33.2	0.3%
ME 2	43 58 5	2018	Above Normal	December	--	5,431.1	5,416.0	15.2	0.3%	5,412.8	18.3	0.3%	5,403.6	27.5	0.5%
ME 2	43 58 5	2018	Above Normal	January	--	17,483.8	17,469.9	13.9	0.1%	17,467.6	16.2	0.1%	17,459.5	24.3	0.1%
ME 2	43 58 5	2018	Above Normal	February	--	7,584.4	7,572.6	11.8	0.2%	7,570.1	14.2	0.2%	7,562.7	21.6	0.3%
ME 2	43 58 5	2018	Above Normal	March	--	20,509.3	20,498.8	10.4	0.1%	20,496.5	12.7	0.1%	20,489.6	19.7	0.1%
ME 2	43 58 5	2018	Above Normal	April	--	31,976.9	31,966.4	10.4	0.0%	31,964.1	12.7	0.0%	31,958.3	18.5	0.1%
ME 2	43 58 5	2018	Above Normal	May	--	6,981.7	6,952.7	29.1	0.4%	6,947.0	34.7	0.5%	6,929.5	52.2	0.7%
ME 2	43 58 5	2018	Above Normal	June	--	1,907.3	1,870.4	36.9	1.9%	1,863.2	44.1	2.3%	1,842.1	65.2	3.4%
ME 2	43 58 5	2018	Above Normal	July	--	773.8	735.2	38.6	5.0%	727.5	46.3	6.0%	704.6	69.2	8.9%
ME 2	43 58 5	2018	Above Normal	August	--	435.1	400.8	34.2	7.9%	394.0	41.1	9.4%	373.4	61.6	14.2%
ME 2	43 58 5	2018	Above Normal	September	Used in Summary Table Analysis	293.3	260.2	33.1	11.3%	253.6	39.7	13.5%	233.7	59.6	20.3%
ME 2	43 58 5	2019	Below Normal	October	Used in Summary Table Analysis	203.1	178.4	24.6	12.1%	173.4	29.6	14.6%	158.4	44.6	22.0%
ME 2	43 58 5	2019	Below Normal	November	Used in Summary Table Analysis	6,511.2	6,492.7	18.5	0.3%	6,488.9	22.3	0.3%	6,477.5	33.7	0.5%
ME 2	43 58 5	2019	Below Normal	December	--	14,473.4	14,458.3	15.0	0.1%	14,454.9	18.5	0.1%	14,445.6	27.8	0.2%
ME 2	43 58 5	2019	Below Normal	January	--	34,828.7	34,814.8	13.9	0.0%	34,812.5	16.2	0.0%	34,803.2	25.5	0.1%
ME 2	43 58 5	2019	Below Normal	February	--	141,504.6	141,493.1	11.6	0.0%	141,493.1	11.6	0.0%	141,481.5	23.1	0.0%
ME 2	43 58 5	2019	Below Normal	March	--	42,105.3	42,093.8	11.6	0.0%	42,091.4	13.9	0.0%	42,084.5	20.8	0.0%
ME 2	43 58 5	2019	Below Normal	April	--	15,214.1	15,203.7	10.4	0.1%	15,201.4	12.7	0.1%	15,195.6	18.5	0.1%
ME 2	43 58 5	2019	Below Normal	May	--	16,643.5	16,612.3	31.3	0.2%	16,606.5	37.0	0.2%	16,588.0	55.6	0.3%
ME 2	43 58 5	2019	Below Normal	June	--	4,244.3	4,205.4	38.9	0.9%	4,198.1	46.2	1.1%	4,176.9	67.5	1.6%
ME 2	43 58 5	2019	Below Normal	July	--	1,351.2	1,312.5	38.7	2.9%	1,304.9	46.3	3.4%	1,282.2	69.0	5.1%
ME 2	43 58 5	2019	Below Normal	August	--	587.4	552.6	34.8	5.9%	545.6	41.8	7.1%	524.9	62.5	10.6%
ME 2	43 58 5	2019	Below Normal	September	Used in Summary Table Analysis	455.5	422.8	32.7	7.2%	416.2	39.3	8.6%	396.6	58.9	12.9%
ME 2	43 58 5	2020	Dry	October	Used in Summary Table Analysis	351.1	328.0	23.1	6.6%	323.3	27.8	7.9%	309.2	41.9	11.9%
ME 2	43 58 5	2020	Dry	November	Used in Summary Table Analysis	306.9	290.3	16.6	5.4%	286.9	20.0	6.5%	276.7	30.2	9.9%
ME 2	43 58 5	2020	Dry	December	--	13,003.5	12,988.4	15.0	0.1%	12,985.0	18.5	0.1%	12,975.7	27.8	0.2%
ME 2	43 58 5	2020	Dry	January	--	22,107.6	22,094.9	12.7	0.1%	22,091.4	16.2	0.1%	22,083.3	24.3	0.1%
ME 2	43 58 5	2020	Dry	February	--	7,405.9	7,394.1	11.8	0.2%	7,391.7	14.2	0.2%	7,384.5	21.4	0.3%
ME 2	43 58 5	2020	Dry	March	--	7,205.2	7,194.2	11.0	0.2%	7,191.9	13.3	0.2%	7,185.2	20.0	0.3%
ME 2	43 58 5	2020	Dry	April	--	5,439.7	5,409.1	30.6	0.6%	5,403.0	36.7	0.7%	5,385.0	54.7	1.0%
ME 2	43 58 5	2020	Dry	May	--	7,320.9	7,284.6	36.3	0.5%	7,277.3	43.6	0.6%	7,255.8	65.2	0.9%
ME 2	43 58 5	2020	Dry	June	--	2,104.4	2,056.3	48.1	2.3%	2,047.1	57.3	2.7%	2,020.1	84.3	4.0%
ME 2	43 58 5	2020	Dry	July	--	791.3	746.2	45.0	5.7%	737.2	54.0	6.8%	715.3	76.0	9.6%
ME 2	43 58 5	2020	Dry	August	--	393.5	351.1	42.5	10.8%	342.5	51.0	13.0%	319.4	74.2	18.8%
ME 2	43 58 5	2020	Dry	September	Used in Summary Table Analysis	243.2	203.4	39.8	16.4%	195.2	48.0	19.7%	171.5	71.7	29.5%
ME 2	42 59 6	2000	Above Normal	October	Used in Summary Table Analysis	808.1	782.9	25.3	3.1%	777.7	30.4	3.8%	762.4	45.7	5.7%
ME 2	42 59 6	2000	Above Normal	November	Used in Summary Table Analysis	11,921.3	11,901.6	19.7	0.2%	11,898.1	23.1	0.2%	11,886.6	34.7	0.3%
ME 2	42 59 6	2000	Above Normal	December	--	10,706.8	10,690.7	16.1	0.2%	10,687.5	19.3	0.2%	10,677.7	29.2	0.3%
ME 2	42 59 6	2000	Above Normal	January	--	28,241.9	28,228.0	13.9	0.0%	28,224.5	17.4	0.1%	28,215.3	26.6	0.1%
ME 2	42 59 6	2000	Above Normal	February	--	36,822.9	36,810.2	12.7	0.0%	36,807.9	15.0	0.0%	36,799.8	23.1	0.1%
ME 2	42 59 6	2000	Above Normal	March	--	18,250.0	18,238.4	11.6	0.1%	18,236.1	13.9	0.1%	18,229.2	20.8	0.1%
ME 2	42 59 6	2000	Above Normal	April	--	12,265.0	12,254.6	10.4	0.1%	12,252.3	12.7	0.1%	12,245.4	19.7	0.2%
ME 2	42 59 6	2000	Above Normal	May	--	7,054.6	7,023.5	31.1	0.4%	7,017.2	37.4	0.5%	6,998.7	55.9	0.8%
ME 2	42 59 6	2000	Above Normal	June	--	2,597.7	2,549.3	48.4	1.9%	2,539.7	58.0	2.2%	2,511.6	86.1	3.3%
ME 2	42 59 6	2000	Above Normal	July	--	987.2	947.2	39.9	4.0%	939.4	47.8	4.8%	915.8	71.4	7.2%
ME 2	42 59 6	2000	Above Normal	August	--	516.8	480.8	36.0	7.0%	473.6	43.2	8.4%	452.0	64.8	12.5%
ME 2	42 59 6	2000	Above Normal	September	Used in Summary Table Analysis	291.3	260.3	31.0	10.6%	254.1	37.2	12.8%	235.5	55.8	19.1%
ME 2	42 59 6	2001	Dry	October	Used in Summary Table Analysis	3,772.2	3,747.3	24.9	0.7%	3,742.2	30.0	0.8%	3,727.1	45.1	1.2%
ME 2	42 59 6	2001	Dry	November	Used in Summary Table Analysis	6,052.2	6,033.2	19.0	0.3%	6,029.4	22.8	0.4%	6,017.8	34.4	0.6%
ME 2	42 59 6	2001	Dry	December	--	8,766.2	8,750.2	16.0	0.2%	8,746.9	19.3	0.2%	8,737.2	29.1	0.3%
ME 2	42 59 6	2001	Dry	January	--	12,649.3	12,635.4	13.9	0.1%	12,633.1	16.2	0.1%	12,623.8	25.5	0.2%
ME 2	42 59 6	2001	Dry	February	--	17,384.3	17,371.5	12.7	0.1%	17,369.2	15.0	0.1%	17,361.1	23.1	0.1%
ME 2	42 59 6	2001	Dry	March	--	12,253.5	12,241.9	11.6	0.1%	12,239.6	13.9	0.1%	12,231.5	22.0	0.2%
ME 2	42 59 6	2001	Dry	April	--	10,925.8	10,893.6	32.2	0.3%	10,887.2	38.7	0.4%	10,868.2	57.6	0.5%
ME 2	42 59 6	2001	Dry	May	--	2,638.8	2,600.8	38.0	1.4%	2,593.3	45.5	1.7%	2,570.7	68.1	2.6%
ME 2	42 59 6	2001	Dry	June	--	2,620.3	2,566.9	53.4	2.0%	2,556.6	63.7	2.4%	2,526.0	94.2	3.6%
ME 2	42 59 6	2001	Dry	July	--	718.6	672.4	46.2	6.4%	663.2	55.4	7.7%	640.6	78.0	10.9%
ME 2	42 59 6	2001	Dry	August	--	170.0	126.1	43.9	25.8%	117.3	52.6	31.0%	93.4	76.5	45.0%
ME 2	42 59 6	2001	Dry	September	Used in Summary Table Analysis	92.4	54.3	38.1	41.2%	46.7	45.7	49.5%	24.8	67.6	73.1%
ME 2	42 59 6	2002	Below Normal	October	Used in Summary Table Analysis	261.2	229.7	31.5	12.0%	223.3	37.8	14.5%	204.1	57.1	21.8%
ME 2	42 59 6	2002	Below Normal	November	Used in Summary Table Analysis	11,929.4	11,905.1	24.3	0.2%	11,900.5	28.9	0.2%	11,883.1	46.3	0.4%
ME 2	42 59 6	2002	Below Normal	December	--	35,381.9	35,361.1	20.8	0.1%	35,357.6	24.3	0.1%	35,343.8	38.2	0.1%
ME 2	42 59 6	2002	Below Normal	January	--	30,687.5	30,669.0	18.5	0.1%	30,665.5	22.0	0.1%	30,655.1	32.4	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
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Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	42 59 6	2002	Below Normal	February	--	24,563.7	24,548.6	15.0	0.1%	24,545.1	18.5	0.1%	24,534.7	28.9	0.1%
ME 2	42 59 6	2002	Below Normal	March	--	17,692.1	17,677.1	15.0	0.1%	17,674.8	17.4	0.1%	17,665.5	26.6	0.2%
ME 2	42 59 6	2002	Below Normal	April	--	9,893.3	9,861.8	31.5	0.3%	9,855.7	37.6	0.4%	9,836.9	56.4	0.6%
ME 2	42 59 6	2002	Below Normal	May	--	3,310.0	3,273.3	36.7	1.1%	3,265.9	44.1	1.3%	3,244.0	66.0	2.0%
ME 2	42 59 6	2002	Below Normal	June	--	851.4	808.2	43.3	5.1%	799.7	51.8	6.1%	774.7	76.7	9.0%
ME 2	42 59 6	2002	Below Normal	July	--	359.8	318.2	41.6	11.6%	309.9	49.9	13.9%	285.9	73.9	20.5%
ME 2	42 59 6	2002	Below Normal	August	--	223.1	185.1	38.1	17.1%	177.5	45.6	20.5%	154.3	68.9	30.9%
ME 2	42 59 6	2002	Below Normal	September	Used in Summary Table Analysis	160.3	125.6	34.7	21.6%	118.7	41.7	26.0%	96.8	63.5	39.6%
ME 2	42 59 6	2003	Wet	October	Used in Summary Table Analysis	125.5	97.9	27.5	21.9%	92.4	33.1	26.4%	75.6	49.8	39.7%
ME 2	42 59 6	2003	Wet	November	Used in Summary Table Analysis	890.4	869.3	21.0	2.4%	865.0	25.4	2.8%	852.0	38.4	4.3%
ME 2	42 59 6	2003	Wet	December	--	56,106.5	56,088.0	18.5	0.0%	56,084.5	22.0	0.0%	56,074.1	32.4	0.1%
ME 2	42 59 6	2003	Wet	January	--	31,384.3	31,369.2	15.0	0.0%	31,365.7	18.5	0.1%	31,356.5	27.8	0.1%
ME 2	42 59 6	2003	Wet	February	--	20,277.8	20,263.9	13.9	0.1%	20,260.4	17.4	0.1%	20,252.3	25.5	0.1%
ME 2	42 59 6	2003	Wet	March	--	23,916.7	23,903.9	12.7	0.1%	23,900.5	16.2	0.1%	23,893.5	23.1	0.1%
ME 2	42 59 6	2003	Wet	April	--	42,619.2	42,606.5	12.7	0.0%	42,604.2	15.0	0.0%	42,596.1	23.1	0.1%
ME 2	42 59 6	2003	Wet	May	--	12,186.3	12,153.9	32.4	0.3%	12,148.1	38.2	0.3%	12,128.5	57.9	0.5%
ME 2	42 59 6	2003	Wet	June	--	3,160.1	3,119.8	40.3	1.3%	3,112.0	48.0	1.5%	3,089.1	70.9	2.2%
ME 2	42 59 6	2003	Wet	July	--	1,467.5	1,426.4	41.1	2.8%	1,418.3	49.2	3.4%	1,394.1	73.4	5.0%
ME 2	42 59 6	2003	Wet	August	--	754.3	715.1	39.2	5.2%	706.8	47.5	6.3%	680.8	73.6	9.8%
ME 2	42 59 6	2003	Wet	September	Used in Summary Table Analysis	453.0	421.6	31.4	6.9%	415.4	37.6	8.3%	395.4	57.6	12.7%
ME 2	42 59 6	2004	Wet	October	Used in Summary Table Analysis	320.2	294.9	25.3	7.9%	289.8	30.4	9.5%	274.4	45.8	14.3%
ME 2	42 59 6	2004	Wet	November	Used in Summary Table Analysis	5,726.6	5,707.1	19.6	0.3%	5,703.0	23.6	0.4%	5,690.9	35.8	0.6%
ME 2	42 59 6	2004	Wet	December	--	35,957.2	35,941.0	16.2	0.0%	35,937.5	19.7	0.1%	35,927.1	30.1	0.1%
ME 2	42 59 6	2004	Wet	January	--	31,232.6	31,218.8	13.9	0.0%	31,215.3	17.4	0.1%	31,206.0	26.6	0.1%
ME 2	42 59 6	2004	Wet	February	--	38,005.8	37,991.9	13.9	0.0%	37,989.6	16.2	0.0%	37,981.5	24.3	0.1%
ME 2	42 59 6	2004	Wet	March	--	16,485.0	16,472.2	12.7	0.1%	16,469.9	15.0	0.1%	16,463.0	22.0	0.1%
ME 2	42 59 6	2004	Wet	April	--	9,422.8	9,411.5	11.3	0.1%	9,409.1	13.7	0.1%	9,402.2	20.6	0.2%
ME 2	42 59 6	2004	Wet	May	--	3,398.4	3,367.1	31.3	0.9%	3,361.0	37.4	1.1%	3,342.5	55.9	1.6%
ME 2	42 59 6	2004	Wet	June	--	689.9	651.4	38.5	5.6%	643.9	46.0	6.7%	621.7	68.2	9.9%
ME 2	42 59 6	2004	Wet	July	--	352.0	311.8	40.3	11.4%	303.8	48.3	13.7%	279.9	72.2	20.5%
ME 2	42 59 6	2004	Wet	August	--	221.6	185.3	36.3	16.4%	178.0	43.6	19.7%	156.1	65.4	29.5%
ME 2	42 59 6	2004	Wet	September	Used in Summary Table Analysis	159.2	124.6	34.7	21.8%	117.6	41.6	26.1%	96.8	62.5	39.2%
ME 2	42 59 6	2005	Above Normal	October	Used in Summary Table Analysis	7,582.1	7,556.0	26.0	0.3%	7,550.8	31.3	0.4%	7,535.1	47.0	0.6%
ME 2	42 59 6	2005	Above Normal	November	Used in Summary Table Analysis	2,245.5	2,226.0	19.4	0.9%	2,222.1	23.4	1.0%	2,210.3	35.2	1.6%
ME 2	42 59 6	2005	Above Normal	December	--	20,732.6	20,716.4	16.2	0.1%	20,713.0	19.7	0.1%	20,702.5	30.1	0.1%
ME 2	42 59 6	2005	Above Normal	January	--	22,153.9	22,138.9	15.0	0.1%	22,136.6	17.4	0.1%	22,127.3	26.6	0.1%
ME 2	42 59 6	2005	Above Normal	February	--	13,972.2	13,959.5	12.7	0.1%	13,957.2	15.0	0.1%	13,949.1	23.1	0.2%
ME 2	42 59 6	2005	Above Normal	March	--	28,392.4	28,380.8	11.6	0.0%	28,378.5	13.9	0.0%	28,370.4	22.0	0.1%
ME 2	42 59 6	2005	Above Normal	April	--	21,331.0	21,319.4	11.6	0.1%	21,317.1	13.9	0.1%	21,310.2	20.8	0.1%
ME 2	42 59 6	2005	Above Normal	May	--	19,434.0	19,401.6	32.4	0.2%	19,394.7	39.4	0.2%	19,376.2	57.9	0.3%
ME 2	42 59 6	2005	Above Normal	June	--	15,709.5	15,659.7	49.8	0.3%	15,649.3	60.2	0.4%	15,621.5	88.0	0.6%
ME 2	42 59 6	2005	Above Normal	July	--	2,864.6	2,822.3	42.2	1.5%	2,814.6	50.0	1.7%	2,791.0	73.6	2.6%
ME 2	42 59 6	2005	Above Normal	August	--	976.7	940.6	36.2	3.7%	933.5	43.3	4.4%	912.1	64.7	6.6%
ME 2	42 59 6	2005	Above Normal	September	Used in Summary Table Analysis	518.7	487.7	31.0	6.0%	481.6	37.2	7.2%	463.1	55.6	10.7%
ME 2	42 59 6	2006	Wet	October	Used in Summary Table Analysis	627.1	602.5	24.6	3.9%	597.6	29.5	4.7%	582.6	44.5	7.1%
ME 2	42 59 6	2006	Wet	November	Used in Summary Table Analysis	9,173.3	9,154.7	18.5	0.2%	9,150.9	22.3	0.2%	9,139.6	33.7	0.4%
ME 2	42 59 6	2006	Wet	December	--	43,054.4	43,037.0	17.4	0.0%	43,033.6	20.8	0.0%	43,023.1	31.3	0.1%
ME 2	42 59 6	2006	Wet	January	--	45,894.7	45,879.6	15.0	0.0%	45,876.2	18.5	0.0%	45,868.1	26.6	0.1%
ME 2	42 59 6	2006	Wet	February	--	26,446.8	26,434.0	12.7	0.0%	26,431.7	15.0	0.1%	26,423.6	23.1	0.1%
ME 2	42 59 6	2006	Wet	March	--	46,841.4	46,829.9	11.6	0.0%	46,826.4	15.0	0.0%	46,819.4	22.0	0.0%
ME 2	42 59 6	2006	Wet	April	--	30,304.4	30,292.8	11.6	0.0%	30,290.5	13.9	0.0%	30,284.7	19.7	0.1%
ME 2	42 59 6	2006	Wet	May	--	14,136.6	14,119.2	17.4	0.1%	14,115.7	20.8	0.1%	14,106.5	30.1	0.2%
ME 2	42 59 6	2006	Wet	June	--	3,542.2	3,501.6	40.6	1.1%	3,493.6	48.6	1.4%	3,470.5	71.8	2.0%
ME 2	42 59 6	2006	Wet	July	--	1,271.4	1,231.1	40.3	3.2%	1,223.3	48.1	3.8%	1,199.9	71.5	5.6%
ME 2	42 59 6	2006	Wet	August	--	657.8	620.3	37.5	5.7%	612.9	44.9	6.8%	590.7	67.2	10.2%
ME 2	42 59 6	2006	Wet	September	Used in Summary Table Analysis	419.8	388.3	31.5	7.5%	382.1	37.7	9.0%	363.2	56.6	13.5%
ME 2	42 59 6	2007	Above Normal	October	Used in Summary Table Analysis	269.7	244.7	25.0	9.3%	239.6	30.1	11.2%	224.3	45.4	16.8%
ME 2	42 59 6	2007	Above Normal	November	Used in Summary Table Analysis	8,550.3	8,530.8	19.6	0.2%	8,526.9	23.5	0.3%	8,514.7	35.6	0.4%
ME 2	42 59 6	2007	Above Normal	December	--	20,170.1	20,152.8	17.4	0.1%	20,149.3	20.8	0.1%	20,138.9	31.3	0.2%
ME 2	42 59 6	2007	Above Normal	January	--	10,189.4	10,174.8	14.6	0.1%	10,171.9	17.5	0.2%	10,162.7	26.6	0.3%
ME 2	42 59 6	2007	Above Normal	February	--	30,300.9	30,288.2	12.7	0.0%	30,284.7	16.2	0.1%	30,276.6	24.3	0.1%
ME 2	42 59 6	2007	Above Normal	March	--	13,056.7	13,045.1	11.6	0.1%	13,041.7	15.0	0.1%	13,034.7	22.0	0.2%
ME 2	42 59 6	2007	Above Normal	April	--	11,493.8	11,463.4	30.3	0.3%	11,457.4	36.3	0.3%	11,439.5	54.3	0.5%
ME 2	42 59 6	2007	Above Normal	May	--	4,122.8	4,087.3	35.5	0.9%	4,080.2	42.6	1.0%	4,058.8	64.0	1.6%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	42 59 6	2007	Above Normal	June	--	1,488.0	1,442.7	45.3	3.0%	1,433.8	54.2	3.6%	1,407.8	80.2	5.4%
ME 2	42 59 6	2007	Above Normal	July	--	493.7	450.7	43.0	8.7%	442.2	51.5	10.4%	417.2	76.5	15.5%
ME 2	42 59 6	2007	Above Normal	August	--	219.1	182.0	37.1	16.9%	174.6	44.5	20.3%	152.0	67.1	30.6%
ME 2	42 59 6	2007	Above Normal	September	Used in Summary Table Analysis	146.8	112.8	34.0	23.2%	106.0	40.8	27.8%	85.5	61.3	41.8%
ME 2	42 59 6	2008	Dry	October	Used in Summary Table Analysis	3,393.9	3,366.9	27.0	0.8%	3,361.5	32.4	1.0%	3,345.1	48.7	1.4%
ME 2	42 59 6	2008	Dry	November	Used in Summary Table Analysis	3,236.7	3,216.7	20.0	0.6%	3,212.7	24.0	0.7%	3,200.5	36.2	1.1%
ME 2	42 59 6	2008	Dry	December	--	22,812.5	22,795.1	17.4	0.1%	22,790.5	22.0	0.1%	22,780.1	32.4	0.1%
ME 2	42 59 6	2008	Dry	January	--	37,230.3	37,214.1	16.2	0.0%	37,210.6	19.7	0.1%	37,201.4	28.9	0.1%
ME 2	42 59 6	2008	Dry	February	--	26,199.1	26,186.3	12.7	0.0%	26,182.9	16.2	0.1%	26,174.8	24.3	0.1%
ME 2	42 59 6	2008	Dry	March	--	11,762.7	11,751.2	11.6	0.1%	11,748.8	13.9	0.1%	11,740.7	22.0	0.2%
ME 2	42 59 6	2008	Dry	April	--	8,992.8	8,960.6	32.2	0.4%	8,954.2	38.7	0.4%	8,935.1	57.8	0.6%
ME 2	42 59 6	2008	Dry	May	--	1,364.8	1,332.8	32.1	2.3%	1,326.6	38.2	2.8%	1,308.2	56.6	4.1%
ME 2	42 59 6	2008	Dry	June	--	435.0	385.0	50.0	11.5%	375.2	59.8	13.7%	346.4	88.6	20.4%
ME 2	42 59 6	2008	Dry	July	--	253.8	207.1	46.7	18.4%	197.8	55.9	22.0%	175.1	78.6	31.0%
ME 2	42 59 6	2008	Dry	August	--	176.7	132.8	43.9	24.9%	124.0	52.7	29.8%	97.2	79.6	45.0%
ME 2	42 59 6	2008	Dry	September	Used in Summary Table Analysis	138.5	96.2	42.3	30.6%	87.7	50.8	36.7%	63.4	75.1	54.2%
ME 2	42 59 6	2009	Critical	October	Used in Summary Table Analysis	918.4	887.1	31.3	3.4%	880.7	37.7	4.1%	861.2	57.2	6.2%
ME 2	42 59 6	2009	Critical	November	Used in Summary Table Analysis	5,437.4	5,414.2	23.1	0.4%	5,409.5	27.9	0.5%	5,392.5	44.9	0.8%
ME 2	42 59 6	2009	Critical	December	--	12,005.8	11,986.1	19.7	0.2%	11,982.6	23.1	0.2%	11,969.9	35.9	0.3%
ME 2	42 59 6	2009	Critical	January	--	8,753.0	8,735.6	17.4	0.2%	8,732.1	20.9	0.2%	8,721.3	31.7	0.4%
ME 2	42 59 6	2009	Critical	February	--	22,482.6	22,467.6	15.0	0.1%	22,464.1	18.5	0.1%	22,454.9	27.8	0.1%
ME 2	42 59 6	2009	Critical	March	--	21,023.1	21,009.3	13.9	0.1%	21,006.9	16.2	0.1%	20,997.7	25.5	0.1%
ME 2	42 59 6	2009	Critical	April	--	10,087.2	10,053.8	33.3	0.3%	10,047.2	39.9	0.4%	10,027.4	59.7	0.6%
ME 2	42 59 6	2009	Critical	May	--	15,534.7	15,494.2	40.5	0.3%	15,486.1	48.6	0.3%	15,461.8	72.9	0.5%
ME 2	42 59 6	2009	Critical	June	--	3,154.7	3,100.7	54.1	1.7%	3,090.4	64.4	2.0%	3,059.5	95.3	3.0%
ME 2	42 59 6	2009	Critical	July	--	1,258.8	1,211.8	47.0	3.7%	1,202.5	56.3	4.5%	1,179.7	79.1	6.3%
ME 2	42 59 6	2009	Critical	August	--	664.6	620.5	44.1	6.6%	611.7	52.9	8.0%	587.6	77.0	11.6%
ME 2	42 59 6	2009	Critical	September	Used in Summary Table Analysis	386.6	348.3	38.3	9.9%	340.6	46.0	11.9%	318.6	68.0	17.6%
ME 2	42 59 6	2010	Below Normal	October	Used in Summary Table Analysis	6,080.7	6,049.2	31.5	0.5%	6,042.8	37.8	0.6%	6,022.5	58.2	1.0%
ME 2	42 59 6	2010	Below Normal	November	Used in Summary Table Analysis	8,241.0	8,217.2	23.7	0.3%	8,212.4	28.6	0.3%	8,195.0	45.9	0.6%
ME 2	42 59 6	2010	Below Normal	December	--	12,252.3	12,232.6	19.7	0.2%	12,229.2	23.1	0.2%	12,216.4	35.9	0.3%
ME 2	42 59 6	2010	Below Normal	January	--	35,885.4	35,868.1	17.4	0.0%	35,864.6	20.8	0.1%	35,853.0	32.4	0.1%
ME 2	42 59 6	2010	Below Normal	February	--	27,148.1	27,133.1	15.0	0.1%	27,129.6	18.5	0.1%	27,120.4	27.8	0.1%
ME 2	42 59 6	2010	Below Normal	March	--	28,754.6	28,739.6	15.0	0.1%	28,737.3	17.4	0.1%	28,728.0	26.6	0.1%
ME 2	42 59 6	2010	Below Normal	April	--	39,857.6	39,843.8	13.9	0.0%	39,841.4	16.2	0.0%	39,833.3	24.3	0.1%
ME 2	42 59 6	2010	Below Normal	May	--	20,148.1	20,114.6	33.6	0.2%	20,107.6	40.5	0.2%	20,088.0	60.2	0.3%
ME 2	42 59 6	2010	Below Normal	June	--	9,255.6	9,204.9	50.7	0.5%	9,194.9	60.6	0.7%	9,165.5	90.0	1.0%
ME 2	42 59 6	2010	Below Normal	July	--	1,450.7	1,408.3	42.4	2.9%	1,400.1	50.6	3.5%	1,376.0	74.7	5.1%
ME 2	42 59 6	2010	Below Normal	August	--	562.7	525.6	37.1	6.6%	518.3	44.4	7.9%	496.4	66.3	11.8%
ME 2	42 59 6	2010	Below Normal	September	Used in Summary Table Analysis	644.6	608.9	35.7	5.5%	601.7	42.9	6.7%	580.4	64.2	10.0%
ME 2	42 59 6	2011	Wet	October	Used in Summary Table Analysis	9,562.2	9,536.8	25.3	0.3%	9,531.7	30.4	0.3%	9,516.3	45.8	0.5%
ME 2	42 59 6	2011	Wet	November	Used in Summary Table Analysis	14,137.7	14,118.1	19.7	0.1%	14,114.6	23.1	0.2%	14,103.0	34.7	0.2%
ME 2	42 59 6	2011	Wet	December	--	33,356.5	33,340.3	16.2	0.0%	33,336.8	19.7	0.1%	33,326.4	30.1	0.1%
ME 2	42 59 6	2011	Wet	January	--	14,092.6	14,078.7	13.9	0.1%	14,075.2	17.4	0.1%	14,067.1	25.5	0.2%
ME 2	42 59 6	2011	Wet	February	--	20,706.0	20,693.3	12.7	0.1%	20,691.0	15.0	0.1%	20,682.9	23.1	0.1%
ME 2	42 59 6	2011	Wet	March	--	51,782.4	51,769.7	12.7	0.0%	51,767.4	15.0	0.0%	51,759.3	23.1	0.0%
ME 2	42 59 6	2011	Wet	April	--	24,723.4	24,711.8	11.6	0.0%	24,709.5	13.9	0.1%	24,701.4	22.0	0.1%
ME 2	42 59 6	2011	Wet	May	--	11,347.9	11,316.0	31.9	0.3%	11,309.7	38.2	0.3%	11,290.9	57.1	0.5%
ME 2	42 59 6	2011	Wet	June	--	7,022.3	6,972.8	49.5	0.7%	6,963.0	59.4	0.8%	6,934.1	88.2	1.3%
ME 2	42 59 6	2011	Wet	July	--	1,827.8	1,780.8	47.0	2.6%	1,771.5	56.3	3.1%	1,745.3	82.5	4.5%
ME 2	42 59 6	2011	Wet	August	--	772.4	735.9	36.5	4.7%	728.6	43.7	5.7%	706.9	65.5	8.5%
ME 2	42 59 6	2011	Wet	September	Used in Summary Table Analysis	429.1	397.2	31.9	7.4%	390.8	38.3	8.9%	371.7	57.4	13.4%
ME 2	42 59 6	2012	Below Normal	October	Used in Summary Table Analysis	4,506.6	4,481.3	25.3	0.6%	4,476.0	30.6	0.7%	4,460.4	46.2	1.0%
ME 2	42 59 6	2012	Below Normal	November	Used in Summary Table Analysis	8,163.0	8,143.4	19.6	0.2%	8,139.4	23.6	0.3%	8,127.3	35.6	0.4%
ME 2	42 59 6	2012	Below Normal	December	--	5,151.7	5,135.3	16.4	0.3%	5,131.9	19.8	0.4%	5,121.6	30.1	0.6%
ME 2	42 59 6	2012	Below Normal	January	--	19,894.7	19,879.6	15.0	0.1%	19,876.2	18.5	0.1%	19,866.9	27.8	0.1%
ME 2	42 59 6	2012	Below Normal	February	--	18,151.6	18,137.7	13.9	0.1%	18,135.4	16.2	0.1%	18,127.3	24.3	0.1%
ME 2	42 59 6	2012	Below Normal	March	--	45,163.2	45,150.5	12.7	0.0%	45,148.1	15.0	0.0%	45,140.0	23.1	0.1%
ME 2	42 59 6	2012	Below Normal	April	--	26,765.0	26,753.5	11.6	0.0%	26,751.2	13.9	0.1%	26,744.2	20.8	0.1%
ME 2	42 59 6	2012	Below Normal	May	--	7,461.9	7,430.0	31.9	0.4%	7,423.6	38.3	0.5%	7,405.0	56.9	0.8%
ME 2	42 59 6	2012	Below Normal	June	--	5,482.2	5,431.8	50.3	0.9%	5,421.9	60.3	1.1%	5,392.8	89.4	1.6%
ME 2	42 59 6	2012	Below Normal	July	--	2,204.3	2,158.2	46.1	2.1%	2,149.1	55.2	2.5%	2,122.1	82.2	3.7%
ME 2	42 59 6	2012	Below Normal	August	--	386.1	351.7	34.4	8.9%	344.8	41.3	10.7%	324.4	61.7	16.0%
ME 2	42 59 6	2012	Below Normal	September	Used in Summary Table Analysis	245.1	215.2	29.9	12.2%	209.2	35.8	14.6%	191.4	53.7	21.9%

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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	42 59 6	2013	Below Normal	October	Used in Summary Table Analysis	1,890.0	1,864.7	25.3	1.3%	1,859.5	30.6	1.6%	1,844.0	46.1	2.4%
ME 2	42 59 6	2013	Below Normal	November	Used in Summary Table Analysis	14,545.1	14,525.5	19.7	0.1%	14,522.0	23.1	0.2%	14,510.4	34.7	0.2%
ME 2	42 59 6	2013	Below Normal	December	--	59,673.6	59,656.3	17.4	0.0%	59,651.6	22.0	0.0%	59,641.2	32.4	0.1%
ME 2	42 59 6	2013	Below Normal	January	--	22,108.8	22,093.8	15.0	0.1%	22,091.4	17.4	0.1%	22,082.2	26.6	0.1%
ME 2	42 59 6	2013	Below Normal	February	--	8,803.8	8,790.4	13.4	0.2%	8,787.6	16.2	0.2%	8,779.3	24.5	0.3%
ME 2	42 59 6	2013	Below Normal	March	--	10,266.1	10,253.5	12.6	0.1%	10,250.9	15.2	0.1%	10,243.2	22.9	0.2%
ME 2	42 59 6	2013	Below Normal	April	--	8,273.6	8,244.1	29.5	0.4%	8,238.2	35.4	0.4%	8,220.6	53.0	0.6%
ME 2	42 59 6	2013	Below Normal	May	--	4,407.4	4,371.9	35.5	0.8%	4,364.8	42.6	1.0%	4,343.6	63.8	1.4%
ME 2	42 59 6	2013	Below Normal	June	--	2,104.6	2,059.5	45.1	2.1%	2,050.7	53.9	2.6%	2,024.7	80.0	3.8%
ME 2	42 59 6	2013	Below Normal	July	--	717.3	676.8	40.5	5.6%	668.8	48.5	6.8%	645.5	71.8	10.0%
ME 2	42 59 6	2013	Below Normal	August	--	337.3	300.1	37.2	11.0%	292.7	44.6	13.2%	269.9	67.3	20.0%
ME 2	42 59 6	2013	Below Normal	September	Used in Summary Table Analysis	4,750.1	4,711.5	38.7	0.8%	4,703.7	46.4	1.0%	4,680.3	69.8	1.5%
ME 2	42 59 6	2014	Critical	October	Used in Summary Table Analysis	282.7	256.6	26.1	9.2%	251.4	31.3	11.1%	236.4	46.3	16.4%
ME 2	42 59 6	2014	Critical	November	Used in Summary Table Analysis	1,520.3	1,500.2	20.0	1.3%	1,496.2	24.1	1.6%	1,483.9	36.3	2.4%
ME 2	42 59 6	2014	Critical	December	--	1,580.6	1,563.7	16.9	1.1%	1,560.2	20.4	1.3%	1,549.7	30.9	2.0%
ME 2	42 59 6	2014	Critical	January	--	2,802.8	2,788.1	14.7	0.5%	2,785.1	17.7	0.6%	2,775.9	26.9	1.0%
ME 2	42 59 6	2014	Critical	February	--	15,692.1	15,678.2	13.9	0.1%	15,675.9	16.2	0.1%	15,667.8	24.3	0.2%
ME 2	42 59 6	2014	Critical	March	--	31,405.1	31,393.5	11.6	0.0%	31,390.0	15.0	0.0%	31,383.1	22.0	0.1%
ME 2	42 59 6	2014	Critical	April	--	12,963.0	12,931.7	31.3	0.2%	12,924.8	38.2	0.3%	12,905.1	57.9	0.4%
ME 2	42 59 6	2014	Critical	May	--	5,172.8	5,134.3	38.5	0.7%	5,126.6	46.2	0.9%	5,103.5	69.3	1.3%
ME 2	42 59 6	2014	Critical	June	--	1,193.6	1,139.6	54.0	4.5%	1,129.1	64.6	5.4%	1,098.8	94.8	7.9%
ME 2	42 59 6	2014	Critical	July	--	544.6	497.9	46.7	8.6%	488.6	56.0	10.3%	465.7	78.9	14.5%
ME 2	42 59 6	2014	Critical	August	--	345.1	301.5	43.6	12.6%	292.8	52.4	15.2%	268.9	76.2	22.1%
ME 2	42 59 6	2014	Critical	September	Used in Summary Table Analysis	2,557.9	2,514.5	43.4	1.7%	2,505.9	52.0	2.0%	2,480.8	77.1	3.0%
ME 2	42 59 6	2015	Dry	October	Used in Summary Table Analysis	11,293.3	11,261.1	32.2	0.3%	11,254.9	38.4	0.3%	11,235.9	57.4	0.5%
ME 2	42 59 6	2015	Dry	November	Used in Summary Table Analysis	8,967.2	8,944.1	23.1	0.3%	8,939.5	27.8	0.3%	8,922.6	44.7	0.5%
ME 2	42 59 6	2015	Dry	December	--	32,341.4	32,321.8	19.7	0.1%	32,318.3	23.1	0.1%	32,305.6	35.9	0.1%
ME 2	42 59 6	2015	Dry	January	--	14,537.0	14,519.7	17.4	0.1%	14,516.2	20.8	0.1%	14,505.8	31.3	0.2%
ME 2	42 59 6	2015	Dry	February	--	27,127.3	27,112.3	15.0	0.1%	27,110.0	17.4	0.1%	27,100.7	26.6	0.1%
ME 2	42 59 6	2015	Dry	March	--	11,547.1	11,534.1	13.0	0.1%	11,531.5	15.6	0.1%	11,523.4	23.7	0.2%
ME 2	42 59 6	2015	Dry	April	--	8,317.6	8,284.6	33.0	0.4%	8,278.0	39.6	0.5%	8,258.3	59.3	0.7%
ME 2	42 59 6	2015	Dry	May	--	1,510.2	1,471.5	38.7	2.6%	1,464.0	46.2	3.1%	1,442.1	68.1	4.5%
ME 2	42 59 6	2015	Dry	June	--	652.1	601.4	50.7	7.8%	591.5	60.7	9.3%	562.2	89.9	13.8%
ME 2	42 59 6	2015	Dry	July	--	267.9	220.8	47.1	17.6%	211.5	56.4	21.1%	188.5	79.4	29.6%
ME 2	42 59 6	2015	Dry	August	--	164.1	120.0	44.2	26.9%	111.1	53.0	32.3%	87.1	77.1	47.0%
ME 2	42 59 6	2015	Dry	September	Used in Summary Table Analysis	119.4	78.3	41.1	34.4%	69.7	49.7	41.6%	45.1	74.3	62.2%
ME 2	42 59 6	2016	Above Normal	October	Used in Summary Table Analysis	85.1	51.5	33.5	39.4%	45.2	39.9	46.9%	25.9	59.2	69.6%
ME 2	42 59 6	2016	Above Normal	November	Used in Summary Table Analysis	3,804.3	3,780.4	23.8	0.6%	3,775.6	28.7	0.8%	3,757.8	46.5	1.2%
ME 2	42 59 6	2016	Above Normal	December	--	36,294.0	36,274.3	19.7	0.1%	36,269.7	24.3	0.1%	36,256.9	37.0	0.1%
ME 2	42 59 6	2016	Above Normal	January	--	56,976.9	56,958.3	18.5	0.0%	56,954.9	22.0	0.0%	56,943.3	33.6	0.1%
ME 2	42 59 6	2016	Above Normal	February	--	24,214.1	24,199.1	15.0	0.1%	24,196.8	17.4	0.1%	24,187.5	26.6	0.1%
ME 2	42 59 6	2016	Above Normal	March	--	41,621.5	41,606.5	15.0	0.0%	41,603.0	18.5	0.0%	41,594.9	26.6	0.1%
ME 2	42 59 6	2016	Above Normal	April	--	18,495.4	18,482.6	12.7	0.1%	18,480.3	15.0	0.1%	18,472.2	23.1	0.1%
ME 2	42 59 6	2016	Above Normal	May	--	5,202.3	5,185.0	17.4	0.3%	5,181.5	20.8	0.4%	5,171.1	31.3	0.6%
ME 2	42 59 6	2016	Above Normal	June	--	1,505.9	1,468.3	37.6	2.5%	1,461.9	44.0	2.9%	1,443.4	62.5	4.2%
ME 2	42 59 6	2016	Above Normal	July	--	818.9	778.3	40.6	5.0%	770.3	48.6	5.9%	746.6	72.2	8.8%
ME 2	42 59 6	2016	Above Normal	August	--	487.2	449.1	38.1	7.8%	441.5	45.7	9.4%	418.8	68.3	14.0%
ME 2	42 59 6	2016	Above Normal	September	Used in Summary Table Analysis	324.0	289.1	34.9	10.8%	281.9	42.0	13.0%	260.6	63.4	19.6%
ME 2	42 59 6	2017	Wet	October	Used in Summary Table Analysis	18,158.6	18,131.9	26.6	0.1%	18,126.2	32.4	0.2%	18,111.1	47.5	0.3%
ME 2	42 59 6	2017	Wet	November	Used in Summary Table Analysis	18,684.0	18,664.4	19.7	0.1%	18,659.7	24.3	0.1%	18,648.1	35.9	0.2%
ME 2	42 59 6	2017	Wet	December	--	23,892.4	23,875.0	17.4	0.1%	23,871.5	20.8	0.1%	23,861.1	31.3	0.1%
ME 2	42 59 6	2017	Wet	January	--	106,248.8	106,233.8	15.0	0.0%	106,230.3	18.5	0.0%	106,221.1	27.8	0.0%
ME 2	42 59 6	2017	Wet	February	--	81,454.9	81,441.0	13.9	0.0%	81,437.5	17.4	0.0%	81,429.4	25.5	0.0%
ME 2	42 59 6	2017	Wet	March	--	27,155.1	27,142.4	12.7	0.0%	27,140.0	15.0	0.1%	27,131.9	23.1	0.1%
ME 2	42 59 6	2017	Wet	April	--	22,810.2	22,799.8	10.4	0.0%	22,797.5	12.7	0.1%	22,790.5	19.7	0.1%
ME 2	42 59 6	2017	Wet	May	--	6,271.2	6,253.9	17.2	0.3%	6,250.6	20.6	0.3%	6,240.4	30.8	0.5%
ME 2	42 59 6	2017	Wet	June	--	2,103.0	2,063.0	40.0	1.9%	2,055.1	47.9	2.3%	2,032.1	70.9	3.4%
ME 2	42 59 6	2017	Wet	July	--	927.4	886.9	40.6	4.4%	878.9	48.5	5.2%	855.4	72.0	7.8%
ME 2	42 59 6	2017	Wet	August	--	499.7	462.0	37.7	7.5%	454.5	45.2	9.0%	432.1	67.7	13.5%
ME 2	42 59 6	2017	Wet	September	Used in Summary Table Analysis	317.6	282.8	34.7	10.9%	275.9	41.7	13.1%	255.0	62.5	19.7%
ME 2	42 59 6	2018	Above Normal	October	Used in Summary Table Analysis	270.4	244.4	26.0	9.6%	239.1	31.3	11.6%	223.4	47.0	17.4%
ME 2	42 59 6	2018	Above Normal	November	Used in Summary Table Analysis	10,642.9	10,623.7	19.2	0.2%	10,619.8	23.1	0.2%	10,608.0	35.0	0.3%
ME 2	42 59 6	2018	Above Normal	December	--	5,434.5	5,418.6	15.9	0.3%	5,415.4	19.1	0.4%	5,405.6	28.9	0.5%
ME 2	42 59 6	2018	Above Normal	January	--	17,522.0	17,508.1	13.9	0.1%	17,504.6	17.4	0.1%	17,496.5	25.5	0.1%

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Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	42 59 6	2018	Above Normal	February	--	7,587.5	7,575.1	12.4	0.2%	7,572.5	15.0	0.2%	7,564.8	22.7	0.3%
ME 2	42 59 6	2018	Above Normal	March	--	20,534.7	20,523.1	11.6	0.1%	20,520.8	13.9	0.1%	20,513.9	20.8	0.1%
ME 2	42 59 6	2018	Above Normal	April	--	32,005.8	31,995.4	10.4	0.0%	31,993.1	12.7	0.0%	31,987.3	18.5	0.1%
ME 2	42 59 6	2018	Above Normal	May	--	6,983.9	6,953.7	30.2	0.4%	6,947.7	36.2	0.5%	6,929.5	54.4	0.8%
ME 2	42 59 6	2018	Above Normal	June	--	1,909.5	1,870.7	38.8	2.0%	1,863.2	46.3	2.4%	1,841.0	68.5	3.6%
ME 2	42 59 6	2018	Above Normal	July	--	776.2	735.7	40.5	5.2%	727.7	48.5	6.3%	703.6	72.6	9.4%
ME 2	42 59 6	2018	Above Normal	August	--	437.5	401.4	36.1	8.3%	394.2	43.3	9.9%	372.5	65.0	14.9%
ME 2	42 59 6	2018	Above Normal	September	Used in Summary Table Analysis	295.6	260.9	34.7	11.7%	253.9	41.7	14.1%	233.1	62.5	21.2%
ME 2	42 59 6	2019	Below Normal	October	Used in Summary Table Analysis	205.2	179.3	25.9	12.6%	174.1	31.1	15.2%	158.4	46.8	22.8%
ME 2	42 59 6	2019	Below Normal	November	Used in Summary Table Analysis	6,526.9	6,507.4	19.4	0.3%	6,503.4	23.5	0.4%	6,491.4	35.4	0.5%
ME 2	42 59 6	2019	Below Normal	December	--	14,498.8	14,482.6	16.2	0.1%	14,479.2	19.7	0.1%	14,468.8	30.1	0.2%
ME 2	42 59 6	2019	Below Normal	January	--	34,878.5	34,864.6	13.9	0.0%	34,861.1	17.4	0.0%	34,851.9	26.6	0.1%
ME 2	42 59 6	2019	Below Normal	February	--	141,562.5	141,539.4	23.1	0.0%	141,539.4	23.1	0.0%	141,539.4	23.1	0.0%
ME 2	42 59 6	2019	Below Normal	March	--	42,131.9	42,120.4	11.6	0.0%	42,118.1	13.9	0.0%	42,111.1	20.8	0.0%
ME 2	42 59 6	2019	Below Normal	April	--	15,222.2	15,211.8	10.4	0.1%	15,209.5	12.7	0.1%	15,202.5	19.7	0.1%
ME 2	42 59 6	2019	Below Normal	May	--	16,681.7	16,649.3	32.4	0.2%	16,643.5	38.2	0.2%	16,623.8	57.9	0.3%
ME 2	42 59 6	2019	Below Normal	June	--	4,245.6	4,204.7	40.9	1.0%	4,197.1	48.5	1.1%	4,174.7	70.9	1.7%
ME 2	42 59 6	2019	Below Normal	July	--	1,353.8	1,313.3	40.5	3.0%	1,305.2	48.6	3.6%	1,281.5	72.3	5.3%
ME 2	42 59 6	2019	Below Normal	August	--	590.0	553.2	36.8	6.2%	545.9	44.1	7.5%	524.1	65.9	11.2%
ME 2	42 59 6	2019	Below Normal	September	Used in Summary Table Analysis	457.9	423.5	34.4	7.5%	416.6	41.3	9.0%	396.0	61.9	13.5%
ME 2	42 59 6	2020	Dry	October	Used in Summary Table Analysis	353.2	328.9	24.3	6.9%	323.9	29.3	8.3%	309.2	44.1	12.5%
ME 2	42 59 6	2020	Dry	November	Used in Summary Table Analysis	310.0	292.4	17.6	5.7%	288.8	21.2	6.8%	278.0	32.0	10.3%
ME 2	42 59 6	2020	Dry	December	--	13,039.4	13,024.3	15.0	0.1%	13,020.8	18.5	0.1%	13,010.4	28.9	0.2%
ME 2	42 59 6	2020	Dry	January	--	22,136.6	22,122.7	13.9	0.1%	22,120.4	16.2	0.1%	22,111.1	25.5	0.1%
ME 2	42 59 6	2020	Dry	February	--	7,408.3	7,395.9	12.4	0.2%	7,393.4	14.9	0.2%	7,385.8	22.6	0.3%
ME 2	42 59 6	2020	Dry	March	--	7,211.5	7,200.0	11.5	0.2%	7,197.6	13.9	0.2%	7,190.5	20.9	0.3%
ME 2	42 59 6	2020	Dry	April	--	5,446.5	5,414.8	31.7	0.6%	5,408.4	38.1	0.7%	5,389.6	56.9	1.0%
ME 2	42 59 6	2020	Dry	May	--	7,329.5	7,291.3	38.2	0.5%	7,283.7	45.8	0.6%	7,261.0	68.5	0.9%
ME 2	42 59 6	2020	Dry	June	--	2,105.9	2,055.8	50.1	2.4%	2,046.2	59.7	2.8%	2,017.9	88.0	4.2%
ME 2	42 59 6	2020	Dry	July	--	793.4	746.1	47.3	6.0%	736.6	56.8	7.2%	713.4	80.0	10.1%
ME 2	42 59 6	2020	Dry	August	--	395.7	350.8	44.9	11.4%	341.8	53.9	13.6%	317.2	78.5	19.8%
ME 2	42 59 6	2020	Dry	September	Used in Summary Table Analysis	245.4	203.5	41.9	17.1%	194.8	50.6	20.6%	169.8	75.6	30.8%
ME 2	41 58 8	2000	Above Normal	October	Used in Summary Table Analysis	801.8	773.9	27.9	3.5%	768.2	33.6	4.2%	751.2	50.6	6.3%
ME 2	41 58 8	2000	Above Normal	November	Used in Summary Table Analysis	11,943.3	11,921.3	22.0	0.2%	11,917.8	25.5	0.2%	11,903.9	39.4	0.3%
ME 2	41 58 8	2000	Above Normal	December	--	10,715.0	10,696.9	18.2	0.2%	10,693.2	21.9	0.2%	10,682.1	33.0	0.3%
ME 2	41 58 8	2000	Above Normal	January	--	28,284.7	28,268.5	16.2	0.1%	28,265.0	19.7	0.1%	28,254.6	30.1	0.1%
ME 2	41 58 8	2000	Above Normal	February	--	36,849.5	36,834.5	15.0	0.0%	36,831.0	18.5	0.1%	36,822.9	26.6	0.1%
ME 2	41 58 8	2000	Above Normal	March	--	18,253.5	18,240.7	12.7	0.1%	18,237.3	16.2	0.1%	18,229.2	24.3	0.1%
ME 2	41 58 8	2000	Above Normal	April	--	12,266.2	12,253.5	12.7	0.1%	12,250.0	16.2	0.1%	12,241.9	24.3	0.2%
ME 2	41 58 8	2000	Above Normal	May	--	7,053.6	7,019.2	34.4	0.5%	7,012.3	41.3	0.6%	6,991.8	61.8	0.9%
ME 2	41 58 8	2000	Above Normal	June	--	2,592.6	2,540.4	52.2	2.0%	2,530.1	62.5	2.4%	2,499.5	93.1	3.6%
ME 2	41 58 8	2000	Above Normal	July	--	980.6	937.0	43.6	4.4%	928.4	52.2	5.3%	902.6	78.0	8.0%
ME 2	41 58 8	2000	Above Normal	August	--	510.2	470.5	39.7	7.8%	462.6	47.6	9.3%	438.7	71.4	14.0%
ME 2	41 58 8	2000	Above Normal	September	Used in Summary Table Analysis	284.5	250.2	34.3	12.0%	243.4	41.1	14.5%	222.7	61.8	21.7%
ME 2	41 58 8	2001	Dry	October	Used in Summary Table Analysis	3,771.1	3,743.5	27.5	0.7%	3,737.8	33.2	0.9%	3,721.1	50.0	1.3%
ME 2	41 58 8	2001	Dry	November	Used in Summary Table Analysis	6,055.6	6,034.1	21.4	0.4%	6,029.9	25.7	0.4%	6,016.8	38.8	0.6%
ME 2	41 58 8	2001	Dry	December	--	8,769.6	8,751.4	18.2	0.2%	8,747.6	22.0	0.3%	8,736.5	33.1	0.4%
ME 2	41 58 8	2001	Dry	January	--	12,663.2	12,647.0	16.2	0.1%	12,644.7	18.5	0.1%	12,634.3	28.9	0.2%
ME 2	41 58 8	2001	Dry	February	--	17,390.0	17,375.0	15.0	0.1%	17,372.7	17.4	0.1%	17,363.4	26.6	0.2%
ME 2	41 58 8	2001	Dry	March	--	12,252.3	12,238.4	13.9	0.1%	12,236.1	16.2	0.1%	12,228.0	24.3	0.2%
ME 2	41 58 8	2001	Dry	April	--	10,925.5	10,889.8	35.6	0.3%	10,882.8	42.7	0.4%	10,861.7	63.8	0.6%
ME 2	41 58 8	2001	Dry	May	--	2,631.4	2,589.7	41.7	1.6%	2,581.4	50.0	1.9%	2,556.5	74.9	2.8%
ME 2	41 58 8	2001	Dry	June	--	2,617.1	2,560.1	57.1	2.2%	2,549.0	68.2	2.6%	2,516.1	101.0	3.9%
ME 2	41 58 8	2001	Dry	July	--	711.3	661.0	50.3	7.1%	650.9	60.3	8.5%	625.8	85.4	12.0%
ME 2	41 58 8	2001	Dry	August	--	163.0	114.9	48.1	29.5%	105.3	57.7	35.4%	78.8	84.2	51.6%
ME 2	41 58 8	2001	Dry	September	Used in Summary Table Analysis	85.4	43.6	41.8	49.0%	35.2	50.2	58.8%	11.1	74.4	87.0%
ME 2	41 58 8	2002	Below Normal	October	Used in Summary Table Analysis	254.2	219.8	34.4	13.5%	212.9	41.4	16.3%	191.8	62.4	24.6%
ME 2	41 58 8	2002	Below Normal	November	Used in Summary Table Analysis	11,935.2	11,909.7	25.5	0.2%	11,903.9	31.3	0.3%	11,885.4	49.8	0.4%
ME 2	41 58 8	2002	Below Normal	December	--	35,419.0	35,397.0	22.0	0.1%	35,392.4	26.6	0.1%	35,377.3	41.7	0.1%
ME 2	41 58 8	2002	Below Normal	January	--	30,708.3	30,688.7	19.7	0.1%	30,685.2	23.1	0.1%	30,672.5	35.9	0.1%
ME 2	41 58 8	2002	Below Normal	February	--	24,574.1	24,556.7	17.4	0.1%	24,553.2	20.8	0.1%	24,541.7	32.4	0.1%
ME 2	41 58 8	2002	Below Normal	March	--	17,697.9	17,681.7	16.2	0.1%	17,678.2	19.7	0.1%	17,667.8	30.1	0.2%
ME 2	41 58 8	2002	Below Normal	April	--	9,891.1	9,856.3	34.8	0.4%	9,849.4	41.7	0.4%	9,828.6	62.5	0.6%
ME 2	41 58 8	2002	Below Normal	May	--	3,304.4	3,263.8	40.6	1.2%	3,255.7	48.7	1.5%	3,231.4	73.0	2.2%

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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	41 58 8	2002	Below Normal	June	--	844.7	798.0	46.7	5.5%	788.8	55.8	6.6%	761.7	82.9	9.8%
ME 2	41 58 8	2002	Below Normal	July	--	352.9	307.6	45.2	12.8%	298.6	54.3	15.4%	272.4	80.4	22.8%
ME 2	41 58 8	2002	Below Normal	August	--	216.4	174.7	41.7	19.3%	166.4	50.0	23.1%	141.0	75.4	34.9%
ME 2	41 58 8	2002	Below Normal	September	Used in Summary Table Analysis	153.5	115.3	38.1	24.8%	107.7	45.8	29.8%	83.8	69.7	45.4%
ME 2	41 58 8	2003	Wet	October	Used in Summary Table Analysis	118.6	88.2	30.3	25.6%	82.1	36.5	30.7%	63.6	55.0	46.4%
ME 2	41 58 8	2003	Wet	November	Used in Summary Table Analysis	883.7	860.3	23.4	2.6%	855.4	28.2	3.2%	840.9	42.7	4.8%
ME 2	41 58 8	2003	Wet	December	--	56,204.9	56,185.2	19.7	0.0%	56,180.6	24.3	0.0%	56,169.0	35.9	0.1%
ME 2	41 58 8	2003	Wet	January	--	31,400.5	31,383.1	17.4	0.1%	31,378.5	22.0	0.1%	31,368.1	32.4	0.1%
ME 2	41 58 8	2003	Wet	February	--	20,282.4	20,266.2	16.2	0.1%	20,263.9	18.5	0.1%	20,253.5	28.9	0.1%
ME 2	41 58 8	2003	Wet	March	--	23,927.1	23,912.0	15.0	0.1%	23,908.6	18.5	0.1%	23,900.5	26.6	0.1%
ME 2	41 58 8	2003	Wet	April	--	42,656.3	42,641.2	15.0	0.0%	42,638.9	17.4	0.0%	42,629.6	26.6	0.1%
ME 2	41 58 8	2003	Wet	May	--	12,185.2	12,150.5	34.7	0.3%	12,143.5	41.7	0.3%	12,121.5	63.7	0.5%
ME 2	41 58 8	2003	Wet	June	--	3,154.3	3,110.2	44.1	1.4%	3,101.6	52.7	1.7%	3,076.4	77.9	2.5%
ME 2	41 58 8	2003	Wet	July	--	1,461.3	1,416.6	44.8	3.1%	1,407.8	53.6	3.7%	1,381.3	80.1	5.5%
ME 2	41 58 8	2003	Wet	August	--	747.9	705.0	42.9	5.7%	696.0	51.9	6.9%	667.7	80.2	10.7%
ME 2	41 58 8	2003	Wet	September	Used in Summary Table Analysis	446.4	411.7	34.7	7.8%	404.8	41.6	9.3%	382.8	63.6	14.3%
ME 2	41 58 8	2004	Wet	October	Used in Summary Table Analysis	313.5	285.5	28.0	8.9%	279.9	33.6	10.7%	262.7	50.8	16.2%
ME 2	41 58 8	2004	Wet	November	Used in Summary Table Analysis	5,730.7	5,708.8	21.9	0.4%	5,704.3	26.4	0.5%	5,690.7	39.9	0.7%
ME 2	41 58 8	2004	Wet	December	--	36,003.5	35,985.0	18.5	0.1%	35,980.3	23.1	0.1%	35,968.8	34.7	0.1%
ME 2	41 58 8	2004	Wet	January	--	31,263.9	31,246.5	17.4	0.1%	31,243.1	20.8	0.1%	31,233.8	30.1	0.1%
ME 2	41 58 8	2004	Wet	February	--	38,033.6	38,018.5	15.0	0.0%	38,015.0	18.5	0.0%	38,005.8	27.8	0.1%
ME 2	41 58 8	2004	Wet	March	--	16,483.8	16,469.9	13.9	0.1%	16,467.6	16.2	0.1%	16,458.3	25.5	0.2%
ME 2	41 58 8	2004	Wet	April	--	9,420.0	9,406.9	13.1	0.1%	9,404.3	15.7	0.2%	9,396.2	23.8	0.3%
ME 2	41 58 8	2004	Wet	May	--	3,394.7	3,360.2	34.5	1.0%	3,353.5	41.2	1.2%	3,333.0	61.7	1.8%
ME 2	41 58 8	2004	Wet	June	--	683.1	640.7	42.4	6.2%	632.4	50.7	7.4%	607.9	75.2	11.0%
ME 2	41 58 8	2004	Wet	July	--	345.4	301.4	43.9	12.7%	292.7	52.7	15.3%	266.6	78.8	22.8%
ME 2	41 58 8	2004	Wet	August	--	214.7	174.7	40.0	18.6%	166.8	48.0	22.3%	142.6	72.1	33.6%
ME 2	41 58 8	2004	Wet	September	Used in Summary Table Analysis	152.3	114.3	38.0	24.9%	106.7	45.6	30.0%	83.7	68.5	45.0%
ME 2	41 58 8	2005	Above Normal	October	Used in Summary Table Analysis	7,589.7	7,561.0	28.7	0.4%	7,555.2	34.5	0.5%	7,537.6	52.1	0.7%
ME 2	41 58 8	2005	Above Normal	November	Used in Summary Table Analysis	2,239.7	2,218.1	21.6	1.0%	2,213.7	26.0	1.2%	2,200.3	39.4	1.8%
ME 2	41 58 8	2005	Above Normal	December	--	20,770.8	20,752.3	18.5	0.1%	20,747.7	23.1	0.1%	20,736.1	34.7	0.2%
ME 2	41 58 8	2005	Above Normal	January	--	22,181.7	22,165.5	16.2	0.1%	22,162.0	19.7	0.1%	22,151.6	30.1	0.1%
ME 2	41 58 8	2005	Above Normal	February	--	13,971.1	13,957.2	13.9	0.1%	13,953.7	17.4	0.1%	13,944.4	26.6	0.2%
ME 2	41 58 8	2005	Above Normal	March	--	28,412.0	28,398.1	13.9	0.0%	28,395.8	16.2	0.1%	28,386.6	25.5	0.1%
ME 2	41 58 8	2005	Above Normal	April	--	21,341.4	21,328.7	12.7	0.1%	21,326.4	15.0	0.1%	21,318.3	23.1	0.1%
ME 2	41 58 8	2005	Above Normal	May	--	19,447.9	19,412.0	35.9	0.2%	19,405.1	42.8	0.2%	19,384.3	63.7	0.3%
ME 2	41 58 8	2005	Above Normal	June	--	15,728.0	15,673.6	54.4	0.3%	15,663.2	64.8	0.4%	15,631.9	96.1	0.6%
ME 2	41 58 8	2005	Above Normal	July	--	2,857.5	2,811.7	45.8	1.6%	2,803.1	54.4	1.9%	2,777.4	80.1	2.8%
ME 2	41 58 8	2005	Above Normal	August	--	970.5	930.7	39.8	4.1%	922.8	47.7	4.9%	899.2	71.3	7.3%
ME 2	41 58 8	2005	Above Normal	September	Used in Summary Table Analysis	512.3	478.0	34.3	6.7%	471.2	41.1	8.0%	450.6	61.7	12.0%
ME 2	41 58 8	2006	Wet	October	Used in Summary Table Analysis	620.8	593.6	27.2	4.4%	588.1	32.7	5.3%	571.5	49.3	7.9%
ME 2	41 58 8	2006	Wet	November	Used in Summary Table Analysis	9,186.0	9,165.3	20.7	0.2%	9,161.1	24.9	0.3%	9,148.3	37.7	0.4%
ME 2	41 58 8	2006	Wet	December	--	43,114.6	43,096.1	18.5	0.0%	43,091.4	23.1	0.1%	43,079.9	34.7	0.1%
ME 2	41 58 8	2006	Wet	January	--	45,950.2	45,934.0	16.2	0.0%	45,930.6	19.7	0.0%	45,920.1	30.1	0.1%
ME 2	41 58 8	2006	Wet	February	--	26,467.6	26,452.5	15.0	0.1%	26,450.2	17.4	0.1%	26,441.0	26.6	0.1%
ME 2	41 58 8	2006	Wet	March	--	46,883.1	46,869.2	13.9	0.0%	46,866.9	16.2	0.0%	46,857.6	25.5	0.1%
ME 2	41 58 8	2006	Wet	April	--	30,317.1	30,304.4	12.7	0.0%	30,302.1	15.0	0.0%	30,294.0	23.1	0.1%
ME 2	41 58 8	2006	Wet	May	--	14,141.2	14,121.5	19.7	0.1%	14,118.1	23.1	0.2%	14,107.6	33.6	0.2%
ME 2	41 58 8	2006	Wet	June	--	3,536.2	3,492.7	43.5	1.2%	3,484.1	52.1	1.5%	3,459.3	77.0	2.2%
ME 2	41 58 8	2006	Wet	July	--	1,265.5	1,221.6	43.9	3.5%	1,213.1	52.4	4.1%	1,187.6	77.9	6.2%
ME 2	41 58 8	2006	Wet	August	--	651.7	610.6	41.1	6.3%	602.5	49.2	7.6%	578.0	73.7	11.3%
ME 2	41 58 8	2006	Wet	September	Used in Summary Table Analysis	413.4	378.7	34.7	8.4%	371.8	41.7	10.1%	350.9	62.5	15.1%
ME 2	41 58 8	2007	Above Normal	October	Used in Summary Table Analysis	263.0	235.4	27.7	10.5%	229.8	33.3	12.6%	212.8	50.2	19.1%
ME 2	41 58 8	2007	Above Normal	November	Used in Summary Table Analysis	8,560.5	8,538.8	21.8	0.3%	8,534.4	26.2	0.3%	8,520.8	39.7	0.5%
ME 2	41 58 8	2007	Above Normal	December	--	20,199.1	20,180.6	18.5	0.1%	20,175.9	23.1	0.1%	20,164.4	34.7	0.2%
ME 2	41 58 8	2007	Above Normal	January	--	10,191.9	10,175.5	16.4	0.2%	10,172.1	19.8	0.2%	10,161.8	30.1	0.3%
ME 2	41 58 8	2007	Above Normal	February	--	30,335.6	30,319.4	16.2	0.1%	30,317.1	18.5	0.1%	30,306.7	28.9	0.1%
ME 2	41 58 8	2007	Above Normal	March	--	13,057.9	13,042.8	15.0	0.1%	13,040.5	17.4	0.1%	13,031.3	26.6	0.2%
ME 2	41 58 8	2007	Above Normal	April	--	11,492.8	11,459.3	33.6	0.3%	11,452.5	40.3	0.4%	11,432.5	60.3	0.5%
ME 2	41 58 8	2007	Above Normal	May	--	4,118.4	4,079.1	39.4	1.0%	4,071.2	47.2	1.1%	4,047.6	70.8	1.7%
ME 2	41 58 8	2007	Above Normal	June	--	1,482.5	1,433.8	48.7	3.3%	1,424.3	58.2	3.9%	1,396.1	86.5	5.8%
ME 2	41 58 8	2007	Above Normal	July	--	486.8	440.2	46.6	9.6%	430.9	55.9	11.5%	403.8	83.0	17.0%
ME 2	41 58 8	2007	Above Normal	August	--	212.3	171.7	40.7	19.2%	163.6	48.8	23.0%	138.8	73.6	34.6%
ME 2	41 58 8	2007	Above Normal	September	Used in Summary Table Analysis	140.0	102.6	37.4	26.7%	95.1	44.8	32.0%	72.6	67.4	48.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	41 58 8	2008	Dry	October	Used in Summary Table Analysis	3,392.4	3,362.7	29.6	0.9%	3,356.7	35.6	1.1%	3,338.5	53.8	1.6%
ME 2	41 58 8	2008	Dry	November	Used in Summary Table Analysis	3,235.1	3,212.8	22.2	0.7%	3,208.3	26.7	0.8%	3,194.7	40.4	1.2%
ME 2	41 58 8	2008	Dry	December	--	22,853.0	22,833.3	19.7	0.1%	22,829.9	23.1	0.1%	22,818.3	34.7	0.2%
ME 2	41 58 8	2008	Dry	January	--	37,268.5	37,251.2	17.4	0.0%	37,247.7	20.8	0.1%	37,236.1	32.4	0.1%
ME 2	41 58 8	2008	Dry	February	--	26,203.7	26,188.7	15.0	0.1%	26,185.2	18.5	0.1%	26,175.9	27.8	0.1%
ME 2	41 58 8	2008	Dry	March	--	11,761.6	11,747.7	13.9	0.1%	11,744.2	17.4	0.1%	11,736.1	25.5	0.2%
ME 2	41 58 8	2008	Dry	April	--	8,989.4	8,953.8	35.5	0.4%	8,946.9	42.5	0.5%	8,925.8	63.5	0.7%
ME 2	41 58 8	2008	Dry	May	--	1,357.1	1,321.4	35.6	2.6%	1,314.6	42.5	3.1%	1,294.0	63.1	4.6%
ME 2	41 58 8	2008	Dry	June	--	428.2	374.8	53.4	12.5%	364.4	63.9	14.9%	333.5	94.7	22.1%
ME 2	41 58 8	2008	Dry	July	--	246.8	196.4	50.3	20.4%	186.5	60.3	24.4%	161.6	85.2	34.5%
ME 2	41 58 8	2008	Dry	August	--	169.8	122.1	47.7	28.1%	112.5	57.2	33.7%	83.4	86.3	50.9%
ME 2	41 58 8	2008	Dry	September	Used in Summary Table Analysis	131.5	85.8	45.7	34.8%	76.6	54.8	41.7%	50.3	81.2	61.7%
ME 2	41 58 8	2009	Critical	October	Used in Summary Table Analysis	911.7	877.6	34.1	3.7%	870.8	41.0	4.5%	849.6	62.1	6.8%
ME 2	41 58 8	2009	Critical	November	Used in Summary Table Analysis	5,441.3	5,415.7	25.6	0.5%	5,410.5	30.8	0.6%	5,392.1	49.2	0.9%
ME 2	41 58 8	2009	Critical	December	--	12,023.1	12,001.2	22.0	0.2%	11,997.7	25.5	0.2%	11,983.8	39.4	0.3%
ME 2	41 58 8	2009	Critical	January	--	8,752.2	8,732.8	19.4	0.2%	8,728.8	23.4	0.3%	8,716.8	35.4	0.4%
ME 2	41 58 8	2009	Critical	February	--	22,495.4	22,478.0	17.4	0.1%	22,474.5	20.8	0.1%	22,464.1	31.3	0.1%
ME 2	41 58 8	2009	Critical	March	--	21,031.3	21,015.0	16.2	0.1%	21,012.7	18.5	0.1%	21,002.3	28.9	0.1%
ME 2	41 58 8	2009	Critical	April	--	10,081.7	10,045.1	36.6	0.4%	10,037.8	43.9	0.4%	10,016.1	65.6	0.7%
ME 2	41 58 8	2009	Critical	May	--	15,534.7	15,490.7	44.0	0.3%	15,482.6	52.1	0.3%	15,456.0	78.7	0.5%
ME 2	41 58 8	2009	Critical	June	--	3,148.6	3,091.2	57.4	1.8%	3,080.1	68.5	2.2%	3,047.2	101.4	3.2%
ME 2	41 58 8	2009	Critical	July	--	1,252.3	1,201.6	50.7	4.0%	1,191.7	60.6	4.8%	1,166.7	85.6	6.8%
ME 2	41 58 8	2009	Critical	August	--	658.0	610.1	47.9	7.3%	600.5	57.4	8.7%	574.1	83.8	12.7%
ME 2	41 58 8	2009	Critical	September	Used in Summary Table Analysis	379.8	338.1	41.7	11.0%	329.7	50.0	13.2%	305.6	74.1	19.5%
ME 2	41 58 8	2010	Below Normal	October	Used in Summary Table Analysis	6,074.0	6,039.7	34.3	0.6%	6,032.8	41.2	0.7%	6,010.6	63.3	1.0%
ME 2	41 58 8	2010	Below Normal	November	Used in Summary Table Analysis	8,241.0	8,214.8	26.2	0.3%	8,209.6	31.4	0.4%	8,190.6	50.3	0.6%
ME 2	41 58 8	2010	Below Normal	December	--	12,261.6	12,239.6	22.0	0.2%	12,235.0	26.6	0.2%	12,221.1	40.5	0.3%
ME 2	41 58 8	2010	Below Normal	January	--	35,932.9	35,913.2	19.7	0.1%	35,909.7	23.1	0.1%	35,897.0	35.9	0.1%
ME 2	41 58 8	2010	Below Normal	February	--	27,156.3	27,138.9	17.4	0.1%	27,135.4	20.8	0.1%	27,125.0	31.3	0.1%
ME 2	41 58 8	2010	Below Normal	March	--	28,760.4	28,744.2	16.2	0.1%	28,740.7	19.7	0.1%	28,730.3	30.1	0.1%
ME 2	41 58 8	2010	Below Normal	April	--	39,875.0	39,860.0	15.0	0.0%	39,856.5	18.5	0.0%	39,847.2	27.8	0.1%
ME 2	41 58 8	2010	Below Normal	May	--	20,160.9	20,123.8	37.0	0.2%	20,116.9	44.0	0.2%	20,094.9	66.0	0.3%
ME 2	41 58 8	2010	Below Normal	June	--	9,264.2	9,209.6	54.6	0.6%	9,198.8	65.4	0.7%	9,167.1	97.1	1.0%
ME 2	41 58 8	2010	Below Normal	July	--	1,444.6	1,398.4	46.2	3.2%	1,389.6	55.0	3.8%	1,363.2	81.4	5.6%
ME 2	41 58 8	2010	Below Normal	August	--	556.5	515.7	40.8	7.3%	507.7	48.9	8.8%	483.5	73.0	13.1%
ME 2	41 58 8	2010	Below Normal	September	Used in Summary Table Analysis	638.3	599.2	39.1	6.1%	591.4	46.9	7.3%	568.0	70.3	11.0%
ME 2	41 58 8	2011	Wet	October	Used in Summary Table Analysis	9,565.9	9,537.7	28.1	0.3%	9,532.2	33.7	0.4%	9,515.0	50.8	0.5%
ME 2	41 58 8	2011	Wet	November	Used in Summary Table Analysis	14,143.5	14,121.5	22.0	0.2%	14,116.9	26.6	0.2%	14,104.2	39.4	0.3%
ME 2	41 58 8	2011	Wet	December	--	33,405.1	33,386.6	18.5	0.1%	33,381.9	23.1	0.1%	33,370.4	34.7	0.1%
ME 2	41 58 8	2011	Wet	January	--	14,096.1	14,079.9	16.2	0.1%	14,077.5	18.5	0.1%	14,067.1	28.9	0.2%
ME 2	41 58 8	2011	Wet	February	--	20,709.5	20,694.4	15.0	0.1%	20,691.0	18.5	0.1%	20,681.7	27.8	0.1%
ME 2	41 58 8	2011	Wet	March	--	51,810.2	51,796.3	13.9	0.0%	51,792.8	17.4	0.0%	51,784.7	25.5	0.0%
ME 2	41 58 8	2011	Wet	April	--	24,729.2	24,715.3	13.9	0.1%	24,713.0	16.2	0.1%	24,704.9	24.3	0.1%
ME 2	41 58 8	2011	Wet	May	--	11,347.0	11,311.7	35.3	0.3%	11,304.7	42.2	0.4%	11,283.9	63.1	0.6%
ME 2	41 58 8	2011	Wet	June	--	7,020.9	6,967.6	53.4	0.8%	6,956.9	64.0	0.9%	6,925.8	95.1	1.4%
ME 2	41 58 8	2011	Wet	July	--	1,820.8	1,770.1	50.7	2.8%	1,760.2	60.6	3.3%	1,731.7	89.1	4.9%
ME 2	41 58 8	2011	Wet	August	--	765.8	725.6	40.3	5.3%	717.6	48.3	6.3%	693.5	72.3	9.4%
ME 2	41 58 8	2011	Wet	September	Used in Summary Table Analysis	422.4	387.0	35.4	8.4%	379.9	42.5	10.1%	358.6	63.8	15.1%
ME 2	41 58 8	2012	Below Normal	October	Used in Summary Table Analysis	4,504.6	4,476.4	28.2	0.6%	4,470.6	34.0	0.8%	4,453.1	51.5	1.1%
ME 2	41 58 8	2012	Below Normal	November	Used in Summary Table Analysis	8,167.6	8,145.6	22.0	0.3%	8,141.1	26.5	0.3%	8,127.4	40.2	0.5%
ME 2	41 58 8	2012	Below Normal	December	--	5,149.5	5,130.9	18.6	0.4%	5,127.1	22.5	0.4%	5,115.5	34.0	0.7%
ME 2	41 58 8	2012	Below Normal	January	--	19,922.5	19,906.3	16.2	0.1%	19,902.8	19.7	0.1%	19,892.4	30.1	0.2%
ME 2	41 58 8	2012	Below Normal	February	--	18,153.9	18,138.9	15.0	0.1%	18,135.4	18.5	0.1%	18,126.2	27.8	0.2%
ME 2	41 58 8	2012	Below Normal	March	--	45,197.9	45,182.9	15.0	0.0%	45,180.6	17.4	0.0%	45,171.3	26.6	0.1%
ME 2	41 58 8	2012	Below Normal	April	--	26,774.3	26,760.4	13.9	0.1%	26,758.1	16.2	0.1%	26,748.8	25.5	0.1%
ME 2	41 58 8	2012	Below Normal	May	--	7,458.9	7,423.6	35.3	0.5%	7,416.7	42.2	0.6%	7,396.1	62.8	0.8%
ME 2	41 58 8	2012	Below Normal	June	--	5,480.7	5,426.3	54.4	1.0%	5,415.6	65.0	1.2%	5,384.1	96.5	1.8%
ME 2	41 58 8	2012	Below Normal	July	--	2,200.3	2,150.7	49.7	2.3%	2,141.0	59.4	2.7%	2,111.8	88.5	4.0%
ME 2	41 58 8	2012	Below Normal	August	--	379.2	341.6	37.7	9.9%	334.1	45.2	11.9%	311.6	67.7	17.8%
ME 2	41 58 8	2012	Below Normal	September	Used in Summary Table Analysis	238.4	205.6	32.8	13.8%	199.1	39.3	16.5%	179.5	58.9	24.7%
ME 2	41 58 8	2013	Below Normal	October	Used in Summary Table Analysis	1,886.1	1,858.2	27.9	1.5%	1,852.5	33.6	1.8%	1,835.5	50.6	2.7%
ME 2	41 58 8	2013	Below Normal	November	Used in Summary Table Analysis	14,560.2	14,538.2	22.0	0.2%	14,534.7	25.5	0.2%	14,520.8	39.4	0.3%
ME 2	41 58 8	2013	Below Normal	December	--	59,716.4	59,696.8	19.7	0.0%	59,692.1	24.3	0.0%	59,680.6	35.9	0.1%
ME 2	41 58 8	2013	Below Normal	January	--	22,118.1	22,101.9	16.2	0.1%	22,098.4	19.7	0.1%	22,088.0	30.1	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	41 58 8	2013	Below Normal	February	--	8,803.9	8,788.7	15.3	0.2%	8,785.5	18.4	0.2%	8,776.2	27.8	0.3%
ME 2	41 58 8	2013	Below Normal	March	--	10,269.3	10,254.7	14.6	0.1%	10,251.9	17.5	0.2%	10,242.9	26.4	0.3%
ME 2	41 58 8	2013	Below Normal	April	--	8,269.2	8,236.3	32.9	0.4%	8,229.9	39.4	0.5%	8,210.2	59.0	0.7%
ME 2	41 58 8	2013	Below Normal	May	--	4,404.1	4,364.8	39.2	0.9%	4,356.9	47.1	1.1%	4,333.4	70.6	1.6%
ME 2	41 58 8	2013	Below Normal	June	--	2,098.3	2,049.9	48.4	2.3%	2,040.4	57.9	2.8%	2,012.2	86.1	4.1%
ME 2	41 58 8	2013	Below Normal	July	--	710.2	666.1	44.1	6.2%	657.3	52.8	7.4%	631.9	78.3	11.0%
ME 2	41 58 8	2013	Below Normal	August	--	330.4	289.7	40.7	12.3%	281.5	48.9	14.8%	256.6	73.8	22.3%
ME 2	41 58 8	2013	Below Normal	September	Used in Summary Table Analysis	4,748.3	4,706.3	42.0	0.9%	4,697.7	50.6	1.1%	4,672.3	75.9	1.6%
ME 2	41 58 8	2014	Critical	October	Used in Summary Table Analysis	275.2	246.3	28.9	10.5%	240.5	34.7	12.6%	223.8	51.4	18.7%
ME 2	41 58 8	2014	Critical	November	Used in Summary Table Analysis	1,515.7	1,493.3	22.5	1.5%	1,488.7	27.1	1.8%	1,475.0	40.7	2.7%
ME 2	41 58 8	2014	Critical	December	--	1,574.5	1,555.4	19.1	1.2%	1,551.5	23.0	1.5%	1,539.7	34.8	2.2%
ME 2	41 58 8	2014	Critical	January	--	2,798.3	2,781.5	16.8	0.6%	2,778.0	20.3	0.7%	2,767.6	30.7	1.1%
ME 2	41 58 8	2014	Critical	February	--	15,693.3	15,678.2	15.0	0.1%	15,674.8	18.5	0.1%	15,665.5	27.8	0.2%
ME 2	41 58 8	2014	Critical	March	--	31,409.7	31,395.8	13.9	0.0%	31,392.4	17.4	0.1%	31,384.3	25.5	0.1%
ME 2	41 58 8	2014	Critical	April	--	12,960.6	12,924.8	35.9	0.3%	12,917.8	42.8	0.3%	12,897.0	63.7	0.5%
ME 2	41 58 8	2014	Critical	May	--	5,168.2	5,125.8	42.4	0.8%	5,117.4	50.8	1.0%	5,091.9	76.3	1.5%
ME 2	41 58 8	2014	Critical	June	--	1,187.2	1,129.2	57.9	4.9%	1,117.9	69.2	5.8%	1,085.3	101.8	8.6%
ME 2	41 58 8	2014	Critical	July	--	537.5	486.7	50.8	9.4%	476.6	60.9	11.3%	451.2	86.3	16.1%
ME 2	41 58 8	2014	Critical	August	--	338.2	290.5	47.7	14.1%	281.0	57.2	16.9%	254.6	83.6	24.7%
ME 2	41 58 8	2014	Critical	September	Used in Summary Table Analysis	2,552.8	2,505.8	47.0	1.8%	2,496.6	56.1	2.2%	2,469.2	83.6	3.3%
ME 2	41 58 8	2015	Dry	October	Used in Summary Table Analysis	11,296.5	11,261.6	35.0	0.3%	11,254.7	41.8	0.4%	11,234.0	62.5	0.6%
ME 2	41 58 8	2015	Dry	November	Used in Summary Table Analysis	8,971.6	8,946.2	25.5	0.3%	8,941.1	30.6	0.3%	8,922.7	49.0	0.5%
ME 2	41 58 8	2015	Dry	December	--	32,379.6	32,357.6	22.0	0.1%	32,353.0	26.6	0.1%	32,339.1	40.5	0.1%
ME 2	41 58 8	2015	Dry	January	--	14,537.0	14,518.5	18.5	0.1%	14,513.9	23.1	0.2%	14,502.3	34.7	0.2%
ME 2	41 58 8	2015	Dry	February	--	27,137.7	27,120.4	17.4	0.1%	27,116.9	20.8	0.1%	27,106.5	31.3	0.1%
ME 2	41 58 8	2015	Dry	March	--	11,544.2	11,529.4	14.8	0.1%	11,526.4	17.8	0.2%	11,517.2	27.0	0.2%
ME 2	41 58 8	2015	Dry	April	--	8,322.0	8,285.8	36.2	0.4%	8,278.5	43.5	0.5%	8,256.9	65.0	0.8%
ME 2	41 58 8	2015	Dry	May	--	1,503.0	1,460.6	42.4	2.8%	1,452.3	50.7	3.4%	1,428.4	74.7	5.0%
ME 2	41 58 8	2015	Dry	June	--	645.0	590.8	54.2	8.4%	580.2	64.8	10.0%	548.9	96.1	14.9%
ME 2	41 58 8	2015	Dry	July	--	260.7	210.0	50.7	19.5%	199.9	60.8	23.3%	174.7	86.0	33.0%
ME 2	41 58 8	2015	Dry	August	--	157.1	109.2	48.0	30.5%	99.6	57.6	36.6%	73.2	83.9	53.4%
ME 2	41 58 8	2015	Dry	September	Used in Summary Table Analysis	112.2	67.7	44.5	39.7%	58.5	53.7	47.9%	31.8	80.4	71.7%
ME 2	41 58 8	2016	Above Normal	October	Used in Summary Table Analysis	77.8	41.6	36.3	46.6%	34.7	43.2	55.5%	13.7	64.1	82.4%
ME 2	41 58 8	2016	Above Normal	November	Used in Summary Table Analysis	3,806.8	3,780.6	26.3	0.7%	3,775.2	31.6	0.8%	3,755.8	51.0	1.3%
ME 2	41 58 8	2016	Above Normal	December	--	36,339.1	36,317.1	22.0	0.1%	36,312.5	26.6	0.1%	36,297.5	41.7	0.1%
ME 2	41 58 8	2016	Above Normal	January	--	57,025.5	57,004.6	20.8	0.0%	57,001.2	24.3	0.0%	56,987.3	38.2	0.1%
ME 2	41 58 8	2016	Above Normal	February	--	24,217.6	24,200.2	17.4	0.1%	24,196.8	20.8	0.1%	24,186.3	31.3	0.1%
ME 2	41 58 8	2016	Above Normal	March	--	41,638.9	41,622.7	16.2	0.0%	41,619.2	19.7	0.0%	41,608.8	30.1	0.1%
ME 2	41 58 8	2016	Above Normal	April	--	18,495.4	18,481.5	13.9	0.1%	18,478.0	17.4	0.1%	18,469.9	25.5	0.1%
ME 2	41 58 8	2016	Above Normal	May	--	5,197.8	5,178.4	19.4	0.4%	5,174.4	23.4	0.4%	5,162.7	35.1	0.7%
ME 2	41 58 8	2016	Above Normal	June	--	1,499.4	1,458.8	40.6	2.7%	1,451.9	47.6	3.2%	1,431.5	67.9	4.5%
ME 2	41 58 8	2016	Above Normal	July	--	812.3	768.2	44.1	5.4%	759.5	52.8	6.5%	733.7	78.6	9.7%
ME 2	41 58 8	2016	Above Normal	August	--	480.5	438.9	41.7	8.7%	430.5	50.0	10.4%	405.7	74.8	15.6%
ME 2	41 58 8	2016	Above Normal	September	Used in Summary Table Analysis	317.2	279.0	38.2	12.0%	271.2	46.0	14.5%	247.8	69.4	21.9%
ME 2	41 58 8	2017	Wet	October	Used in Summary Table Analysis	18,171.3	18,141.2	30.1	0.2%	18,135.4	35.9	0.2%	18,118.1	53.2	0.3%
ME 2	41 58 8	2017	Wet	November	Used in Summary Table Analysis	18,699.1	18,677.1	22.0	0.1%	18,672.5	26.6	0.1%	18,659.7	39.4	0.2%
ME 2	41 58 8	2017	Wet	December	--	23,921.3	23,901.6	19.7	0.1%	23,898.1	23.1	0.1%	23,886.6	34.7	0.1%
ME 2	41 58 8	2017	Wet	January	--	106,346.1	106,329.9	16.2	0.0%	106,326.4	19.7	0.0%	106,314.8	31.3	0.0%
ME 2	41 58 8	2017	Wet	February	--	81,511.6	81,496.5	15.0	0.0%	81,493.1	18.5	0.0%	81,483.8	27.8	0.0%
ME 2	41 58 8	2017	Wet	March	--	27,169.0	27,155.1	13.9	0.1%	27,151.6	17.4	0.1%	27,143.5	25.5	0.1%
ME 2	41 58 8	2017	Wet	April	--	22,824.1	22,811.3	12.7	0.1%	22,809.0	15.0	0.1%	22,800.9	23.1	0.1%
ME 2	41 58 8	2017	Wet	May	--	6,264.9	6,245.6	19.3	0.3%	6,241.8	23.1	0.4%	6,230.2	34.7	0.6%
ME 2	41 58 8	2017	Wet	June	--	2,098.3	2,055.3	42.9	2.0%	2,046.9	51.4	2.4%	2,022.0	76.3	3.6%
ME 2	41 58 8	2017	Wet	July	--	921.3	877.2	44.2	4.8%	868.5	52.8	5.7%	842.8	78.5	8.5%
ME 2	41 58 8	2017	Wet	August	--	493.5	452.1	41.4	8.4%	443.9	49.6	10.1%	419.2	74.3	15.1%
ME 2	41 58 8	2017	Wet	September	Used in Summary Table Analysis	311.0	273.0	38.0	12.2%	265.4	45.6	14.7%	242.5	68.4	22.0%
ME 2	41 58 8	2018	Above Normal	October	Used in Summary Table Analysis	263.7	235.0	28.7	10.9%	229.2	34.5	13.1%	211.8	51.9	19.7%
ME 2	41 58 8	2018	Above Normal	November	Used in Summary Table Analysis	10,658.9	10,637.3	21.6	0.2%	10,632.9	26.0	0.2%	10,619.7	39.2	0.4%
ME 2	41 58 8	2018	Above Normal	December	--	5,428.9	5,411.0	17.9	0.3%	5,407.3	21.6	0.4%	5,396.2	32.8	0.6%
ME 2	41 58 8	2018	Above Normal	January	--	17,556.7	17,540.5	16.2	0.1%	17,537.0	19.7	0.1%	17,526.6	30.1	0.2%
ME 2	41 58 8	2018	Above Normal	February	--	7,581.9	7,567.8	14.1	0.2%	7,564.8	17.1	0.2%	7,555.9	26.0	0.3%
ME 2	41 58 8	2018	Above Normal	March	--	20,553.2	20,540.5	12.7	0.1%	20,537.0	16.2	0.1%	20,528.9	24.3	0.1%
ME 2	41 58 8	2018	Above Normal	April	--	32,030.1	32,017.4	12.7	0.0%	32,015.0	15.0	0.0%	32,006.9	23.1	0.1%
ME 2	41 58 8	2018	Above Normal	May	--	6,978.1	6,944.7	33.4	0.5%	6,938.2	39.9	0.6%	6,918.1	60.1	0.9%

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Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 2	41 58 8	2018	Above Normal	June	--	1,903.2	1,860.6	42.6	2.2%	1,852.4	50.8	2.7%	1,828.0	75.2	4.0%
ME 2	41 58 8	2018	Above Normal	July	--	769.8	725.7	44.1	5.7%	716.9	52.9	6.9%	690.7	79.1	10.3%
ME 2	41 58 8	2018	Above Normal	August	--	430.9	391.2	39.7	9.2%	383.3	47.7	11.1%	359.4	71.6	16.6%
ME 2	41 58 8	2018	Above Normal	September	Used in Summary Table Analysis	288.9	250.9	38.0	13.2%	243.3	45.6	15.8%	220.4	68.5	23.7%
ME 2	41 58 8	2019	Below Normal	October	Used in Summary Table Analysis	198.2	169.7	28.5	14.4%	163.9	34.3	17.3%	146.5	51.7	26.1%
ME 2	41 58 8	2019	Below Normal	November	Used in Summary Table Analysis	6,534.6	6,512.8	21.8	0.3%	6,508.3	26.3	0.4%	6,494.9	39.7	0.6%
ME 2	41 58 8	2019	Below Normal	December	--	14,517.4	14,500.0	17.4	0.1%	14,495.4	22.0	0.2%	14,485.0	32.4	0.2%
ME 2	41 58 8	2019	Below Normal	January	--	34,925.9	34,909.7	16.2	0.0%	34,906.3	19.7	0.1%	34,895.8	30.1	0.1%
ME 2	41 58 8	2019	Below Normal	February	--	141,608.8	141,597.2	11.6	0.0%	141,585.6	23.1	0.0%	141,574.1	34.7	0.0%
ME 2	41 58 8	2019	Below Normal	March	--	42,157.4	42,144.7	12.7	0.0%	42,141.2	16.2	0.0%	42,133.1	24.3	0.1%
ME 2	41 58 8	2019	Below Normal	April	--	15,224.5	15,211.8	12.7	0.1%	15,209.5	15.0	0.1%	15,201.4	23.1	0.2%
ME 2	41 58 8	2019	Below Normal	May	--	16,716.4	16,681.7	34.7	0.2%	16,674.8	41.7	0.2%	16,653.9	62.5	0.4%
ME 2	41 58 8	2019	Below Normal	June	--	4,238.4	4,193.8	44.7	1.1%	4,185.3	53.1	1.3%	4,160.5	77.9	1.8%
ME 2	41 58 8	2019	Below Normal	July	--	1,347.9	1,303.7	44.2	3.3%	1,294.9	53.0	3.9%	1,269.0	78.9	5.9%
ME 2	41 58 8	2019	Below Normal	August	--	583.7	543.2	40.5	6.9%	535.1	48.6	8.3%	511.0	72.7	12.5%
ME 2	41 58 8	2019	Below Normal	September	Used in Summary Table Analysis	451.3	413.5	37.7	8.4%	405.9	45.3	10.0%	383.3	68.0	15.1%
ME 2	41 58 8	2020	Dry	October	Used in Summary Table Analysis	346.2	319.2	27.0	7.8%	313.8	32.5	9.4%	297.3	48.9	14.1%
ME 2	41 58 8	2020	Dry	November	Used in Summary Table Analysis	304.0	284.1	19.9	6.5%	280.0	24.0	7.9%	267.8	36.2	11.9%
ME 2	41 58 8	2020	Dry	December	--	13,071.8	13,053.2	18.5	0.1%	13,049.8	22.0	0.2%	13,038.2	33.6	0.3%
ME 2	41 58 8	2020	Dry	January	--	22,159.7	22,143.5	16.2	0.1%	22,141.2	18.5	0.1%	22,130.8	28.9	0.1%
ME 2	41 58 8	2020	Dry	February	--	7,402.5	7,388.3	14.2	0.2%	7,385.3	17.2	0.2%	7,376.4	26.2	0.4%
ME 2	41 58 8	2020	Dry	March	--	7,209.4	7,195.9	13.4	0.2%	7,193.3	16.1	0.2%	7,185.1	24.3	0.3%
ME 2	41 58 8	2020	Dry	April	--	5,445.0	5,409.7	35.3	0.6%	5,402.8	42.2	0.8%	5,381.9	63.1	1.2%
ME 2	41 58 8	2020	Dry	May	--	7,329.4	7,287.4	42.0	0.6%	7,278.9	50.5	0.7%	7,253.9	75.5	1.0%
ME 2	41 58 8	2020	Dry	June	--	2,098.5	2,044.6	53.9	2.6%	2,034.3	64.2	3.1%	2,003.8	94.7	4.5%
ME 2	41 58 8	2020	Dry	July	--	786.6	735.1	51.5	6.5%	724.8	61.8	7.9%	699.1	87.5	11.1%
ME 2	41 58 8	2020	Dry	August	--	388.9	339.6	49.3	12.7%	329.7	59.2	15.2%	302.4	86.4	22.2%
ME 2	41 58 8	2020	Dry	September	Used in Summary Table Analysis	238.4	192.6	45.9	19.2%	183.1	55.3	23.2%	155.6	82.8	34.7%
ME 3	39 58 10	2000	Above Normal	October	Used in Summary Table Analysis	806.9	775.8	31.1	3.9%	769.4	37.4	4.6%	750.5	56.4	7.0%
ME 3	39 58 10	2000	Above Normal	November	Used in Summary Table Analysis	11,991.9	11,967.6	24.3	0.2%	11,963.0	28.9	0.2%	11,947.9	44.0	0.4%
ME 3	39 58 10	2000	Above Normal	December	--	10,741.8	10,721.3	20.5	0.2%	10,717.1	24.7	0.2%	10,704.5	37.3	0.3%
ME 3	39 58 10	2000	Above Normal	January	--	28,364.6	28,344.9	19.7	0.1%	28,341.4	23.1	0.1%	28,329.9	34.7	0.1%
ME 3	39 58 10	2000	Above Normal	February	--	36,901.6	36,884.3	17.4	0.0%	36,880.8	20.8	0.1%	36,870.4	31.3	0.1%
ME 3	39 58 10	2000	Above Normal	March	--	18,270.8	18,254.6	16.2	0.1%	18,252.3	18.5	0.1%	18,241.9	28.9	0.2%
ME 3	39 58 10	2000	Above Normal	April	--	12,280.1	12,265.0	15.0	0.1%	12,261.6	18.5	0.2%	12,252.3	27.8	0.2%
ME 3	39 58 10	2000	Above Normal	May	--	7,065.4	7,028.2	37.2	0.5%	7,020.7	44.7	0.6%	6,998.6	66.8	0.9%
ME 3	39 58 10	2000	Above Normal	June	--	2,598.5	2,542.5	56.0	2.2%	2,531.4	67.1	2.6%	2,498.6	99.9	3.8%
ME 3	39 58 10	2000	Above Normal	July	--	984.5	936.7	47.8	4.9%	927.3	57.2	5.8%	899.0	85.5	8.7%
ME 3	39 58 10	2000	Above Normal	August	--	514.4	470.5	43.9	8.5%	461.7	52.7	10.2%	435.3	79.1	15.4%
ME 3	39 58 10	2000	Above Normal	September	Used in Summary Table Analysis	288.5	250.4	38.1	13.2%	242.8	45.8	15.9%	219.8	68.8	23.8%
ME 3	39 58 10	2001	Dry	October	Used in Summary Table Analysis	3,784.3	3,753.6	30.7	0.8%	3,747.2	37.0	1.0%	3,728.5	55.8	1.5%
ME 3	39 58 10	2001	Dry	November	Used in Summary Table Analysis	6,075.2	6,051.2	24.1	0.4%	6,046.3	28.9	0.5%	6,031.6	43.6	0.7%
ME 3	39 58 10	2001	Dry	December	--	8,789.4	8,768.6	20.7	0.2%	8,764.5	24.9	0.3%	8,751.7	37.6	0.4%
ME 3	39 58 10	2001	Dry	January	--	12,699.1	12,680.6	18.5	0.1%	12,677.1	22.0	0.2%	12,665.5	33.6	0.3%
ME 3	39 58 10	2001	Dry	February	--	17,413.2	17,395.8	17.4	0.1%	17,392.4	20.8	0.1%	17,381.9	31.3	0.2%
ME 3	39 58 10	2001	Dry	March	--	12,265.0	12,250.0	15.0	0.1%	12,246.5	18.5	0.2%	12,237.3	27.8	0.2%
ME 3	39 58 10	2001	Dry	April	--	10,938.9	10,900.6	38.3	0.4%	10,892.9	45.9	0.4%	10,870.1	68.8	0.6%
ME 3	39 58 10	2001	Dry	May	--	2,633.8	2,588.5	45.3	1.7%	2,579.5	54.3	2.1%	2,552.5	81.3	3.1%
ME 3	39 58 10	2001	Dry	June	--	2,626.5	2,565.3	61.2	2.3%	2,553.2	73.3	2.8%	2,517.9	108.6	4.1%
ME 3	39 58 10	2001	Dry	July	--	714.3	659.2	55.1	7.7%	648.3	66.1	9.3%	620.3	94.0	13.2%
ME 3	39 58 10	2001	Dry	August	--	166.7	113.8	53.0	31.8%	103.2	63.5	38.1%	73.8	93.0	55.8%
ME 3	39 58 10	2001	Dry	September	Used in Summary Table Analysis	89.4	43.1	46.2	51.8%	33.9	55.5	62.1%	7.0	82.4	92.2%
ME 3	39 58 10	2002	Below Normal	October	Used in Summary Table Analysis	258.5	220.6	37.9	14.7%	212.9	45.6	17.6%	189.7	68.8	26.6%
ME 3	39 58 10	2002	Below Normal	November	Used in Summary Table Analysis	11,961.8	11,932.9	28.9	0.2%	11,927.1	34.7	0.3%	11,906.3	55.6	0.5%
ME 3	39 58 10	2002	Below Normal	December	--	35,490.7	35,465.3	25.5	0.1%	35,460.6	30.1	0.1%	35,444.4	46.3	0.1%
ME 3	39 58 10	2002	Below Normal	January	--	30,754.6	30,732.6	22.0	0.1%	30,728.0	26.6	0.1%	30,714.1	40.5	0.1%
ME 3	39 58 10	2002	Below Normal	February	--	24,603.0	24,582.2	20.8	0.1%	24,577.5	25.5	0.1%	24,566.0	37.0	0.2%
ME 3	39 58 10	2002	Below Normal	March	--	17,719.9	17,701.4	18.5	0.1%	17,697.9	22.0	0.1%	17,686.3	33.6	0.2%
ME 3	39 58 10	2002	Below Normal	April	--	9,900.8	9,863.1	37.7	0.4%	9,855.7	45.1	0.5%	9,833.2	67.6	0.7%
ME 3	39 58 10	2002	Below Normal	May	--	3,309.1	3,264.9	44.2	1.3%	3,256.0	53.1	1.6%	3,229.5	79.6	2.4%
ME 3	39 58 10	2002	Below Normal	June	--	848.1	797.7	50.4	5.9%	787.8	60.3	7.1%	758.4	89.7	10.6%
ME 3	39 58 10	2002	Below Normal	July	--	356.5	307.0	49.5	13.9%	297.2	59.4	16.6%	268.5	88.1	24.7%
ME 3	39 58 10	2002	Below Normal	August	--	220.5	174.6	45.8	20.8%	165.5	55.0	24.9%	137.5	83.0	37.6%
ME 3	39 58 10	2002	Below Normal	September	Used in Summary Table Analysis	157.5	115.3	42.2	26.8%	106.9	50.7	32.2%	80.5	77.1	48.9%

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At Surface Water Depletion Locations of Interest
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Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 58 10	2003	Wet	October	Used in Summary Table Analysis	122.7	89.0	33.7	27.5%	82.2	40.5	33.0%	61.6	61.1	49.8%
ME 3	39 58 10	2003	Wet	November	Used in Summary Table Analysis	888.5	862.2	26.2	3.0%	856.8	31.6	3.6%	840.6	47.9	5.4%
ME 3	39 58 10	2003	Wet	December	--	56,371.5	56,348.4	23.1	0.0%	56,343.8	27.8	0.0%	56,329.9	41.7	0.1%
ME 3	39 58 10	2003	Wet	January	--	31,435.2	31,415.5	19.7	0.1%	31,410.9	24.3	0.1%	31,399.3	35.9	0.1%
ME 3	39 58 10	2003	Wet	February	--	20,302.1	20,283.6	18.5	0.1%	20,280.1	22.0	0.1%	20,268.5	33.6	0.2%
ME 3	39 58 10	2003	Wet	March	--	23,956.0	23,939.8	16.2	0.1%	23,936.3	19.7	0.1%	23,925.9	30.1	0.1%
ME 3	39 58 10	2003	Wet	April	--	42,725.7	42,709.5	16.2	0.0%	42,706.0	19.7	0.0%	42,695.6	30.1	0.1%
ME 3	39 58 10	2003	Wet	May	--	12,195.6	12,157.4	38.2	0.3%	12,150.5	45.1	0.4%	12,127.3	68.3	0.6%
ME 3	39 58 10	2003	Wet	June	--	3,158.1	3,110.2	47.9	1.5%	3,100.8	57.3	1.8%	3,073.3	84.8	2.7%
ME 3	39 58 10	2003	Wet	July	--	1,465.6	1,416.6	49.1	3.3%	1,406.8	58.8	4.0%	1,377.9	87.7	6.0%
ME 3	39 58 10	2003	Wet	August	--	752.2	705.0	47.2	6.3%	695.1	57.1	7.6%	664.2	88.0	11.7%
ME 3	39 58 10	2003	Wet	September	Used in Summary Table Analysis	450.6	412.0	38.6	8.6%	404.3	46.3	10.3%	379.9	70.7	15.7%
ME 3	39 58 10	2004	Wet	October	Used in Summary Table Analysis	317.8	286.6	31.2	9.8%	280.3	37.5	11.8%	261.2	56.6	17.8%
ME 3	39 58 10	2004	Wet	November	Used in Summary Table Analysis	5,751.9	5,727.2	24.7	0.4%	5,722.1	29.7	0.5%	5,706.8	45.0	0.8%
ME 3	39 58 10	2004	Wet	December	--	36,089.1	36,067.1	22.0	0.1%	36,062.5	26.6	0.1%	36,049.8	39.4	0.1%
ME 3	39 58 10	2004	Wet	January	--	31,321.8	31,303.2	18.5	0.1%	31,298.6	23.1	0.1%	31,287.0	34.7	0.1%
ME 3	39 58 10	2004	Wet	February	--	38,090.3	38,072.9	17.4	0.0%	38,069.4	20.8	0.1%	38,057.9	32.4	0.1%
ME 3	39 58 10	2004	Wet	March	--	16,495.4	16,479.2	16.2	0.1%	16,475.7	19.7	0.1%	16,466.4	28.9	0.2%
ME 3	39 58 10	2004	Wet	April	--	9,428.9	9,413.7	15.3	0.2%	9,410.5	18.4	0.2%	9,401.3	27.7	0.3%
ME 3	39 58 10	2004	Wet	May	--	3,402.3	3,365.0	37.3	1.1%	3,357.6	44.7	1.3%	3,335.4	66.9	2.0%
ME 3	39 58 10	2004	Wet	June	--	686.4	640.2	46.1	6.7%	631.2	55.2	8.0%	604.4	81.9	11.9%
ME 3	39 58 10	2004	Wet	July	--	349.3	301.2	48.1	13.8%	291.6	57.7	16.5%	263.0	86.3	24.7%
ME 3	39 58 10	2004	Wet	August	--	218.7	174.5	44.3	20.2%	165.6	53.1	24.3%	138.9	79.8	36.5%
ME 3	39 58 10	2004	Wet	September	Used in Summary Table Analysis	156.2	114.3	41.9	26.8%	105.9	50.3	32.2%	80.6	75.6	48.4%
ME 3	39 58 10	2005	Above Normal	October	Used in Summary Table Analysis	7,616.6	7,584.5	32.1	0.4%	7,578.1	38.4	0.5%	7,558.6	58.0	0.8%
ME 3	39 58 10	2005	Above Normal	November	Used in Summary Table Analysis	2,245.6	2,221.2	24.4	1.1%	2,216.3	29.3	1.3%	2,201.3	44.3	2.0%
ME 3	39 58 10	2005	Above Normal	December	--	20,842.6	20,820.6	22.0	0.1%	20,817.1	25.5	0.1%	20,803.2	39.4	0.2%
ME 3	39 58 10	2005	Above Normal	January	--	22,238.4	22,219.9	18.5	0.1%	22,216.4	22.0	0.1%	22,204.9	33.6	0.2%
ME 3	39 58 10	2005	Above Normal	February	--	13,982.6	13,966.4	16.2	0.1%	13,963.0	19.7	0.1%	13,952.5	30.1	0.2%
ME 3	39 58 10	2005	Above Normal	March	--	28,456.0	28,439.8	16.2	0.1%	28,436.3	19.7	0.1%	28,427.1	28.9	0.1%
ME 3	39 58 10	2005	Above Normal	April	--	21,370.4	21,355.3	15.0	0.1%	21,353.0	17.4	0.1%	21,342.6	27.8	0.1%
ME 3	39 58 10	2005	Above Normal	May	--	19,481.5	19,443.3	38.2	0.2%	19,436.3	45.1	0.2%	19,413.2	68.3	0.4%
ME 3	39 58 10	2005	Above Normal	June	--	15,767.4	15,710.6	56.7	0.4%	15,699.1	68.3	0.4%	15,665.5	101.9	0.6%
ME 3	39 58 10	2005	Above Normal	July	--	2,860.0	2,810.0	50.0	1.7%	2,800.5	59.5	2.1%	2,772.3	87.6	3.1%
ME 3	39 58 10	2005	Above Normal	August	--	974.7	930.7	44.1	4.5%	922.0	52.8	5.4%	895.8	78.9	8.1%
ME 3	39 58 10	2005	Above Normal	September	Used in Summary Table Analysis	516.6	478.5	38.1	7.4%	470.9	45.7	8.9%	448.0	68.6	13.3%
ME 3	39 58 10	2006	Wet	October	Used in Summary Table Analysis	625.6	595.4	30.3	4.8%	589.3	36.3	5.8%	570.8	54.8	8.8%
ME 3	39 58 10	2006	Wet	November	Used in Summary Table Analysis	9,220.4	9,197.0	23.4	0.3%	9,192.2	28.1	0.3%	9,177.9	42.5	0.5%
ME 3	39 58 10	2006	Wet	December	--	43,221.1	43,200.2	20.8	0.0%	43,196.8	24.3	0.1%	43,182.9	38.2	0.1%
ME 3	39 58 10	2006	Wet	January	--	46,046.3	46,027.8	18.5	0.0%	46,023.1	23.1	0.1%	46,011.6	34.7	0.1%
ME 3	39 58 10	2006	Wet	February	--	26,509.3	26,491.9	17.4	0.1%	26,489.6	19.7	0.1%	26,479.2	30.1	0.1%
ME 3	39 58 10	2006	Wet	March	--	46,959.5	46,943.3	16.2	0.0%	46,939.8	19.7	0.0%	46,930.6	28.9	0.1%
ME 3	39 58 10	2006	Wet	April	--	30,347.2	30,333.3	13.9	0.0%	30,329.9	17.4	0.1%	30,320.6	26.6	0.1%
ME 3	39 58 10	2006	Wet	May	--	14,159.7	14,137.7	22.0	0.2%	14,134.3	25.5	0.2%	14,121.5	38.2	0.3%
ME 3	39 58 10	2006	Wet	June	--	3,539.8	3,492.9	46.9	1.3%	3,483.8	56.0	1.6%	3,456.8	83.0	2.3%
ME 3	39 58 10	2006	Wet	July	--	1,269.9	1,222.0	47.9	3.8%	1,212.6	57.3	4.5%	1,184.7	85.2	6.7%
ME 3	39 58 10	2006	Wet	August	--	656.3	611.0	45.3	6.9%	602.0	54.3	8.3%	575.0	81.3	12.4%
ME 3	39 58 10	2006	Wet	September	Used in Summary Table Analysis	417.9	379.3	38.6	9.2%	371.7	46.3	11.1%	348.5	69.5	16.6%
ME 3	39 58 10	2007	Above Normal	October	Used in Summary Table Analysis	267.3	236.5	30.8	11.5%	230.3	37.0	13.8%	211.4	55.8	20.9%
ME 3	39 58 10	2007	Above Normal	November	Used in Summary Table Analysis	8,591.1	8,566.7	24.4	0.3%	8,561.7	29.4	0.3%	8,546.5	44.6	0.5%
ME 3	39 58 10	2007	Above Normal	December	--	20,258.1	20,237.3	20.8	0.1%	20,232.6	25.5	0.1%	20,219.9	38.2	0.2%
ME 3	39 58 10	2007	Above Normal	January	--	10,209.0	10,190.3	18.8	0.2%	10,186.5	22.6	0.2%	10,174.8	34.3	0.3%
ME 3	39 58 10	2007	Above Normal	February	--	30,401.6	30,384.3	17.4	0.1%	30,379.6	22.0	0.1%	30,369.2	32.4	0.1%
ME 3	39 58 10	2007	Above Normal	March	--	13,069.4	13,053.2	16.2	0.1%	13,049.8	19.7	0.2%	13,039.4	30.1	0.2%
ME 3	39 58 10	2007	Above Normal	April	--	11,505.1	11,468.9	36.2	0.3%	11,461.6	43.5	0.4%	11,439.9	65.2	0.6%
ME 3	39 58 10	2007	Above Normal	May	--	4,125.0	4,082.1	42.9	1.0%	4,073.5	51.5	1.2%	4,047.7	77.3	1.9%
ME 3	39 58 10	2007	Above Normal	June	--	1,487.7	1,435.5	52.2	3.5%	1,425.2	62.5	4.2%	1,394.8	92.9	6.2%
ME 3	39 58 10	2007	Above Normal	July	--	490.4	439.6	50.8	10.4%	429.5	60.9	12.4%	399.9	90.5	18.5%
ME 3	39 58 10	2007	Above Normal	August	--	216.4	171.6	44.8	20.7%	162.7	53.7	24.8%	135.4	81.0	37.4%
ME 3	39 58 10	2007	Above Normal	September	Used in Summary Table Analysis	144.1	102.7	41.4	28.7%	94.4	49.7	34.5%	69.5	74.7	51.8%
ME 3	39 58 10	2008	Dry	October	Used in Summary Table Analysis	3,405.1	3,372.2	32.9	1.0%	3,365.6	39.5	1.2%	3,345.5	59.6	1.8%
ME 3	39 58 10	2008	Dry	November	Used in Summary Table Analysis	3,247.3	3,222.5	24.9	0.8%	3,217.5	29.9	0.9%	3,202.1	45.3	1.4%
ME 3	39 58 10	2008	Dry	December	--	22,929.4	22,907.4	22.0	0.1%	22,902.8	26.6	0.1%	22,890.0	39.4	0.2%
ME 3	39 58 10	2008	Dry	January	--	37,342.6	37,321.8	20.8	0.1%	37,318.3	24.3	0.1%	37,305.6	37.0	0.1%

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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 58 10	2008	Dry	February	--	26,222.2	26,204.9	17.4	0.1%	26,201.4	20.8	0.1%	26,191.0	31.3	0.1%
ME 3	39 58 10	2008	Dry	March	--	11,770.8	11,754.6	16.2	0.1%	11,752.3	18.5	0.2%	11,741.9	28.9	0.2%
ME 3	39 58 10	2008	Dry	April	--	8,997.7	8,959.8	37.8	0.4%	8,952.3	45.4	0.5%	8,929.9	67.8	0.8%
ME 3	39 58 10	2008	Dry	May	--	1,358.6	1,319.7	38.9	2.9%	1,312.3	46.3	3.4%	1,289.7	68.9	5.1%
ME 3	39 58 10	2008	Dry	June	--	431.9	374.7	57.2	13.2%	363.4	68.4	15.8%	330.3	101.6	23.5%
ME 3	39 58 10	2008	Dry	July	--	250.5	195.8	54.6	21.8%	185.0	65.5	26.1%	157.5	92.9	37.1%
ME 3	39 58 10	2008	Dry	August	--	173.6	121.5	52.1	30.0%	111.1	62.6	36.0%	79.4	94.3	54.3%
ME 3	39 58 10	2008	Dry	September	Used in Summary Table Analysis	135.4	85.6	49.8	36.7%	75.7	59.7	44.1%	46.9	88.4	65.3%
ME 3	39 58 10	2009	Critical	October	Used in Summary Table Analysis	916.5	879.0	37.5	4.1%	871.5	45.0	4.9%	848.3	68.2	7.4%
ME 3	39 58 10	2009	Critical	November	Used in Summary Table Analysis	5,462.0	5,433.7	28.4	0.5%	5,428.0	34.0	0.6%	5,407.8	54.3	1.0%
ME 3	39 58 10	2009	Critical	December	--	12,063.7	12,039.4	24.3	0.2%	12,034.7	28.9	0.2%	12,019.7	44.0	0.4%
ME 3	39 58 10	2009	Critical	January	--	8,765.7	8,743.8	22.0	0.3%	8,739.2	26.5	0.3%	8,725.7	40.0	0.5%
ME 3	39 58 10	2009	Critical	February	--	22,528.9	22,510.4	18.5	0.1%	22,505.8	23.1	0.1%	22,494.2	34.7	0.2%
ME 3	39 58 10	2009	Critical	March	--	21,056.7	21,039.4	17.4	0.1%	21,035.9	20.8	0.1%	21,025.5	31.3	0.1%
ME 3	39 58 10	2009	Critical	April	--	10,086.7	10,047.5	39.2	0.4%	10,039.8	46.9	0.5%	10,016.4	70.3	0.7%
ME 3	39 58 10	2009	Critical	May	--	15,549.8	15,502.3	47.5	0.3%	15,493.1	56.7	0.4%	15,464.1	85.6	0.6%
ME 3	39 58 10	2009	Critical	June	--	3,152.7	3,091.2	61.5	1.9%	3,079.4	73.3	2.3%	3,044.1	108.6	3.4%
ME 3	39 58 10	2009	Critical	July	--	1,256.1	1,201.2	55.0	4.4%	1,190.3	65.9	5.2%	1,162.7	93.4	7.4%
ME 3	39 58 10	2009	Critical	August	--	662.0	609.7	52.4	7.9%	599.2	62.8	9.5%	570.2	91.9	13.9%
ME 3	39 58 10	2009	Critical	September	Used in Summary Table Analysis	383.8	338.0	45.8	11.9%	328.9	54.9	14.3%	302.3	81.5	21.2%
ME 3	39 58 10	2010	Below Normal	October	Used in Summary Table Analysis	6,079.5	6,041.7	37.8	0.6%	6,034.0	45.5	0.7%	6,009.8	69.7	1.1%
ME 3	39 58 10	2010	Below Normal	November	Used in Summary Table Analysis	8,256.1	8,227.0	29.2	0.4%	8,221.1	35.1	0.4%	8,200.3	55.8	0.7%
ME 3	39 58 10	2010	Below Normal	December	--	12,289.4	12,263.9	25.5	0.2%	12,259.3	30.1	0.2%	12,243.1	46.3	0.4%
ME 3	39 58 10	2010	Below Normal	January	--	36,019.7	35,996.5	23.1	0.1%	35,993.1	26.6	0.1%	35,978.0	41.7	0.1%
ME 3	39 58 10	2010	Below Normal	February	--	27,181.7	27,163.2	18.5	0.1%	27,158.6	23.1	0.1%	27,147.0	34.7	0.1%
ME 3	39 58 10	2010	Below Normal	March	--	28,782.4	28,763.9	18.5	0.1%	28,760.4	22.0	0.1%	28,748.8	33.6	0.1%
ME 3	39 58 10	2010	Below Normal	April	--	39,915.5	39,898.1	17.4	0.0%	39,894.7	20.8	0.1%	39,884.3	31.3	0.1%
ME 3	39 58 10	2010	Below Normal	May	--	20,192.1	20,151.6	40.5	0.2%	20,144.7	47.5	0.2%	20,120.4	71.8	0.4%
ME 3	39 58 10	2010	Below Normal	June	--	9,289.2	9,230.8	58.4	0.6%	9,219.2	70.0	0.8%	9,185.1	104.2	1.1%
ME 3	39 58 10	2010	Below Normal	July	--	1,447.9	1,397.6	50.3	3.5%	1,387.8	60.1	4.1%	1,358.9	89.0	6.1%
ME 3	39 58 10	2010	Below Normal	August	--	560.8	515.7	45.2	8.1%	506.8	54.1	9.6%	480.0	80.8	14.4%
ME 3	39 58 10	2010	Below Normal	September	Used in Summary Table Analysis	642.9	599.9	43.0	6.7%	591.3	51.6	8.0%	565.4	77.4	12.0%
ME 3	39 58 10	2011	Wet	October	Used in Summary Table Analysis	9,586.9	9,555.7	31.3	0.3%	9,549.3	37.6	0.4%	9,530.3	56.6	0.6%
ME 3	39 58 10	2011	Wet	November	Used in Summary Table Analysis	14,166.7	14,142.4	24.3	0.2%	14,137.7	28.9	0.2%	14,122.7	44.0	0.3%
ME 3	39 58 10	2011	Wet	December	--	33,493.1	33,472.2	20.8	0.1%	33,467.6	25.5	0.1%	33,453.7	39.4	0.1%
ME 3	39 58 10	2011	Wet	January	--	14,114.6	14,096.1	18.5	0.1%	14,092.6	22.0	0.2%	14,081.0	33.6	0.2%
ME 3	39 58 10	2011	Wet	February	--	20,726.9	20,709.5	17.4	0.1%	20,706.0	20.8	0.1%	20,695.6	31.3	0.2%
ME 3	39 58 10	2011	Wet	March	--	51,869.2	51,851.9	17.4	0.0%	51,848.4	20.8	0.0%	51,839.1	30.1	0.1%
ME 3	39 58 10	2011	Wet	April	--	24,750.0	24,733.8	16.2	0.1%	24,731.5	18.5	0.1%	24,721.1	28.9	0.1%
ME 3	39 58 10	2011	Wet	May	--	11,357.9	11,319.8	38.1	0.3%	11,312.3	45.6	0.4%	11,289.6	68.3	0.6%
ME 3	39 58 10	2011	Wet	June	--	7,032.1	6,974.8	57.3	0.8%	6,963.4	68.6	1.0%	6,930.1	102.0	1.5%
ME 3	39 58 10	2011	Wet	July	--	1,823.8	1,768.9	55.0	3.0%	1,758.1	65.7	3.6%	1,727.1	96.8	5.3%
ME 3	39 58 10	2011	Wet	August	--	769.8	725.2	44.6	5.8%	716.4	53.5	6.9%	689.7	80.1	10.4%
ME 3	39 58 10	2011	Wet	September	Used in Summary Table Analysis	426.5	387.0	39.5	9.3%	379.1	47.4	11.1%	355.3	71.2	16.7%
ME 3	39 58 10	2012	Below Normal	October	Used in Summary Table Analysis	4,516.7	4,485.1	31.6	0.7%	4,478.6	38.1	0.8%	4,459.0	57.6	1.3%
ME 3	39 58 10	2012	Below Normal	November	Used in Summary Table Analysis	8,189.5	8,164.6	24.9	0.3%	8,159.5	30.0	0.4%	8,144.1	45.4	0.6%
ME 3	39 58 10	2012	Below Normal	December	--	5,160.5	5,139.4	21.2	0.4%	5,135.0	25.6	0.5%	5,121.9	38.7	0.7%
ME 3	39 58 10	2012	Below Normal	January	--	19,980.3	19,961.8	18.5	0.1%	19,957.2	23.1	0.1%	19,945.6	34.7	0.2%
ME 3	39 58 10	2012	Below Normal	February	--	18,172.5	18,155.1	17.4	0.1%	18,151.6	20.8	0.1%	18,140.0	32.4	0.2%
ME 3	39 58 10	2012	Below Normal	March	--	45,266.2	45,248.8	17.4	0.0%	45,245.4	20.8	0.0%	45,235.0	31.3	0.1%
ME 3	39 58 10	2012	Below Normal	April	--	26,799.8	26,783.6	16.2	0.1%	26,780.1	19.7	0.1%	26,770.8	28.9	0.1%
ME 3	39 58 10	2012	Below Normal	May	--	7,466.2	7,428.2	38.0	0.5%	7,420.7	45.5	0.6%	7,398.4	67.8	0.9%
ME 3	39 58 10	2012	Below Normal	June	--	5,491.7	5,433.4	58.2	1.1%	5,421.9	69.8	1.3%	5,388.2	103.5	1.9%
ME 3	39 58 10	2012	Below Normal	July	--	2,208.1	2,154.5	53.6	2.4%	2,143.9	64.2	2.9%	2,112.4	95.7	4.3%
ME 3	39 58 10	2012	Below Normal	August	--	382.8	341.3	41.4	10.8%	333.1	49.7	13.0%	308.3	74.4	19.4%
ME 3	39 58 10	2012	Below Normal	September	Used in Summary Table Analysis	242.4	206.2	36.2	14.9%	199.0	43.4	17.9%	177.4	65.1	26.8%
ME 3	39 58 10	2013	Below Normal	October	Used in Summary Table Analysis	1,894.9	1,864.0	30.9	1.6%	1,857.8	37.2	2.0%	1,838.9	56.0	3.0%
ME 3	39 58 10	2013	Below Normal	November	Used in Summary Table Analysis	14,598.4	14,574.1	24.3	0.2%	14,569.4	28.9	0.2%	14,554.4	44.0	0.3%
ME 3	39 58 10	2013	Below Normal	December	--	59,798.6	59,776.6	22.0	0.0%	59,772.0	26.6	0.0%	59,759.3	39.4	0.1%
ME 3	39 58 10	2013	Below Normal	January	--	22,142.4	22,123.8	18.5	0.1%	22,119.2	23.1	0.1%	22,108.8	33.6	0.2%
ME 3	39 58 10	2013	Below Normal	February	--	8,816.6	8,799.1	17.5	0.2%	8,795.5	21.1	0.2%	8,784.8	31.7	0.4%
ME 3	39 58 10	2013	Below Normal	March	--	10,287.8	10,271.2	16.7	0.2%	10,267.8	20.0	0.2%	10,257.6	30.2	0.3%
ME 3	39 58 10	2013	Below Normal	April	--	8,276.4	8,240.9	35.5	0.4%	8,233.8	42.6	0.5%	8,212.5	63.9	0.8%
ME 3	39 58 10	2013	Below Normal	May	--	4,412.7	4,369.9	42.8	1.0%	4,361.3	51.4	1.2%	4,335.6	77.1	1.7%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 58 10	2013	Below Normal	June	--	2,102.8	2,050.7	52.1	2.5%	2,040.5	62.3	3.0%	2,010.1	92.7	4.4%
ME 3	39 58 10	2013	Below Normal	July	--	713.5	665.2	48.2	6.8%	655.7	57.8	8.1%	627.8	85.7	12.0%
ME 3	39 58 10	2013	Below Normal	August	--	334.2	289.4	44.8	13.4%	280.5	53.8	16.1%	253.1	81.2	24.3%
ME 3	39 58 10	2013	Below Normal	September	Used in Summary Table Analysis	4,760.6	4,714.6	46.1	1.0%	4,705.2	55.4	1.2%	4,677.4	83.2	1.7%
ME 3	39 58 10	2014	Critical	October	Used in Summary Table Analysis	278.0	245.8	32.1	11.6%	239.3	38.6	13.9%	220.6	57.4	20.6%
ME 3	39 58 10	2014	Critical	November	Used in Summary Table Analysis	1,523.5	1,498.1	25.3	1.7%	1,493.1	30.4	2.0%	1,477.7	45.8	3.0%
ME 3	39 58 10	2014	Critical	December	--	1,580.2	1,558.4	21.8	1.4%	1,554.1	26.2	1.7%	1,540.6	39.6	2.5%
ME 3	39 58 10	2014	Critical	January	--	2,806.4	2,787.0	19.3	0.7%	2,783.1	23.3	0.8%	2,771.2	35.2	1.3%
ME 3	39 58 10	2014	Critical	February	--	15,713.0	15,694.4	18.5	0.1%	15,691.0	22.0	0.1%	15,679.4	33.6	0.2%
ME 3	39 58 10	2014	Critical	March	--	31,434.0	31,416.7	17.4	0.1%	31,413.2	20.8	0.1%	31,402.8	31.3	0.1%
ME 3	39 58 10	2014	Critical	April	--	12,969.9	12,931.7	38.2	0.3%	12,923.6	46.3	0.4%	12,900.5	69.4	0.5%
ME 3	39 58 10	2014	Critical	May	--	5,174.8	5,128.9	45.8	0.9%	5,119.8	55.0	1.1%	5,092.1	82.6	1.6%
ME 3	39 58 10	2014	Critical	June	--	1,191.2	1,128.9	62.3	5.2%	1,116.7	74.5	6.3%	1,081.6	109.6	9.2%
ME 3	39 58 10	2014	Critical	July	--	541.0	485.5	55.5	10.3%	474.5	66.6	12.3%	446.3	94.8	17.5%
ME 3	39 58 10	2014	Critical	August	--	342.2	289.8	52.4	15.3%	279.3	62.8	18.4%	250.1	92.0	26.9%
ME 3	39 58 10	2014	Critical	September	Used in Summary Table Analysis	2,560.2	2,508.9	51.3	2.0%	2,498.8	61.3	2.4%	2,468.9	91.3	3.6%
ME 3	39 58 10	2015	Dry	October	Used in Summary Table Analysis	11,317.2	11,278.8	38.4	0.3%	11,271.3	45.9	0.4%	11,248.5	68.8	0.6%
ME 3	39 58 10	2015	Dry	November	Used in Summary Table Analysis	8,992.7	8,964.5	28.2	0.3%	8,958.8	33.9	0.4%	8,938.7	54.1	0.6%
ME 3	39 58 10	2015	Dry	December	--	32,451.4	32,427.1	24.3	0.1%	32,422.5	28.9	0.1%	32,406.3	45.1	0.1%
ME 3	39 58 10	2015	Dry	January	--	14,549.8	14,527.8	22.0	0.2%	14,523.1	26.6	0.2%	14,510.4	39.4	0.3%
ME 3	39 58 10	2015	Dry	February	--	27,166.7	27,148.1	18.5	0.1%	27,144.7	22.0	0.1%	27,131.9	34.7	0.1%
ME 3	39 58 10	2015	Dry	March	--	11,552.7	11,535.8	16.9	0.1%	11,532.3	20.4	0.2%	11,521.9	30.8	0.3%
ME 3	39 58 10	2015	Dry	April	--	8,341.9	8,303.2	38.7	0.5%	8,295.4	46.5	0.6%	8,272.3	69.6	0.8%
ME 3	39 58 10	2015	Dry	May	--	1,505.6	1,460.1	45.5	3.0%	1,451.0	54.5	3.6%	1,425.0	80.6	5.4%
ME 3	39 58 10	2015	Dry	June	--	648.2	590.2	58.0	8.9%	578.8	69.4	10.7%	545.2	103.1	15.9%
ME 3	39 58 10	2015	Dry	July	--	264.1	209.1	55.1	20.9%	198.1	66.0	25.0%	170.4	93.8	35.5%
ME 3	39 58 10	2015	Dry	August	--	161.0	108.6	52.4	32.6%	98.1	62.9	39.1%	69.1	91.9	57.1%
ME 3	39 58 10	2015	Dry	September	Used in Summary Table Analysis	115.9	67.3	48.6	41.9%	57.3	58.6	50.6%	28.2	87.8	75.7%
ME 3	39 58 10	2016	Above Normal	October	Used in Summary Table Analysis	81.5	41.8	39.6	48.6%	34.3	47.2	57.9%	11.3	70.2	86.1%
ME 3	39 58 10	2016	Above Normal	November	Used in Summary Table Analysis	3,825.7	3,796.5	29.2	0.8%	3,790.5	35.2	0.9%	3,769.2	56.5	1.5%
ME 3	39 58 10	2016	Above Normal	December	--	36,423.6	36,398.1	25.5	0.1%	36,393.5	30.1	0.1%	36,377.3	46.3	0.1%
ME 3	39 58 10	2016	Above Normal	January	--	57,113.4	57,090.3	23.1	0.0%	57,084.5	28.9	0.1%	57,070.6	42.8	0.1%
ME 3	39 58 10	2016	Above Normal	February	--	24,232.6	24,213.0	19.7	0.1%	24,209.5	23.1	0.1%	24,197.9	34.7	0.1%
ME 3	39 58 10	2016	Above Normal	March	--	41,680.6	41,662.0	18.5	0.0%	41,658.6	22.0	0.1%	41,647.0	33.6	0.1%
ME 3	39 58 10	2016	Above Normal	April	--	18,508.1	18,491.9	16.2	0.1%	18,488.4	19.7	0.1%	18,478.0	30.1	0.2%
ME 3	39 58 10	2016	Above Normal	May	--	5,203.5	5,181.7	21.8	0.4%	5,177.3	26.2	0.5%	5,164.1	39.4	0.8%
ME 3	39 58 10	2016	Above Normal	June	--	1,503.1	1,459.0	44.1	2.9%	1,451.4	51.7	3.4%	1,428.9	74.2	4.9%
ME 3	39 58 10	2016	Above Normal	July	--	816.3	768.1	48.2	5.9%	758.5	57.8	7.1%	730.3	86.0	10.5%
ME 3	39 58 10	2016	Above Normal	August	--	484.8	438.9	45.9	9.5%	429.7	55.1	11.4%	402.3	82.5	17.0%
ME 3	39 58 10	2016	Above Normal	September	Used in Summary Table Analysis	321.4	279.3	42.1	13.1%	270.7	50.8	15.8%	244.9	76.6	23.8%
ME 3	39 58 10	2017	Wet	October	Used in Summary Table Analysis	18,206.0	18,173.6	32.4	0.2%	18,166.7	39.4	0.2%	18,148.1	57.9	0.3%
ME 3	39 58 10	2017	Wet	November	Used in Summary Table Analysis	18,737.3	18,713.0	24.3	0.1%	18,707.2	30.1	0.2%	18,692.1	45.1	0.2%
ME 3	39 58 10	2017	Wet	December	--	23,978.0	23,957.2	20.8	0.1%	23,952.5	25.5	0.1%	23,939.8	38.2	0.2%
ME 3	39 58 10	2017	Wet	January	--	106,510.4	106,490.7	19.7	0.0%	106,487.3	23.1	0.0%	106,474.5	35.9	0.0%
ME 3	39 58 10	2017	Wet	February	--	81,606.5	81,589.1	17.4	0.0%	81,585.6	20.8	0.0%	81,574.1	32.4	0.0%
ME 3	39 58 10	2017	Wet	March	--	27,199.1	27,182.9	16.2	0.1%	27,179.4	19.7	0.1%	27,169.0	30.1	0.1%
ME 3	39 58 10	2017	Wet	April	--	22,857.6	22,842.6	15.0	0.1%	22,839.1	18.5	0.1%	22,829.9	27.8	0.1%
ME 3	39 58 10	2017	Wet	May	--	6,267.5	6,245.7	21.8	0.3%	6,241.4	26.0	0.4%	6,228.4	39.1	0.6%
ME 3	39 58 10	2017	Wet	June	--	2,104.1	2,057.8	46.3	2.2%	2,048.7	55.3	2.6%	2,021.9	82.2	3.9%
ME 3	39 58 10	2017	Wet	July	--	925.8	877.4	48.4	5.2%	867.9	57.9	6.3%	839.8	86.0	9.3%
ME 3	39 58 10	2017	Wet	August	--	498.1	452.4	45.7	9.2%	443.3	54.8	11.0%	416.1	82.0	16.5%
ME 3	39 58 10	2017	Wet	September	Used in Summary Table Analysis	315.3	273.5	41.8	13.3%	265.1	50.2	15.9%	239.9	75.4	23.9%
ME 3	39 58 10	2018	Above Normal	October	Used in Summary Table Analysis	268.2	236.2	31.9	11.9%	229.8	38.4	14.3%	210.4	57.8	21.6%
ME 3	39 58 10	2018	Above Normal	November	Used in Summary Table Analysis	10,698.3	10,674.0	24.3	0.2%	10,669.0	29.3	0.3%	10,654.1	44.2	0.4%
ME 3	39 58 10	2018	Above Normal	December	--	5,435.0	5,414.6	20.4	0.4%	5,410.4	24.5	0.5%	5,397.8	37.2	0.7%
ME 3	39 58 10	2018	Above Normal	January	--	17,621.5	17,603.0	18.5	0.1%	17,599.5	22.0	0.1%	17,588.0	33.6	0.2%
ME 3	39 58 10	2018	Above Normal	February	--	7,587.3	7,570.9	16.3	0.2%	7,567.5	19.8	0.3%	7,557.3	30.0	0.4%
ME 3	39 58 10	2018	Above Normal	March	--	20,597.2	20,581.0	16.2	0.1%	20,577.5	19.7	0.1%	20,568.3	28.9	0.1%
ME 3	39 58 10	2018	Above Normal	April	--	32,079.9	32,066.0	13.9	0.0%	32,062.5	17.4	0.1%	32,053.2	26.6	0.1%
ME 3	39 58 10	2018	Above Normal	May	--	6,981.5	6,945.6	35.9	0.5%	6,938.4	43.1	0.6%	6,916.9	64.6	0.9%
ME 3	39 58 10	2018	Above Normal	June	--	1,906.9	1,860.9	46.1	2.4%	1,851.9	55.1	2.9%	1,825.2	81.7	4.3%
ME 3	39 58 10	2018	Above Normal	July	--	774.0	725.7	48.3	6.2%	716.1	57.9	7.5%	687.5	86.5	11.2%
ME 3	39 58 10	2018	Above Normal	August	--	435.3	391.4	43.9	10.1%	382.6	52.7	12.1%	356.2	79.1	18.2%
ME 3	39 58 10	2018	Above Normal	September	Used in Summary Table Analysis	293.2	251.3	41.9	14.3%	242.9	50.3	17.1%	217.7	75.5	25.8%

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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 58 10	2019	Below Normal	October	Used in Summary Table Analysis	202.2	170.6	31.6	15.6%	164.2	38.0	18.8%	144.8	57.3	28.4%
ME 3	39 58 10	2019	Below Normal	November	Used in Summary Table Analysis	6,561.6	6,537.0	24.5	0.4%	6,532.1	29.5	0.4%	6,516.9	44.7	0.7%
ME 3	39 58 10	2019	Below Normal	December	--	14,561.3	14,540.5	20.8	0.1%	14,537.0	24.3	0.2%	14,523.1	38.2	0.3%
ME 3	39 58 10	2019	Below Normal	January	--	35,011.6	34,993.1	18.5	0.1%	34,988.4	23.1	0.1%	34,976.9	34.7	0.1%
ME 3	39 58 10	2019	Below Normal	February	--	141,701.4	141,678.2	23.1	0.0%	141,678.2	23.1	0.0%	141,666.7	34.7	0.0%
ME 3	39 58 10	2019	Below Normal	March	--	42,203.7	42,188.7	15.0	0.0%	42,185.2	18.5	0.0%	42,175.9	27.8	0.1%
ME 3	39 58 10	2019	Below Normal	April	--	15,238.4	15,223.4	15.0	0.1%	15,221.1	17.4	0.1%	15,211.8	26.6	0.2%
ME 3	39 58 10	2019	Below Normal	May	--	16,781.3	16,743.1	38.2	0.2%	16,735.0	46.3	0.3%	16,713.0	68.3	0.4%
ME 3	39 58 10	2019	Below Normal	June	--	4,240.3	4,191.8	48.5	1.1%	4,182.5	57.8	1.4%	4,155.6	84.7	2.0%
ME 3	39 58 10	2019	Below Normal	July	--	1,352.3	1,303.9	48.4	3.6%	1,294.3	58.0	4.3%	1,265.9	86.5	6.4%
ME 3	39 58 10	2019	Below Normal	August	--	588.2	543.4	44.8	7.6%	534.4	53.8	9.1%	507.7	80.5	13.7%
ME 3	39 58 10	2019	Below Normal	September	Used in Summary Table Analysis	455.5	413.9	41.6	9.1%	405.6	50.0	11.0%	380.5	75.0	16.5%
ME 3	39 58 10	2020	Dry	October	Used in Summary Table Analysis	350.1	320.0	30.1	8.6%	313.9	36.2	10.3%	295.5	54.6	15.6%
ME 3	39 58 10	2020	Dry	November	Used in Summary Table Analysis	309.5	286.9	22.7	7.3%	282.3	27.3	8.8%	268.4	41.2	13.3%
ME 3	39 58 10	2020	Dry	December	--	13,134.3	13,113.4	20.8	0.2%	13,108.8	25.5	0.2%	13,096.1	38.2	0.3%
ME 3	39 58 10	2020	Dry	January	--	22,209.5	22,191.0	18.5	0.1%	22,187.5	22.0	0.1%	22,175.9	33.6	0.2%
ME 3	39 58 10	2020	Dry	February	--	7,406.7	7,390.0	16.7	0.2%	7,386.7	20.0	0.3%	7,376.5	30.2	0.4%
ME 3	39 58 10	2020	Dry	March	--	7,220.3	7,204.6	15.6	0.2%	7,201.5	18.8	0.3%	7,191.9	28.4	0.4%
ME 3	39 58 10	2020	Dry	April	--	5,456.8	5,418.9	38.0	0.7%	5,411.2	45.6	0.8%	5,388.8	68.1	1.2%
ME 3	39 58 10	2020	Dry	May	--	7,344.1	7,298.5	45.6	0.6%	7,289.4	54.7	0.7%	7,262.3	81.8	1.1%
ME 3	39 58 10	2020	Dry	June	--	2,101.2	2,043.2	58.0	2.8%	2,032.1	69.1	3.3%	1,999.2	102.0	4.9%
ME 3	39 58 10	2020	Dry	July	--	790.4	734.0	56.4	7.1%	722.8	67.6	8.6%	694.2	96.2	12.2%
ME 3	39 58 10	2020	Dry	August	--	392.9	338.5	54.4	13.9%	327.6	65.4	16.6%	297.3	95.6	24.3%
ME 3	39 58 10	2020	Dry	September	Used in Summary Table Analysis	242.5	192.0	50.5	20.8%	181.6	60.9	25.1%	151.2	91.3	37.6%
ME 3	39 57 11	2000	Above Normal	October	Used in Summary Table Analysis	809.2	774.7	34.5	4.3%	767.7	41.5	5.1%	746.8	62.4	7.7%
ME 3	39 57 11	2000	Above Normal	November	Used in Summary Table Analysis	12,006.9	11,980.3	26.6	0.2%	11,974.5	32.4	0.3%	11,958.3	48.6	0.4%
ME 3	39 57 11	2000	Above Normal	December	--	10,751.2	10,727.8	23.4	0.2%	10,723.0	28.1	0.3%	10,708.8	42.4	0.4%
ME 3	39 57 11	2000	Above Normal	January	--	28,388.9	28,368.1	20.8	0.1%	28,363.4	25.5	0.1%	28,350.7	38.2	0.1%
ME 3	39 57 11	2000	Above Normal	February	--	36,919.0	36,899.3	19.7	0.1%	36,895.8	23.1	0.1%	36,883.1	35.9	0.1%
ME 3	39 57 11	2000	Above Normal	March	--	18,277.8	18,259.3	18.5	0.1%	18,255.8	22.0	0.1%	18,244.2	33.6	0.2%
ME 3	39 57 11	2000	Above Normal	April	--	12,284.7	12,267.4	17.4	0.1%	12,263.9	20.8	0.2%	12,252.3	32.4	0.3%
ME 3	39 57 11	2000	Above Normal	May	--	7,070.3	7,029.9	40.4	0.6%	7,021.9	48.4	0.7%	6,997.8	72.5	1.0%
ME 3	39 57 11	2000	Above Normal	June	--	2,601.4	2,541.8	59.6	2.3%	2,530.0	71.4	2.7%	2,495.1	106.3	4.1%
ME 3	39 57 11	2000	Above Normal	July	--	986.7	934.7	52.0	5.3%	924.5	62.2	6.3%	894.0	92.7	9.4%
ME 3	39 57 11	2000	Above Normal	August	--	516.6	468.4	48.1	9.3%	458.8	57.7	11.2%	430.2	86.4	16.7%
ME 3	39 57 11	2000	Above Normal	September	Used in Summary Table Analysis	290.6	248.6	42.0	14.4%	240.2	50.4	17.3%	215.0	75.6	26.0%
ME 3	39 57 11	2001	Dry	October	Used in Summary Table Analysis	3,789.1	3,755.0	34.1	0.9%	3,748.0	41.1	1.1%	3,727.3	61.8	1.6%
ME 3	39 57 11	2001	Dry	November	Used in Summary Table Analysis	6,082.2	6,055.0	27.2	0.4%	6,049.5	32.6	0.5%	6,033.0	49.2	0.8%
ME 3	39 57 11	2001	Dry	December	--	8,796.4	8,772.7	23.7	0.3%	8,767.9	28.5	0.3%	8,753.5	42.9	0.5%
ME 3	39 57 11	2001	Dry	January	--	12,710.6	12,689.8	20.8	0.2%	12,685.2	25.5	0.2%	12,672.5	38.2	0.3%
ME 3	39 57 11	2001	Dry	February	--	17,421.3	17,401.6	19.7	0.1%	17,397.0	24.3	0.1%	17,385.4	35.9	0.2%
ME 3	39 57 11	2001	Dry	March	--	12,270.8	12,252.3	18.5	0.2%	12,247.7	23.1	0.2%	12,237.3	33.6	0.3%
ME 3	39 57 11	2001	Dry	April	--	10,944.3	10,902.8	41.6	0.4%	10,894.6	49.8	0.5%	10,870.0	74.3	0.7%
ME 3	39 57 11	2001	Dry	May	--	2,635.8	2,587.2	48.6	1.8%	2,577.4	58.3	2.2%	2,548.5	87.3	3.3%
ME 3	39 57 11	2001	Dry	June	--	2,630.4	2,564.9	65.5	2.5%	2,552.2	78.2	3.0%	2,514.8	115.6	4.4%
ME 3	39 57 11	2001	Dry	July	--	716.3	656.6	59.7	8.3%	644.7	71.5	10.0%	614.5	101.7	14.2%
ME 3	39 57 11	2001	Dry	August	--	168.7	111.3	57.4	34.0%	99.9	68.8	40.8%	68.2	100.5	59.6%
ME 3	39 57 11	2001	Dry	September	Used in Summary Table Analysis	91.4	41.1	50.3	55.0%	31.1	60.3	66.0%	2.0	89.4	97.9%
ME 3	39 57 11	2002	Below Normal	October	Used in Summary Table Analysis	260.5	219.3	41.3	15.8%	210.9	49.7	19.1%	185.7	74.8	28.7%
ME 3	39 57 11	2002	Below Normal	November	Used in Summary Table Analysis	11,969.9	11,938.7	31.3	0.3%	11,931.7	38.2	0.3%	11,909.7	60.2	0.5%
ME 3	39 57 11	2002	Below Normal	December	--	35,515.0	35,486.1	28.9	0.1%	35,480.3	34.7	0.1%	35,463.0	52.1	0.1%
ME 3	39 57 11	2002	Below Normal	January	--	30,770.8	30,745.4	25.5	0.1%	30,740.7	30.1	0.1%	30,724.5	46.3	0.2%
ME 3	39 57 11	2002	Below Normal	February	--	24,613.4	24,589.1	24.3	0.1%	24,584.5	28.9	0.1%	24,570.6	42.8	0.2%
ME 3	39 57 11	2002	Below Normal	March	--	17,729.2	17,707.2	22.0	0.1%	17,702.5	26.6	0.2%	17,688.7	40.5	0.2%
ME 3	39 57 11	2002	Below Normal	April	--	9,905.2	9,864.2	41.0	0.4%	9,856.1	49.1	0.5%	9,831.7	73.5	0.7%
ME 3	39 57 11	2002	Below Normal	May	--	3,311.9	3,263.5	48.4	1.5%	3,253.9	58.0	1.8%	3,225.2	86.7	2.6%
ME 3	39 57 11	2002	Below Normal	June	--	850.2	796.2	54.0	6.3%	785.6	64.6	7.6%	754.2	96.0	11.3%
ME 3	39 57 11	2002	Below Normal	July	--	358.6	304.9	53.6	15.0%	294.3	64.3	17.9%	263.4	95.1	26.5%
ME 3	39 57 11	2002	Below Normal	August	--	222.5	172.9	49.6	22.3%	163.0	59.5	26.7%	132.9	89.6	40.3%
ME 3	39 57 11	2002	Below Normal	September	Used in Summary Table Analysis	159.6	113.4	46.2	29.0%	104.2	55.4	34.7%	75.7	83.9	52.6%
ME 3	39 57 11	2003	Wet	October	Used in Summary Table Analysis	124.7	87.6	37.1	29.8%	80.1	44.6	35.8%	57.5	67.2	53.9%
ME 3	39 57 11	2003	Wet	November	Used in Summary Table Analysis	890.7	861.4	29.2	3.3%	855.4	35.2	4.0%	837.4	53.3	6.0%
ME 3	39 57 11	2003	Wet	December	--	56,423.6	56,397.0	26.6	0.0%	56,392.4	31.3	0.1%	56,377.3	46.3	0.1%
ME 3	39 57 11	2003	Wet	January	--	31,447.9	31,424.8	23.1	0.1%	31,420.1	27.8	0.1%	31,406.3	41.7	0.1%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 57 11	2003	Wet	February	--	20,310.2	20,289.4	20.8	0.1%	20,284.7	25.5	0.1%	20,272.0	38.2	0.2%
ME 3	39 57 11	2003	Wet	March	--	23,966.4	23,946.8	19.7	0.1%	23,943.3	23.1	0.1%	23,930.6	35.9	0.1%
ME 3	39 57 11	2003	Wet	April	--	42,748.8	42,729.2	19.7	0.0%	42,725.7	23.1	0.1%	42,713.0	35.9	0.1%
ME 3	39 57 11	2003	Wet	May	--	12,201.4	12,159.7	41.7	0.3%	12,151.6	49.8	0.4%	12,126.2	75.2	0.6%
ME 3	39 57 11	2003	Wet	June	--	3,160.6	3,108.9	51.7	1.6%	3,099.0	61.7	2.0%	3,069.3	91.3	2.9%
ME 3	39 57 11	2003	Wet	July	--	1,467.9	1,414.7	53.2	3.6%	1,404.2	63.8	4.3%	1,373.0	94.9	6.5%
ME 3	39 57 11	2003	Wet	August	--	754.4	703.0	51.5	6.8%	692.3	62.1	8.2%	659.1	95.3	12.6%
ME 3	39 57 11	2003	Wet	September	Used in Summary Table Analysis	452.8	410.3	42.5	9.4%	401.8	51.0	11.3%	375.3	77.5	17.1%
ME 3	39 57 11	2004	Wet	October	Used in Summary Table Analysis	319.9	285.3	34.6	10.8%	278.3	41.6	13.0%	257.2	62.7	19.6%
ME 3	39 57 11	2004	Wet	November	Used in Summary Table Analysis	5,759.0	5,731.4	27.7	0.5%	5,725.7	33.3	0.6%	5,708.7	50.3	0.9%
ME 3	39 57 11	2004	Wet	December	--	36,116.9	36,092.6	24.3	0.1%	36,086.8	30.1	0.1%	36,071.8	45.1	0.1%
ME 3	39 57 11	2004	Wet	January	--	31,341.4	31,319.4	22.0	0.1%	31,314.8	26.6	0.1%	31,302.1	39.4	0.1%
ME 3	39 57 11	2004	Wet	February	--	38,108.8	38,089.1	19.7	0.1%	38,084.5	24.3	0.1%	38,071.8	37.0	0.1%
ME 3	39 57 11	2004	Wet	March	--	16,500.0	16,481.5	18.5	0.1%	16,478.0	22.0	0.1%	16,466.4	33.6	0.2%
ME 3	39 57 11	2004	Wet	April	--	9,433.0	9,414.9	18.1	0.2%	9,411.3	21.6	0.2%	9,400.3	32.6	0.3%
ME 3	39 57 11	2004	Wet	May	--	3,405.9	3,365.4	40.5	1.2%	3,357.4	48.5	1.4%	3,333.4	72.5	2.1%
ME 3	39 57 11	2004	Wet	June	--	688.4	638.6	49.8	7.2%	628.8	59.6	8.7%	600.0	88.4	12.8%
ME 3	39 57 11	2004	Wet	July	--	351.4	299.1	52.4	14.9%	288.7	62.7	17.9%	257.9	93.5	26.6%
ME 3	39 57 11	2004	Wet	August	--	220.8	172.3	48.5	22.0%	162.6	58.1	26.3%	133.7	87.1	39.4%
ME 3	39 57 11	2004	Wet	September	Used in Summary Table Analysis	158.2	112.4	45.8	28.9%	103.3	54.9	34.7%	75.8	82.4	52.1%
ME 3	39 57 11	2005	Above Normal	October	Used in Summary Table Analysis	7,625.5	7,590.0	35.4	0.5%	7,582.9	42.6	0.6%	7,561.3	64.1	0.8%
ME 3	39 57 11	2005	Above Normal	November	Used in Summary Table Analysis	2,248.4	2,220.9	27.4	1.2%	2,215.5	32.9	1.5%	2,198.7	49.7	2.2%
ME 3	39 57 11	2005	Above Normal	December	--	20,864.6	20,841.4	23.1	0.1%	20,836.8	27.8	0.1%	20,821.8	42.8	0.2%
ME 3	39 57 11	2005	Above Normal	January	--	22,256.9	22,236.1	20.8	0.1%	22,231.5	25.5	0.1%	22,217.6	39.4	0.2%
ME 3	39 57 11	2005	Above Normal	February	--	13,988.4	13,968.8	19.7	0.1%	13,964.1	24.3	0.2%	13,952.5	35.9	0.3%
ME 3	39 57 11	2005	Above Normal	March	--	28,471.1	28,451.4	19.7	0.1%	28,447.9	23.1	0.1%	28,436.3	34.7	0.1%
ME 3	39 57 11	2005	Above Normal	April	--	21,380.8	21,363.4	17.4	0.1%	21,360.0	20.8	0.1%	21,348.4	32.4	0.2%
ME 3	39 57 11	2005	Above Normal	May	--	19,494.2	19,452.5	41.7	0.2%	19,444.4	49.8	0.3%	19,420.1	74.1	0.4%
ME 3	39 57 11	2005	Above Normal	June	--	15,781.3	15,719.9	61.3	0.4%	15,708.3	72.9	0.5%	15,672.5	108.8	0.7%
ME 3	39 57 11	2005	Above Normal	July	--	2,862.0	2,807.8	54.3	1.9%	2,797.6	64.5	2.3%	2,767.0	95.0	3.3%
ME 3	39 57 11	2005	Above Normal	August	--	977.0	928.7	48.3	4.9%	919.2	57.8	5.9%	890.8	86.2	8.8%
ME 3	39 57 11	2005	Above Normal	September	Used in Summary Table Analysis	518.8	476.8	42.0	8.1%	468.5	50.4	9.7%	443.4	75.4	14.5%
ME 3	39 57 11	2006	Wet	October	Used in Summary Table Analysis	627.9	594.4	33.4	5.3%	587.7	40.2	6.4%	567.3	60.6	9.6%
ME 3	39 57 11	2006	Wet	November	Used in Summary Table Analysis	9,231.6	9,205.4	26.2	0.3%	9,200.1	31.5	0.3%	9,184.0	47.6	0.5%
ME 3	39 57 11	2006	Wet	December	--	43,255.8	43,231.5	24.3	0.1%	43,226.9	28.9	0.1%	43,211.8	44.0	0.1%
ME 3	39 57 11	2006	Wet	January	--	46,077.5	46,055.6	22.0	0.0%	46,050.9	26.6	0.1%	46,038.2	39.4	0.1%
ME 3	39 57 11	2006	Wet	February	--	26,524.3	26,504.6	19.7	0.1%	26,501.2	23.1	0.1%	26,488.4	35.9	0.1%
ME 3	39 57 11	2006	Wet	March	--	46,985.0	46,966.4	18.5	0.0%	46,961.8	23.1	0.0%	46,951.4	33.6	0.1%
ME 3	39 57 11	2006	Wet	April	--	30,358.8	30,341.4	17.4	0.1%	30,338.0	20.8	0.1%	30,327.5	31.3	0.1%
ME 3	39 57 11	2006	Wet	May	--	14,166.7	14,142.4	24.3	0.2%	14,137.7	28.9	0.2%	14,123.8	42.8	0.3%
ME 3	39 57 11	2006	Wet	June	--	3,542.2	3,492.0	50.2	1.4%	3,482.2	60.1	1.7%	3,453.2	89.0	2.5%
ME 3	39 57 11	2006	Wet	July	--	1,272.3	1,220.5	51.9	4.1%	1,210.4	61.9	4.9%	1,180.4	91.9	7.2%
ME 3	39 57 11	2006	Wet	August	--	658.6	609.2	49.4	7.5%	599.5	59.2	9.0%	570.3	88.3	13.4%
ME 3	39 57 11	2006	Wet	September	Used in Summary Table Analysis	420.2	377.7	42.4	10.1%	369.3	50.9	12.1%	343.9	76.2	18.1%
ME 3	39 57 11	2007	Above Normal	October	Used in Summary Table Analysis	269.4	235.3	34.1	12.6%	228.4	40.9	15.2%	207.7	61.7	22.9%
ME 3	39 57 11	2007	Above Normal	November	Used in Summary Table Analysis	8,601.2	8,573.8	27.3	0.3%	8,568.3	32.9	0.4%	8,551.5	49.7	0.6%
ME 3	39 57 11	2007	Above Normal	December	--	20,277.8	20,253.5	24.3	0.1%	20,248.8	28.9	0.1%	20,233.8	44.0	0.2%
ME 3	39 57 11	2007	Above Normal	January	--	10,215.7	10,194.2	21.5	0.2%	10,189.9	25.8	0.3%	10,176.5	39.2	0.4%
ME 3	39 57 11	2007	Above Normal	February	--	30,422.5	30,402.8	19.7	0.1%	30,398.1	24.3	0.1%	30,385.4	37.0	0.1%
ME 3	39 57 11	2007	Above Normal	March	--	13,075.2	13,055.6	19.7	0.2%	13,052.1	23.1	0.2%	13,039.4	35.9	0.3%
ME 3	39 57 11	2007	Above Normal	April	--	11,510.2	11,470.5	39.7	0.3%	11,462.6	47.6	0.4%	11,439.1	71.1	0.6%
ME 3	39 57 11	2007	Above Normal	May	--	4,128.4	4,081.4	47.0	1.1%	4,072.0	56.4	1.4%	4,044.0	84.4	2.0%
ME 3	39 57 11	2007	Above Normal	June	--	1,490.5	1,434.6	55.9	3.8%	1,423.6	66.9	4.5%	1,391.2	99.3	6.7%
ME 3	39 57 11	2007	Above Normal	July	--	492.4	437.5	54.9	11.2%	426.6	65.8	13.4%	394.9	97.5	19.8%
ME 3	39 57 11	2007	Above Normal	August	--	218.5	169.9	48.6	22.2%	160.3	58.2	26.6%	130.9	87.6	40.1%
ME 3	39 57 11	2007	Above Normal	September	Used in Summary Table Analysis	146.2	100.8	45.4	31.0%	91.8	54.4	37.2%	64.7	81.5	55.8%
ME 3	39 57 11	2008	Dry	October	Used in Summary Table Analysis	3,409.7	3,373.6	36.1	1.1%	3,366.3	43.4	1.3%	3,344.2	65.5	1.9%
ME 3	39 57 11	2008	Dry	November	Used in Summary Table Analysis	3,252.0	3,224.3	27.7	0.9%	3,218.6	33.3	1.0%	3,201.7	50.2	1.5%
ME 3	39 57 11	2008	Dry	December	--	22,953.7	22,929.4	24.3	0.1%	22,924.8	28.9	0.1%	22,909.7	44.0	0.2%
ME 3	39 57 11	2008	Dry	January	--	37,366.9	37,343.8	23.1	0.1%	37,338.0	28.9	0.1%	37,324.1	42.8	0.1%
ME 3	39 57 11	2008	Dry	February	--	26,230.3	26,210.6	19.7	0.1%	26,206.0	24.3	0.1%	26,194.4	35.9	0.1%
ME 3	39 57 11	2008	Dry	March	--	11,775.5	11,756.9	18.5	0.2%	11,753.5	22.0	0.2%	11,741.9	33.6	0.3%
ME 3	39 57 11	2008	Dry	April	--	9,001.5	8,961.1	40.4	0.4%	8,953.0	48.5	0.5%	8,928.9	72.6	0.8%
ME 3	39 57 11	2008	Dry	May	--	1,360.3	1,318.4	41.9	3.1%	1,310.3	50.0	3.7%	1,286.1	74.2	5.5%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 57 11	2008	Dry	June	--	433.9	373.3	60.6	14.0%	361.5	72.5	16.7%	326.4	107.5	24.8%
ME 3	39 57 11	2008	Dry	July	--	252.4	194.1	58.4	23.1%	182.5	69.9	27.7%	153.0	99.4	39.4%
ME 3	39 57 11	2008	Dry	August	--	175.6	119.8	55.8	31.8%	108.7	67.0	38.1%	74.9	100.7	57.3%
ME 3	39 57 11	2008	Dry	September	Used in Summary Table Analysis	137.4	84.2	53.2	38.7%	73.6	63.8	46.4%	42.9	94.5	68.8%
ME 3	39 57 11	2009	Critical	October	Used in Summary Table Analysis	918.7	878.1	40.6	4.4%	869.9	48.8	5.3%	844.9	73.8	8.0%
ME 3	39 57 11	2009	Critical	November	Used in Summary Table Analysis	5,469.2	5,438.1	31.1	0.6%	5,431.7	37.5	0.7%	5,409.8	59.4	1.1%
ME 3	39 57 11	2009	Critical	December	--	12,077.5	12,050.9	26.6	0.2%	12,045.1	32.4	0.3%	12,027.8	49.8	0.4%
ME 3	39 57 11	2009	Critical	January	--	8,770.9	8,746.1	24.9	0.3%	8,741.0	30.0	0.3%	8,725.7	45.3	0.5%
ME 3	39 57 11	2009	Critical	February	--	22,541.7	22,518.5	23.1	0.1%	22,513.9	27.8	0.1%	22,501.2	40.5	0.2%
ME 3	39 57 11	2009	Critical	March	--	21,066.0	21,046.3	19.7	0.1%	21,041.7	24.3	0.1%	21,030.1	35.9	0.2%
ME 3	39 57 11	2009	Critical	April	--	10,089.7	10,047.9	41.8	0.4%	10,039.6	50.1	0.5%	10,014.7	75.0	0.7%
ME 3	39 57 11	2009	Critical	May	--	15,555.6	15,504.6	50.9	0.3%	15,494.2	61.3	0.4%	15,464.1	91.4	0.6%
ME 3	39 57 11	2009	Critical	June	--	3,155.2	3,090.4	64.8	2.1%	3,077.9	77.3	2.5%	3,040.6	114.6	3.6%
ME 3	39 57 11	2009	Critical	July	--	1,258.3	1,199.5	58.8	4.7%	1,188.1	70.3	5.6%	1,158.4	99.9	7.9%
ME 3	39 57 11	2009	Critical	August	--	664.2	608.1	56.1	8.4%	596.9	67.2	10.1%	565.8	98.3	14.8%
ME 3	39 57 11	2009	Critical	September	Used in Summary Table Analysis	385.8	336.6	49.2	12.8%	326.8	59.0	15.3%	298.4	87.5	22.7%
ME 3	39 57 11	2010	Below Normal	October	Used in Summary Table Analysis	6,081.9	6,040.7	41.2	0.7%	6,032.4	49.5	0.8%	6,006.4	75.6	1.2%
ME 3	39 57 11	2010	Below Normal	November	Used in Summary Table Analysis	8,261.6	8,229.4	32.2	0.4%	8,222.9	38.7	0.5%	8,200.5	61.1	0.7%
ME 3	39 57 11	2010	Below Normal	December	--	12,298.6	12,270.8	27.8	0.2%	12,265.0	33.6	0.3%	12,247.7	50.9	0.4%
ME 3	39 57 11	2010	Below Normal	January	--	36,047.5	36,022.0	25.5	0.1%	36,017.4	30.1	0.1%	36,001.2	46.3	0.1%
ME 3	39 57 11	2010	Below Normal	February	--	27,192.1	27,170.1	22.0	0.1%	27,165.5	26.6	0.1%	27,151.6	40.5	0.1%
ME 3	39 57 11	2010	Below Normal	March	--	28,791.7	28,769.7	22.0	0.1%	28,766.2	25.5	0.1%	28,753.5	38.2	0.1%
ME 3	39 57 11	2010	Below Normal	April	--	39,929.4	39,908.6	20.8	0.1%	39,905.1	24.3	0.1%	39,892.4	37.0	0.1%
ME 3	39 57 11	2010	Below Normal	May	--	20,203.7	20,159.7	44.0	0.2%	20,151.6	52.1	0.3%	20,126.2	77.5	0.4%
ME 3	39 57 11	2010	Below Normal	June	--	9,298.5	9,236.2	62.3	0.7%	9,224.1	74.4	0.8%	9,187.8	110.6	1.2%
ME 3	39 57 11	2010	Below Normal	July	--	1,450.2	1,395.6	54.6	3.8%	1,385.1	65.2	4.5%	1,353.9	96.3	6.6%
ME 3	39 57 11	2010	Below Normal	August	--	563.1	513.7	49.4	8.8%	504.0	59.1	10.5%	475.0	88.1	15.6%
ME 3	39 57 11	2010	Below Normal	September	Used in Summary Table Analysis	645.1	598.2	46.9	7.3%	588.8	56.3	8.7%	560.9	84.2	13.1%
ME 3	39 57 11	2011	Wet	October	Used in Summary Table Analysis	9,594.1	9,559.5	34.6	0.4%	9,552.5	41.6	0.4%	9,531.5	62.6	0.7%
ME 3	39 57 11	2011	Wet	November	Used in Summary Table Analysis	14,174.8	14,148.1	26.6	0.2%	14,142.4	32.4	0.2%	14,125.0	49.8	0.4%
ME 3	39 57 11	2011	Wet	December	--	33,520.8	33,496.5	24.3	0.1%	33,491.9	28.9	0.1%	33,476.9	44.0	0.1%
ME 3	39 57 11	2011	Wet	January	--	14,121.5	14,100.7	20.8	0.1%	14,096.1	25.5	0.2%	14,083.3	38.2	0.3%
ME 3	39 57 11	2011	Wet	February	--	20,733.8	20,714.1	19.7	0.1%	20,709.5	24.3	0.1%	20,696.8	37.0	0.2%
ME 3	39 57 11	2011	Wet	March	--	51,887.7	51,869.2	18.5	0.0%	51,864.6	23.1	0.0%	51,853.0	34.7	0.1%
ME 3	39 57 11	2011	Wet	April	--	24,759.3	24,739.6	19.7	0.1%	24,736.1	23.1	0.1%	24,724.5	34.7	0.1%
ME 3	39 57 11	2011	Wet	May	--	11,362.7	11,321.5	41.2	0.4%	11,313.3	49.4	0.4%	11,288.8	74.0	0.7%
ME 3	39 57 11	2011	Wet	June	--	7,036.7	6,975.8	60.9	0.9%	6,963.7	73.0	1.0%	6,928.2	108.4	1.5%
ME 3	39 57 11	2011	Wet	July	--	1,825.9	1,766.7	59.3	3.2%	1,755.1	70.8	3.9%	1,721.8	104.2	5.7%
ME 3	39 57 11	2011	Wet	August	--	772.0	723.0	49.0	6.3%	713.3	58.7	7.6%	684.3	87.6	11.4%
ME 3	39 57 11	2011	Wet	September	Used in Summary Table Analysis	428.6	384.8	43.9	10.2%	376.0	52.6	12.3%	350.0	78.7	18.4%
ME 3	39 57 11	2012	Below Normal	October	Used in Summary Table Analysis	4,521.1	4,485.8	35.3	0.8%	4,478.7	42.4	0.9%	4,456.9	64.1	1.4%
ME 3	39 57 11	2012	Below Normal	November	Used in Summary Table Analysis	8,197.0	8,169.0	28.0	0.3%	8,163.3	33.7	0.4%	8,145.9	51.0	0.6%
ME 3	39 57 11	2012	Below Normal	December	--	5,164.9	5,140.7	24.2	0.5%	5,135.8	29.2	0.6%	5,120.8	44.1	0.9%
ME 3	39 57 11	2012	Below Normal	January	--	19,998.8	19,976.9	22.0	0.1%	19,972.2	26.6	0.1%	19,958.3	40.5	0.2%
ME 3	39 57 11	2012	Below Normal	February	--	18,179.4	18,158.6	20.8	0.1%	18,155.1	24.3	0.1%	18,142.4	37.0	0.2%
ME 3	39 57 11	2012	Below Normal	March	--	45,288.2	45,268.5	19.7	0.0%	45,263.9	24.3	0.1%	45,252.3	35.9	0.1%
ME 3	39 57 11	2012	Below Normal	April	--	26,809.0	26,790.5	18.5	0.1%	26,785.9	23.1	0.1%	26,774.3	34.7	0.1%
ME 3	39 57 11	2012	Below Normal	May	--	7,470.1	7,428.9	41.2	0.6%	7,420.8	49.3	0.7%	7,396.6	73.5	1.0%
ME 3	39 57 11	2012	Below Normal	June	--	5,496.2	5,434.0	62.2	1.1%	5,421.8	74.4	1.4%	5,385.9	110.3	2.0%
ME 3	39 57 11	2012	Below Normal	July	--	2,211.5	2,154.2	57.3	2.6%	2,142.8	68.6	3.1%	2,109.3	102.2	4.6%
ME 3	39 57 11	2012	Below Normal	August	--	384.8	339.9	44.9	11.7%	331.0	53.8	14.0%	304.3	80.5	20.9%
ME 3	39 57 11	2012	Below Normal	September	Used in Summary Table Analysis	244.5	205.1	39.4	16.1%	197.3	47.2	19.3%	173.8	70.7	28.9%
ME 3	39 57 11	2013	Below Normal	October	Used in Summary Table Analysis	1,898.3	1,864.2	34.0	1.8%	1,857.4	40.9	2.2%	1,836.8	61.5	3.2%
ME 3	39 57 11	2013	Below Normal	November	Used in Summary Table Analysis	14,611.1	14,583.3	27.8	0.2%	14,578.7	32.4	0.2%	14,561.3	49.8	0.3%
ME 3	39 57 11	2013	Below Normal	December	--	59,825.2	59,800.9	24.3	0.0%	59,795.1	30.1	0.1%	59,780.1	45.1	0.1%
ME 3	39 57 11	2013	Below Normal	January	--	22,151.6	22,130.8	20.8	0.1%	22,126.2	25.5	0.1%	22,113.4	38.2	0.2%
ME 3	39 57 11	2013	Below Normal	February	--	8,822.0	8,801.7	20.3	0.2%	8,797.6	24.4	0.3%	8,785.3	36.7	0.4%
ME 3	39 57 11	2013	Below Normal	March	--	10,294.8	10,275.1	19.7	0.2%	10,271.2	23.6	0.2%	10,259.3	35.5	0.3%
ME 3	39 57 11	2013	Below Normal	April	--	8,279.7	8,241.0	38.8	0.5%	8,233.2	46.5	0.6%	8,210.1	69.7	0.8%
ME 3	39 57 11	2013	Below Normal	May	--	4,416.4	4,369.7	46.8	1.1%	4,360.3	56.1	1.3%	4,332.5	83.9	1.9%
ME 3	39 57 11	2013	Below Normal	June	--	2,105.1	2,049.5	55.6	2.6%	2,038.5	66.6	3.2%	2,006.1	99.0	4.7%
ME 3	39 57 11	2013	Below Normal	July	--	715.4	663.1	52.3	7.3%	652.7	62.7	8.8%	622.6	92.8	13.0%
ME 3	39 57 11	2013	Below Normal	August	--	336.3	287.7	48.6	14.4%	278.0	58.3	17.3%	248.5	87.8	26.1%
ME 3	39 57 11	2013	Below Normal	September	Used in Summary Table Analysis	4,765.2	4,715.0	50.1	1.1%	4,705.0	60.2	1.3%	4,675.0	90.2	1.9%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 57 11	2014	Critical	October	Used in Summary Table Analysis	279.8	244.2	35.6	12.7%	237.0	42.7	15.3%	216.3	63.5	22.7%
ME 3	39 57 11	2014	Critical	November	Used in Summary Table Analysis	1,526.6	1,498.3	28.4	1.9%	1,492.5	34.1	2.2%	1,475.2	51.4	3.4%
ME 3	39 57 11	2014	Critical	December	--	1,582.9	1,557.9	25.0	1.6%	1,552.9	30.0	1.9%	1,537.6	45.3	2.9%
ME 3	39 57 11	2014	Critical	January	--	2,809.6	2,787.3	22.3	0.8%	2,782.8	26.9	1.0%	2,769.0	40.6	1.4%
ME 3	39 57 11	2014	Critical	February	--	15,718.8	15,697.9	20.8	0.1%	15,694.4	24.3	0.2%	15,680.6	38.2	0.2%
ME 3	39 57 11	2014	Critical	March	--	31,442.1	31,422.5	19.7	0.1%	31,417.8	24.3	0.1%	31,406.3	35.9	0.1%
ME 3	39 57 11	2014	Critical	April	--	12,974.5	12,932.9	41.7	0.3%	12,924.8	49.8	0.4%	12,899.3	75.2	0.6%
ME 3	39 57 11	2014	Critical	May	--	5,178.0	5,128.7	49.3	1.0%	5,118.9	59.1	1.1%	5,089.2	88.8	1.7%
ME 3	39 57 11	2014	Critical	June	--	1,193.5	1,126.9	66.6	5.6%	1,113.9	79.7	6.7%	1,076.5	117.1	9.8%
ME 3	39 57 11	2014	Critical	July	--	543.0	483.1	59.9	11.0%	471.2	71.8	13.2%	440.7	102.3	18.8%
ME 3	39 57 11	2014	Critical	August	--	344.2	287.8	56.5	16.4%	276.5	67.7	19.7%	245.0	99.2	28.8%
ME 3	39 57 11	2014	Critical	September	Used in Summary Table Analysis	2,563.1	2,508.2	54.9	2.1%	2,497.5	65.6	2.6%	2,465.3	97.8	3.8%
ME 3	39 57 11	2015	Dry	October	Used in Summary Table Analysis	11,324.3	11,282.6	41.7	0.4%	11,274.5	49.8	0.4%	11,249.8	74.5	0.7%
ME 3	39 57 11	2015	Dry	November	Used in Summary Table Analysis	9,000.2	8,969.1	31.1	0.3%	8,962.8	37.4	0.4%	8,941.1	59.1	0.7%
ME 3	39 57 11	2015	Dry	December	--	32,474.5	32,447.9	26.6	0.1%	32,442.1	32.4	0.1%	32,424.8	49.8	0.2%
ME 3	39 57 11	2015	Dry	January	--	14,555.6	14,531.3	24.3	0.2%	14,525.5	30.1	0.2%	14,510.4	45.1	0.3%
ME 3	39 57 11	2015	Dry	February	--	27,177.1	27,156.3	20.8	0.1%	27,151.6	25.5	0.1%	27,137.7	39.4	0.1%
ME 3	39 57 11	2015	Dry	March	--	11,556.8	11,537.4	19.4	0.2%	11,533.4	23.4	0.2%	11,521.4	35.4	0.3%
ME 3	39 57 11	2015	Dry	April	--	8,349.2	8,307.9	41.3	0.5%	8,299.7	49.5	0.6%	8,275.0	74.2	0.9%
ME 3	39 57 11	2015	Dry	May	--	1,507.5	1,458.9	48.6	3.2%	1,449.4	58.1	3.9%	1,421.6	85.9	5.7%
ME 3	39 57 11	2015	Dry	June	--	650.1	588.7	61.4	9.4%	576.6	73.5	11.3%	541.1	109.0	16.8%
ME 3	39 57 11	2015	Dry	July	--	266.0	207.2	58.8	22.1%	195.5	70.5	26.5%	165.8	100.2	37.7%
ME 3	39 57 11	2015	Dry	August	--	162.9	106.8	56.1	34.4%	95.6	67.3	41.3%	64.6	98.3	60.3%
ME 3	39 57 11	2015	Dry	September	Used in Summary Table Analysis	117.8	65.8	52.0	44.1%	55.1	62.7	53.2%	24.0	93.8	79.6%
ME 3	39 57 11	2016	Above Normal	October	Used in Summary Table Analysis	83.3	40.5	42.8	51.4%	32.3	51.0	61.2%	7.5	75.8	91.0%
ME 3	39 57 11	2016	Above Normal	November	Used in Summary Table Analysis	3,832.2	3,800.0	32.2	0.8%	3,793.5	38.7	1.0%	3,770.4	61.8	1.6%
ME 3	39 57 11	2016	Above Normal	December	--	36,451.4	36,422.5	28.9	0.1%	36,417.8	33.6	0.1%	36,399.3	52.1	0.1%
ME 3	39 57 11	2016	Above Normal	January	--	57,141.2	57,115.7	25.5	0.0%	57,110.0	31.3	0.1%	57,093.8	47.5	0.1%
ME 3	39 57 11	2016	Above Normal	February	--	24,239.6	24,217.6	22.0	0.1%	24,213.0	26.6	0.1%	24,200.2	39.4	0.2%
ME 3	39 57 11	2016	Above Normal	March	--	41,695.6	41,674.8	20.8	0.0%	41,670.1	25.5	0.1%	41,657.4	38.2	0.1%
ME 3	39 57 11	2016	Above Normal	April	--	18,513.9	18,495.4	18.5	0.1%	18,490.7	23.1	0.1%	18,479.2	34.7	0.2%
ME 3	39 57 11	2016	Above Normal	May	--	5,206.6	5,182.1	24.5	0.5%	5,177.1	29.5	0.6%	5,162.3	44.3	0.9%
ME 3	39 57 11	2016	Above Normal	June	--	1,505.2	1,457.8	47.5	3.2%	1,449.4	55.8	3.7%	1,425.1	80.1	5.3%
ME 3	39 57 11	2016	Above Normal	July	--	818.4	766.5	52.0	6.3%	756.2	62.3	7.6%	725.9	92.5	11.3%
ME 3	39 57 11	2016	Above Normal	August	--	486.9	437.0	49.9	10.2%	427.0	59.8	12.3%	397.5	89.3	18.3%
ME 3	39 57 11	2016	Above Normal	September	Used in Summary Table Analysis	323.5	277.4	46.1	14.2%	268.0	55.5	17.1%	240.1	83.4	25.8%
ME 3	39 57 11	2017	Wet	October	Used in Summary Table Analysis	18,217.6	18,181.7	35.9	0.2%	18,174.8	42.8	0.2%	18,152.8	64.8	0.4%
ME 3	39 57 11	2017	Wet	November	Used in Summary Table Analysis	18,750.0	18,722.2	27.8	0.1%	18,716.4	33.6	0.2%	18,700.2	49.8	0.3%
ME 3	39 57 11	2017	Wet	December	--	23,996.5	23,973.4	23.1	0.1%	23,967.6	28.9	0.1%	23,953.7	42.8	0.2%
ME 3	39 57 11	2017	Wet	January	--	106,562.5	106,540.5	22.0	0.0%	106,535.9	26.6	0.0%	106,522.0	40.5	0.0%
ME 3	39 57 11	2017	Wet	February	--	81,638.9	81,618.1	20.8	0.0%	81,614.6	24.3	0.0%	81,601.9	37.0	0.0%
ME 3	39 57 11	2017	Wet	March	--	27,211.8	27,192.1	19.7	0.1%	27,187.5	24.3	0.1%	27,175.9	35.9	0.1%
ME 3	39 57 11	2017	Wet	April	--	22,869.2	22,851.9	17.4	0.1%	22,848.4	20.8	0.1%	22,836.8	32.4	0.1%
ME 3	39 57 11	2017	Wet	May	--	6,269.8	6,244.9	24.9	0.4%	6,240.0	29.7	0.5%	6,225.2	44.6	0.7%
ME 3	39 57 11	2017	Wet	June	--	2,106.9	2,057.4	49.5	2.4%	2,047.6	59.4	2.8%	2,018.9	88.1	4.2%
ME 3	39 57 11	2017	Wet	July	--	928.1	875.7	52.4	5.6%	865.4	62.6	6.7%	835.2	92.9	10.0%
ME 3	39 57 11	2017	Wet	August	--	500.3	450.5	49.8	10.0%	440.6	59.7	11.9%	411.2	89.2	17.8%
ME 3	39 57 11	2017	Wet	September	Used in Summary Table Analysis	317.4	271.8	45.6	14.4%	262.7	54.8	17.3%	235.3	82.1	25.9%
ME 3	39 57 11	2018	Above Normal	October	Used in Summary Table Analysis	270.3	234.9	35.4	13.1%	227.7	42.5	15.7%	206.3	63.9	23.7%
ME 3	39 57 11	2018	Above Normal	November	Used in Summary Table Analysis	10,711.0	10,683.7	27.3	0.3%	10,678.1	32.9	0.3%	10,661.3	49.7	0.5%
ME 3	39 57 11	2018	Above Normal	December	--	5,437.8	5,414.7	23.1	0.4%	5,410.0	27.9	0.5%	5,395.7	42.1	0.8%
ME 3	39 57 11	2018	Above Normal	January	--	17,642.4	17,621.5	20.8	0.1%	17,616.9	25.5	0.1%	17,604.2	38.2	0.2%
ME 3	39 57 11	2018	Above Normal	February	--	7,590.3	7,571.2	19.1	0.3%	7,567.2	23.0	0.3%	7,555.4	34.8	0.5%
ME 3	39 57 11	2018	Above Normal	March	--	20,611.1	20,592.6	18.5	0.1%	20,589.1	22.0	0.1%	20,577.5	33.6	0.2%
ME 3	39 57 11	2018	Above Normal	April	--	32,096.1	32,079.9	16.2	0.1%	32,076.4	19.7	0.1%	32,066.0	30.1	0.1%
ME 3	39 57 11	2018	Above Normal	May	--	6,984.3	6,945.4	38.9	0.6%	6,937.7	46.5	0.7%	6,914.5	69.8	1.0%
ME 3	39 57 11	2018	Above Normal	June	--	1,909.3	1,859.7	49.5	2.6%	1,850.0	59.3	3.1%	1,821.4	87.8	4.6%
ME 3	39 57 11	2018	Above Normal	July	--	776.2	723.8	52.4	6.8%	713.4	62.8	8.1%	682.6	93.6	12.1%
ME 3	39 57 11	2018	Above Normal	August	--	437.5	389.5	48.0	11.0%	379.9	57.5	13.2%	351.3	86.1	19.7%
ME 3	39 57 11	2018	Above Normal	September	Used in Summary Table Analysis	295.3	249.6	45.7	15.5%	240.4	54.9	18.6%	213.0	82.3	27.9%
ME 3	39 57 11	2019	Below Normal	October	Used in Summary Table Analysis	204.1	169.3	34.9	17.1%	162.2	41.9	20.5%	141.0	63.2	30.9%
ME 3	39 57 11	2019	Below Normal	November	Used in Summary Table Analysis	6,570.5	6,542.9	27.5	0.4%	6,537.4	33.1	0.5%	6,520.5	50.0	0.8%
ME 3	39 57 11	2019	Below Normal	December	--	14,576.4	14,552.1	24.3	0.2%	14,547.5	28.9	0.2%	14,532.4	44.0	0.3%
ME 3	39 57 11	2019	Below Normal	January	--	35,038.2	35,017.4	20.8	0.1%	35,012.7	25.5	0.1%	35,000.0	38.2	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	39 57 11	2019	Below Normal	February	--	141,724.5	141,713.0	11.6	0.0%	141,701.4	23.1	0.0%	141,689.8	34.7	0.0%
ME 3	39 57 11	2019	Below Normal	March	--	42,221.1	42,202.5	18.5	0.0%	42,199.1	22.0	0.1%	42,187.5	33.6	0.1%
ME 3	39 57 11	2019	Below Normal	April	--	15,244.2	15,226.9	17.4	0.1%	15,223.4	20.8	0.1%	15,213.0	31.3	0.2%
ME 3	39 57 11	2019	Below Normal	May	--	16,802.1	16,760.4	41.7	0.2%	16,752.3	49.8	0.3%	16,728.0	74.1	0.4%
ME 3	39 57 11	2019	Below Normal	June	--	4,242.2	4,190.0	52.2	1.2%	4,180.1	62.2	1.5%	4,150.9	91.3	2.2%
ME 3	39 57 11	2019	Below Normal	July	--	1,354.7	1,302.1	52.7	3.9%	1,291.8	63.0	4.6%	1,261.0	93.8	6.9%
ME 3	39 57 11	2019	Below Normal	August	--	590.4	541.2	49.2	8.3%	531.4	59.0	10.0%	502.4	88.0	14.9%
ME 3	39 57 11	2019	Below Normal	September	Used in Summary Table Analysis	457.6	412.1	45.5	9.9%	403.0	54.6	11.9%	375.7	81.9	17.9%
ME 3	39 57 11	2020	Dry	October	Used in Summary Table Analysis	352.0	318.6	33.4	9.5%	311.9	40.2	11.4%	291.5	60.5	17.2%
ME 3	39 57 11	2020	Dry	November	Used in Summary Table Analysis	312.0	286.2	25.7	8.2%	281.0	30.9	9.9%	265.3	46.6	15.0%
ME 3	39 57 11	2020	Dry	December	--	13,153.9	13,129.6	24.3	0.2%	13,125.0	28.9	0.2%	13,111.1	42.8	0.3%
ME 3	39 57 11	2020	Dry	January	--	22,226.9	22,204.9	22.0	0.1%	22,200.2	26.6	0.1%	22,187.5	39.4	0.2%
ME 3	39 57 11	2020	Dry	February	--	7,409.5	7,390.0	19.4	0.3%	7,386.1	23.4	0.3%	7,374.2	35.3	0.5%
ME 3	39 57 11	2020	Dry	March	--	7,224.7	7,206.3	18.4	0.3%	7,202.4	22.2	0.3%	7,191.3	33.3	0.5%
ME 3	39 57 11	2020	Dry	April	--	5,461.5	5,420.4	41.1	0.8%	5,412.2	49.3	0.9%	5,387.8	73.6	1.3%
ME 3	39 57 11	2020	Dry	May	--	7,349.5	7,300.5	49.1	0.7%	7,290.7	58.8	0.8%	7,261.6	88.0	1.2%
ME 3	39 57 11	2020	Dry	June	--	2,103.1	2,041.2	61.9	2.9%	2,029.3	73.8	3.5%	1,994.3	108.8	5.2%
ME 3	39 57 11	2020	Dry	July	--	792.5	731.4	61.1	7.7%	719.3	73.2	9.2%	688.5	104.0	13.1%
ME 3	39 57 11	2020	Dry	August	--	395.0	335.7	59.3	15.0%	323.9	71.1	18.0%	291.4	103.5	26.2%
ME 3	39 57 11	2020	Dry	September	Used in Summary Table Analysis	244.6	189.6	55.0	22.5%	178.4	66.2	27.1%	145.7	98.9	40.4%
ME 3	38 57 12	2000	Above Normal	October	Used in Summary Table Analysis	810.6	775.0	35.6	4.4%	767.8	42.8	5.3%	746.3	64.4	7.9%
ME 3	38 57 12	2000	Above Normal	November	Used in Summary Table Analysis	12,023.1	11,995.4	27.8	0.2%	11,989.6	33.6	0.3%	11,972.2	50.9	0.4%
ME 3	38 57 12	2000	Above Normal	December	--	10,760.4	10,736.3	24.1	0.2%	10,731.4	29.1	0.3%	10,716.7	43.8	0.4%
ME 3	38 57 12	2000	Above Normal	January	--	28,416.7	28,394.7	22.0	0.1%	28,390.0	26.6	0.1%	28,376.2	40.5	0.1%
ME 3	38 57 12	2000	Above Normal	February	--	36,937.5	36,917.8	19.7	0.1%	36,913.2	24.3	0.1%	36,900.5	37.0	0.1%
ME 3	38 57 12	2000	Above Normal	March	--	18,284.7	18,265.0	19.7	0.1%	18,261.6	23.1	0.1%	18,250.0	34.7	0.2%
ME 3	38 57 12	2000	Above Normal	April	--	12,290.5	12,272.0	18.5	0.2%	12,268.5	22.0	0.2%	12,256.9	33.6	0.3%
ME 3	38 57 12	2000	Above Normal	May	--	7,074.5	7,033.4	41.1	0.6%	7,025.1	49.4	0.7%	7,000.7	73.8	1.0%
ME 3	38 57 12	2000	Above Normal	June	--	2,603.5	2,542.6	60.9	2.3%	2,530.7	72.8	2.8%	2,495.1	108.3	4.2%
ME 3	38 57 12	2000	Above Normal	July	--	987.9	934.6	53.3	5.4%	924.1	63.8	6.5%	892.9	95.1	9.6%
ME 3	38 57 12	2000	Above Normal	August	--	517.7	468.2	49.5	9.6%	458.4	59.3	11.5%	428.9	88.8	17.1%
ME 3	38 57 12	2000	Above Normal	September	Used in Summary Table Analysis	291.7	248.4	43.2	14.8%	239.8	51.9	17.8%	213.8	77.8	26.7%
ME 3	38 57 12	2001	Dry	October	Used in Summary Table Analysis	3,793.3	3,758.1	35.2	0.9%	3,750.9	42.4	1.1%	3,729.5	63.8	1.7%
ME 3	38 57 12	2001	Dry	November	Used in Summary Table Analysis	6,088.8	6,060.8	28.0	0.5%	6,055.1	33.7	0.6%	6,038.0	50.8	0.8%
ME 3	38 57 12	2001	Dry	December	--	8,803.1	8,778.7	24.4	0.3%	8,773.7	29.4	0.3%	8,758.8	44.3	0.5%
ME 3	38 57 12	2001	Dry	January	--	12,723.4	12,701.4	22.0	0.2%	12,696.8	26.6	0.2%	12,682.9	40.5	0.3%
ME 3	38 57 12	2001	Dry	February	--	17,429.4	17,408.6	20.8	0.1%	17,405.1	24.3	0.1%	17,392.4	37.0	0.2%
ME 3	38 57 12	2001	Dry	March	--	12,275.5	12,255.8	19.7	0.2%	12,252.3	23.1	0.2%	12,240.7	34.7	0.3%
ME 3	38 57 12	2001	Dry	April	--	10,949.1	10,906.8	42.2	0.4%	10,898.5	50.6	0.5%	10,873.5	75.6	0.7%
ME 3	38 57 12	2001	Dry	May	--	2,636.6	2,587.0	49.5	1.9%	2,577.1	59.5	2.3%	2,547.6	89.0	3.4%
ME 3	38 57 12	2001	Dry	June	--	2,633.4	2,566.8	66.7	2.5%	2,553.7	79.7	3.0%	2,515.5	117.9	4.5%
ME 3	38 57 12	2001	Dry	July	--	717.1	655.9	61.2	8.5%	643.7	73.3	10.2%	612.7	104.4	14.6%
ME 3	38 57 12	2001	Dry	August	--	169.7	110.7	59.0	34.8%	98.9	70.8	41.7%	66.3	103.4	60.9%
ME 3	38 57 12	2001	Dry	September	Used in Summary Table Analysis	92.3	40.6	51.8	56.1%	30.2	62.1	67.3%	0.2	92.1	99.8%
ME 3	38 57 12	2002	Below Normal	October	Used in Summary Table Analysis	261.6	219.1	42.5	16.3%	210.4	51.1	19.6%	184.5	77.0	29.5%
ME 3	38 57 12	2002	Below Normal	November	Used in Summary Table Analysis	11,979.2	11,945.6	33.6	0.3%	11,938.7	40.5	0.3%	11,916.7	62.5	0.5%
ME 3	38 57 12	2002	Below Normal	December	--	35,539.4	35,510.4	28.9	0.1%	35,504.6	34.7	0.1%	35,486.1	53.2	0.1%
ME 3	38 57 12	2002	Below Normal	January	--	30,787.0	30,760.4	26.6	0.1%	30,755.8	31.3	0.1%	30,739.6	47.5	0.2%
ME 3	38 57 12	2002	Below Normal	February	--	24,622.7	24,599.5	23.1	0.1%	24,593.8	28.9	0.1%	24,579.9	42.8	0.2%
ME 3	38 57 12	2002	Below Normal	March	--	17,737.3	17,714.1	23.1	0.1%	17,709.5	27.8	0.2%	17,695.6	41.7	0.2%
ME 3	38 57 12	2002	Below Normal	April	--	9,908.9	9,867.0	41.9	0.4%	9,858.8	50.1	0.5%	9,833.9	75.0	0.8%
ME 3	38 57 12	2002	Below Normal	May	--	3,313.7	3,264.2	49.4	1.5%	3,254.4	59.3	1.8%	3,225.1	88.5	2.7%
ME 3	38 57 12	2002	Below Normal	June	--	851.2	796.1	55.1	6.5%	785.2	66.0	7.7%	753.1	98.1	11.5%
ME 3	38 57 12	2002	Below Normal	July	--	359.5	304.6	55.0	15.3%	293.6	65.9	18.3%	262.0	97.6	27.1%
ME 3	38 57 12	2002	Below Normal	August	--	223.6	172.6	51.0	22.8%	162.4	61.2	27.4%	131.5	92.1	41.2%
ME 3	38 57 12	2002	Below Normal	September	Used in Summary Table Analysis	160.6	113.0	47.6	29.6%	103.5	57.0	35.5%	74.2	86.4	53.8%
ME 3	38 57 12	2003	Wet	October	Used in Summary Table Analysis	125.7	87.4	38.3	30.5%	79.7	46.0	36.6%	56.4	69.2	55.1%
ME 3	38 57 12	2003	Wet	November	Used in Summary Table Analysis	891.9	861.7	30.2	3.4%	855.5	36.4	4.1%	836.9	55.0	6.2%
ME 3	38 57 12	2003	Wet	December	--	56,480.3	56,453.7	26.6	0.0%	56,449.1	31.3	0.1%	56,432.9	47.5	0.1%
ME 3	38 57 12	2003	Wet	January	--	31,460.6	31,437.5	23.1	0.1%	31,432.9	27.8	0.1%	31,417.8	42.8	0.1%
ME 3	38 57 12	2003	Wet	February	--	20,317.1	20,295.1	22.0	0.1%	20,290.5	26.6	0.1%	20,277.8	39.4	0.2%
ME 3	38 57 12	2003	Wet	March	--	23,976.9	23,957.2	19.7	0.1%	23,952.5	24.3	0.1%	23,939.8	37.0	0.2%
ME 3	38 57 12	2003	Wet	April	--	42,773.1	42,753.5	19.7	0.0%	42,748.8	24.3	0.1%	42,737.3	35.9	0.1%
ME 3	38 57 12	2003	Wet	May	--	12,206.0	12,163.2	42.8	0.4%	12,155.1	50.9	0.4%	12,129.6	76.4	0.6%

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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 57 12	2003	Wet	June	--	3,162.2	3,109.3	52.9	1.7%	3,099.1	63.1	2.0%	3,068.6	93.5	3.0%
ME 3	38 57 12	2003	Wet	July	--	1,469.3	1,414.7	54.6	3.7%	1,403.9	65.4	4.5%	1,372.0	97.3	6.6%
ME 3	38 57 12	2003	Wet	August	--	755.7	702.8	52.9	7.0%	691.9	63.8	8.4%	657.9	97.8	12.9%
ME 3	38 57 12	2003	Wet	September	Used in Summary Table Analysis	453.9	410.2	43.8	9.6%	401.4	52.5	11.6%	374.1	79.9	17.6%
ME 3	38 57 12	2004	Wet	October	Used in Summary Table Analysis	321.0	285.3	35.7	11.1%	278.1	42.9	13.4%	256.4	64.6	20.1%
ME 3	38 57 12	2004	Wet	November	Used in Summary Table Analysis	5,766.0	5,737.4	28.6	0.5%	5,731.5	34.5	0.6%	5,713.9	52.1	0.9%
ME 3	38 57 12	2004	Wet	December	--	36,147.0	36,121.5	25.5	0.1%	36,115.7	31.3	0.1%	36,100.7	46.3	0.1%
ME 3	38 57 12	2004	Wet	January	--	31,361.1	31,339.1	22.0	0.1%	31,334.5	26.6	0.1%	31,320.6	40.5	0.1%
ME 3	38 57 12	2004	Wet	February	--	38,128.5	38,107.6	20.8	0.1%	38,104.2	24.3	0.1%	38,091.4	37.0	0.1%
ME 3	38 57 12	2004	Wet	March	--	16,504.6	16,486.1	18.5	0.1%	16,481.5	23.1	0.1%	16,469.9	34.7	0.2%
ME 3	38 57 12	2004	Wet	April	--	9,436.3	9,417.7	18.6	0.2%	9,413.9	22.5	0.2%	9,402.5	33.8	0.4%
ME 3	38 57 12	2004	Wet	May	--	3,408.6	3,367.2	41.3	1.2%	3,359.1	49.4	1.4%	3,334.7	73.8	2.2%
ME 3	38 57 12	2004	Wet	June	--	689.4	638.5	50.9	7.4%	628.5	60.9	8.8%	599.0	90.4	13.1%
ME 3	38 57 12	2004	Wet	July	--	352.5	298.9	53.7	15.2%	288.2	64.3	18.2%	256.6	95.9	27.2%
ME 3	38 57 12	2004	Wet	August	--	221.8	171.9	49.8	22.5%	162.0	59.8	26.9%	132.3	89.5	40.4%
ME 3	38 57 12	2004	Wet	September	Used in Summary Table Analysis	159.2	112.1	47.0	29.5%	102.7	56.4	35.5%	74.5	84.7	53.2%
ME 3	38 57 12	2005	Above Normal	October	Used in Summary Table Analysis	7,634.3	7,597.8	36.5	0.5%	7,590.5	43.8	0.6%	7,568.3	66.0	0.9%
ME 3	38 57 12	2005	Above Normal	November	Used in Summary Table Analysis	2,250.3	2,222.0	28.4	1.3%	2,216.3	34.0	1.5%	2,199.0	51.4	2.3%
ME 3	38 57 12	2005	Above Normal	December	--	20,890.0	20,864.6	25.5	0.1%	20,860.0	30.1	0.1%	20,844.9	45.1	0.2%
ME 3	38 57 12	2005	Above Normal	January	--	22,277.8	22,254.6	23.1	0.1%	22,250.0	27.8	0.1%	22,236.1	41.7	0.2%
ME 3	38 57 12	2005	Above Normal	February	--	13,993.1	13,972.2	20.8	0.1%	13,968.8	24.3	0.2%	13,956.0	37.0	0.3%
ME 3	38 57 12	2005	Above Normal	March	--	28,486.1	28,466.4	19.7	0.1%	28,463.0	23.1	0.1%	28,450.2	35.9	0.1%
ME 3	38 57 12	2005	Above Normal	April	--	21,392.4	21,372.7	19.7	0.1%	21,369.2	23.1	0.1%	21,357.6	34.7	0.2%
ME 3	38 57 12	2005	Above Normal	May	--	19,505.8	19,464.1	41.7	0.2%	19,456.0	49.8	0.3%	19,430.6	75.2	0.4%
ME 3	38 57 12	2005	Above Normal	June	--	15,795.1	15,733.8	61.3	0.4%	15,721.1	74.1	0.5%	15,685.2	110.0	0.7%
ME 3	38 57 12	2005	Above Normal	July	--	2,863.1	2,807.5	55.6	1.9%	2,797.0	66.1	2.3%	2,765.7	97.3	3.4%
ME 3	38 57 12	2005	Above Normal	August	--	978.4	928.7	49.6	5.1%	919.0	59.4	6.1%	889.7	88.6	9.1%
ME 3	38 57 12	2005	Above Normal	September	Used in Summary Table Analysis	520.1	476.8	43.3	8.3%	468.2	51.9	10.0%	442.4	77.7	14.9%
ME 3	38 57 12	2006	Wet	October	Used in Summary Table Analysis	629.2	594.8	34.5	5.5%	587.8	41.4	6.6%	566.8	62.4	9.9%
ME 3	38 57 12	2006	Wet	November	Used in Summary Table Analysis	9,243.1	9,216.0	27.1	0.3%	9,210.5	32.5	0.4%	9,194.0	49.1	0.5%
ME 3	38 57 12	2006	Wet	December	--	43,292.8	43,268.5	24.3	0.1%	43,263.9	28.9	0.1%	43,247.7	45.1	0.1%
ME 3	38 57 12	2006	Wet	January	--	46,111.1	46,089.1	22.0	0.0%	46,084.5	26.6	0.1%	46,070.6	40.5	0.1%
ME 3	38 57 12	2006	Wet	February	--	26,539.4	26,519.7	19.7	0.1%	26,515.0	24.3	0.1%	26,502.3	37.0	0.1%
ME 3	38 57 12	2006	Wet	March	--	47,011.6	46,993.1	18.5	0.0%	46,988.4	23.1	0.0%	46,976.9	34.7	0.1%
ME 3	38 57 12	2006	Wet	April	--	30,370.4	30,353.0	17.4	0.1%	30,349.5	20.8	0.1%	30,338.0	32.4	0.1%
ME 3	38 57 12	2006	Wet	May	--	14,173.6	14,149.3	24.3	0.2%	14,143.5	30.1	0.2%	14,129.6	44.0	0.3%
ME 3	38 57 12	2006	Wet	June	--	3,543.8	3,492.5	51.3	1.4%	3,482.4	61.3	1.7%	3,453.0	90.7	2.6%
ME 3	38 57 12	2006	Wet	July	--	1,273.8	1,220.7	53.1	4.2%	1,210.3	63.5	5.0%	1,179.5	94.3	7.4%
ME 3	38 57 12	2006	Wet	August	--	660.0	609.2	50.8	7.7%	599.2	60.8	9.2%	569.3	90.7	13.7%
ME 3	38 57 12	2006	Wet	September	Used in Summary Table Analysis	421.4	377.7	43.7	10.4%	369.0	52.4	12.4%	342.9	78.5	18.6%
ME 3	38 57 12	2007	Above Normal	October	Used in Summary Table Analysis	270.5	235.4	35.1	13.0%	228.3	42.2	15.6%	206.9	63.6	23.5%
ME 3	38 57 12	2007	Above Normal	November	Used in Summary Table Analysis	8,611.2	8,583.1	28.1	0.3%	8,577.4	33.8	0.4%	8,560.1	51.2	0.6%
ME 3	38 57 12	2007	Above Normal	December	--	20,298.6	20,273.1	25.5	0.1%	20,267.4	31.3	0.2%	20,252.3	46.3	0.2%
ME 3	38 57 12	2007	Above Normal	January	--	10,221.9	10,199.8	22.1	0.2%	10,195.3	26.6	0.3%	10,181.5	40.4	0.4%
ME 3	38 57 12	2007	Above Normal	February	--	30,445.6	30,424.8	20.8	0.1%	30,420.1	25.5	0.1%	30,406.3	39.4	0.1%
ME 3	38 57 12	2007	Above Normal	March	--	13,081.0	13,060.2	20.8	0.2%	13,055.6	25.5	0.2%	13,044.0	37.0	0.3%
ME 3	38 57 12	2007	Above Normal	April	--	11,514.6	11,474.2	40.4	0.4%	11,466.2	48.4	0.4%	11,442.1	72.5	0.6%
ME 3	38 57 12	2007	Above Normal	May	--	4,130.8	4,082.8	48.0	1.2%	4,073.1	57.6	1.4%	4,044.6	86.2	2.1%
ME 3	38 57 12	2007	Above Normal	June	--	1,492.1	1,435.2	56.9	3.8%	1,424.1	68.1	4.6%	1,390.9	101.3	6.8%
ME 3	38 57 12	2007	Above Normal	July	--	493.4	437.2	56.2	11.4%	426.0	67.4	13.7%	393.5	99.9	20.2%
ME 3	38 57 12	2007	Above Normal	August	--	219.5	169.6	49.9	22.7%	159.7	59.8	27.3%	129.5	90.0	41.0%
ME 3	38 57 12	2007	Above Normal	September	Used in Summary Table Analysis	147.2	100.5	46.7	31.7%	91.2	56.0	38.0%	63.3	83.9	57.0%
ME 3	38 57 12	2008	Dry	October	Used in Summary Table Analysis	3,413.8	3,376.5	37.3	1.1%	3,369.0	44.8	1.3%	3,346.2	67.6	2.0%
ME 3	38 57 12	2008	Dry	November	Used in Summary Table Analysis	3,255.9	3,227.3	28.6	0.9%	3,221.5	34.4	1.1%	3,204.1	51.9	1.6%
ME 3	38 57 12	2008	Dry	December	--	22,980.3	22,954.9	25.5	0.1%	22,949.1	31.3	0.1%	22,934.0	46.3	0.2%
ME 3	38 57 12	2008	Dry	January	--	37,392.4	37,368.1	24.3	0.1%	37,363.4	28.9	0.1%	37,348.4	44.0	0.1%
ME 3	38 57 12	2008	Dry	February	--	26,237.3	26,217.6	19.7	0.1%	26,213.0	24.3	0.1%	26,200.2	37.0	0.1%
ME 3	38 57 12	2008	Dry	March	--	11,778.9	11,760.4	18.5	0.2%	11,756.9	22.0	0.2%	11,745.4	33.6	0.3%
ME 3	38 57 12	2008	Dry	April	--	9,004.5	8,963.4	41.1	0.5%	8,955.2	49.3	0.5%	8,930.8	73.7	0.8%
ME 3	38 57 12	2008	Dry	May	--	1,360.9	1,318.1	42.8	3.1%	1,309.7	51.2	3.8%	1,285.0	75.9	5.6%
ME 3	38 57 12	2008	Dry	June	--	435.0	373.1	61.8	14.2%	361.0	73.9	17.0%	325.3	109.7	25.2%
ME 3	38 57 12	2008	Dry	July	--	253.4	193.6	59.8	23.6%	181.7	71.6	28.3%	151.4	101.9	40.2%
ME 3	38 57 12	2008	Dry	August	--	176.6	119.2	57.3	32.5%	107.8	68.8	39.0%	73.2	103.4	58.6%
ME 3	38 57 12	2008	Dry	September	Used in Summary Table Analysis	138.3	83.7	54.6	39.5%	72.8	65.5	47.3%	41.3	97.0	70.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 57 12	2009	Critical	October	Used in Summary Table Analysis	919.9	878.1	41.9	4.5%	869.7	50.3	5.5%	843.9	76.0	8.3%
ME 3	38 57 12	2009	Critical	November	Used in Summary Table Analysis	5,476.0	5,443.9	32.2	0.6%	5,437.3	38.8	0.7%	5,414.8	61.2	1.1%
ME 3	38 57 12	2009	Critical	December	--	12,091.4	12,063.7	27.8	0.2%	12,057.9	33.6	0.3%	12,040.5	50.9	0.4%
ME 3	38 57 12	2009	Critical	January	--	8,775.6	8,749.9	25.7	0.3%	8,744.8	30.8	0.4%	8,728.9	46.6	0.5%
ME 3	38 57 12	2009	Critical	February	--	22,553.2	22,530.1	23.1	0.1%	22,525.5	27.8	0.1%	22,511.6	41.7	0.2%
ME 3	38 57 12	2009	Critical	March	--	21,075.2	21,054.4	20.8	0.1%	21,050.9	24.3	0.1%	21,038.2	37.0	0.2%
ME 3	38 57 12	2009	Critical	April	--	10,091.7	10,049.2	42.5	0.4%	10,040.7	50.9	0.5%	10,015.4	76.3	0.8%
ME 3	38 57 12	2009	Critical	May	--	15,560.2	15,509.3	50.9	0.3%	15,498.8	61.3	0.4%	15,467.6	92.6	0.6%
ME 3	38 57 12	2009	Critical	June	--	3,156.7	3,090.6	66.1	2.1%	3,077.9	78.8	2.5%	3,039.9	116.8	3.7%
ME 3	38 57 12	2009	Critical	July	--	1,259.6	1,199.3	60.3	4.8%	1,187.5	72.1	5.7%	1,157.0	102.6	8.1%
ME 3	38 57 12	2009	Critical	August	--	665.3	607.7	57.6	8.7%	596.2	69.1	10.4%	564.2	101.1	15.2%
ME 3	38 57 12	2009	Critical	September	Used in Summary Table Analysis	386.9	336.2	50.6	13.1%	326.1	60.8	15.7%	296.8	90.1	23.3%
ME 3	38 57 12	2010	Below Normal	October	Used in Summary Table Analysis	6,083.4	6,041.1	42.4	0.7%	6,032.5	50.9	0.8%	6,005.7	77.8	1.3%
ME 3	38 57 12	2010	Below Normal	November	Used in Summary Table Analysis	8,266.7	8,233.4	33.2	0.4%	8,226.7	39.9	0.5%	8,203.6	63.1	0.8%
ME 3	38 57 12	2010	Below Normal	December	--	12,307.9	12,278.9	28.9	0.2%	12,273.1	34.7	0.3%	12,255.8	52.1	0.4%
ME 3	38 57 12	2010	Below Normal	January	--	36,077.5	36,050.9	26.6	0.1%	36,046.3	31.3	0.1%	36,030.1	47.5	0.1%
ME 3	38 57 12	2010	Below Normal	February	--	27,201.4	27,178.2	23.1	0.1%	27,173.6	27.8	0.1%	27,159.7	41.7	0.2%
ME 3	38 57 12	2010	Below Normal	March	--	28,799.8	28,777.8	22.0	0.1%	28,773.1	26.6	0.1%	28,760.4	39.4	0.1%
ME 3	38 57 12	2010	Below Normal	April	--	39,944.4	39,923.6	20.8	0.1%	39,919.0	25.5	0.1%	39,906.3	38.2	0.1%
ME 3	38 57 12	2010	Below Normal	May	--	20,215.3	20,170.1	45.1	0.2%	20,162.0	53.2	0.3%	20,136.6	78.7	0.4%
ME 3	38 57 12	2010	Below Normal	June	--	9,307.3	9,244.0	63.3	0.7%	9,231.5	75.8	0.8%	9,194.6	112.7	1.2%
ME 3	38 57 12	2010	Below Normal	July	--	1,451.5	1,395.5	56.0	3.9%	1,384.7	66.8	4.6%	1,352.7	98.8	6.8%
ME 3	38 57 12	2010	Below Normal	August	--	564.4	513.6	50.8	9.0%	503.6	60.8	10.8%	473.8	90.6	16.1%
ME 3	38 57 12	2010	Below Normal	September	Used in Summary Table Analysis	646.4	598.2	48.2	7.5%	588.6	57.8	8.9%	559.8	86.6	13.4%
ME 3	38 57 12	2011	Wet	October	Used in Summary Table Analysis	9,601.0	9,565.4	35.6	0.4%	9,558.2	42.8	0.4%	9,536.6	64.5	0.7%
ME 3	38 57 12	2011	Wet	November	Used in Summary Table Analysis	14,184.0	14,155.1	28.9	0.2%	14,149.3	34.7	0.2%	14,131.9	52.1	0.4%
ME 3	38 57 12	2011	Wet	December	--	33,550.9	33,526.6	24.3	0.1%	33,520.8	30.1	0.1%	33,505.8	45.1	0.1%
ME 3	38 57 12	2011	Wet	January	--	14,128.5	14,106.5	22.0	0.2%	14,101.9	26.6	0.2%	14,088.0	40.5	0.3%
ME 3	38 57 12	2011	Wet	February	--	20,740.7	20,719.9	20.8	0.1%	20,715.3	25.5	0.1%	20,702.5	38.2	0.2%
ME 3	38 57 12	2011	Wet	March	--	51,908.6	51,888.9	19.7	0.0%	51,885.4	23.1	0.0%	51,872.7	35.9	0.1%
ME 3	38 57 12	2011	Wet	April	--	24,766.2	24,747.7	18.5	0.1%	24,743.1	23.1	0.1%	24,731.5	34.7	0.1%
ME 3	38 57 12	2011	Wet	May	--	11,366.9	11,324.9	42.0	0.4%	11,316.6	50.3	0.4%	11,291.6	75.3	0.7%
ME 3	38 57 12	2011	Wet	June	--	7,040.7	6,978.6	62.2	0.9%	6,966.3	74.4	1.1%	6,930.2	110.5	1.6%
ME 3	38 57 12	2011	Wet	July	--	1,827.0	1,766.3	60.6	3.3%	1,754.5	72.5	4.0%	1,720.5	106.5	5.8%
ME 3	38 57 12	2011	Wet	August	--	773.2	722.8	50.4	6.5%	712.8	60.3	7.8%	683.1	90.1	11.7%
ME 3	38 57 12	2011	Wet	September	Used in Summary Table Analysis	429.7	384.6	45.2	10.5%	375.6	54.2	12.6%	348.7	81.0	18.9%
ME 3	38 57 12	2012	Below Normal	October	Used in Summary Table Analysis	4,524.9	4,488.5	36.3	0.8%	4,481.1	43.8	1.0%	4,458.7	66.2	1.5%
ME 3	38 57 12	2012	Below Normal	November	Used in Summary Table Analysis	8,204.3	8,175.5	28.8	0.4%	8,169.6	34.7	0.4%	8,151.7	52.5	0.6%
ME 3	38 57 12	2012	Below Normal	December	--	5,168.6	5,143.6	25.0	0.5%	5,138.5	30.1	0.6%	5,123.1	45.5	0.9%
ME 3	38 57 12	2012	Below Normal	January	--	20,018.5	19,996.5	22.0	0.1%	19,991.9	26.6	0.1%	19,976.9	41.7	0.2%
ME 3	38 57 12	2012	Below Normal	February	--	18,185.2	18,164.4	20.8	0.1%	18,160.9	24.3	0.1%	18,147.0	38.2	0.2%
ME 3	38 57 12	2012	Below Normal	March	--	45,312.5	45,291.7	20.8	0.0%	45,287.0	25.5	0.1%	45,274.3	38.2	0.1%
ME 3	38 57 12	2012	Below Normal	April	--	26,818.3	26,798.6	19.7	0.1%	26,795.1	23.1	0.1%	26,782.4	35.9	0.1%
ME 3	38 57 12	2012	Below Normal	May	--	7,473.0	7,431.1	41.9	0.6%	7,422.9	50.1	0.7%	7,398.3	74.8	1.0%
ME 3	38 57 12	2012	Below Normal	June	--	5,500.0	5,436.7	63.3	1.2%	5,424.2	75.8	1.4%	5,387.6	112.4	2.0%
ME 3	38 57 12	2012	Below Normal	July	--	2,214.1	2,155.6	58.6	2.6%	2,143.9	70.3	3.2%	2,109.6	104.5	4.7%
ME 3	38 57 12	2012	Below Normal	August	--	385.8	339.7	46.1	11.9%	330.6	55.2	14.3%	303.1	82.7	21.4%
ME 3	38 57 12	2012	Below Normal	September	Used in Summary Table Analysis	245.6	205.1	40.5	16.5%	197.0	48.6	19.8%	172.8	72.8	29.6%
ME 3	38 57 12	2013	Below Normal	October	Used in Summary Table Analysis	1,900.9	1,866.0	35.0	1.8%	1,858.9	42.0	2.2%	1,837.7	63.2	3.3%
ME 3	38 57 12	2013	Below Normal	November	Used in Summary Table Analysis	14,623.8	14,596.1	27.8	0.2%	14,590.3	33.6	0.2%	14,572.9	50.9	0.3%
ME 3	38 57 12	2013	Below Normal	December	--	59,854.2	59,828.7	25.5	0.0%	59,822.9	31.3	0.1%	59,807.9	46.3	0.1%
ME 3	38 57 12	2013	Below Normal	January	--	22,160.9	22,138.9	22.0	0.1%	22,134.3	26.6	0.1%	22,121.5	39.4	0.2%
ME 3	38 57 12	2013	Below Normal	February	--	8,826.5	8,805.7	20.8	0.2%	8,801.5	25.0	0.3%	8,788.8	37.7	0.4%
ME 3	38 57 12	2013	Below Normal	March	--	10,301.3	10,281.0	20.3	0.2%	10,277.0	24.3	0.2%	10,264.7	36.6	0.4%
ME 3	38 57 12	2013	Below Normal	April	--	8,282.4	8,242.8	39.6	0.5%	8,235.0	47.5	0.6%	8,211.3	71.1	0.9%
ME 3	38 57 12	2013	Below Normal	May	--	4,419.4	4,371.6	47.8	1.1%	4,362.2	57.3	1.3%	4,333.8	85.6	1.9%
ME 3	38 57 12	2013	Below Normal	June	--	2,106.5	2,049.9	56.6	2.7%	2,038.7	67.8	3.2%	2,005.6	100.9	4.8%
ME 3	38 57 12	2013	Below Normal	July	--	716.4	662.7	53.6	7.5%	652.1	64.3	9.0%	621.2	95.1	13.3%
ME 3	38 57 12	2013	Below Normal	August	--	337.3	287.4	49.9	14.8%	277.5	59.8	17.7%	247.1	90.2	26.7%
ME 3	38 57 12	2013	Below Normal	September	Used in Summary Table Analysis	4,769.1	4,717.7	51.4	1.1%	4,707.4	61.7	1.3%	4,676.5	92.6	1.9%
ME 3	38 57 12	2014	Critical	October	Used in Summary Table Analysis	280.5	243.9	36.7	13.1%	236.5	44.1	15.7%	215.0	65.5	23.3%
ME 3	38 57 12	2014	Critical	November	Used in Summary Table Analysis	1,528.9	1,499.7	29.3	1.9%	1,493.8	35.2	2.3%	1,475.9	53.0	3.5%
ME 3	38 57 12	2014	Critical	December	--	1,584.5	1,558.8	25.7	1.6%	1,553.5	31.0	2.0%	1,537.7	46.8	3.0%
ME 3	38 57 12	2014	Critical	January	--	2,812.0	2,789.0	23.0	0.8%	2,784.3	27.8	1.0%	2,770.1	41.9	1.5%

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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 57 12	2014	Critical	February	--	15,725.7	15,703.7	22.0	0.1%	15,700.2	25.5	0.2%	15,686.3	39.4	0.3%
ME 3	38 57 12	2014	Critical	March	--	31,450.2	31,430.6	19.7	0.1%	31,425.9	24.3	0.1%	31,413.2	37.0	0.1%
ME 3	38 57 12	2014	Critical	April	--	12,978.0	12,935.2	42.8	0.3%	12,927.1	50.9	0.4%	12,901.6	76.4	0.6%
ME 3	38 57 12	2014	Critical	May	--	5,180.4	5,130.0	50.5	1.0%	5,120.0	60.4	1.2%	5,089.8	90.6	1.7%
ME 3	38 57 12	2014	Critical	June	--	1,194.8	1,126.8	68.0	5.7%	1,113.5	81.3	6.8%	1,075.4	119.4	10.0%
ME 3	38 57 12	2014	Critical	July	--	543.9	482.5	61.4	11.3%	470.3	73.6	13.5%	438.9	105.0	19.3%
ME 3	38 57 12	2014	Critical	August	--	345.2	287.2	58.0	16.8%	275.6	69.6	20.2%	243.3	102.0	29.5%
ME 3	38 57 12	2014	Critical	September	Used in Summary Table Analysis	2,565.3	2,508.9	56.4	2.2%	2,497.8	67.5	2.6%	2,464.8	100.5	3.9%
ME 3	38 57 12	2015	Dry	October	Used in Summary Table Analysis	11,331.1	11,288.3	42.8	0.4%	11,280.0	51.2	0.5%	11,254.5	76.6	0.7%
ME 3	38 57 12	2015	Dry	November	Used in Summary Table Analysis	9,007.5	8,975.3	32.2	0.4%	8,968.9	38.7	0.4%	8,946.5	61.0	0.7%
ME 3	38 57 12	2015	Dry	December	--	32,498.8	32,471.1	27.8	0.1%	32,466.4	32.4	0.1%	32,447.9	50.9	0.2%
ME 3	38 57 12	2015	Dry	January	--	14,560.2	14,534.7	25.5	0.2%	14,530.1	30.1	0.2%	14,513.9	46.3	0.3%
ME 3	38 57 12	2015	Dry	February	--	27,187.5	27,165.5	22.0	0.1%	27,160.9	26.6	0.1%	27,147.0	40.5	0.1%
ME 3	38 57 12	2015	Dry	March	--	11,560.1	11,540.0	20.0	0.2%	11,536.0	24.1	0.2%	11,523.5	36.6	0.3%
ME 3	38 57 12	2015	Dry	April	--	8,356.1	8,314.1	42.0	0.5%	8,305.7	50.5	0.6%	8,280.6	75.6	0.9%
ME 3	38 57 12	2015	Dry	May	--	1,508.4	1,458.9	49.5	3.3%	1,449.1	59.4	3.9%	1,420.7	87.7	5.8%
ME 3	38 57 12	2015	Dry	June	--	651.0	588.4	62.6	9.6%	576.1	74.9	11.5%	539.8	111.2	17.1%
ME 3	38 57 12	2015	Dry	July	--	266.9	206.6	60.3	22.6%	194.7	72.2	27.1%	164.1	102.8	38.5%
ME 3	38 57 12	2015	Dry	August	--	163.9	106.3	57.7	35.2%	94.7	69.2	42.2%	62.8	101.1	61.7%
ME 3	38 57 12	2015	Dry	September	Used in Summary Table Analysis	118.6	65.2	53.4	45.0%	54.2	64.4	54.3%	22.3	96.4	81.2%
ME 3	38 57 12	2016	Above Normal	October	Used in Summary Table Analysis	84.2	40.1	44.0	52.3%	31.7	52.5	62.3%	0.0	84.2	100.0%
ME 3	38 57 12	2016	Above Normal	November	Used in Summary Table Analysis	3,838.2	3,805.1	33.1	0.9%	3,798.3	39.9	1.0%	3,774.4	63.8	1.7%
ME 3	38 57 12	2016	Above Normal	December	--	36,480.3	36,451.4	28.9	0.1%	36,445.6	34.7	0.1%	36,427.1	53.2	0.1%
ME 3	38 57 12	2016	Above Normal	January	--	57,172.5	57,144.7	27.8	0.0%	57,140.0	32.4	0.1%	57,122.7	49.8	0.1%
ME 3	38 57 12	2016	Above Normal	February	--	24,245.4	24,223.4	22.0	0.1%	24,218.8	26.6	0.1%	24,204.9	40.5	0.2%
ME 3	38 57 12	2016	Above Normal	March	--	41,710.6	41,688.7	22.0	0.1%	41,684.0	26.6	0.1%	41,671.3	39.4	0.1%
ME 3	38 57 12	2016	Above Normal	April	--	18,518.5	18,498.8	19.7	0.1%	18,495.4	23.1	0.1%	18,483.8	34.7	0.2%
ME 3	38 57 12	2016	Above Normal	May	--	5,208.8	5,183.6	25.2	0.5%	5,178.5	30.3	0.6%	5,163.2	45.6	0.9%
ME 3	38 57 12	2016	Above Normal	June	--	1,506.5	1,458.0	48.5	3.2%	1,449.4	57.1	3.8%	1,424.5	81.9	5.4%
ME 3	38 57 12	2016	Above Normal	July	--	819.6	766.3	53.3	6.5%	755.8	63.8	7.8%	724.7	94.9	11.6%
ME 3	38 57 12	2016	Above Normal	August	--	488.0	436.8	51.3	10.5%	426.5	61.5	12.6%	396.2	91.8	18.8%
ME 3	38 57 12	2016	Above Normal	September	Used in Summary Table Analysis	324.6	277.3	47.4	14.6%	267.6	57.0	17.6%	238.9	85.8	26.4%
ME 3	38 57 12	2017	Wet	October	Used in Summary Table Analysis	18,229.2	18,192.1	37.0	0.2%	18,185.2	44.0	0.2%	18,163.2	66.0	0.4%
ME 3	38 57 12	2017	Wet	November	Used in Summary Table Analysis	18,762.7	18,735.0	27.8	0.1%	18,729.2	33.6	0.2%	18,711.8	50.9	0.3%
ME 3	38 57 12	2017	Wet	December	--	24,016.2	23,991.9	24.3	0.1%	23,987.3	28.9	0.1%	23,972.2	44.0	0.2%
ME 3	38 57 12	2017	Wet	January	--	106,619.2	106,596.1	23.1	0.0%	106,591.4	27.8	0.0%	106,577.5	41.7	0.0%
ME 3	38 57 12	2017	Wet	February	--	81,673.6	81,651.6	22.0	0.0%	81,647.0	26.6	0.0%	81,634.3	39.4	0.0%
ME 3	38 57 12	2017	Wet	March	--	27,223.4	27,202.5	20.8	0.1%	27,199.1	24.3	0.1%	27,186.3	37.0	0.1%
ME 3	38 57 12	2017	Wet	April	--	22,880.8	22,863.4	17.4	0.1%	22,858.8	22.0	0.1%	22,848.4	32.4	0.1%
ME 3	38 57 12	2017	Wet	May	--	6,271.3	6,245.7	25.6	0.4%	6,240.6	30.7	0.5%	6,225.3	45.9	0.7%
ME 3	38 57 12	2017	Wet	June	--	2,109.0	2,058.4	50.6	2.4%	2,048.5	60.5	2.9%	2,019.2	89.8	4.3%
ME 3	38 57 12	2017	Wet	July	--	929.5	875.8	53.7	5.8%	865.3	64.2	6.9%	834.2	95.3	10.3%
ME 3	38 57 12	2017	Wet	August	--	501.7	450.5	51.2	10.2%	440.3	61.4	12.2%	410.0	91.7	18.3%
ME 3	38 57 12	2017	Wet	September	Used in Summary Table Analysis	318.7	271.8	46.9	14.7%	262.4	56.3	17.7%	234.3	84.4	26.5%
ME 3	38 57 12	2018	Above Normal	October	Used in Summary Table Analysis	271.5	235.0	36.5	13.4%	227.6	43.8	16.1%	205.6	65.9	24.3%
ME 3	38 57 12	2018	Above Normal	November	Used in Summary Table Analysis	10,724.2	10,695.9	28.2	0.3%	10,690.3	33.9	0.3%	10,672.9	51.3	0.5%
ME 3	38 57 12	2018	Above Normal	December	--	5,440.0	5,416.1	24.0	0.4%	5,411.2	28.8	0.5%	5,396.4	43.6	0.8%
ME 3	38 57 12	2018	Above Normal	January	--	17,664.4	17,643.5	20.8	0.1%	17,638.9	25.5	0.1%	17,625.0	39.4	0.2%
ME 3	38 57 12	2018	Above Normal	February	--	7,592.4	7,572.7	19.7	0.3%	7,568.6	23.7	0.3%	7,556.4	36.0	0.5%
ME 3	38 57 12	2018	Above Normal	March	--	20,626.2	20,606.5	19.7	0.1%	20,603.0	23.1	0.1%	20,591.4	34.7	0.2%
ME 3	38 57 12	2018	Above Normal	April	--	32,114.6	32,096.1	18.5	0.1%	32,092.6	22.0	0.1%	32,082.2	32.4	0.1%
ME 3	38 57 12	2018	Above Normal	May	--	6,985.9	6,946.4	39.5	0.6%	6,938.5	47.3	0.7%	6,914.8	71.1	1.0%
ME 3	38 57 12	2018	Above Normal	June	--	1,910.6	1,860.0	50.7	2.7%	1,850.0	60.6	3.2%	1,820.8	89.8	4.7%
ME 3	38 57 12	2018	Above Normal	July	--	777.4	723.7	53.7	6.9%	713.1	64.4	8.3%	681.5	96.0	12.3%
ME 3	38 57 12	2018	Above Normal	August	--	438.7	389.4	49.3	11.2%	379.5	59.1	13.5%	350.1	88.5	20.2%
ME 3	38 57 12	2018	Above Normal	September	Used in Summary Table Analysis	296.4	249.4	47.0	15.9%	240.0	56.4	19.0%	211.9	84.6	28.5%
ME 3	38 57 12	2019	Below Normal	October	Used in Summary Table Analysis	205.1	169.2	35.9	17.5%	161.9	43.2	21.1%	140.1	65.1	31.7%
ME 3	38 57 12	2019	Below Normal	November	Used in Summary Table Analysis	6,579.3	6,550.9	28.4	0.4%	6,545.1	34.1	0.5%	6,527.8	51.5	0.8%
ME 3	38 57 12	2019	Below Normal	December	--	14,590.3	14,566.0	24.3	0.2%	14,561.3	28.9	0.2%	14,546.3	44.0	0.3%
ME 3	38 57 12	2019	Below Normal	January	--	35,068.3	35,046.3	22.0	0.1%	35,041.7	26.6	0.1%	35,027.8	40.5	0.1%
ME 3	38 57 12	2019	Below Normal	February	--	141,759.3	141,736.1	23.1	0.0%	141,736.1	23.1	0.0%	141,724.5	34.7	0.0%
ME 3	38 57 12	2019	Below Normal	March	--	42,237.3	42,218.8	18.5	0.0%	42,215.3	22.0	0.1%	42,203.7	33.6	0.1%
ME 3	38 57 12	2019	Below Normal	April	--	15,250.0	15,231.5	18.5	0.1%	15,228.0	22.0	0.1%	15,217.6	32.4	0.2%
ME 3	38 57 12	2019	Below Normal	May	--	16,825.2	16,782.4	42.8	0.3%	16,774.3	50.9	0.3%	16,748.8	76.4	0.5%

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Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 56 13	2001	Dry	October	Used in Summary Table Analysis	3,798.5	3,762.5	36.0	0.9%	3,755.1	43.4	1.1%	3,733.2	65.3	1.7%
ME 3	38 56 13	2001	Dry	November	Used in Summary Table Analysis	6,097.1	6,068.3	28.8	0.5%	6,062.4	34.7	0.6%	6,044.9	52.2	0.9%
ME 3	38 56 13	2001	Dry	December	--	8,811.3	8,786.1	25.2	0.3%	8,781.0	30.3	0.3%	8,765.6	45.7	0.5%
ME 3	38 56 13	2001	Dry	January	--	12,738.4	12,716.4	22.0	0.2%	12,711.8	26.6	0.2%	12,696.8	41.7	0.3%
ME 3	38 56 13	2001	Dry	February	--	17,438.7	17,417.8	20.8	0.1%	17,413.2	25.5	0.1%	17,400.5	38.2	0.2%
ME 3	38 56 13	2001	Dry	March	--	12,280.1	12,260.4	19.7	0.2%	12,255.8	24.3	0.2%	12,244.2	35.9	0.3%
ME 3	38 56 13	2001	Dry	April	--	10,954.1	10,911.1	42.9	0.4%	10,902.5	51.5	0.5%	10,877.2	76.9	0.7%
ME 3	38 56 13	2001	Dry	May	--	2,636.3	2,585.9	50.5	1.9%	2,575.9	60.4	2.3%	2,545.9	90.4	3.4%
ME 3	38 56 13	2001	Dry	June	--	2,636.7	2,569.1	67.6	2.6%	2,555.9	80.8	3.1%	2,517.1	119.6	4.5%
ME 3	38 56 13	2001	Dry	July	--	717.3	655.0	62.2	8.7%	642.7	74.6	10.4%	610.9	106.3	14.8%
ME 3	38 56 13	2001	Dry	August	--	170.3	110.2	60.1	35.3%	98.3	72.0	42.3%	64.9	105.4	61.9%
ME 3	38 56 13	2001	Dry	September	Used in Summary Table Analysis	93.1	40.3	52.8	56.7%	29.8	63.3	68.0%	0.0	93.1	100.0%
ME 3	38 56 13	2002	Below Normal	October	Used in Summary Table Analysis	262.5	219.1	43.4	16.5%	210.3	52.2	19.9%	183.8	78.7	30.0%
ME 3	38 56 13	2002	Below Normal	November	Used in Summary Table Analysis	11,989.6	11,956.0	33.6	0.3%	11,949.1	40.5	0.3%	11,925.9	63.7	0.5%
ME 3	38 56 13	2002	Below Normal	December	--	35,572.9	35,542.8	30.1	0.1%	35,537.0	35.9	0.1%	35,517.4	55.6	0.2%
ME 3	38 56 13	2002	Below Normal	January	--	30,806.7	30,780.1	26.6	0.1%	30,775.5	31.3	0.1%	30,759.3	47.5	0.2%
ME 3	38 56 13	2002	Below Normal	February	--	24,635.4	24,610.0	25.5	0.1%	24,605.3	30.1	0.1%	24,590.3	45.1	0.2%
ME 3	38 56 13	2002	Below Normal	March	--	17,746.5	17,722.2	24.3	0.1%	17,717.6	28.9	0.2%	17,703.7	42.8	0.2%
ME 3	38 56 13	2002	Below Normal	April	--	9,911.9	9,869.4	42.5	0.4%	9,861.0	50.9	0.5%	9,835.6	76.3	0.8%
ME 3	38 56 13	2002	Below Normal	May	--	3,314.5	3,264.2	50.2	1.5%	3,254.3	60.2	1.8%	3,224.4	90.0	2.7%
ME 3	38 56 13	2002	Below Normal	June	--	851.6	795.6	56.0	6.6%	784.6	67.0	7.9%	752.0	99.6	11.7%
ME 3	38 56 13	2002	Below Normal	July	--	360.1	304.2	55.9	15.5%	293.1	67.0	18.6%	260.8	99.2	27.6%
ME 3	38 56 13	2002	Below Normal	August	--	224.4	172.5	51.9	23.1%	162.1	62.3	27.8%	130.6	93.8	41.8%
ME 3	38 56 13	2002	Below Normal	September	Used in Summary Table Analysis	161.4	112.9	48.5	30.1%	103.2	58.2	36.0%	73.3	88.1	54.6%
ME 3	38 56 13	2003	Wet	October	Used in Summary Table Analysis	126.5	87.4	39.1	30.9%	79.5	47.0	37.2%	55.7	70.8	56.0%
ME 3	38 56 13	2003	Wet	November	Used in Summary Table Analysis	893.0	862.0	31.0	3.5%	855.7	37.3	4.2%	836.6	56.4	6.3%
ME 3	38 56 13	2003	Wet	December	--	56,559.0	56,531.3	27.8	0.0%	56,526.6	32.4	0.1%	56,509.3	49.8	0.1%
ME 3	38 56 13	2003	Wet	January	--	31,476.9	31,451.4	25.5	0.1%	31,446.8	30.1	0.1%	31,431.7	45.1	0.1%
ME 3	38 56 13	2003	Wet	February	--	20,325.2	20,302.1	23.1	0.1%	20,297.5	27.8	0.1%	20,284.7	40.5	0.2%
ME 3	38 56 13	2003	Wet	March	--	23,989.6	23,968.8	20.8	0.1%	23,964.1	25.5	0.1%	23,951.4	38.2	0.2%
ME 3	38 56 13	2003	Wet	April	--	42,805.6	42,784.7	20.8	0.0%	42,780.1	25.5	0.1%	42,767.4	38.2	0.1%
ME 3	38 56 13	2003	Wet	May	--	12,208.3	12,165.5	42.8	0.4%	12,157.4	50.9	0.4%	12,131.9	76.4	0.6%
ME 3	38 56 13	2003	Wet	June	--	3,162.5	3,108.8	53.7	1.7%	3,098.4	64.1	2.0%	3,067.6	94.9	3.0%
ME 3	38 56 13	2003	Wet	July	--	1,470.0	1,414.5	55.6	3.8%	1,403.6	66.4	4.5%	1,370.9	99.1	6.7%
ME 3	38 56 13	2003	Wet	August	--	756.5	702.7	53.8	7.1%	691.5	65.0	8.6%	656.9	99.6	13.2%
ME 3	38 56 13	2003	Wet	September	Used in Summary Table Analysis	454.8	410.1	44.7	9.8%	401.1	53.6	11.8%	373.2	81.6	17.9%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 56 13	2004	Wet	October	Used in Summary Table Analysis	321.9	285.4	36.5	11.3%	278.0	43.9	13.6%	255.7	66.2	20.6%
ME 3	38 56 13	2004	Wet	November	Used in Summary Table Analysis	5,775.0	5,745.6	29.4	0.5%	5,739.7	35.3	0.6%	5,721.5	53.5	0.9%
ME 3	38 56 13	2004	Wet	December	--	36,186.3	36,160.9	25.5	0.1%	36,155.1	31.3	0.1%	36,138.9	47.5	0.1%
ME 3	38 56 13	2004	Wet	January	--	31,387.7	31,364.6	23.1	0.1%	31,360.0	27.8	0.1%	31,346.1	41.7	0.1%
ME 3	38 56 13	2004	Wet	February	--	38,153.9	38,133.1	20.8	0.1%	38,128.5	25.5	0.1%	38,114.6	39.4	0.1%
ME 3	38 56 13	2004	Wet	March	--	16,508.1	16,488.4	19.7	0.1%	16,485.0	23.1	0.1%	16,472.2	35.9	0.2%
ME 3	38 56 13	2004	Wet	April	--	9,439.0	9,419.8	19.2	0.2%	9,415.9	23.1	0.2%	9,404.2	34.8	0.4%
ME 3	38 56 13	2004	Wet	May	--	3,410.8	3,368.9	41.9	1.2%	3,360.5	50.2	1.5%	3,335.6	75.1	2.2%
ME 3	38 56 13	2004	Wet	June	--	689.7	637.9	51.7	7.5%	627.8	61.9	9.0%	597.8	91.8	13.3%
ME 3	38 56 13	2004	Wet	July	--	353.2	298.6	54.6	15.5%	287.8	65.5	18.5%	255.6	97.6	27.6%
ME 3	38 56 13	2004	Wet	August	--	222.5	171.7	50.8	22.8%	161.6	61.0	27.4%	131.2	91.3	41.0%
ME 3	38 56 13	2004	Wet	September	Used in Summary Table Analysis	159.9	111.9	48.0	30.0%	102.3	57.6	36.0%	73.5	86.4	54.0%
ME 3	38 56 13	2005	Above Normal	October	Used in Summary Table Analysis	7,646.1	7,608.7	37.4	0.5%	7,601.2	44.9	0.6%	7,578.4	67.7	0.9%
ME 3	38 56 13	2005	Above Normal	November	Used in Summary Table Analysis	2,251.7	2,222.7	29.1	1.3%	2,216.9	34.8	1.5%	2,199.1	52.7	2.3%
ME 3	38 56 13	2005	Above Normal	December	--	20,923.6	20,897.0	26.6	0.1%	20,892.4	31.3	0.1%	20,877.3	46.3	0.2%
ME 3	38 56 13	2005	Above Normal	January	--	22,303.2	22,280.1	23.1	0.1%	22,275.5	27.8	0.1%	22,261.6	41.7	0.2%
ME 3	38 56 13	2005	Above Normal	February	--	13,996.5	13,975.7	20.8	0.1%	13,971.1	25.5	0.2%	13,958.3	38.2	0.3%
ME 3	38 56 13	2005	Above Normal	March	--	28,505.8	28,485.0	20.8	0.1%	28,481.5	24.3	0.1%	28,468.8	37.0	0.1%
ME 3	38 56 13	2005	Above Normal	April	--	21,403.9	21,384.3	19.7	0.1%	21,380.8	23.1	0.1%	21,369.2	34.7	0.2%
ME 3	38 56 13	2005	Above Normal	May	--	19,520.8	19,478.0	42.8	0.2%	19,469.9	50.9	0.3%	19,444.4	76.4	0.4%
ME 3	38 56 13	2005	Above Normal	June	--	15,813.7	15,750.0	63.7	0.4%	15,738.4	75.2	0.5%	15,701.4	112.3	0.7%
ME 3	38 56 13	2005	Above Normal	July	--	2,862.7	2,806.1	56.6	2.0%	2,795.5	67.2	2.3%	2,763.5	99.2	3.5%
ME 3	38 56 13	2005	Above Normal	August	--	979.1	928.5	50.6	5.2%	918.5	60.6	6.2%	888.7	90.4	9.2%
ME 3	38 56 13	2005	Above Normal	September	Used in Summary Table Analysis	520.9	476.7	44.2	8.5%	467.9	53.0	10.2%	441.6	79.4	15.2%
ME 3	38 56 13	2006	Wet	October	Used in Summary Table Analysis	630.3	595.1	35.3	5.6%	588.0	42.4	6.7%	566.4	63.9	10.1%
ME 3	38 56 13	2006	Wet	November	Used in Summary Table Analysis	9,258.4	9,230.7	27.8	0.3%	9,225.1	33.3	0.4%	9,208.0	50.5	0.5%
ME 3	38 56 13	2006	Wet	December	--	43,342.6	43,317.1	25.5	0.1%	43,312.5	30.1	0.1%	43,296.3	46.3	0.1%
ME 3	38 56 13	2006	Wet	January	--	46,156.3	46,133.1	23.1	0.1%	46,128.5	27.8	0.1%	46,114.6	41.7	0.1%
ME 3	38 56 13	2006	Wet	February	--	26,557.9	26,537.0	20.8	0.1%	26,532.4	25.5	0.1%	26,520.8	37.0	0.1%
ME 3	38 56 13	2006	Wet	March	--	47,046.3	47,026.6	19.7	0.0%	47,023.1	23.1	0.0%	47,010.4	35.9	0.1%
ME 3	38 56 13	2006	Wet	April	--	30,383.1	30,364.6	18.5	0.1%	30,361.1	22.0	0.1%	30,350.7	32.4	0.1%
ME 3	38 56 13	2006	Wet	May	--	14,180.6	14,155.1	25.5	0.2%	14,150.5	30.1	0.2%	14,135.4	45.1	0.3%
ME 3	38 56 13	2006	Wet	June	--	3,543.9	3,491.9	52.0	1.5%	3,481.7	62.2	1.8%	3,451.9	92.0	2.6%
ME 3	38 56 13	2006	Wet	July	--	1,274.5	1,220.6	53.9	4.2%	1,210.1	64.5	5.1%	1,178.8	95.7	7.5%
ME 3	38 56 13	2006	Wet	August	--	660.9	609.2	51.7	7.8%	599.0	61.9	9.4%	568.5	92.5	14.0%
ME 3	38 56 13	2006	Wet	September	Used in Summary Table Analysis	422.4	377.7	44.6	10.6%	368.9	53.5	12.7%	342.2	80.2	19.0%
ME 3	38 56 13	2007	Above Normal	October	Used in Summary Table Analysis	271.3	235.4	35.9	13.2%	228.2	43.1	15.9%	206.2	65.1	24.0%
ME 3	38 56 13	2007	Above Normal	November	Used in Summary Table Analysis	8,624.8	8,595.9	28.8	0.3%	8,590.0	34.7	0.4%	8,572.2	52.5	0.6%
ME 3	38 56 13	2007	Above Normal	December	--	20,325.2	20,299.8	25.5	0.1%	20,294.0	31.3	0.2%	20,278.9	46.3	0.2%
ME 3	38 56 13	2007	Above Normal	January	--	10,228.6	10,205.8	22.8	0.2%	10,201.2	27.4	0.3%	10,187.0	41.6	0.4%
ME 3	38 56 13	2007	Above Normal	February	--	30,476.9	30,454.9	22.0	0.1%	30,450.2	26.6	0.1%	30,436.3	40.5	0.1%
ME 3	38 56 13	2007	Above Normal	March	--	13,084.5	13,063.7	20.8	0.2%	13,060.2	24.3	0.2%	13,046.3	38.2	0.3%
ME 3	38 56 13	2007	Above Normal	April	--	11,519.0	11,477.8	41.2	0.4%	11,469.7	49.3	0.4%	11,445.1	73.8	0.6%
ME 3	38 56 13	2007	Above Normal	May	--	4,132.4	4,083.6	48.8	1.2%	4,073.8	58.6	1.4%	4,044.8	87.6	2.1%
ME 3	38 56 13	2007	Above Normal	June	--	1,493.4	1,435.6	57.8	3.9%	1,424.3	69.1	4.6%	1,390.6	102.8	6.9%
ME 3	38 56 13	2007	Above Normal	July	--	493.9	436.7	57.2	11.6%	425.4	68.5	13.9%	392.3	101.6	20.6%
ME 3	38 56 13	2007	Above Normal	August	--	220.3	169.5	50.8	23.1%	159.4	60.9	27.7%	128.6	91.7	41.6%
ME 3	38 56 13	2007	Above Normal	September	Used in Summary Table Analysis	148.1	100.4	47.6	32.2%	91.0	57.1	38.6%	62.5	85.6	57.8%
ME 3	38 56 13	2008	Dry	October	Used in Summary Table Analysis	3,418.6	3,380.6	38.1	1.1%	3,372.9	45.7	1.3%	3,349.7	69.0	2.0%
ME 3	38 56 13	2008	Dry	November	Used in Summary Table Analysis	3,260.5	3,231.3	29.3	0.9%	3,225.3	35.2	1.1%	3,207.4	53.1	1.6%
ME 3	38 56 13	2008	Dry	December	--	23,016.2	22,989.6	26.6	0.1%	22,985.0	31.3	0.1%	22,968.8	47.5	0.2%
ME 3	38 56 13	2008	Dry	January	--	37,425.9	37,401.6	24.3	0.1%	37,395.8	30.1	0.1%	37,380.8	45.1	0.1%
ME 3	38 56 13	2008	Dry	February	--	26,245.4	26,223.4	22.0	0.1%	26,219.9	25.5	0.1%	26,206.0	39.4	0.1%
ME 3	38 56 13	2008	Dry	March	--	11,782.4	11,762.7	19.7	0.2%	11,759.3	23.1	0.2%	11,746.5	35.9	0.3%
ME 3	38 56 13	2008	Dry	April	--	9,007.1	8,965.3	41.8	0.5%	8,957.1	50.0	0.6%	8,932.2	74.9	0.8%
ME 3	38 56 13	2008	Dry	May	--	1,360.2	1,316.7	43.5	3.2%	1,308.3	51.9	3.8%	1,283.1	77.1	5.7%
ME 3	38 56 13	2008	Dry	June	--	435.5	372.9	62.6	14.4%	360.6	74.8	17.2%	324.4	111.1	25.5%
ME 3	38 56 13	2008	Dry	July	--	253.9	193.3	60.7	23.9%	181.3	72.7	28.6%	150.4	103.5	40.8%
ME 3	38 56 13	2008	Dry	August	--	177.3	119.0	58.3	32.9%	107.4	69.9	39.4%	72.2	105.1	59.3%
ME 3	38 56 13	2008	Dry	September	Used in Summary Table Analysis	139.0	83.6	55.5	39.9%	72.5	66.5	47.8%	40.4	98.6	70.9%
ME 3	38 56 13	2009	Critical	October	Used in Summary Table Analysis	921.1	878.4	42.7	4.6%	869.8	51.3	5.6%	843.6	77.5	8.4%
ME 3	38 56 13	2009	Critical	November	Used in Summary Table Analysis	5,485.0	5,452.0	33.0	0.6%	5,445.3	39.7	0.7%	5,422.3	62.6	1.1%
ME 3	38 56 13	2009	Critical	December	--	12,110.0	12,081.0	28.9	0.2%	12,075.2	34.7	0.3%	12,057.9	52.1	0.4%
ME 3	38 56 13	2009	Critical	January	--	8,780.6	8,754.2	26.4	0.3%	8,748.8	31.7	0.4%	8,732.6	47.9	0.5%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 56 13	2009	Critical	February	--	22,568.3	22,545.1	23.1	0.1%	22,539.4	28.9	0.1%	22,525.5	42.8	0.2%
ME 3	38 56 13	2009	Critical	March	--	21,086.8	21,064.8	22.0	0.1%	21,061.3	25.5	0.1%	21,047.5	39.4	0.2%
ME 3	38 56 13	2009	Critical	April	--	10,092.5	10,049.3	43.2	0.4%	10,040.7	51.7	0.5%	10,015.0	77.4	0.8%
ME 3	38 56 13	2009	Critical	May	--	15,566.0	15,513.9	52.1	0.3%	15,503.5	62.5	0.4%	15,472.2	93.8	0.6%
ME 3	38 56 13	2009	Critical	June	--	3,157.2	3,090.3	66.9	2.1%	3,077.4	79.7	2.5%	3,038.9	118.3	3.7%
ME 3	38 56 13	2009	Critical	July	--	1,260.2	1,199.0	61.2	4.9%	1,186.9	73.3	5.8%	1,155.9	104.2	8.3%
ME 3	38 56 13	2009	Critical	August	--	666.1	607.5	58.6	8.8%	595.9	70.2	10.5%	563.3	102.8	15.4%
ME 3	38 56 13	2009	Critical	September	Used in Summary Table Analysis	387.6	336.1	51.5	13.3%	325.8	61.8	15.9%	295.9	91.7	23.6%
ME 3	38 56 13	2010	Below Normal	October	Used in Summary Table Analysis	6,084.7	6,041.6	43.2	0.7%	6,032.8	52.0	0.9%	6,005.3	79.4	1.3%
ME 3	38 56 13	2010	Below Normal	November	Used in Summary Table Analysis	8,272.6	8,238.5	34.0	0.4%	8,231.7	40.9	0.5%	8,208.1	64.5	0.8%
ME 3	38 56 13	2010	Below Normal	December	--	12,319.4	12,290.5	28.9	0.2%	12,284.7	34.7	0.3%	12,266.2	53.2	0.4%
ME 3	38 56 13	2010	Below Normal	January	--	36,118.1	36,090.3	27.8	0.1%	36,085.6	32.4	0.1%	36,068.3	49.8	0.1%
ME 3	38 56 13	2010	Below Normal	February	--	27,211.8	27,188.7	23.1	0.1%	27,184.0	27.8	0.1%	27,169.0	42.8	0.2%
ME 3	38 56 13	2010	Below Normal	March	--	28,809.0	28,785.9	23.1	0.1%	28,781.3	27.8	0.1%	28,768.5	40.5	0.1%
ME 3	38 56 13	2010	Below Normal	April	--	39,961.8	39,939.8	22.0	0.1%	39,935.2	26.6	0.1%	39,922.5	39.4	0.1%
ME 3	38 56 13	2010	Below Normal	May	--	20,228.0	20,182.9	45.1	0.2%	20,174.8	53.2	0.3%	20,148.1	79.9	0.4%
ME 3	38 56 13	2010	Below Normal	June	--	9,318.1	9,253.8	64.2	0.7%	9,241.2	76.9	0.8%	9,203.7	114.4	1.2%
ME 3	38 56 13	2010	Below Normal	July	--	1,451.7	1,394.8	56.9	3.9%	1,383.8	67.9	4.7%	1,351.2	100.6	6.9%
ME 3	38 56 13	2010	Below Normal	August	--	565.2	513.4	51.8	9.2%	503.2	62.0	11.0%	472.8	92.4	16.4%
ME 3	38 56 13	2010	Below Normal	September	Used in Summary Table Analysis	647.3	598.2	49.1	7.6%	588.4	58.9	9.1%	559.0	88.3	13.6%
ME 3	38 56 13	2011	Wet	October	Used in Summary Table Analysis	9,609.8	9,573.3	36.6	0.4%	9,566.0	43.9	0.5%	9,543.8	66.1	0.7%
ME 3	38 56 13	2011	Wet	November	Used in Summary Table Analysis	14,193.3	14,164.4	28.9	0.2%	14,158.6	34.7	0.2%	14,140.0	53.2	0.4%
ME 3	38 56 13	2011	Wet	December	--	33,592.6	33,567.1	25.5	0.1%	33,561.3	31.3	0.1%	33,545.1	47.5	0.1%
ME 3	38 56 13	2011	Wet	January	--	14,135.4	14,112.3	23.1	0.2%	14,107.6	27.8	0.2%	14,093.8	41.7	0.3%
ME 3	38 56 13	2011	Wet	February	--	20,747.7	20,725.7	22.0	0.1%	20,722.2	25.5	0.1%	20,708.3	39.4	0.2%
ME 3	38 56 13	2011	Wet	March	--	51,935.2	51,914.4	20.8	0.0%	51,910.9	24.3	0.0%	51,898.1	37.0	0.1%
ME 3	38 56 13	2011	Wet	April	--	24,774.3	24,754.6	19.7	0.1%	24,751.2	23.1	0.1%	24,738.4	35.9	0.1%
ME 3	38 56 13	2011	Wet	May	--	11,370.5	11,327.8	42.7	0.4%	11,319.3	51.2	0.4%	11,293.9	76.6	0.7%
ME 3	38 56 13	2011	Wet	June	--	7,044.6	6,981.6	63.0	0.9%	6,969.2	75.3	1.1%	6,932.5	112.0	1.6%
ME 3	38 56 13	2011	Wet	July	--	1,827.0	1,765.4	61.6	3.4%	1,753.4	73.6	4.0%	1,718.8	108.2	5.9%
ME 3	38 56 13	2011	Wet	August	--	773.8	722.4	51.4	6.6%	712.2	61.6	8.0%	681.8	92.0	11.9%
ME 3	38 56 13	2011	Wet	September	Used in Summary Table Analysis	430.5	384.3	46.2	10.7%	375.1	55.4	12.9%	347.6	82.9	19.3%
ME 3	38 56 13	2012	Below Normal	October	Used in Summary Table Analysis	4,529.4	4,492.1	37.3	0.8%	4,484.6	44.8	1.0%	4,461.6	67.8	1.5%
ME 3	38 56 13	2012	Below Normal	November	Used in Summary Table Analysis	8,213.5	8,183.8	29.7	0.4%	8,177.8	35.8	0.4%	8,159.5	54.1	0.7%
ME 3	38 56 13	2012	Below Normal	December	--	5,172.5	5,146.8	25.7	0.5%	5,141.6	30.9	0.6%	5,125.7	46.8	0.9%
ME 3	38 56 13	2012	Below Normal	January	--	20,045.1	20,022.0	23.1	0.1%	20,017.4	27.8	0.1%	20,002.3	42.8	0.2%
ME 3	38 56 13	2012	Below Normal	February	--	18,193.3	18,171.3	22.0	0.1%	18,166.7	26.6	0.1%	18,152.8	40.5	0.2%
ME 3	38 56 13	2012	Below Normal	March	--	45,342.6	45,321.8	20.8	0.0%	45,317.1	25.5	0.1%	45,304.4	38.2	0.1%
ME 3	38 56 13	2012	Below Normal	April	--	26,828.7	26,809.0	19.7	0.1%	26,804.4	24.3	0.1%	26,791.7	37.0	0.1%
ME 3	38 56 13	2012	Below Normal	May	--	7,475.0	7,432.4	42.6	0.6%	7,424.0	51.0	0.7%	7,399.0	76.0	1.0%
ME 3	38 56 13	2012	Below Normal	June	--	5,503.9	5,439.7	64.2	1.2%	5,427.1	76.9	1.4%	5,390.0	113.9	2.1%
ME 3	38 56 13	2012	Below Normal	July	--	2,216.4	2,156.9	59.5	2.7%	2,145.3	71.2	3.2%	2,110.3	106.1	4.8%
ME 3	38 56 13	2012	Below Normal	August	--	386.2	339.3	46.9	12.1%	330.0	56.2	14.6%	302.0	84.2	21.8%
ME 3	38 56 13	2012	Below Normal	September	Used in Summary Table Analysis	246.3	205.0	41.3	16.8%	196.8	49.5	20.1%	172.1	74.2	30.1%
ME 3	38 56 13	2013	Below Normal	October	Used in Summary Table Analysis	1,903.9	1,868.2	35.8	1.9%	1,861.0	42.9	2.3%	1,839.2	64.7	3.4%
ME 3	38 56 13	2013	Below Normal	November	Used in Summary Table Analysis	14,641.2	14,612.3	28.9	0.2%	14,606.5	34.7	0.2%	14,589.1	52.1	0.4%
ME 3	38 56 13	2013	Below Normal	December	--	59,892.4	59,865.7	26.6	0.0%	59,860.0	32.4	0.1%	59,843.8	48.6	0.1%
ME 3	38 56 13	2013	Below Normal	January	--	22,171.3	22,149.3	22.0	0.1%	22,144.7	26.6	0.1%	22,130.8	40.5	0.2%
ME 3	38 56 13	2013	Below Normal	February	--	8,831.1	8,809.7	21.4	0.2%	8,805.3	25.8	0.3%	8,792.2	38.9	0.4%
ME 3	38 56 13	2013	Below Normal	March	--	10,308.7	10,287.8	20.8	0.2%	10,283.7	25.0	0.2%	10,270.9	37.7	0.4%
ME 3	38 56 13	2013	Below Normal	April	--	8,284.3	8,244.1	40.2	0.5%	8,236.0	48.3	0.6%	8,212.0	72.2	0.9%
ME 3	38 56 13	2013	Below Normal	May	--	4,422.2	4,373.6	48.6	1.1%	4,363.9	58.3	1.3%	4,335.0	87.3	2.0%
ME 3	38 56 13	2013	Below Normal	June	--	2,107.3	2,049.8	57.5	2.7%	2,038.4	68.9	3.3%	2,004.9	102.4	4.9%
ME 3	38 56 13	2013	Below Normal	July	--	716.7	662.1	54.6	7.6%	651.3	65.4	9.1%	619.8	96.8	13.5%
ME 3	38 56 13	2013	Below Normal	August	--	337.9	287.1	50.8	15.0%	277.0	60.9	18.0%	246.1	91.9	27.2%
ME 3	38 56 13	2013	Below Normal	September	Used in Summary Table Analysis	4,773.8	4,721.4	52.4	1.1%	4,710.9	63.0	1.3%	4,679.5	94.3	2.0%
ME 3	38 56 13	2014	Critical	October	Used in Summary Table Analysis	280.6	243.1	37.5	13.4%	235.5	45.1	16.1%	213.5	67.1	23.9%
ME 3	38 56 13	2014	Critical	November	Used in Summary Table Analysis	1,531.5	1,501.4	30.1	2.0%	1,495.4	36.1	2.4%	1,477.1	54.4	3.6%
ME 3	38 56 13	2014	Critical	December	--	1,586.0	1,559.5	26.5	1.7%	1,554.2	31.8	2.0%	1,538.0	48.0	3.0%
ME 3	38 56 13	2014	Critical	January	--	2,814.7	2,790.9	23.8	0.8%	2,786.0	28.7	1.0%	2,771.4	43.3	1.5%
ME 3	38 56 13	2014	Critical	February	--	15,732.6	15,710.6	22.0	0.1%	15,706.0	26.6	0.2%	15,692.1	40.5	0.3%
ME 3	38 56 13	2014	Critical	March	--	31,459.5	31,438.7	20.8	0.1%	31,435.2	24.3	0.1%	31,421.3	38.2	0.1%
ME 3	38 56 13	2014	Critical	April	--	12,980.3	12,937.5	42.8	0.3%	12,929.4	50.9	0.4%	12,902.8	77.5	0.6%
ME 3	38 56 13	2014	Critical	May	--	5,182.2	5,130.9	51.3	1.0%	5,120.7	61.5	1.2%	5,090.2	92.0	1.8%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 56 13	2014	Critical	June	--	1,195.4	1,126.5	68.9	5.8%	1,113.0	82.3	6.9%	1,074.3	121.1	10.1%
ME 3	38 56 13	2014	Critical	July	--	544.4	481.9	62.5	11.5%	469.5	74.9	13.8%	437.5	106.9	19.6%
ME 3	38 56 13	2014	Critical	August	--	345.9	286.9	59.0	17.1%	275.1	70.8	20.5%	242.1	103.8	30.0%
ME 3	38 56 13	2014	Critical	September	Used in Summary Table Analysis	2,567.6	2,510.3	57.3	2.2%	2,499.1	68.5	2.7%	2,465.4	102.2	4.0%
ME 3	38 56 13	2015	Dry	October	Used in Summary Table Analysis	11,339.7	11,296.1	43.6	0.4%	11,287.5	52.2	0.5%	11,261.5	78.2	0.7%
ME 3	38 56 13	2015	Dry	November	Used in Summary Table Analysis	9,016.2	8,983.3	32.9	0.4%	8,976.7	39.5	0.4%	8,953.8	62.4	0.7%
ME 3	38 56 13	2015	Dry	December	--	32,532.4	32,504.6	27.8	0.1%	32,498.8	33.6	0.1%	32,480.3	52.1	0.2%
ME 3	38 56 13	2015	Dry	January	--	14,564.8	14,538.2	26.6	0.2%	14,533.6	31.3	0.2%	14,517.4	47.5	0.3%
ME 3	38 56 13	2015	Dry	February	--	27,200.2	27,177.1	23.1	0.1%	27,172.5	27.8	0.1%	27,158.6	41.7	0.2%
ME 3	38 56 13	2015	Dry	March	--	11,562.5	11,541.9	20.6	0.2%	11,537.6	24.9	0.2%	11,524.9	37.6	0.3%
ME 3	38 56 13	2015	Dry	April	--	8,364.4	8,321.8	42.6	0.5%	8,313.2	51.2	0.6%	8,287.7	76.6	0.9%
ME 3	38 56 13	2015	Dry	May	--	1,508.2	1,458.0	50.2	3.3%	1,448.1	60.1	4.0%	1,419.3	88.9	5.9%
ME 3	38 56 13	2015	Dry	June	--	651.3	587.8	63.4	9.7%	575.4	75.9	11.7%	538.6	112.6	17.3%
ME 3	38 56 13	2015	Dry	July	--	267.3	206.1	61.2	22.9%	194.0	73.3	27.4%	162.9	104.4	39.1%
ME 3	38 56 13	2015	Dry	August	--	164.6	106.0	58.6	35.6%	94.3	70.3	42.7%	61.8	102.7	62.4%
ME 3	38 56 13	2015	Dry	September	Used in Summary Table Analysis	119.2	64.9	54.3	45.5%	53.7	65.5	54.9%	21.3	98.0	82.2%
ME 3	38 56 13	2016	Above Normal	October	Used in Summary Table Analysis	84.7	39.9	44.8	52.9%	31.3	53.4	63.0%	0.0	84.7	100.0%
ME 3	38 56 13	2016	Above Normal	November	Used in Summary Table Analysis	3,846.2	3,812.3	33.9	0.9%	3,805.3	40.9	1.1%	3,780.8	65.4	1.7%
ME 3	38 56 13	2016	Above Normal	December	--	36,519.7	36,490.7	28.9	0.1%	36,483.8	35.9	0.1%	36,465.3	54.4	0.1%
ME 3	38 56 13	2016	Above Normal	January	--	57,213.0	57,185.2	27.8	0.0%	57,179.4	33.6	0.1%	57,162.0	50.9	0.1%
ME 3	38 56 13	2016	Above Normal	February	--	24,251.2	24,228.0	23.1	0.1%	24,223.4	27.8	0.1%	24,209.5	41.7	0.2%
ME 3	38 56 13	2016	Above Normal	March	--	41,729.2	41,706.0	23.1	0.1%	41,701.4	27.8	0.1%	41,688.7	40.5	0.1%
ME 3	38 56 13	2016	Above Normal	April	--	18,523.1	18,503.5	19.7	0.1%	18,498.8	24.3	0.1%	18,486.1	37.0	0.2%
ME 3	38 56 13	2016	Above Normal	May	--	5,210.0	5,184.1	25.8	0.5%	5,178.8	31.1	0.6%	5,163.2	46.8	0.9%
ME 3	38 56 13	2016	Above Normal	June	--	1,506.8	1,457.5	49.3	3.3%	1,448.8	58.0	3.8%	1,423.5	83.3	5.5%
ME 3	38 56 13	2016	Above Normal	July	--	820.2	766.1	54.2	6.6%	755.3	64.9	7.9%	723.7	96.5	11.8%
ME 3	38 56 13	2016	Above Normal	August	--	488.8	436.6	52.2	10.7%	426.2	62.6	12.8%	395.2	93.6	19.1%
ME 3	38 56 13	2016	Above Normal	September	Used in Summary Table Analysis	325.4	277.1	48.3	14.8%	267.2	58.2	17.9%	237.9	87.5	26.9%
ME 3	38 56 13	2017	Wet	October	Used in Summary Table Analysis	18,244.2	18,207.2	37.0	0.2%	18,199.1	45.1	0.2%	18,177.1	67.1	0.4%
ME 3	38 56 13	2017	Wet	November	Used in Summary Table Analysis	18,780.1	18,751.2	28.9	0.2%	18,744.2	35.9	0.2%	18,726.9	53.2	0.3%
ME 3	38 56 13	2017	Wet	December	--	24,042.8	24,017.4	25.5	0.1%	24,012.7	30.1	0.1%	23,996.5	46.3	0.2%
ME 3	38 56 13	2017	Wet	January	--	106,696.8	106,672.5	24.3	0.0%	106,667.8	28.9	0.0%	106,652.8	44.0	0.0%
ME 3	38 56 13	2017	Wet	February	--	81,717.6	81,695.6	22.0	0.0%	81,691.0	26.6	0.0%	81,677.1	40.5	0.0%
ME 3	38 56 13	2017	Wet	March	--	27,236.1	27,214.1	22.0	0.1%	27,210.6	25.5	0.1%	27,197.9	38.2	0.1%
ME 3	38 56 13	2017	Wet	April	--	22,895.8	22,876.2	19.7	0.1%	22,872.7	23.1	0.1%	22,861.1	34.7	0.2%
ME 3	38 56 13	2017	Wet	May	--	6,270.7	6,244.6	26.2	0.4%	6,239.4	31.4	0.5%	6,223.7	47.0	0.7%
ME 3	38 56 13	2017	Wet	June	--	2,110.3	2,059.0	51.3	2.4%	2,049.0	61.3	2.9%	2,019.2	91.1	4.3%
ME 3	38 56 13	2017	Wet	July	--	930.3	875.7	54.6	5.9%	865.0	65.3	7.0%	833.4	96.9	10.4%
ME 3	38 56 13	2017	Wet	August	--	502.7	450.5	52.2	10.4%	440.1	62.6	12.4%	409.2	93.4	18.6%
ME 3	38 56 13	2017	Wet	September	Used in Summary Table Analysis	319.5	271.7	47.8	15.0%	262.1	57.4	18.0%	233.4	86.1	26.9%
ME 3	38 56 13	2018	Above Normal	October	Used in Summary Table Analysis	272.4	235.1	37.3	13.7%	227.5	44.8	16.5%	205.0	67.4	24.8%
ME 3	38 56 13	2018	Above Normal	November	Used in Summary Table Analysis	10,742.0	10,713.1	28.9	0.3%	10,707.2	34.8	0.3%	10,689.4	52.7	0.5%
ME 3	38 56 13	2018	Above Normal	December	--	5,441.3	5,416.7	24.7	0.5%	5,411.7	29.6	0.5%	5,396.5	44.8	0.8%
ME 3	38 56 13	2018	Above Normal	January	--	17,695.6	17,672.5	23.1	0.1%	17,667.8	27.8	0.2%	17,653.9	41.7	0.2%
ME 3	38 56 13	2018	Above Normal	February	--	7,593.3	7,572.9	20.4	0.3%	7,568.8	24.5	0.3%	7,556.1	37.2	0.5%
ME 3	38 56 13	2018	Above Normal	March	--	20,644.7	20,625.0	19.7	0.1%	20,621.5	23.1	0.1%	20,610.0	34.7	0.2%
ME 3	38 56 13	2018	Above Normal	April	--	32,136.6	32,118.1	18.5	0.1%	32,114.6	22.0	0.1%	32,104.2	32.4	0.1%
ME 3	38 56 13	2018	Above Normal	May	--	6,985.9	6,945.7	40.2	0.6%	6,937.8	48.0	0.7%	6,913.7	72.2	1.0%
ME 3	38 56 13	2018	Above Normal	June	--	1,911.0	1,859.6	51.4	2.7%	1,849.5	61.5	3.2%	1,819.9	91.1	4.8%
ME 3	38 56 13	2018	Above Normal	July	--	778.2	723.5	54.7	7.0%	712.7	65.5	8.4%	680.5	97.7	12.5%
ME 3	38 56 13	2018	Above Normal	August	--	439.5	389.3	50.3	11.4%	379.2	60.3	13.7%	349.2	90.3	20.5%
ME 3	38 56 13	2018	Above Normal	September	Used in Summary Table Analysis	297.3	249.4	47.9	16.1%	239.8	57.5	19.4%	211.1	86.3	29.0%
ME 3	38 56 13	2019	Below Normal	October	Used in Summary Table Analysis	205.8	169.1	36.7	17.8%	161.7	44.2	21.5%	139.3	66.6	32.3%
ME 3	38 56 13	2019	Below Normal	November	Used in Summary Table Analysis	6,591.1	6,561.9	29.2	0.4%	6,556.0	35.1	0.5%	6,538.2	52.9	0.8%
ME 3	38 56 13	2019	Below Normal	December	--	14,611.1	14,585.6	25.5	0.2%	14,579.9	31.3	0.2%	14,564.8	46.3	0.3%
ME 3	38 56 13	2019	Below Normal	January	--	35,107.6	35,085.6	22.0	0.1%	35,081.0	26.6	0.1%	35,067.1	40.5	0.1%
ME 3	38 56 13	2019	Below Normal	February	--	141,805.6	141,782.4	23.1	0.0%	141,782.4	23.1	0.0%	141,759.3	46.3	0.0%
ME 3	38 56 13	2019	Below Normal	March	--	42,258.1	42,238.4	19.7	0.0%	42,235.0	23.1	0.1%	42,223.4	34.7	0.1%
ME 3	38 56 13	2019	Below Normal	April	--	15,254.6	15,236.1	18.5	0.1%	15,232.6	22.0	0.1%	15,221.1	33.6	0.2%
ME 3	38 56 13	2019	Below Normal	May	--	16,855.3	16,811.3	44.0	0.3%	16,803.2	52.1	0.3%	16,777.8	77.5	0.5%
ME 3	38 56 13	2019	Below Normal	June	--	4,242.4	4,188.3	54.1	1.3%	4,178.0	64.4	1.5%	4,147.7	94.7	2.2%
ME 3	38 56 13	2019	Below Normal	July	--	1,356.9	1,302.1	54.9	4.0%	1,291.3	65.6	4.8%	1,259.3	97.7	7.2%
ME 3	38 56 13	2019	Below Normal	August	--	592.7	541.0	51.6	8.7%	530.8	61.9	10.4%	500.3	92.3	15.6%
ME 3	38 56 13	2019	Below Normal	September	Used in Summary Table Analysis	459.6	411.9	47.7	10.4%	402.3	57.3	12.5%	373.7	85.9	18.7%

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Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 3	38 56 13	2020	Dry	October	Used in Summary Table Analysis	353.7	318.4	35.3	10.0%	311.3	42.4	12.0%	289.7	63.9	18.1%
ME 3	38 56 13	2020	Dry	November	Used in Summary Table Analysis	315.0	287.6	27.4	8.7%	282.0	32.9	10.5%	265.3	49.6	15.8%
ME 3	38 56 13	2020	Dry	December	--	13,203.7	13,179.4	24.3	0.2%	13,173.6	30.1	0.2%	13,158.6	45.1	0.3%
ME 3	38 56 13	2020	Dry	January	--	22,266.2	22,243.1	23.1	0.1%	22,238.4	27.8	0.1%	22,224.5	41.7	0.2%
ME 3	38 56 13	2020	Dry	February	--	7,411.7	7,390.9	20.8	0.3%	7,386.6	25.1	0.3%	7,374.0	37.7	0.5%
ME 3	38 56 13	2020	Dry	March	--	7,232.2	7,212.5	19.7	0.3%	7,208.4	23.7	0.3%	7,196.5	35.6	0.5%
ME 3	38 56 13	2020	Dry	April	--	5,469.8	5,427.2	42.6	0.8%	5,418.8	51.0	0.9%	5,393.5	76.3	1.4%
ME 3	38 56 13	2020	Dry	May	--	7,360.1	7,309.3	50.8	0.7%	7,299.2	60.9	0.8%	7,269.0	91.1	1.2%
ME 3	38 56 13	2020	Dry	June	--	2,103.9	2,039.9	64.0	3.0%	2,027.5	76.4	3.6%	1,991.2	112.7	5.4%
ME 3	38 56 13	2020	Dry	July	--	794.2	730.5	63.7	8.0%	717.9	76.3	9.6%	685.5	108.6	13.7%
ME 3	38 56 13	2020	Dry	August	--	396.8	334.7	62.1	15.6%	322.3	74.4	18.8%	288.1	108.6	27.4%
ME 3	38 56 13	2020	Dry	September	Used in Summary Table Analysis	246.4	188.8	57.6	23.4%	177.0	69.4	28.2%	142.6	103.7	42.1%
ME 4	37 55 15	2000	Above Normal	October	Used in Summary Table Analysis	814.1	776.5	37.7	4.6%	768.8	45.3	5.6%	745.9	68.2	8.4%
ME 4	37 55 15	2000	Above Normal	November	Used in Summary Table Analysis	12,079.9	12,049.8	30.1	0.2%	12,044.0	35.9	0.3%	12,025.5	54.4	0.5%
ME 4	37 55 15	2000	Above Normal	December	--	10,790.3	10,764.5	25.8	0.2%	10,759.3	31.0	0.3%	10,743.5	46.8	0.4%
ME 4	37 55 15	2000	Above Normal	January	--	28,510.4	28,487.3	23.1	0.1%	28,481.5	28.9	0.1%	28,467.6	42.8	0.2%
ME 4	37 55 15	2000	Above Normal	February	--	36,998.8	36,976.9	22.0	0.1%	36,972.2	26.6	0.1%	36,959.5	39.4	0.1%
ME 4	37 55 15	2000	Above Normal	March	--	18,303.2	18,283.6	19.7	0.1%	18,278.9	24.3	0.1%	18,266.2	37.0	0.2%
ME 4	37 55 15	2000	Above Normal	April	--	12,304.4	12,284.7	19.7	0.2%	12,281.3	23.1	0.2%	12,268.5	35.9	0.3%
ME 4	37 55 15	2000	Above Normal	May	--	7,086.5	7,044.0	42.5	0.6%	7,035.5	50.9	0.7%	7,010.2	76.3	1.1%
ME 4	37 55 15	2000	Above Normal	June	--	2,608.2	2,545.6	62.6	2.4%	2,533.2	75.0	2.9%	2,496.8	111.5	4.3%
ME 4	37 55 15	2000	Above Normal	July	--	990.3	934.8	55.5	5.6%	923.9	66.5	6.7%	891.2	99.1	10.0%
ME 4	37 55 15	2000	Above Normal	August	--	520.3	468.5	51.8	10.0%	458.2	62.1	11.9%	427.3	93.0	17.9%
ME 4	37 55 15	2000	Above Normal	September	Used in Summary Table Analysis	294.0	248.5	45.5	15.5%	239.4	54.6	18.6%	212.0	82.0	27.9%
ME 4	37 55 15	2001	Dry	October	Used in Summary Table Analysis	3,806.6	3,769.3	37.3	1.0%	3,761.7	44.9	1.2%	3,739.0	67.6	1.8%
ME 4	37 55 15	2001	Dry	November	Used in Summary Table Analysis	6,110.1	6,080.1	30.0	0.5%	6,074.1	36.0	0.6%	6,055.9	54.2	0.9%
ME 4	37 55 15	2001	Dry	December	--	8,824.4	8,798.3	26.2	0.3%	8,792.9	31.5	0.4%	8,777.0	47.5	0.5%
ME 4	37 55 15	2001	Dry	January	--	12,763.9	12,739.6	24.3	0.2%	12,735.0	28.9	0.2%	12,719.9	44.0	0.3%
ME 4	37 55 15	2001	Dry	February	--	17,454.9	17,432.9	22.0	0.1%	17,428.2	26.6	0.2%	17,415.5	39.4	0.2%
ME 4	37 55 15	2001	Dry	March	--	12,288.2	12,267.4	20.8	0.2%	12,263.9	24.3	0.2%	12,251.2	37.0	0.3%
ME 4	37 55 15	2001	Dry	April	--	10,962.7	10,919.2	43.5	0.4%	10,910.5	52.2	0.5%	10,884.6	78.1	0.7%
ME 4	37 55 15	2001	Dry	May	--	2,637.0	2,585.8	51.3	1.9%	2,575.6	61.5	2.3%	2,545.0	92.0	3.5%
ME 4	37 55 15	2001	Dry	June	--	2,642.4	2,573.5	68.9	2.6%	2,560.1	82.3	3.1%	2,520.6	121.8	4.6%
ME 4	37 55 15	2001	Dry	July	--	718.2	654.4	63.8	8.9%	641.8	76.4	10.6%	609.2	109.1	15.2%
ME 4	37 55 15	2001	Dry	August	--	171.6	109.9	61.7	36.0%	97.6	74.0	43.1%	63.3	108.3	63.1%
ME 4	37 55 15	2001	Dry	September	Used in Summary Table Analysis	94.4	40.0	54.4	57.6%	29.1	65.3	69.1%	0.1	94.3	99.9%
ME 4	37 55 15	2002	Below Normal	October	Used in Summary Table Analysis	264.0	219.0	45.0	17.0%	209.9	54.1	20.5%	182.6	81.4	30.8%
ME 4	37 55 15	2002	Below Normal	November	Used in Summary Table Analysis	12,006.9	11,972.2	34.7	0.3%	11,965.3	41.7	0.3%	11,941.0	66.0	0.5%
ME 4	37 55 15	2002	Below Normal	December	--	35,623.8	35,592.6	31.3	0.1%	35,586.8	37.0	0.1%	35,567.1	56.7	0.2%
ME 4	37 55 15	2002	Below Normal	January	--	30,840.3	30,812.5	27.8	0.1%	30,806.7	33.6	0.1%	30,789.4	50.9	0.2%
ME 4	37 55 15	2002	Below Normal	February	--	24,655.1	24,629.6	25.5	0.1%	24,623.8	31.3	0.1%	24,608.8	46.3	0.2%
ME 4	37 55 15	2002	Below Normal	March	--	17,761.6	17,737.3	24.3	0.1%	17,732.6	28.9	0.2%	17,717.6	44.0	0.2%
ME 4	37 55 15	2002	Below Normal	April	--	9,918.3	9,874.9	43.4	0.4%	9,866.3	52.0	0.5%	9,840.5	77.8	0.8%
ME 4	37 55 15	2002	Below Normal	May	--	3,317.1	3,265.9	51.3	1.5%	3,255.7	61.5	1.9%	3,225.2	91.9	2.8%
ME 4	37 55 15	2002	Below Normal	June	--	853.0	795.8	57.1	6.7%	784.6	68.4	8.0%	751.2	101.7	11.9%
ME 4	37 55 15	2002	Below Normal	July	--	361.4	304.1	57.3	15.9%	292.8	68.7	19.0%	259.7	101.7	28.2%
ME 4	37 55 15	2002	Below Normal	August	--	225.9	172.5	53.4	23.6%	161.9	64.1	28.4%	129.4	96.5	42.7%
ME 4	37 55 15	2002	Below Normal	September	Used in Summary Table Analysis	162.9	112.8	50.0	30.7%	102.9	60.0	36.8%	72.1	90.8	55.8%
ME 4	37 55 15	2003	Wet	October	Used in Summary Table Analysis	127.9	87.4	40.5	31.7%	79.2	48.7	38.1%	54.6	73.3	57.3%
ME 4	37 55 15	2003	Wet	November	Used in Summary Table Analysis	894.8	862.6	32.2	3.6%	856.0	38.8	4.3%	836.2	58.6	6.6%
ME 4	37 55 15	2003	Wet	December	--	56,679.4	56,650.5	28.9	0.1%	56,644.7	34.7	0.1%	56,627.3	52.1	0.1%
ME 4	37 55 15	2003	Wet	January	--	31,502.3	31,476.9	25.5	0.1%	31,471.1	31.3	0.1%	31,456.0	46.3	0.1%
ME 4	37 55 15	2003	Wet	February	--	20,338.0	20,314.8	23.1	0.1%	20,310.2	27.8	0.1%	20,296.3	41.7	0.2%
ME 4	37 55 15	2003	Wet	March	--	24,010.4	23,988.4	22.0	0.1%	23,983.8	26.6	0.1%	23,971.1	39.4	0.2%
ME 4	37 55 15	2003	Wet	April	--	42,855.3	42,833.3	22.0	0.1%	42,828.7	26.6	0.1%	42,816.0	39.4	0.1%
ME 4	37 55 15	2003	Wet	May	--	12,216.4	12,172.5	44.0	0.4%	12,163.2	53.2	0.4%	12,137.7	78.7	0.6%
ME 4	37 55 15	2003	Wet	June	--	3,164.6	3,110.0	54.6	1.7%	3,099.3	65.3	2.1%	3,067.8	96.8	3.1%
ME 4	37 55 15	2003	Wet	July	--	1,472.2	1,415.3	56.9	3.9%	1,404.1	68.2	4.6%	1,370.7	101.5	6.9%
ME 4	37 55 15	2003	Wet	August	--	758.4	703.1	55.3	7.3%	691.7	66.7	8.8%	656.3	102.2	13.5%
ME 4	37 55 15	2003	Wet	September	Used in Summary Table Analysis	456.5	410.4	46.1	10.1%	401.2	55.4	12.1%	372.3	84.2	18.4%
ME 4	37 55 15	2004	Wet	October	Used in Summary Table Analysis	323.6	285.8	37.8	11.7%	278.1	45.4	14.0%	255.1	68.5	21.2%
ME 4	37 55 15	2004	Wet	November	Used in Summary Table Analysis	5,788.8	5,758.3	30.4	0.5%	5,752.1	36.7	0.6%	5,733.3	55.4	1.0%
ME 4	37 55 15	2004	Wet	December	--	36,247.7	36,219.9	27.8	0.1%	36,214.1	33.6	0.1%	36,197.9	49.8	0.1%
ME 4	37 55 15	2004	Wet	January	--	31,430.6	31,406.3	24.3	0.1%	31,401.6	28.9	0.1%	31,386.6	44.0	0.1%

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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	37 55 15	2004	Wet	February	--	38,194.4	38,172.5	22.0	0.1%	38,167.8	26.6	0.1%	38,153.9	40.5	0.1%
ME 4	37 55 15	2004	Wet	March	--	16,516.2	16,495.4	20.8	0.1%	16,491.9	24.3	0.1%	16,479.2	37.0	0.2%
ME 4	37 55 15	2004	Wet	April	--	9,444.8	9,425.0	19.8	0.2%	9,420.9	23.8	0.3%	9,408.7	36.1	0.4%
ME 4	37 55 15	2004	Wet	May	--	3,415.5	3,372.8	42.7	1.3%	3,364.4	51.2	1.5%	3,339.1	76.4	2.2%
ME 4	37 55 15	2004	Wet	June	--	691.0	638.3	52.7	7.6%	627.9	63.1	9.1%	597.4	93.6	13.6%
ME 4	37 55 15	2004	Wet	July	--	354.9	298.9	55.9	15.8%	287.8	67.0	18.9%	254.9	99.9	28.2%
ME 4	37 55 15	2004	Wet	August	--	224.1	171.8	52.2	23.3%	161.4	62.7	28.0%	130.2	93.8	41.9%
ME 4	37 55 15	2004	Wet	September	Used in Summary Table Analysis	161.3	111.9	49.4	30.6%	102.1	59.2	36.7%	72.4	88.9	55.1%
ME 4	37 55 15	2005	Above Normal	October	Used in Summary Table Analysis	7,664.0	7,625.3	38.7	0.5%	7,617.6	46.4	0.6%	7,594.0	70.0	0.9%
ME 4	37 55 15	2005	Above Normal	November	Used in Summary Table Analysis	2,254.6	2,224.4	30.2	1.3%	2,218.4	36.2	1.6%	2,199.9	54.7	2.4%
ME 4	37 55 15	2005	Above Normal	December	--	20,974.5	20,947.9	26.6	0.1%	20,942.1	32.4	0.2%	20,925.9	48.6	0.2%
ME 4	37 55 15	2005	Above Normal	January	--	22,343.8	22,319.4	24.3	0.1%	22,314.8	28.9	0.1%	22,299.8	44.0	0.2%
ME 4	37 55 15	2005	Above Normal	February	--	14,004.6	13,982.6	22.0	0.2%	13,978.0	26.6	0.2%	13,965.3	39.4	0.3%
ME 4	37 55 15	2005	Above Normal	March	--	28,535.9	28,515.0	20.8	0.1%	28,511.6	24.3	0.1%	28,498.8	37.0	0.1%
ME 4	37 55 15	2005	Above Normal	April	--	21,424.8	21,405.1	19.7	0.1%	21,400.5	24.3	0.1%	21,388.9	35.9	0.2%
ME 4	37 55 15	2005	Above Normal	May	--	19,545.1	19,502.3	42.8	0.2%	19,493.1	52.1	0.3%	19,467.6	77.5	0.4%
ME 4	37 55 15	2005	Above Normal	June	--	15,842.6	15,778.9	63.7	0.4%	15,766.2	76.4	0.5%	15,728.0	114.6	0.7%
ME 4	37 55 15	2005	Above Normal	July	--	2,863.7	2,805.8	57.9	2.0%	2,794.9	68.8	2.4%	2,762.3	101.4	3.5%
ME 4	37 55 15	2005	Above Normal	August	--	981.1	929.1	52.0	5.3%	918.9	62.2	6.3%	888.3	92.9	9.5%
ME 4	37 55 15	2005	Above Normal	September	Used in Summary Table Analysis	522.8	477.3	45.6	8.7%	468.2	54.6	10.4%	441.0	81.8	15.6%
ME 4	37 55 15	2006	Wet	October	Used in Summary Table Analysis	632.4	595.9	36.5	5.8%	588.6	43.8	6.9%	566.3	66.1	10.5%
ME 4	37 55 15	2006	Wet	November	Used in Summary Table Analysis	9,281.9	9,253.1	28.8	0.3%	9,247.3	34.6	0.4%	9,229.6	52.3	0.6%
ME 4	37 55 15	2006	Wet	December	--	43,419.0	43,393.5	25.5	0.1%	43,387.7	31.3	0.1%	43,371.5	47.5	0.1%
ME 4	37 55 15	2006	Wet	January	--	46,226.9	46,202.5	24.3	0.1%	46,197.9	28.9	0.1%	46,182.9	44.0	0.1%
ME 4	37 55 15	2006	Wet	February	--	26,588.0	26,567.1	20.8	0.1%	26,562.5	25.5	0.1%	26,549.8	38.2	0.1%
ME 4	37 55 15	2006	Wet	March	--	47,101.9	47,082.2	19.7	0.0%	47,077.5	24.3	0.1%	47,064.8	37.0	0.1%
ME 4	37 55 15	2006	Wet	April	--	30,406.3	30,386.6	19.7	0.1%	30,383.1	23.1	0.1%	30,371.5	34.7	0.1%
ME 4	37 55 15	2006	Wet	May	--	14,194.4	14,167.8	26.6	0.2%	14,163.2	31.3	0.2%	14,147.0	47.5	0.3%
ME 4	37 55 15	2006	Wet	June	--	3,545.8	3,493.1	52.8	1.5%	3,482.8	63.1	1.8%	3,452.3	93.5	2.6%
ME 4	37 55 15	2006	Wet	July	--	1,277.0	1,221.8	55.2	4.3%	1,211.0	66.0	5.2%	1,178.9	98.0	7.7%
ME 4	37 55 15	2006	Wet	August	--	663.2	610.1	53.1	8.0%	599.6	63.6	9.6%	568.2	95.0	14.3%
ME 4	37 55 15	2006	Wet	September	Used in Summary Table Analysis	424.4	378.4	46.0	10.8%	369.2	55.2	13.0%	341.7	82.7	19.5%
ME 4	37 55 15	2007	Above Normal	October	Used in Summary Table Analysis	273.0	235.9	37.2	13.6%	228.4	44.6	16.4%	205.7	67.3	24.7%
ME 4	37 55 15	2007	Above Normal	November	Used in Summary Table Analysis	8,645.6	8,615.6	30.0	0.3%	8,609.5	36.1	0.4%	8,591.0	54.6	0.6%
ME 4	37 55 15	2007	Above Normal	December	--	20,368.1	20,340.3	27.8	0.1%	20,335.6	32.4	0.2%	20,319.4	48.6	0.2%
ME 4	37 55 15	2007	Above Normal	January	--	10,240.3	10,216.7	23.6	0.2%	10,211.8	28.5	0.3%	10,197.1	43.2	0.4%
ME 4	37 55 15	2007	Above Normal	February	--	30,523.1	30,501.2	22.0	0.1%	30,496.5	26.6	0.1%	30,481.5	41.7	0.1%
ME 4	37 55 15	2007	Above Normal	March	--	13,093.8	13,071.8	22.0	0.2%	13,067.1	26.6	0.2%	13,054.4	39.4	0.3%
ME 4	37 55 15	2007	Above Normal	April	--	11,527.0	11,485.2	41.8	0.4%	11,476.9	50.1	0.4%	11,452.0	75.0	0.7%
ME 4	37 55 15	2007	Above Normal	May	--	4,136.5	4,086.7	49.8	1.2%	4,076.7	59.7	1.4%	4,047.1	89.4	2.2%
ME 4	37 55 15	2007	Above Normal	June	--	1,496.2	1,437.4	58.8	3.9%	1,425.8	70.4	4.7%	1,391.4	104.7	7.0%
ME 4	37 55 15	2007	Above Normal	July	--	495.2	436.7	58.5	11.8%	425.2	70.1	14.1%	391.3	104.0	21.0%
ME 4	37 55 15	2007	Above Normal	August	--	221.9	169.7	52.2	23.5%	159.3	62.6	28.2%	127.6	94.3	42.5%
ME 4	37 55 15	2007	Above Normal	September	Used in Summary Table Analysis	149.6	100.5	49.0	32.8%	90.8	58.8	39.3%	61.4	88.2	58.9%
ME 4	37 55 15	2008	Dry	October	Used in Summary Table Analysis	3,426.4	3,386.9	39.5	1.2%	3,379.1	47.3	1.4%	3,354.9	71.5	2.1%
ME 4	37 55 15	2008	Dry	November	Used in Summary Table Analysis	3,267.9	3,237.6	30.3	0.9%	3,231.4	36.6	1.1%	3,212.7	55.2	1.7%
ME 4	37 55 15	2008	Dry	December	--	23,070.6	23,044.0	26.6	0.1%	23,038.2	32.4	0.1%	23,022.0	48.6	0.2%
ME 4	37 55 15	2008	Dry	January	--	37,478.0	37,452.5	25.5	0.1%	37,447.9	30.1	0.1%	37,431.7	46.3	0.1%
ME 4	37 55 15	2008	Dry	February	--	26,258.1	26,236.1	22.0	0.1%	26,231.5	26.6	0.1%	26,218.8	39.4	0.1%
ME 4	37 55 15	2008	Dry	March	--	11,788.2	11,768.5	19.7	0.2%	11,765.0	23.1	0.2%	11,752.3	35.9	0.3%
ME 4	37 55 15	2008	Dry	April	--	9,012.3	8,969.8	42.5	0.5%	8,961.3	50.9	0.6%	8,936.1	76.2	0.8%
ME 4	37 55 15	2008	Dry	May	--	1,360.3	1,316.0	44.3	3.3%	1,307.4	52.9	3.9%	1,281.6	78.7	5.8%
ME 4	37 55 15	2008	Dry	June	--	436.9	373.2	63.8	14.6%	360.7	76.2	17.4%	323.7	113.2	25.9%
ME 4	37 55 15	2008	Dry	July	--	255.2	193.1	62.2	24.4%	180.8	74.4	29.2%	149.1	106.1	41.6%
ME 4	37 55 15	2008	Dry	August	--	178.6	118.7	59.9	33.5%	106.8	71.8	40.2%	70.7	108.0	60.4%
ME 4	37 55 15	2008	Dry	September	Used in Summary Table Analysis	140.3	83.2	57.1	40.7%	71.8	68.5	48.8%	38.8	101.6	72.4%
ME 4	37 55 15	2009	Critical	October	Used in Summary Table Analysis	922.9	878.7	44.2	4.8%	869.8	53.1	5.8%	842.6	80.3	8.7%
ME 4	37 55 15	2009	Critical	November	Used in Summary Table Analysis	5,498.5	5,464.1	34.4	0.6%	5,457.3	41.2	0.7%	5,433.6	64.9	1.2%
ME 4	37 55 15	2009	Critical	December	--	12,137.7	12,107.6	30.1	0.2%	12,101.9	35.9	0.3%	12,083.3	54.4	0.4%
ME 4	37 55 15	2009	Critical	January	--	8,788.9	8,761.6	27.3	0.3%	8,756.0	32.9	0.4%	8,739.2	49.7	0.6%
ME 4	37 55 15	2009	Critical	February	--	22,591.4	22,567.1	24.3	0.1%	22,562.5	28.9	0.1%	22,547.5	44.0	0.2%
ME 4	37 55 15	2009	Critical	March	--	21,104.2	21,082.2	22.0	0.1%	21,077.5	26.6	0.1%	21,064.8	39.4	0.2%
ME 4	37 55 15	2009	Critical	April	--	10,095.1	10,051.2	44.0	0.4%	10,042.6	52.5	0.5%	10,016.3	78.8	0.8%
ME 4	37 55 15	2009	Critical	May	--	15,575.2	15,522.0	53.2	0.3%	15,511.6	63.7	0.4%	15,479.2	96.1	0.6%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	37 55 15	2009	Critical	June	--	3,159.1	3,091.0	68.2	2.2%	3,077.8	81.4	2.6%	3,038.7	120.5	3.8%
ME 4	37 55 15	2009	Critical	July	--	1,261.8	1,199.1	62.7	5.0%	1,186.7	75.1	6.0%	1,154.8	107.0	8.5%
ME 4	37 55 15	2009	Critical	August	--	667.7	607.4	60.2	9.0%	595.5	72.2	10.8%	561.9	105.8	15.8%
ME 4	37 55 15	2009	Critical	September	Used in Summary Table Analysis	389.1	335.9	53.2	13.7%	325.2	63.8	16.4%	294.4	94.7	24.3%
ME 4	37 55 15	2010	Below Normal	October	Used in Summary Table Analysis	6,087.0	6,042.1	44.9	0.7%	6,033.1	53.9	0.9%	6,004.7	82.3	1.4%
ME 4	37 55 15	2010	Below Normal	November	Used in Summary Table Analysis	8,281.9	8,246.5	35.4	0.4%	8,239.5	42.5	0.5%	8,215.0	66.9	0.8%
ME 4	37 55 15	2010	Below Normal	December	--	12,338.0	12,307.9	30.1	0.2%	12,302.1	35.9	0.3%	12,282.4	55.6	0.5%
ME 4	37 55 15	2010	Below Normal	January	--	36,179.4	36,151.6	27.8	0.1%	36,145.8	33.6	0.1%	36,128.5	50.9	0.1%
ME 4	37 55 15	2010	Below Normal	February	--	27,230.3	27,206.0	24.3	0.1%	27,200.2	30.1	0.1%	27,185.2	45.1	0.2%
ME 4	37 55 15	2010	Below Normal	March	--	28,824.1	28,800.9	23.1	0.1%	28,796.3	27.8	0.1%	28,782.4	41.7	0.1%
ME 4	37 55 15	2010	Below Normal	April	--	39,990.7	39,967.6	23.1	0.1%	39,963.0	27.8	0.1%	39,949.1	41.7	0.1%
ME 4	37 55 15	2010	Below Normal	May	--	20,251.2	20,204.9	46.3	0.2%	20,196.8	54.4	0.3%	20,169.0	82.2	0.4%
ME 4	37 55 15	2010	Below Normal	June	--	9,335.9	9,270.6	65.3	0.7%	9,257.8	78.1	0.8%	9,219.6	116.3	1.2%
ME 4	37 55 15	2010	Below Normal	July	--	1,453.5	1,395.1	58.3	4.0%	1,383.8	69.7	4.8%	1,350.5	103.0	7.1%
ME 4	37 55 15	2010	Below Normal	August	--	567.2	514.0	53.2	9.4%	503.5	63.7	11.2%	472.2	95.0	16.8%
ME 4	37 55 15	2010	Below Normal	September	Used in Summary Table Analysis	649.4	598.8	50.5	7.8%	588.7	60.7	9.3%	558.5	90.9	14.0%
ME 4	37 55 15	2011	Wet	October	Used in Summary Table Analysis	9,623.6	9,585.8	37.8	0.4%	9,578.1	45.5	0.5%	9,555.1	68.5	0.7%
ME 4	37 55 15	2011	Wet	November	Used in Summary Table Analysis	14,209.5	14,179.4	30.1	0.2%	14,172.5	37.0	0.3%	14,153.9	55.6	0.4%
ME 4	37 55 15	2011	Wet	December	--	33,655.1	33,628.5	26.6	0.1%	33,622.7	32.4	0.1%	33,606.5	48.6	0.1%
ME 4	37 55 15	2011	Wet	January	--	14,148.1	14,123.8	24.3	0.2%	14,119.2	28.9	0.2%	14,105.3	42.8	0.3%
ME 4	37 55 15	2011	Wet	February	--	20,759.3	20,737.3	22.0	0.1%	20,732.6	26.6	0.1%	20,718.8	40.5	0.2%
ME 4	37 55 15	2011	Wet	March	--	51,976.9	51,956.0	20.8	0.0%	51,951.4	25.5	0.0%	51,937.5	39.4	0.1%
ME 4	37 55 15	2011	Wet	April	--	24,790.5	24,769.7	20.8	0.1%	24,765.0	25.5	0.1%	24,752.3	38.2	0.2%
ME 4	37 55 15	2011	Wet	May	--	11,378.0	11,334.6	43.4	0.4%	11,325.9	52.1	0.5%	11,300.1	77.9	0.7%
ME 4	37 55 15	2011	Wet	June	--	7,051.9	6,988.0	63.9	0.9%	6,975.2	76.6	1.1%	6,938.0	113.9	1.6%
ME 4	37 55 15	2011	Wet	July	--	1,828.1	1,765.4	62.7	3.4%	1,753.0	75.1	4.1%	1,717.6	110.5	6.0%
ME 4	37 55 15	2011	Wet	August	--	775.5	722.8	52.8	6.8%	712.3	63.2	8.2%	681.1	94.4	12.2%
ME 4	37 55 15	2011	Wet	September	Used in Summary Table Analysis	432.2	384.6	47.5	11.0%	375.1	57.0	13.2%	346.8	85.4	19.8%
ME 4	37 55 15	2012	Below Normal	October	Used in Summary Table Analysis	4,536.7	4,498.0	38.7	0.9%	4,490.3	46.4	1.0%	4,466.4	70.3	1.5%
ME 4	37 55 15	2012	Below Normal	November	Used in Summary Table Analysis	8,228.0	8,197.2	30.8	0.4%	8,191.0	37.0	0.5%	8,172.0	56.0	0.7%
ME 4	37 55 15	2012	Below Normal	December	--	5,179.2	5,152.5	26.6	0.5%	5,147.1	32.1	0.6%	5,130.7	48.5	0.9%
ME 4	37 55 15	2012	Below Normal	January	--	20,086.8	20,062.5	24.3	0.1%	20,056.7	30.1	0.1%	20,041.7	45.1	0.2%
ME 4	37 55 15	2012	Below Normal	February	--	18,204.9	18,182.9	22.0	0.1%	18,178.2	26.6	0.1%	18,164.4	40.5	0.2%
ME 4	37 55 15	2012	Below Normal	March	--	45,391.2	45,369.2	22.0	0.0%	45,364.6	26.6	0.1%	45,350.7	40.5	0.1%
ME 4	37 55 15	2012	Below Normal	April	--	26,847.2	26,826.4	20.8	0.1%	26,821.8	25.5	0.1%	26,809.0	38.2	0.1%
ME 4	37 55 15	2012	Below Normal	May	--	7,480.0	7,436.7	43.3	0.6%	7,428.1	51.9	0.7%	7,402.7	77.3	1.0%
ME 4	37 55 15	2012	Below Normal	June	--	5,511.1	5,445.8	65.3	1.2%	5,433.1	78.0	1.4%	5,395.4	115.7	2.1%
ME 4	37 55 15	2012	Below Normal	July	--	2,221.1	2,160.3	60.8	2.7%	2,148.3	72.8	3.3%	2,112.6	108.4	4.9%
ME 4	37 55 15	2012	Below Normal	August	--	387.6	339.4	48.2	12.4%	329.8	57.8	14.9%	301.0	86.6	22.3%
ME 4	37 55 15	2012	Below Normal	September	Used in Summary Table Analysis	247.9	205.3	42.6	17.2%	196.8	51.1	20.6%	171.4	76.5	30.9%
ME 4	37 55 15	2013	Below Normal	October	Used in Summary Table Analysis	1,908.8	1,871.9	36.9	1.9%	1,864.4	44.4	2.3%	1,842.0	66.8	3.5%
ME 4	37 55 15	2013	Below Normal	November	Used in Summary Table Analysis	14,666.7	14,637.7	28.9	0.2%	14,631.9	34.7	0.2%	14,613.4	53.2	0.4%
ME 4	37 55 15	2013	Below Normal	December	--	59,950.2	59,922.5	27.8	0.0%	59,916.7	33.6	0.1%	59,900.5	49.8	0.1%
ME 4	37 55 15	2013	Below Normal	January	--	22,188.7	22,165.5	23.1	0.1%	22,160.9	27.8	0.1%	22,147.0	41.7	0.2%
ME 4	37 55 15	2013	Below Normal	February	--	8,839.8	8,817.6	22.2	0.3%	8,813.1	26.7	0.3%	8,799.5	40.3	0.5%
ME 4	37 55 15	2013	Below Normal	March	--	10,321.3	10,299.9	21.4	0.2%	10,295.5	25.8	0.3%	10,282.4	38.9	0.4%
ME 4	37 55 15	2013	Below Normal	April	--	8,288.4	8,247.6	40.9	0.5%	8,239.4	49.1	0.6%	8,214.9	73.5	0.9%
ME 4	37 55 15	2013	Below Normal	May	--	4,427.4	4,377.9	49.5	1.1%	4,368.1	59.4	1.3%	4,338.7	88.8	2.0%
ME 4	37 55 15	2013	Below Normal	June	--	2,109.4	2,050.7	58.7	2.8%	2,039.2	70.1	3.3%	2,004.9	104.5	5.0%
ME 4	37 55 15	2013	Below Normal	July	--	717.8	661.9	55.9	7.8%	650.8	66.9	9.3%	618.6	99.1	13.8%
ME 4	37 55 15	2013	Below Normal	August	--	339.4	287.1	52.2	15.4%	276.7	62.6	18.5%	245.0	94.4	27.8%
ME 4	37 55 15	2013	Below Normal	September	Used in Summary Table Analysis	4,781.3	4,727.3	53.9	1.1%	4,716.6	64.7	1.4%	4,684.3	97.0	2.0%
ME 4	37 55 15	2014	Critical	October	Used in Summary Table Analysis	281.2	242.4	38.8	13.8%	234.5	46.6	16.6%	211.8	69.4	24.7%
ME 4	37 55 15	2014	Critical	November	Used in Summary Table Analysis	1,535.5	1,504.4	31.1	2.0%	1,498.1	37.4	2.4%	1,479.2	56.4	3.7%
ME 4	37 55 15	2014	Critical	December	--	1,588.5	1,561.1	27.4	1.7%	1,555.6	33.0	2.1%	1,538.8	49.8	3.1%
ME 4	37 55 15	2014	Critical	January	--	2,818.9	2,794.2	24.7	0.9%	2,789.2	29.6	1.1%	2,774.1	44.8	1.6%
ME 4	37 55 15	2014	Critical	February	--	15,745.4	15,722.2	23.1	0.1%	15,717.6	27.8	0.2%	15,702.5	42.8	0.3%
ME 4	37 55 15	2014	Critical	March	--	31,475.7	31,453.7	22.0	0.1%	31,449.1	26.6	0.1%	31,435.2	40.5	0.1%
ME 4	37 55 15	2014	Critical	April	--	12,986.1	12,942.1	44.0	0.3%	12,934.0	52.1	0.4%	12,907.4	78.7	0.6%
ME 4	37 55 15	2014	Critical	May	--	5,185.9	5,133.8	52.1	1.0%	5,123.4	62.5	1.2%	5,092.1	93.8	1.8%
ME 4	37 55 15	2014	Critical	June	--	1,197.1	1,127.0	70.1	5.9%	1,113.3	83.8	7.0%	1,073.8	123.3	10.3%
ME 4	37 55 15	2014	Critical	July	--	545.6	481.6	64.0	11.7%	468.9	76.7	14.1%	435.9	109.7	20.1%
ME 4	37 55 15	2014	Critical	August	--	347.3	286.7	60.6	17.5%	274.6	72.8	20.9%	240.6	106.8	30.7%
ME 4	37 55 15	2014	Critical	September	Used in Summary Table Analysis	2,571.3	2,512.3	59.0	2.3%	2,500.7	70.6	2.7%	2,466.1	105.2	4.1%

Table A.1

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At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	37 55 15	2015	Dry	October	Used in Summary Table Analysis	11,353.0	11,307.8	45.3	0.4%	11,299.0	54.1	0.5%	11,272.0	81.0	0.7%
ME 4	37 55 15	2015	Dry	November	Used in Summary Table Analysis	9,030.1	8,996.1	34.0	0.4%	8,989.2	40.9	0.5%	8,965.5	64.6	0.7%
ME 4	37 55 15	2015	Dry	December	--	32,583.3	32,554.4	28.9	0.1%	32,548.6	34.7	0.1%	32,528.9	54.4	0.2%
ME 4	37 55 15	2015	Dry	January	--	14,572.9	14,546.3	26.6	0.2%	14,540.5	32.4	0.2%	14,524.3	48.6	0.3%
ME 4	37 55 15	2015	Dry	February	--	27,221.1	27,196.8	24.3	0.1%	27,192.1	28.9	0.1%	27,177.1	44.0	0.2%
ME 4	37 55 15	2015	Dry	March	--	11,567.9	11,546.5	21.4	0.2%	11,542.1	25.8	0.2%	11,528.9	39.0	0.3%
ME 4	37 55 15	2015	Dry	April	--	8,378.0	8,334.6	43.4	0.5%	8,325.9	52.1	0.6%	8,299.9	78.1	0.9%
ME 4	37 55 15	2015	Dry	May	--	1,509.0	1,457.9	51.2	3.4%	1,447.8	61.2	4.1%	1,418.4	90.6	6.0%
ME 4	37 55 15	2015	Dry	June	--	652.3	587.7	64.6	9.9%	575.0	77.3	11.9%	537.5	114.8	17.6%
ME 4	37 55 15	2015	Dry	July	--	268.3	205.6	62.7	23.4%	193.2	75.1	28.0%	161.2	107.1	39.9%
ME 4	37 55 15	2015	Dry	August	--	165.8	105.6	60.2	36.3%	93.6	72.3	43.6%	60.2	105.7	63.7%
ME 4	37 55 15	2015	Dry	September	Used in Summary Table Analysis	120.3	64.3	56.0	46.5%	52.8	67.5	56.1%	19.4	100.9	83.9%
ME 4	37 55 15	2016	Above Normal	October	Used in Summary Table Analysis	85.8	39.4	46.3	54.0%	30.5	55.2	64.4%	0.0	85.8	100.0%
ME 4	37 55 15	2016	Above Normal	November	Used in Summary Table Analysis	3,858.2	3,822.9	35.3	0.9%	3,815.7	42.5	1.1%	3,790.2	68.1	1.8%
ME 4	37 55 15	2016	Above Normal	December	--	36,579.9	36,548.6	31.3	0.1%	36,542.8	37.0	0.1%	36,522.0	57.9	0.2%
ME 4	37 55 15	2016	Above Normal	January	--	57,275.5	57,246.5	28.9	0.1%	57,240.7	34.7	0.1%	57,222.2	53.2	0.1%
ME 4	37 55 15	2016	Above Normal	February	--	24,261.6	24,238.4	23.1	0.1%	24,233.8	27.8	0.1%	24,218.8	42.8	0.2%
ME 4	37 55 15	2016	Above Normal	March	--	41,758.1	41,735.0	23.1	0.1%	41,730.3	27.8	0.1%	41,716.4	41.7	0.1%
ME 4	37 55 15	2016	Above Normal	April	--	18,532.4	18,511.6	20.8	0.1%	18,506.9	25.5	0.1%	18,494.2	38.2	0.2%
ME 4	37 55 15	2016	Above Normal	May	--	5,213.4	5,186.9	26.5	0.5%	5,181.5	31.9	0.6%	5,165.4	48.0	0.9%
ME 4	37 55 15	2016	Above Normal	June	--	1,508.4	1,458.2	50.2	3.3%	1,449.4	59.0	3.9%	1,423.4	85.1	5.6%
ME 4	37 55 15	2016	Above Normal	July	--	821.9	766.5	55.5	6.7%	755.5	66.5	8.1%	723.0	98.9	12.0%
ME 4	37 55 15	2016	Above Normal	August	--	490.5	436.8	53.7	10.9%	426.1	64.4	13.1%	394.3	96.2	19.6%
ME 4	37 55 15	2016	Above Normal	September	Used in Summary Table Analysis	327.0	277.2	49.8	15.2%	267.1	59.9	18.3%	236.9	90.1	27.6%
ME 4	37 55 15	2017	Wet	October	Used in Summary Table Analysis	18,268.5	18,229.2	39.4	0.2%	18,221.1	47.5	0.3%	18,197.9	70.6	0.4%
ME 4	37 55 15	2017	Wet	November	Used in Summary Table Analysis	18,805.6	18,775.5	30.1	0.2%	18,769.7	35.9	0.2%	18,751.2	54.4	0.3%
ME 4	37 55 15	2017	Wet	December	--	24,083.3	24,056.7	26.6	0.1%	24,052.1	31.3	0.1%	24,035.9	47.5	0.2%
ME 4	37 55 15	2017	Wet	January	--	106,814.8	106,790.5	24.3	0.0%	106,785.9	28.9	0.0%	106,769.7	45.1	0.0%
ME 4	37 55 15	2017	Wet	February	--	81,788.2	81,765.0	23.1	0.0%	81,760.4	27.8	0.0%	81,746.5	41.7	0.1%
ME 4	37 55 15	2017	Wet	March	--	27,258.1	27,237.3	20.8	0.1%	27,232.6	25.5	0.1%	27,219.9	38.2	0.1%
ME 4	37 55 15	2017	Wet	April	--	22,919.0	22,899.3	19.7	0.1%	22,895.8	23.1	0.1%	22,884.3	34.7	0.2%
ME 4	37 55 15	2017	Wet	May	--	6,272.3	6,245.5	26.9	0.4%	6,240.2	32.2	0.5%	6,224.1	48.3	0.8%
ME 4	37 55 15	2017	Wet	June	--	2,113.9	2,061.7	52.2	2.5%	2,051.5	62.4	3.0%	2,021.2	92.7	4.4%
ME 4	37 55 15	2017	Wet	July	--	932.5	876.7	55.8	6.0%	865.8	66.8	7.2%	833.4	99.1	10.6%
ME 4	37 55 15	2017	Wet	August	--	504.8	451.2	53.6	10.6%	440.6	64.3	12.7%	408.8	96.0	19.0%
ME 4	37 55 15	2017	Wet	September	Used in Summary Table Analysis	321.3	272.1	49.2	15.3%	262.3	59.1	18.4%	232.7	88.6	27.6%
ME 4	37 55 15	2018	Above Normal	October	Used in Summary Table Analysis	274.2	235.6	38.6	14.1%	227.8	46.4	16.9%	204.5	69.7	25.4%
ME 4	37 55 15	2018	Above Normal	November	Used in Summary Table Analysis	10,769.2	10,739.1	30.1	0.3%	10,733.0	36.2	0.3%	10,714.6	54.6	0.5%
ME 4	37 55 15	2018	Above Normal	December	--	5,444.4	5,418.8	25.7	0.5%	5,413.5	30.9	0.6%	5,397.8	46.6	0.9%
ME 4	37 55 15	2018	Above Normal	January	--	17,741.9	17,718.8	23.1	0.1%	17,714.1	27.8	0.2%	17,699.1	42.8	0.2%
ME 4	37 55 15	2018	Above Normal	February	--	7,596.2	7,575.1	21.1	0.3%	7,570.7	25.5	0.3%	7,557.6	38.5	0.5%
ME 4	37 55 15	2018	Above Normal	March	--	20,674.8	20,655.1	19.7	0.1%	20,650.5	24.3	0.1%	20,638.9	35.9	0.2%
ME 4	37 55 15	2018	Above Normal	April	--	32,172.5	32,153.9	18.5	0.1%	32,149.3	23.1	0.1%	32,137.7	34.7	0.1%
ME 4	37 55 15	2018	Above Normal	May	--	6,987.8	6,947.0	40.9	0.6%	6,939.0	48.8	0.7%	6,914.4	73.5	1.1%
ME 4	37 55 15	2018	Above Normal	June	--	1,912.8	1,860.4	52.4	2.7%	1,850.2	62.6	3.3%	1,819.9	92.9	4.9%
ME 4	37 55 15	2018	Above Normal	July	--	780.1	724.1	55.9	7.2%	713.0	67.0	8.6%	680.1	100.0	12.8%
ME 4	37 55 15	2018	Above Normal	August	--	441.4	389.7	51.7	11.7%	379.4	62.0	14.0%	348.6	92.8	21.0%
ME 4	37 55 15	2018	Above Normal	September	Used in Summary Table Analysis	299.0	249.6	49.3	16.5%	239.8	59.2	19.8%	210.2	88.8	29.7%
ME 4	37 55 15	2019	Below Normal	October	Used in Summary Table Analysis	207.2	169.2	38.0	18.3%	161.5	45.7	22.1%	138.3	68.9	33.2%
ME 4	37 55 15	2019	Below Normal	November	Used in Summary Table Analysis	6,609.0	6,578.8	30.2	0.5%	6,572.7	36.3	0.5%	6,554.2	54.9	0.8%
ME 4	37 55 15	2019	Below Normal	December	--	14,641.2	14,614.6	26.6	0.2%	14,610.0	31.3	0.2%	14,593.8	47.5	0.3%
ME 4	37 55 15	2019	Below Normal	January	--	35,169.0	35,145.8	23.1	0.1%	35,141.2	27.8	0.1%	35,126.2	42.8	0.1%
ME 4	37 55 15	2019	Below Normal	February	--	141,863.4	141,840.3	23.1	0.0%	141,840.3	23.1	0.0%	141,828.7	34.7	0.0%
ME 4	37 55 15	2019	Below Normal	March	--	42,292.8	42,273.1	19.7	0.0%	42,268.5	24.3	0.1%	42,256.9	35.9	0.1%
ME 4	37 55 15	2019	Below Normal	April	--	15,265.0	15,245.4	19.7	0.1%	15,241.9	23.1	0.2%	15,230.3	34.7	0.2%
ME 4	37 55 15	2019	Below Normal	May	--	16,901.6	16,857.6	44.0	0.3%	16,849.5	52.1	0.3%	16,824.1	77.5	0.5%
ME 4	37 55 15	2019	Below Normal	June	--	4,243.2	4,188.1	55.1	1.3%	4,177.5	65.6	1.5%	4,146.6	96.5	2.3%
ME 4	37 55 15	2019	Below Normal	July	--	1,359.3	1,303.1	56.1	4.1%	1,292.0	67.2	4.9%	1,259.3	100.0	7.4%
ME 4	37 55 15	2019	Below Normal	August	--	594.8	541.7	53.0	8.9%	531.2	63.6	10.7%	499.9	94.8	15.9%
ME 4	37 55 15	2019	Below Normal	September	Used in Summary Table Analysis	461.4	412.3	49.1	10.6%	402.4	59.0	12.8%	372.9	88.4	19.2%
ME 4	37 55 15	2020	Dry	October	Used in Summary Table Analysis	355.0	318.5	36.5	10.3%	311.1	43.9	12.4%	288.9	66.2	18.6%
ME 4	37 55 15	2020	Dry	November	Used in Summary Table Analysis	317.5	289.0	28.5	9.0%	283.2	34.2	10.8%	265.9	51.6	16.3%
ME 4	37 55 15	2020	Dry	December	--	13,247.7	13,222.2	25.5	0.2%	13,216.4	31.3	0.2%	13,201.4	46.3	0.3%
ME 4	37 55 15	2020	Dry	January	--	22,300.9	22,277.8	23.1	0.1%	22,272.0	28.9	0.1%	22,258.1	42.8	0.2%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	37 55 15	2020	Dry	February	--	7,413.8	7,392.2	21.5	0.3%	7,387.8	25.9	0.3%	7,374.7	39.1	0.5%
ME 4	37 55 15	2020	Dry	March	--	7,238.9	7,218.5	20.4	0.3%	7,214.4	24.5	0.3%	7,202.0	36.9	0.5%
ME 4	37 55 15	2020	Dry	April	--	5,477.1	5,433.9	43.2	0.8%	5,425.2	51.9	0.9%	5,399.5	77.5	1.4%
ME 4	37 55 15	2020	Dry	May	--	7,369.3	7,317.6	51.7	0.7%	7,307.3	62.0	0.8%	7,276.5	92.8	1.3%
ME 4	37 55 15	2020	Dry	June	--	2,104.6	2,039.4	65.3	3.1%	2,026.9	77.8	3.7%	1,989.7	114.9	5.5%
ME 4	37 55 15	2020	Dry	July	--	795.6	730.4	65.2	8.2%	717.5	78.2	9.8%	684.2	111.4	14.0%
ME 4	37 55 15	2020	Dry	August	--	398.3	334.5	63.8	16.0%	321.8	76.5	19.2%	286.6	111.7	28.0%
ME 4	37 55 15	2020	Dry	September	Used in Summary Table Analysis	247.8	188.5	59.3	23.9%	176.3	71.4	28.8%	140.9	106.8	43.1%
ME 4	36 55 16	2000	Above Normal	October	Used in Summary Table Analysis	814.6	775.9	38.8	4.8%	768.1	46.6	5.7%	744.5	70.1	8.6%
ME 4	36 55 16	2000	Above Normal	November	Used in Summary Table Analysis	12,093.8	12,062.5	31.3	0.3%	12,056.7	37.0	0.3%	12,038.2	55.6	0.5%
ME 4	36 55 16	2000	Above Normal	December	--	10,797.9	10,771.3	26.6	0.2%	10,766.0	31.9	0.3%	10,749.7	48.3	0.4%
ME 4	36 55 16	2000	Above Normal	January	--	28,534.7	28,510.4	24.3	0.1%	28,505.8	28.9	0.1%	28,489.6	45.1	0.2%
ME 4	36 55 16	2000	Above Normal	February	--	37,015.0	36,991.9	23.1	0.1%	36,987.3	27.8	0.1%	36,974.5	40.5	0.1%
ME 4	36 55 16	2000	Above Normal	March	--	18,309.0	18,288.2	20.8	0.1%	18,283.6	25.5	0.1%	18,270.8	38.2	0.2%
ME 4	36 55 16	2000	Above Normal	April	--	12,307.9	12,288.2	19.7	0.2%	12,284.7	23.1	0.2%	12,272.0	35.9	0.3%
ME 4	36 55 16	2000	Above Normal	May	--	7,089.7	7,046.8	42.9	0.6%	7,038.2	51.5	0.7%	7,012.6	77.1	1.1%
ME 4	36 55 16	2000	Above Normal	June	--	2,609.5	2,546.2	63.3	2.4%	2,533.7	75.8	2.9%	2,496.8	112.7	4.3%
ME 4	36 55 16	2000	Above Normal	July	--	990.8	934.3	56.5	5.7%	923.2	67.6	6.8%	890.0	100.8	10.2%
ME 4	36 55 16	2000	Above Normal	August	--	520.7	467.9	52.9	10.2%	457.3	63.4	12.2%	425.9	94.9	18.2%
ME 4	36 55 16	2000	Above Normal	September	Used in Summary Table Analysis	294.3	247.7	46.6	15.8%	238.4	55.9	19.0%	210.4	83.9	28.5%
ME 4	36 55 16	2001	Dry	October	Used in Summary Table Analysis	3,809.5	3,771.2	38.3	1.0%	3,763.4	46.1	1.2%	3,740.0	69.4	1.8%
ME 4	36 55 16	2001	Dry	November	Used in Summary Table Analysis	6,115.0	6,084.4	30.7	0.5%	6,078.1	36.9	0.6%	6,059.4	55.7	0.9%
ME 4	36 55 16	2001	Dry	December	--	8,829.5	8,802.7	26.9	0.3%	8,797.2	32.3	0.4%	8,780.8	48.7	0.6%
ME 4	36 55 16	2001	Dry	January	--	12,773.1	12,750.0	23.1	0.2%	12,744.2	28.9	0.2%	12,729.2	44.0	0.3%
ME 4	36 55 16	2001	Dry	February	--	17,460.6	17,438.7	22.0	0.1%	17,434.0	26.6	0.2%	17,420.1	40.5	0.2%
ME 4	36 55 16	2001	Dry	March	--	12,291.7	12,270.8	20.8	0.2%	12,266.2	25.5	0.2%	12,253.5	38.2	0.3%
ME 4	36 55 16	2001	Dry	April	--	10,966.1	10,922.1	44.0	0.4%	10,913.3	52.8	0.5%	10,887.2	78.9	0.7%
ME 4	36 55 16	2001	Dry	May	--	2,637.0	2,585.2	51.9	2.0%	2,574.9	62.2	2.4%	2,544.0	93.1	3.5%
ME 4	36 55 16	2001	Dry	June	--	2,644.4	2,574.8	69.7	2.6%	2,561.1	83.3	3.2%	2,521.2	123.3	4.7%
ME 4	36 55 16	2001	Dry	July	--	718.2	653.3	64.9	9.0%	640.4	77.8	10.8%	607.2	111.1	15.5%
ME 4	36 55 16	2001	Dry	August	--	171.8	108.8	63.0	36.7%	96.2	75.6	44.0%	61.2	110.6	64.4%
ME 4	36 55 16	2001	Dry	September	Used in Summary Table Analysis	94.6	38.8	55.8	59.0%	27.7	66.9	70.8%	0.0	94.6	100.0%
ME 4	36 55 16	2002	Below Normal	October	Used in Summary Table Analysis	264.1	217.8	46.3	17.5%	208.4	55.6	21.1%	180.3	83.8	31.7%
ME 4	36 55 16	2002	Below Normal	November	Used in Summary Table Analysis	12,013.9	11,976.9	37.0	0.3%	11,969.9	44.0	0.4%	11,945.6	68.3	0.6%
ME 4	36 55 16	2002	Below Normal	December	--	35,645.8	35,613.4	32.4	0.1%	35,606.5	39.4	0.1%	35,586.8	59.0	0.2%
ME 4	36 55 16	2002	Below Normal	January	--	30,854.2	30,825.2	28.9	0.1%	30,819.4	34.7	0.1%	30,802.1	52.1	0.2%
ME 4	36 55 16	2002	Below Normal	February	--	24,663.2	24,636.6	26.6	0.1%	24,631.9	31.3	0.1%	24,615.7	47.5	0.2%
ME 4	36 55 16	2002	Below Normal	March	--	17,768.5	17,743.1	25.5	0.1%	17,738.4	30.1	0.2%	17,723.4	45.1	0.3%
ME 4	36 55 16	2002	Below Normal	April	--	9,920.8	9,876.9	44.0	0.4%	9,868.2	52.7	0.5%	9,842.0	78.8	0.8%
ME 4	36 55 16	2002	Below Normal	May	--	3,317.9	3,266.1	51.9	1.6%	3,255.8	62.2	1.9%	3,224.9	93.1	2.8%
ME 4	36 55 16	2002	Below Normal	June	--	853.3	795.3	57.9	6.8%	783.9	69.4	8.1%	750.0	103.2	12.1%
ME 4	36 55 16	2002	Below Normal	July	--	361.7	303.3	58.4	16.1%	291.7	70.0	19.3%	258.0	103.7	28.7%
ME 4	36 55 16	2002	Below Normal	August	--	226.2	171.6	54.6	24.1%	160.7	65.5	29.0%	127.6	98.6	43.6%
ME 4	36 55 16	2002	Below Normal	September	Used in Summary Table Analysis	163.0	111.8	51.3	31.4%	101.6	61.5	37.7%	70.0	93.0	57.0%
ME 4	36 55 16	2003	Wet	October	Used in Summary Table Analysis	128.0	86.3	41.7	32.6%	77.9	50.1	39.1%	52.6	75.4	58.9%
ME 4	36 55 16	2003	Wet	November	Used in Summary Table Analysis	895.0	861.7	33.3	3.7%	855.0	40.1	4.5%	834.5	60.5	6.8%
ME 4	36 55 16	2003	Wet	December	--	56,730.3	56,701.4	28.9	0.1%	56,695.6	34.7	0.1%	56,677.1	53.2	0.1%
ME 4	36 55 16	2003	Wet	January	--	31,512.7	31,486.1	26.6	0.1%	31,481.5	31.3	0.1%	31,465.3	47.5	0.2%
ME 4	36 55 16	2003	Wet	February	--	20,343.8	20,320.6	23.1	0.1%	20,314.8	28.9	0.1%	20,300.9	42.8	0.2%
ME 4	36 55 16	2003	Wet	March	--	24,018.5	23,996.5	22.0	0.1%	23,991.9	26.6	0.1%	23,978.0	40.5	0.2%
ME 4	36 55 16	2003	Wet	April	--	42,876.2	42,854.2	22.0	0.1%	42,849.5	26.6	0.1%	42,836.8	39.4	0.1%
ME 4	36 55 16	2003	Wet	May	--	12,219.9	12,174.8	45.1	0.4%	12,166.7	53.2	0.4%	12,140.0	79.9	0.7%
ME 4	36 55 16	2003	Wet	June	--	3,165.5	3,110.1	55.4	1.8%	3,099.3	66.2	2.1%	3,067.4	98.1	3.1%
ME 4	36 55 16	2003	Wet	July	--	1,472.9	1,414.9	58.0	3.9%	1,403.5	69.4	4.7%	1,369.6	103.4	7.0%
ME 4	36 55 16	2003	Wet	August	--	758.9	702.5	56.4	7.4%	690.9	68.0	9.0%	654.8	104.2	13.7%
ME 4	36 55 16	2003	Wet	September	Used in Summary Table Analysis	456.9	409.6	47.3	10.4%	400.2	56.7	12.4%	370.7	86.2	18.9%
ME 4	36 55 16	2004	Wet	October	Used in Summary Table Analysis	323.9	285.0	38.9	12.0%	277.1	46.8	14.4%	253.4	70.5	21.8%
ME 4	36 55 16	2004	Wet	November	Used in Summary Table Analysis	5,794.2	5,762.7	31.5	0.5%	5,756.4	37.8	0.7%	5,737.0	57.2	1.0%
ME 4	36 55 16	2004	Wet	December	--	36,273.1	36,245.4	27.8	0.1%	36,239.6	33.6	0.1%	36,222.2	50.9	0.1%
ME 4	36 55 16	2004	Wet	January	--	31,447.9	31,423.6	24.3	0.1%	31,419.0	28.9	0.1%	31,403.9	44.0	0.1%
ME 4	36 55 16	2004	Wet	February	--	38,211.8	38,188.7	23.1	0.1%	38,184.0	27.8	0.1%	38,170.1	41.7	0.1%
ME 4	36 55 16	2004	Wet	March	--	16,519.7	16,498.8	20.8	0.1%	16,494.2	25.5	0.2%	16,481.5	38.2	0.2%
ME 4	36 55 16	2004	Wet	April	--	9,447.1	9,426.7	20.4	0.2%	9,422.6	24.5	0.3%	9,410.2	36.9	0.4%
ME 4	36 55 16	2004	Wet	May	--	3,417.4	3,374.3	43.1	1.3%	3,365.7	51.6	1.5%	3,340.2	77.2	2.3%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 55 16	2004	Wet	June	--	691.3	637.9	53.4	7.7%	627.5	63.9	9.2%	596.5	94.8	13.7%
ME 4	36 55 16	2004	Wet	July	--	355.2	298.3	56.9	16.0%	287.0	68.2	19.2%	253.5	101.7	28.6%
ME 4	36 55 16	2004	Wet	August	--	224.3	171.0	53.3	23.8%	160.4	63.9	28.5%	128.5	95.8	42.7%
ME 4	36 55 16	2004	Wet	September	Used in Summary Table Analysis	161.4	111.0	50.5	31.3%	100.9	60.6	37.5%	70.5	90.9	56.3%
ME 4	36 55 16	2005	Above Normal	October	Used in Summary Table Analysis	7,671.2	7,631.4	39.8	0.5%	7,623.4	47.8	0.6%	7,599.2	72.0	0.9%
ME 4	36 55 16	2005	Above Normal	November	Used in Summary Table Analysis	2,255.4	2,224.3	31.1	1.4%	2,218.1	37.4	1.7%	2,199.1	56.4	2.5%
ME 4	36 55 16	2005	Above Normal	December	--	20,995.4	20,968.8	26.6	0.1%	20,963.0	32.4	0.2%	20,946.8	48.6	0.2%
ME 4	36 55 16	2005	Above Normal	January	--	22,361.1	22,336.8	24.3	0.1%	22,331.0	30.1	0.1%	22,316.0	45.1	0.2%
ME 4	36 55 16	2005	Above Normal	February	--	14,006.9	13,985.0	22.0	0.2%	13,980.3	26.6	0.2%	13,966.4	40.5	0.3%
ME 4	36 55 16	2005	Above Normal	March	--	28,548.6	28,527.8	20.8	0.1%	28,523.1	25.5	0.1%	28,510.4	38.2	0.1%
ME 4	36 55 16	2005	Above Normal	April	--	21,434.0	21,413.2	20.8	0.1%	21,408.6	25.5	0.1%	21,397.0	37.0	0.2%
ME 4	36 55 16	2005	Above Normal	May	--	19,555.6	19,511.6	44.0	0.2%	19,503.5	52.1	0.3%	19,476.9	78.7	0.4%
ME 4	36 55 16	2005	Above Normal	June	--	15,855.3	15,790.5	64.8	0.4%	15,777.8	77.5	0.5%	15,739.6	115.7	0.7%
ME 4	36 55 16	2005	Above Normal	July	--	2,864.0	2,805.2	58.8	2.1%	2,794.1	69.9	2.4%	2,760.9	103.1	3.6%
ME 4	36 55 16	2005	Above Normal	August	--	981.8	928.7	53.0	5.4%	918.3	63.5	6.5%	887.0	94.7	9.6%
ME 4	36 55 16	2005	Above Normal	September	Used in Summary Table Analysis	523.3	476.7	46.6	8.9%	467.4	55.9	10.7%	439.6	83.7	16.0%
ME 4	36 55 16	2006	Wet	October	Used in Summary Table Analysis	632.9	595.4	37.5	5.9%	587.9	45.1	7.1%	565.0	68.0	10.7%
ME 4	36 55 16	2006	Wet	November	Used in Summary Table Analysis	9,291.6	9,261.9	29.6	0.3%	9,255.9	35.6	0.4%	9,237.7	53.8	0.6%
ME 4	36 55 16	2006	Wet	December	--	43,451.4	43,424.8	26.6	0.1%	43,419.0	32.4	0.1%	43,402.8	48.6	0.1%
ME 4	36 55 16	2006	Wet	January	--	46,256.9	46,232.6	24.3	0.1%	46,226.9	30.1	0.1%	46,211.8	45.1	0.1%
ME 4	36 55 16	2006	Wet	February	--	26,601.9	26,579.9	22.0	0.1%	26,575.2	26.6	0.1%	26,561.3	40.5	0.2%
ME 4	36 55 16	2006	Wet	March	--	47,126.2	47,104.2	22.0	0.0%	47,100.7	25.5	0.1%	47,086.8	39.4	0.1%
ME 4	36 55 16	2006	Wet	April	--	30,415.5	30,395.8	19.7	0.1%	30,392.4	23.1	0.1%	30,380.8	34.7	0.1%
ME 4	36 55 16	2006	Wet	May	--	14,200.2	14,173.6	26.6	0.2%	14,167.8	32.4	0.2%	14,152.8	47.5	0.3%
ME 4	36 55 16	2006	Wet	June	--	3,546.8	3,493.4	53.4	1.5%	3,483.0	63.8	1.8%	3,452.2	94.6	2.7%
ME 4	36 55 16	2006	Wet	July	--	1,277.8	1,221.8	56.0	4.4%	1,210.8	67.0	5.2%	1,178.2	99.5	7.8%
ME 4	36 55 16	2006	Wet	August	--	663.9	609.7	54.2	8.2%	599.0	64.9	9.8%	567.0	96.9	14.6%
ME 4	36 55 16	2006	Wet	September	Used in Summary Table Analysis	424.9	377.8	47.1	11.1%	368.4	56.5	13.3%	340.3	84.7	19.9%
ME 4	36 55 16	2007	Above Normal	October	Used in Summary Table Analysis	273.4	235.2	38.2	14.0%	227.5	45.9	16.8%	204.2	69.2	25.3%
ME 4	36 55 16	2007	Above Normal	November	Used in Summary Table Analysis	8,653.9	8,623.0	30.9	0.4%	8,616.8	37.2	0.4%	8,597.8	56.1	0.6%
ME 4	36 55 16	2007	Above Normal	December	--	20,385.4	20,357.6	27.8	0.1%	20,351.9	33.6	0.2%	20,335.6	49.8	0.2%
ME 4	36 55 16	2007	Above Normal	January	--	10,245.1	10,220.8	24.3	0.2%	10,215.9	29.3	0.3%	10,200.8	44.3	0.4%
ME 4	36 55 16	2007	Above Normal	February	--	30,544.0	30,519.7	24.3	0.1%	30,515.0	28.9	0.1%	30,501.2	42.8	0.1%
ME 4	36 55 16	2007	Above Normal	March	--	13,097.2	13,075.2	22.0	0.2%	13,070.6	26.6	0.2%	13,056.7	40.5	0.3%
ME 4	36 55 16	2007	Above Normal	April	--	11,530.1	11,487.8	42.2	0.4%	11,479.4	50.7	0.4%	11,454.2	75.9	0.7%
ME 4	36 55 16	2007	Above Normal	May	--	4,138.0	4,087.6	50.3	1.2%	4,077.5	60.4	1.5%	4,047.6	90.4	2.2%
ME 4	36 55 16	2007	Above Normal	June	--	1,497.2	1,437.5	59.7	4.0%	1,425.8	71.4	4.8%	1,391.0	106.3	7.1%
ME 4	36 55 16	2007	Above Normal	July	--	495.5	436.0	59.5	12.0%	424.2	71.3	14.4%	389.7	105.8	21.3%
ME 4	36 55 16	2007	Above Normal	August	--	222.2	168.9	53.3	24.0%	158.3	63.9	28.8%	125.9	96.3	43.3%
ME 4	36 55 16	2007	Above Normal	September	Used in Summary Table Analysis	149.8	99.6	50.2	33.5%	89.6	60.2	40.2%	59.6	90.2	60.2%
ME 4	36 55 16	2008	Dry	October	Used in Summary Table Analysis	3,429.2	3,388.5	40.6	1.2%	3,380.4	48.7	1.4%	3,355.6	73.6	2.1%
ME 4	36 55 16	2008	Dry	November	Used in Summary Table Analysis	3,270.7	3,239.2	31.5	1.0%	3,233.0	37.7	1.2%	3,213.7	57.1	1.7%
ME 4	36 55 16	2008	Dry	December	--	23,093.8	23,066.0	27.8	0.1%	23,060.2	33.6	0.1%	23,044.0	49.8	0.2%
ME 4	36 55 16	2008	Dry	January	--	37,500.0	37,474.5	25.5	0.1%	37,468.8	31.3	0.1%	37,452.5	47.5	0.1%
ME 4	36 55 16	2008	Dry	February	--	26,263.9	26,241.9	22.0	0.1%	26,237.3	26.6	0.1%	26,223.4	40.5	0.2%
ME 4	36 55 16	2008	Dry	March	--	11,791.7	11,770.8	20.8	0.2%	11,766.2	25.5	0.2%	11,753.5	38.2	0.3%
ME 4	36 55 16	2008	Dry	April	--	9,014.1	8,971.2	42.9	0.5%	8,962.6	51.5	0.6%	8,937.0	77.1	0.9%
ME 4	36 55 16	2008	Dry	May	--	1,360.2	1,315.3	44.9	3.3%	1,306.5	53.7	3.9%	1,280.4	79.7	5.9%
ME 4	36 55 16	2008	Dry	June	--	437.2	372.6	64.6	14.8%	360.0	77.3	17.7%	322.5	114.7	26.2%
ME 4	36 55 16	2008	Dry	July	--	255.4	192.1	63.3	24.8%	179.6	75.8	29.7%	147.2	108.2	42.4%
ME 4	36 55 16	2008	Dry	August	--	178.8	117.5	61.2	34.2%	105.4	73.4	41.1%	68.5	110.3	61.7%
ME 4	36 55 16	2008	Dry	September	Used in Summary Table Analysis	140.4	81.9	58.5	41.7%	70.3	70.2	50.0%	36.4	104.0	74.1%
ME 4	36 55 16	2009	Critical	October	Used in Summary Table Analysis	923.1	877.5	45.6	4.9%	868.4	54.7	5.9%	840.4	82.7	9.0%
ME 4	36 55 16	2009	Critical	November	Used in Summary Table Analysis	5,503.7	5,468.3	35.4	0.6%	5,461.1	42.6	0.8%	5,436.7	67.0	1.2%
ME 4	36 55 16	2009	Critical	December	--	12,149.3	12,119.2	30.1	0.2%	12,112.3	37.0	0.3%	12,093.8	55.6	0.5%
ME 4	36 55 16	2009	Critical	January	--	8,792.2	8,764.0	28.2	0.3%	8,758.2	34.0	0.4%	8,740.9	51.4	0.6%
ME 4	36 55 16	2009	Critical	February	--	22,601.9	22,576.4	25.5	0.1%	22,571.8	30.1	0.1%	22,555.6	46.3	0.2%
ME 4	36 55 16	2009	Critical	March	--	21,112.3	21,089.1	23.1	0.1%	21,084.5	27.8	0.1%	21,070.6	41.7	0.2%
ME 4	36 55 16	2009	Critical	April	--	10,096.1	10,051.5	44.6	0.4%	10,042.7	53.4	0.5%	10,016.1	80.0	0.8%
ME 4	36 55 16	2009	Critical	May	--	15,578.7	15,524.3	54.4	0.3%	15,513.9	64.8	0.4%	15,481.5	97.2	0.6%
ME 4	36 55 16	2009	Critical	June	--	3,159.7	3,090.6	69.1	2.2%	3,077.3	82.4	2.6%	3,037.5	122.2	3.9%
ME 4	36 55 16	2009	Critical	July	--	1,262.2	1,198.3	63.9	5.1%	1,185.6	76.5	6.1%	1,153.1	109.1	8.6%
ME 4	36 55 16	2009	Critical	August	--	668.0	606.4	61.6	9.2%	594.1	73.8	11.1%	559.8	108.1	16.2%
ME 4	36 55 16	2009	Critical	September	Used in Summary Table Analysis	389.3	334.6	54.7	14.0%	323.7	65.5	16.8%	292.1	97.2	25.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 55 16	2010	Below Normal	October	Used in Summary Table Analysis	6,087.3	6,041.0	46.3	0.8%	6,031.7	55.6	0.9%	6,002.5	84.7	1.4%
ME 4	36 55 16	2010	Below Normal	November	Used in Summary Table Analysis	8,285.4	8,248.7	36.7	0.4%	8,241.4	44.0	0.5%	8,216.3	69.1	0.8%
ME 4	36 55 16	2010	Below Normal	December	--	12,346.1	12,314.8	31.3	0.3%	12,307.9	38.2	0.3%	12,288.2	57.9	0.5%
ME 4	36 55 16	2010	Below Normal	January	--	36,206.0	36,177.1	28.9	0.1%	36,171.3	34.7	0.1%	36,153.9	52.1	0.1%
ME 4	36 55 16	2010	Below Normal	February	--	27,237.3	27,211.8	25.5	0.1%	27,207.2	30.1	0.1%	27,191.0	46.3	0.2%
ME 4	36 55 16	2010	Below Normal	March	--	28,831.0	28,806.7	24.3	0.1%	28,802.1	28.9	0.1%	28,787.0	44.0	0.2%
ME 4	36 55 16	2010	Below Normal	April	--	40,002.3	39,979.2	23.1	0.1%	39,974.5	27.8	0.1%	39,959.5	42.8	0.1%
ME 4	36 55 16	2010	Below Normal	May	--	20,260.4	20,214.1	46.3	0.2%	20,204.9	55.6	0.3%	20,178.2	82.2	0.4%
ME 4	36 55 16	2010	Below Normal	June	--	9,343.6	9,277.5	66.1	0.7%	9,264.5	79.2	0.8%	9,225.9	117.7	1.3%
ME 4	36 55 16	2010	Below Normal	July	--	1,454.1	1,394.7	59.4	4.1%	1,383.2	70.8	4.9%	1,349.2	104.9	7.2%
ME 4	36 55 16	2010	Below Normal	August	--	567.8	513.5	54.3	9.6%	502.8	65.0	11.5%	470.8	97.0	17.1%
ME 4	36 55 16	2010	Below Normal	September	Used in Summary Table Analysis	649.9	598.2	51.7	8.0%	587.8	62.0	9.5%	556.9	93.0	14.3%
ME 4	36 55 16	2011	Wet	October	Used in Summary Table Analysis	9,628.8	9,589.9	38.9	0.4%	9,582.1	46.8	0.5%	9,558.4	70.4	0.7%
ME 4	36 55 16	2011	Wet	November	Used in Summary Table Analysis	14,215.3	14,184.0	31.3	0.2%	14,178.2	37.0	0.3%	14,158.6	56.7	0.4%
ME 4	36 55 16	2011	Wet	December	--	33,681.7	33,655.1	26.6	0.1%	33,649.3	32.4	0.1%	33,631.9	49.8	0.1%
ME 4	36 55 16	2011	Wet	January	--	14,152.8	14,128.5	24.3	0.2%	14,123.8	28.9	0.2%	14,108.8	44.0	0.3%
ME 4	36 55 16	2011	Wet	February	--	20,763.9	20,741.9	22.0	0.1%	20,737.3	26.6	0.1%	20,722.2	41.7	0.2%
ME 4	36 55 16	2011	Wet	March	--	51,994.2	51,972.2	22.0	0.0%	51,967.6	26.6	0.1%	51,953.7	40.5	0.1%
ME 4	36 55 16	2011	Wet	April	--	24,796.3	24,775.5	20.8	0.1%	24,770.8	25.5	0.1%	24,758.1	38.2	0.2%
ME 4	36 55 16	2011	Wet	May	--	11,381.0	11,337.3	43.8	0.4%	11,328.5	52.5	0.5%	11,302.4	78.6	0.7%
ME 4	36 55 16	2011	Wet	June	--	7,054.7	6,990.3	64.5	0.9%	6,977.4	77.3	1.1%	6,939.7	115.0	1.6%
ME 4	36 55 16	2011	Wet	July	--	1,828.5	1,764.7	63.8	3.5%	1,752.2	76.3	4.2%	1,716.2	112.3	6.1%
ME 4	36 55 16	2011	Wet	August	--	776.0	722.2	53.8	6.9%	711.5	64.4	8.3%	679.7	96.3	12.4%
ME 4	36 55 16	2011	Wet	September	Used in Summary Table Analysis	432.5	383.9	48.6	11.2%	374.2	58.3	13.5%	345.2	87.3	20.2%
ME 4	36 55 16	2012	Below Normal	October	Used in Summary Table Analysis	4,539.2	4,499.7	39.6	0.9%	4,491.6	47.7	1.1%	4,467.1	72.1	1.6%
ME 4	36 55 16	2012	Below Normal	November	Used in Summary Table Analysis	8,233.7	8,202.1	31.6	0.4%	8,195.6	38.1	0.5%	8,176.0	57.6	0.7%
ME 4	36 55 16	2012	Below Normal	December	--	5,181.6	5,154.3	27.3	0.5%	5,148.7	32.9	0.6%	5,131.8	49.8	1.0%
ME 4	36 55 16	2012	Below Normal	January	--	20,104.2	20,078.7	25.5	0.1%	20,074.1	30.1	0.1%	20,057.9	46.3	0.2%
ME 4	36 55 16	2012	Below Normal	February	--	18,209.5	18,187.5	22.0	0.1%	18,182.9	26.6	0.1%	18,167.8	41.7	0.2%
ME 4	36 55 16	2012	Below Normal	March	--	45,410.9	45,388.9	22.0	0.0%	45,384.3	26.6	0.1%	45,370.4	40.5	0.1%
ME 4	36 55 16	2012	Below Normal	April	--	26,855.3	26,833.3	22.0	0.1%	26,829.9	25.5	0.1%	26,816.0	39.4	0.1%
ME 4	36 55 16	2012	Below Normal	May	--	7,482.1	7,438.4	43.6	0.6%	7,429.7	52.3	0.7%	7,404.1	78.0	1.0%
ME 4	36 55 16	2012	Below Normal	June	--	5,513.9	5,448.1	65.7	1.2%	5,435.2	78.7	1.4%	5,397.1	116.8	2.1%
ME 4	36 55 16	2012	Below Normal	July	--	2,222.7	2,161.1	61.6	2.8%	2,148.8	73.8	3.3%	2,112.6	110.1	5.0%
ME 4	36 55 16	2012	Below Normal	August	--	387.9	338.7	49.2	12.7%	328.9	59.0	15.2%	299.5	88.3	22.8%
ME 4	36 55 16	2012	Below Normal	September	Used in Summary Table Analysis	248.2	204.6	43.6	17.6%	195.9	52.3	21.1%	169.9	78.3	31.5%
ME 4	36 55 16	2013	Below Normal	October	Used in Summary Table Analysis	1,910.4	1,872.5	38.0	2.0%	1,864.8	45.6	2.4%	1,841.9	68.5	3.6%
ME 4	36 55 16	2013	Below Normal	November	Used in Summary Table Analysis	14,677.1	14,647.0	30.1	0.2%	14,641.2	35.9	0.2%	14,622.7	54.4	0.4%
ME 4	36 55 16	2013	Below Normal	December	--	59,974.5	59,946.8	27.8	0.0%	59,941.0	33.6	0.1%	59,923.6	50.9	0.1%
ME 4	36 55 16	2013	Below Normal	January	--	22,196.8	22,173.6	23.1	0.1%	22,167.8	28.9	0.1%	22,153.9	42.8	0.2%
ME 4	36 55 16	2013	Below Normal	February	--	8,843.3	8,820.7	22.6	0.3%	8,816.1	27.2	0.3%	8,802.2	41.1	0.5%
ME 4	36 55 16	2013	Below Normal	March	--	10,326.4	10,304.5	21.9	0.2%	10,300.1	26.3	0.3%	10,286.7	39.7	0.4%
ME 4	36 55 16	2013	Below Normal	April	--	8,289.9	8,248.5	41.4	0.5%	8,240.3	49.7	0.6%	8,215.6	74.3	0.9%
ME 4	36 55 16	2013	Below Normal	May	--	4,429.4	4,379.4	50.0	1.1%	4,369.4	60.0	1.4%	4,339.7	89.7	2.0%
ME 4	36 55 16	2013	Below Normal	June	--	2,109.8	2,050.6	59.3	2.8%	2,038.9	70.9	3.4%	2,004.2	105.7	5.0%
ME 4	36 55 16	2013	Below Normal	July	--	717.9	661.0	56.9	7.9%	649.8	68.1	9.5%	617.0	100.9	14.1%
ME 4	36 55 16	2013	Below Normal	August	--	339.6	286.3	53.3	15.7%	275.7	63.9	18.8%	243.3	96.3	28.4%
ME 4	36 55 16	2013	Below Normal	September	Used in Summary Table Analysis	4,783.8	4,728.8	55.0	1.1%	4,717.8	66.0	1.4%	4,684.8	99.0	2.1%
ME 4	36 55 16	2014	Critical	October	Used in Summary Table Analysis	281.1	241.2	39.9	14.2%	233.1	47.9	17.0%	209.8	71.3	25.4%
ME 4	36 55 16	2014	Critical	November	Used in Summary Table Analysis	1,536.8	1,504.7	32.1	2.1%	1,498.3	38.5	2.5%	1,478.7	58.1	3.8%
ME 4	36 55 16	2014	Critical	December	--	1,589.1	1,560.9	28.2	1.8%	1,555.2	33.9	2.1%	1,537.8	51.3	3.2%
ME 4	36 55 16	2014	Critical	January	--	2,820.1	2,794.9	25.2	0.9%	2,789.7	30.4	1.1%	2,774.1	46.1	1.6%
ME 4	36 55 16	2014	Critical	February	--	15,748.8	15,725.7	23.1	0.1%	15,721.1	27.8	0.2%	15,706.0	42.8	0.3%
ME 4	36 55 16	2014	Critical	March	--	31,481.5	31,459.5	22.0	0.1%	31,454.9	26.6	0.1%	31,441.0	40.5	0.1%
ME 4	36 55 16	2014	Critical	April	--	12,988.4	12,944.4	44.0	0.3%	12,936.3	52.1	0.4%	12,909.7	78.7	0.6%
ME 4	36 55 16	2014	Critical	May	--	5,187.3	5,134.5	52.8	1.0%	5,124.1	63.2	1.2%	5,092.5	94.8	1.8%
ME 4	36 55 16	2014	Critical	June	--	1,197.6	1,126.6	70.9	5.9%	1,112.7	84.8	7.1%	1,072.7	124.8	10.4%
ME 4	36 55 16	2014	Critical	July	--	545.7	480.5	65.2	11.9%	467.6	78.1	14.3%	434.0	111.7	20.5%
ME 4	36 55 16	2014	Critical	August	--	347.5	285.6	61.9	17.8%	273.2	74.3	21.4%	238.4	109.1	31.4%
ME 4	36 55 16	2014	Critical	September	Used in Summary Table Analysis	2,572.3	2,511.9	60.4	2.3%	2,500.1	72.2	2.8%	2,464.7	107.6	4.2%
ME 4	36 55 16	2015	Dry	October	Used in Summary Table Analysis	11,358.0	11,311.5	46.5	0.4%	11,302.4	55.6	0.5%	11,274.7	83.3	0.7%
ME 4	36 55 16	2015	Dry	November	Used in Summary Table Analysis	9,035.6	9,000.6	35.1	0.4%	8,993.4	42.2	0.5%	8,969.1	66.6	0.7%
ME 4	36 55 16	2015	Dry	December	--	32,605.3	32,575.2	30.1	0.1%	32,568.3	37.0	0.1%	32,549.8	55.6	0.2%
ME 4	36 55 16	2015	Dry	January	--	14,576.4	14,548.6	27.8	0.2%	14,542.8	33.6	0.2%	14,525.5	50.9	0.3%

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Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 55 16	2015	Dry	February	--	27,229.2	27,204.9	24.3	0.1%	27,199.1	30.1	0.1%	27,184.0	45.1	0.2%
ME 4	36 55 16	2015	Dry	March	--	11,570.0	11,548.0	22.0	0.2%	11,543.5	26.5	0.2%	11,529.9	40.2	0.3%
ME 4	36 55 16	2015	Dry	April	--	8,383.6	8,339.7	43.9	0.5%	8,330.8	52.8	0.6%	8,304.5	79.1	0.9%
ME 4	36 55 16	2015	Dry	May	--	1,509.1	1,457.3	51.9	3.4%	1,447.1	62.0	4.1%	1,417.4	91.8	6.1%
ME 4	36 55 16	2015	Dry	June	--	652.4	586.9	65.5	10.0%	574.0	78.4	12.0%	536.0	116.4	17.8%
ME 4	36 55 16	2015	Dry	July	--	268.4	204.5	63.9	23.8%	191.9	76.6	28.5%	159.2	109.2	40.7%
ME 4	36 55 16	2015	Dry	August	--	166.0	104.4	61.6	37.1%	92.1	73.9	44.5%	58.0	108.0	65.1%
ME 4	36 55 16	2015	Dry	September	Used in Summary Table Analysis	120.3	63.0	57.4	47.7%	51.1	69.2	57.5%	16.9	103.4	86.0%
ME 4	36 55 16	2016	Above Normal	October	Used in Summary Table Analysis	85.7	38.1	47.7	55.6%	28.9	56.8	66.3%	0.0	85.7	100.0%
ME 4	36 55 16	2016	Above Normal	November	Used in Summary Table Analysis	3,862.8	3,826.4	36.5	0.9%	3,819.0	43.9	1.1%	3,792.5	70.4	1.8%
ME 4	36 55 16	2016	Above Normal	December	--	36,605.3	36,572.9	32.4	0.1%	36,566.0	39.4	0.1%	36,545.1	60.2	0.2%
ME 4	36 55 16	2016	Above Normal	January	--	57,302.1	57,273.1	28.9	0.1%	57,266.2	35.9	0.1%	57,247.7	54.4	0.1%
ME 4	36 55 16	2016	Above Normal	February	--	24,267.4	24,241.9	25.5	0.1%	24,237.3	30.1	0.1%	24,222.2	45.1	0.2%
ME 4	36 55 16	2016	Above Normal	March	--	41,770.8	41,746.5	24.3	0.1%	41,740.7	30.1	0.1%	41,726.9	44.0	0.1%
ME 4	36 55 16	2016	Above Normal	April	--	18,535.9	18,515.0	20.8	0.1%	18,510.4	25.5	0.1%	18,496.5	39.4	0.2%
ME 4	36 55 16	2016	Above Normal	May	--	5,214.9	5,187.8	27.1	0.5%	5,182.4	32.5	0.6%	5,165.9	49.1	0.9%
ME 4	36 55 16	2016	Above Normal	June	--	1,509.0	1,458.2	50.8	3.4%	1,449.2	59.8	4.0%	1,422.8	86.2	5.7%
ME 4	36 55 16	2016	Above Normal	July	--	822.4	766.0	56.4	6.9%	754.8	67.6	8.2%	721.8	100.6	12.2%
ME 4	36 55 16	2016	Above Normal	August	--	490.9	436.1	54.8	11.2%	425.2	65.8	13.4%	392.7	98.3	20.0%
ME 4	36 55 16	2016	Above Normal	September	Used in Summary Table Analysis	327.3	276.4	51.0	15.6%	266.0	61.3	18.7%	235.1	92.3	28.2%
ME 4	36 55 16	2017	Wet	October	Used in Summary Table Analysis	18,277.8	18,237.3	40.5	0.2%	18,229.2	48.6	0.3%	18,206.0	71.8	0.4%
ME 4	36 55 16	2017	Wet	November	Used in Summary Table Analysis	18,817.1	18,785.9	31.3	0.2%	18,780.1	37.0	0.2%	18,760.4	56.7	0.3%
ME 4	36 55 16	2017	Wet	December	--	24,100.7	24,074.1	26.6	0.1%	24,068.3	32.4	0.1%	24,052.1	48.6	0.2%
ME 4	36 55 16	2017	Wet	January	--	106,866.9	106,841.4	25.5	0.0%	106,835.6	31.3	0.0%	106,820.6	46.3	0.0%
ME 4	36 55 16	2017	Wet	February	--	81,818.3	81,795.1	23.1	0.0%	81,790.5	27.8	0.0%	81,775.5	42.8	0.1%
ME 4	36 55 16	2017	Wet	March	--	27,268.5	27,246.5	22.0	0.1%	27,241.9	26.6	0.1%	27,229.2	39.4	0.1%
ME 4	36 55 16	2017	Wet	April	--	22,929.4	22,909.7	19.7	0.1%	22,906.3	23.1	0.1%	22,893.5	35.9	0.2%
ME 4	36 55 16	2017	Wet	May	--	6,273.3	6,245.9	27.3	0.4%	6,240.5	32.8	0.5%	6,224.2	49.1	0.8%
ME 4	36 55 16	2017	Wet	June	--	2,115.4	2,062.7	52.7	2.5%	2,052.3	63.1	3.0%	2,021.6	93.8	4.4%
ME 4	36 55 16	2017	Wet	July	--	933.4	876.6	56.7	6.1%	865.5	67.9	7.3%	832.6	100.8	10.8%
ME 4	36 55 16	2017	Wet	August	--	505.5	450.8	54.7	10.8%	440.0	65.6	13.0%	407.6	97.9	19.4%
ME 4	36 55 16	2017	Wet	September	Used in Summary Table Analysis	321.8	271.5	50.3	15.6%	261.4	60.4	18.8%	231.2	90.6	28.2%
ME 4	36 55 16	2018	Above Normal	October	Used in Summary Table Analysis	274.6	234.9	39.7	14.4%	226.9	47.7	17.4%	203.0	71.6	26.1%
ME 4	36 55 16	2018	Above Normal	November	Used in Summary Table Analysis	10,780.4	10,749.4	31.0	0.3%	10,743.1	37.4	0.3%	10,724.1	56.4	0.5%
ME 4	36 55 16	2018	Above Normal	December	--	5,445.5	5,419.0	26.5	0.5%	5,413.5	31.9	0.6%	5,397.3	48.1	0.9%
ME 4	36 55 16	2018	Above Normal	January	--	17,761.6	17,737.3	24.3	0.1%	17,732.6	28.9	0.2%	17,718.8	42.8	0.2%
ME 4	36 55 16	2018	Above Normal	February	--	7,597.1	7,575.5	21.6	0.3%	7,570.9	26.2	0.3%	7,557.5	39.6	0.5%
ME 4	36 55 16	2018	Above Normal	March	--	20,687.5	20,666.7	20.8	0.1%	20,663.2	24.3	0.1%	20,650.5	37.0	0.2%
ME 4	36 55 16	2018	Above Normal	April	--	32,187.5	32,167.8	19.7	0.1%	32,164.4	23.1	0.1%	32,152.8	34.7	0.1%
ME 4	36 55 16	2018	Above Normal	May	--	6,988.8	6,947.5	41.3	0.6%	6,939.4	49.4	0.7%	6,914.5	74.3	1.1%
ME 4	36 55 16	2018	Above Normal	June	--	1,913.4	1,860.4	53.0	2.8%	1,850.1	63.3	3.3%	1,819.4	94.0	4.9%
ME 4	36 55 16	2018	Above Normal	July	--	780.6	723.7	56.9	7.3%	712.4	68.2	8.7%	678.9	101.7	13.0%
ME 4	36 55 16	2018	Above Normal	August	--	441.8	389.1	52.7	11.9%	378.5	63.2	14.3%	347.1	94.7	21.4%
ME 4	36 55 16	2018	Above Normal	September	Used in Summary Table Analysis	299.3	248.8	50.4	16.9%	238.7	60.5	20.2%	208.5	90.8	30.3%
ME 4	36 55 16	2019	Below Normal	October	Used in Summary Table Analysis	207.3	168.3	39.1	18.8%	160.4	47.0	22.7%	136.6	70.8	34.1%
ME 4	36 55 16	2019	Below Normal	November	Used in Summary Table Analysis	6,616.2	6,585.1	31.1	0.5%	6,578.7	37.5	0.6%	6,559.6	56.6	0.9%
ME 4	36 55 16	2019	Below Normal	December	--	14,653.9	14,627.3	26.6	0.2%	14,621.5	32.4	0.2%	14,605.3	48.6	0.3%
ME 4	36 55 16	2019	Below Normal	January	--	35,195.6	35,171.3	24.3	0.1%	35,166.7	28.9	0.1%	35,151.6	44.0	0.1%
ME 4	36 55 16	2019	Below Normal	February	--	141,898.1	141,875.0	23.1	0.0%	141,863.4	34.7	0.0%	141,851.9	46.3	0.0%
ME 4	36 55 16	2019	Below Normal	March	--	42,309.0	42,288.2	20.8	0.0%	42,284.7	24.3	0.1%	42,272.0	37.0	0.1%
ME 4	36 55 16	2019	Below Normal	April	--	15,269.7	15,250.0	19.7	0.1%	15,246.5	23.1	0.2%	15,235.0	34.7	0.2%
ME 4	36 55 16	2019	Below Normal	May	--	16,922.5	16,878.5	44.0	0.3%	16,869.2	53.2	0.3%	16,843.8	78.7	0.5%
ME 4	36 55 16	2019	Below Normal	June	--	4,243.6	4,187.7	55.9	1.3%	4,177.1	66.6	1.6%	4,145.8	97.8	2.3%
ME 4	36 55 16	2019	Below Normal	July	--	1,360.2	1,303.1	57.1	4.2%	1,291.8	68.4	5.0%	1,258.3	101.9	7.5%
ME 4	36 55 16	2019	Below Normal	August	--	595.4	541.3	54.1	9.1%	530.6	64.9	10.9%	498.7	96.8	16.3%
ME 4	36 55 16	2019	Below Normal	September	Used in Summary Table Analysis	461.8	411.6	50.2	10.9%	401.5	60.3	13.1%	371.4	90.4	19.6%
ME 4	36 55 16	2020	Dry	October	Used in Summary Table Analysis	355.3	317.7	37.6	10.6%	310.1	45.2	12.7%	287.2	68.1	19.2%
ME 4	36 55 16	2020	Dry	November	Used in Summary Table Analysis	318.2	288.8	29.4	9.2%	282.8	35.4	11.1%	264.8	53.3	16.8%
ME 4	36 55 16	2020	Dry	December	--	13,266.2	13,239.6	26.6	0.2%	13,235.0	31.3	0.2%	13,217.6	48.6	0.4%
ME 4	36 55 16	2020	Dry	January	--	22,316.0	22,291.7	24.3	0.1%	22,285.9	30.1	0.1%	22,270.8	45.1	0.2%
ME 4	36 55 16	2020	Dry	February	--	7,414.6	7,392.5	22.1	0.3%	7,387.8	26.7	0.4%	7,374.3	40.3	0.5%
ME 4	36 55 16	2020	Dry	March	--	7,241.4	7,220.5	20.9	0.3%	7,216.3	25.1	0.3%	7,203.5	38.0	0.5%
ME 4	36 55 16	2020	Dry	April	--	5,480.0	5,436.2	43.8	0.8%	5,427.4	52.5	1.0%	5,401.5	78.5	1.4%
ME 4	36 55 16	2020	Dry	May	--	7,372.9	7,320.6	52.3	0.7%	7,310.1	62.8	0.9%	7,278.9	94.0	1.3%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 55 16	2020	Dry	June	--	2,104.6	2,038.5	66.1	3.1%	2,025.8	78.8	3.7%	1,988.2	116.4	5.5%
ME 4	36 55 16	2020	Dry	July	--	795.9	729.5	66.4	8.3%	716.3	79.6	10.0%	682.4	113.4	14.3%
ME 4	36 55 16	2020	Dry	August	--	398.5	333.4	65.1	16.3%	320.4	78.1	19.6%	284.5	114.0	28.6%
ME 4	36 55 16	2020	Dry	September	Used in Summary Table Analysis	247.9	187.2	60.7	24.5%	174.8	73.1	29.5%	138.7	109.3	44.1%
ME 4	36 54 17	2000	Above Normal	October	Used in Summary Table Analysis	815.5	776.5	39.0	4.8%	768.6	46.9	5.7%	745.0	70.5	8.6%
ME 4	36 54 17	2000	Above Normal	November	Used in Summary Table Analysis	12,111.1	12,079.9	31.3	0.3%	12,074.1	37.0	0.3%	12,055.6	55.6	0.5%
ME 4	36 54 17	2000	Above Normal	December	--	10,807.3	10,780.6	26.7	0.2%	10,775.1	32.2	0.3%	10,758.7	48.6	0.4%
ME 4	36 54 17	2000	Above Normal	January	--	28,564.8	28,539.4	25.5	0.1%	28,534.7	30.1	0.1%	28,519.7	45.1	0.2%
ME 4	36 54 17	2000	Above Normal	February	--	37,034.7	37,011.6	23.1	0.1%	37,006.9	27.8	0.1%	36,993.1	41.7	0.1%
ME 4	36 54 17	2000	Above Normal	March	--	18,314.8	18,294.0	20.8	0.1%	18,289.4	25.5	0.1%	18,276.6	38.2	0.2%
ME 4	36 54 17	2000	Above Normal	April	--	12,313.7	12,292.8	20.8	0.2%	12,289.4	24.3	0.2%	12,276.6	37.0	0.3%
ME 4	36 54 17	2000	Above Normal	May	--	7,093.6	7,050.6	43.1	0.6%	7,041.9	51.7	0.7%	7,016.3	77.3	1.1%
ME 4	36 54 17	2000	Above Normal	June	--	2,611.0	2,547.6	63.4	2.4%	2,535.1	75.9	2.9%	2,498.0	113.0	4.3%
ME 4	36 54 17	2000	Above Normal	July	--	991.4	934.8	56.7	5.7%	923.6	67.8	6.8%	890.3	101.1	10.2%
ME 4	36 54 17	2000	Above Normal	August	--	521.4	468.3	53.1	10.2%	457.7	63.6	12.2%	426.1	95.3	18.3%
ME 4	36 54 17	2000	Above Normal	September	Used in Summary Table Analysis	294.7	247.9	46.8	15.9%	238.6	56.2	19.1%	210.5	84.3	28.6%
ME 4	36 54 17	2001	Dry	October	Used in Summary Table Analysis	3,813.4	3,774.9	38.5	1.0%	3,767.1	46.3	1.2%	3,743.6	69.8	1.8%
ME 4	36 54 17	2001	Dry	November	Used in Summary Table Analysis	6,121.6	6,090.6	31.0	0.5%	6,084.4	37.3	0.6%	6,065.5	56.1	0.9%
ME 4	36 54 17	2001	Dry	December	--	8,836.1	8,809.0	27.1	0.3%	8,803.6	32.5	0.4%	8,787.0	49.1	0.6%
ME 4	36 54 17	2001	Dry	January	--	12,785.9	12,761.6	24.3	0.2%	12,756.9	28.9	0.2%	12,741.9	44.0	0.3%
ME 4	36 54 17	2001	Dry	February	--	17,468.8	17,446.8	22.0	0.1%	17,442.1	26.6	0.2%	17,428.2	40.5	0.2%
ME 4	36 54 17	2001	Dry	March	--	12,296.3	12,274.3	22.0	0.2%	12,270.8	25.5	0.2%	12,258.1	38.2	0.3%
ME 4	36 54 17	2001	Dry	April	--	10,970.6	10,926.5	44.1	0.4%	10,917.7	52.9	0.5%	10,891.4	79.2	0.7%
ME 4	36 54 17	2001	Dry	May	--	2,637.3	2,585.2	52.1	2.0%	2,574.9	62.4	2.4%	2,543.9	93.4	3.5%
ME 4	36 54 17	2001	Dry	June	--	2,647.1	2,577.2	69.9	2.6%	2,563.7	83.4	3.2%	2,523.5	123.6	4.7%
ME 4	36 54 17	2001	Dry	July	--	718.4	653.2	65.2	9.1%	640.3	78.1	10.9%	606.9	111.5	15.5%
ME 4	36 54 17	2001	Dry	August	--	172.1	108.9	63.3	36.7%	96.3	75.9	44.1%	61.1	111.1	64.5%
ME 4	36 54 17	2001	Dry	September	Used in Summary Table Analysis	94.9	38.9	56.1	59.1%	27.7	67.2	70.8%	0.0	94.9	100.0%
ME 4	36 54 17	2002	Below Normal	October	Used in Summary Table Analysis	264.5	217.9	46.6	17.6%	208.5	56.0	21.2%	180.2	84.3	31.9%
ME 4	36 54 17	2002	Below Normal	November	Used in Summary Table Analysis	12,022.0	11,986.1	35.9	0.3%	11,978.0	44.0	0.4%	11,953.7	68.3	0.6%
ME 4	36 54 17	2002	Below Normal	December	--	35,672.5	35,640.0	32.4	0.1%	35,633.1	39.4	0.1%	35,612.3	60.2	0.2%
ME 4	36 54 17	2002	Below Normal	January	--	30,871.5	30,842.6	28.9	0.1%	30,836.8	34.7	0.1%	30,819.4	52.1	0.2%
ME 4	36 54 17	2002	Below Normal	February	--	24,673.6	24,647.0	26.6	0.1%	24,642.4	31.3	0.1%	24,626.2	47.5	0.2%
ME 4	36 54 17	2002	Below Normal	March	--	17,776.6	17,751.2	25.5	0.1%	17,746.5	30.1	0.2%	17,731.5	45.1	0.3%
ME 4	36 54 17	2002	Below Normal	April	--	9,924.1	9,880.0	44.1	0.4%	9,871.2	52.9	0.5%	9,844.9	79.2	0.8%
ME 4	36 54 17	2002	Below Normal	May	--	3,319.1	3,267.1	52.0	1.6%	3,256.7	62.4	1.9%	3,225.7	93.4	2.8%
ME 4	36 54 17	2002	Below Normal	June	--	853.7	795.6	58.1	6.8%	784.1	69.6	8.2%	750.1	103.6	12.1%
ME 4	36 54 17	2002	Below Normal	July	--	362.1	303.5	58.6	16.2%	291.8	70.2	19.4%	258.0	104.1	28.7%
ME 4	36 54 17	2002	Below Normal	August	--	226.6	171.8	54.8	24.2%	160.9	65.8	29.0%	127.6	99.0	43.7%
ME 4	36 54 17	2002	Below Normal	September	Used in Summary Table Analysis	163.4	111.9	51.5	31.5%	101.6	61.8	37.8%	70.0	93.5	57.2%
ME 4	36 54 17	2003	Wet	October	Used in Summary Table Analysis	128.4	86.4	42.0	32.7%	78.0	50.4	39.3%	52.5	75.9	59.1%
ME 4	36 54 17	2003	Wet	November	Used in Summary Table Analysis	895.6	862.1	33.5	3.7%	855.3	40.4	4.5%	834.6	61.0	6.8%
ME 4	36 54 17	2003	Wet	December	--	56,792.8	56,762.7	30.1	0.1%	56,756.9	35.9	0.1%	56,739.6	53.2	0.1%
ME 4	36 54 17	2003	Wet	January	--	31,526.6	31,500.0	26.6	0.1%	31,494.2	32.4	0.1%	31,478.0	48.6	0.2%
ME 4	36 54 17	2003	Wet	February	--	20,351.9	20,327.5	24.3	0.1%	20,322.9	28.9	0.1%	20,307.9	44.0	0.2%
ME 4	36 54 17	2003	Wet	March	--	24,030.1	24,006.9	23.1	0.1%	24,002.3	27.8	0.1%	23,988.4	41.7	0.2%
ME 4	36 54 17	2003	Wet	April	--	42,902.8	42,880.8	22.0	0.1%	42,876.2	26.6	0.1%	42,862.3	40.5	0.1%
ME 4	36 54 17	2003	Wet	May	--	12,223.4	12,179.4	44.0	0.4%	12,170.1	53.2	0.4%	12,143.5	79.9	0.7%
ME 4	36 54 17	2003	Wet	June	--	3,166.4	3,110.9	55.6	1.8%	3,100.0	66.4	2.1%	3,067.9	98.5	3.1%
ME 4	36 54 17	2003	Wet	July	--	1,473.7	1,415.6	58.1	3.9%	1,404.1	69.7	4.7%	1,370.0	103.7	7.0%
ME 4	36 54 17	2003	Wet	August	--	759.6	703.0	56.6	7.5%	691.3	68.3	9.0%	655.0	104.6	13.8%
ME 4	36 54 17	2003	Wet	September	Used in Summary Table Analysis	457.5	409.9	47.5	10.4%	400.4	57.0	12.5%	370.8	86.7	19.0%
ME 4	36 54 17	2004	Wet	October	Used in Summary Table Analysis	324.4	285.2	39.1	12.1%	277.3	47.1	14.5%	253.5	70.9	21.9%
ME 4	36 54 17	2004	Wet	November	Used in Summary Table Analysis	5,801.2	5,769.6	31.6	0.5%	5,763.1	38.1	0.7%	5,743.5	57.6	1.0%
ME 4	36 54 17	2004	Wet	December	--	36,304.4	36,276.6	27.8	0.1%	36,270.8	33.6	0.1%	36,253.5	50.9	0.1%
ME 4	36 54 17	2004	Wet	January	--	31,469.9	31,445.6	24.3	0.1%	31,441.0	28.9	0.1%	31,424.8	45.1	0.1%
ME 4	36 54 17	2004	Wet	February	--	38,232.6	38,209.5	23.1	0.1%	38,204.9	27.8	0.1%	38,191.0	41.7	0.1%
ME 4	36 54 17	2004	Wet	March	--	16,524.3	16,502.3	22.0	0.1%	16,497.7	26.6	0.2%	16,485.0	39.4	0.2%
ME 4	36 54 17	2004	Wet	April	--	9,450.0	9,429.6	20.4	0.2%	9,425.5	24.5	0.3%	9,412.8	37.2	0.4%
ME 4	36 54 17	2004	Wet	May	--	3,419.6	3,376.4	43.2	1.3%	3,367.8	51.7	1.5%	3,342.1	77.4	2.3%
ME 4	36 54 17	2004	Wet	June	--	691.7	638.2	53.6	7.7%	627.7	64.1	9.3%	596.6	95.1	13.8%
ME 4	36 54 17	2004	Wet	July	--	355.8	298.6	57.1	16.1%	287.3	68.4	19.2%	253.7	102.0	28.7%
ME 4	36 54 17	2004	Wet	August	--	224.7	171.2	53.6	23.8%	160.5	64.2	28.6%	128.6	96.2	42.8%
ME 4	36 54 17	2004	Wet	September	Used in Summary Table Analysis	161.8	111.1	50.7	31.3%	100.9	60.9	37.6%	70.4	91.4	56.5%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 54 17	2005	Above Normal	October	Used in Summary Table Analysis	7,680.2	7,640.3	39.9	0.5%	7,632.2	48.0	0.6%	7,607.9	72.3	0.9%
ME 4	36 54 17	2005	Above Normal	November	Used in Summary Table Analysis	2,256.6	2,225.2	31.4	1.4%	2,219.0	37.6	1.7%	2,199.8	56.8	2.5%
ME 4	36 54 17	2005	Above Normal	December	--	21,022.0	20,995.4	26.6	0.1%	20,989.6	32.4	0.2%	20,972.2	49.8	0.2%
ME 4	36 54 17	2005	Above Normal	January	--	22,381.9	22,357.6	24.3	0.1%	22,351.9	30.1	0.1%	22,336.8	45.1	0.2%
ME 4	36 54 17	2005	Above Normal	February	--	14,011.6	13,988.4	23.1	0.2%	13,983.8	27.8	0.2%	13,971.1	40.5	0.3%
ME 4	36 54 17	2005	Above Normal	March	--	28,564.8	28,544.0	20.8	0.1%	28,539.4	25.5	0.1%	28,526.6	38.2	0.1%
ME 4	36 54 17	2005	Above Normal	April	--	21,444.4	21,423.6	20.8	0.1%	21,420.1	24.3	0.1%	21,407.4	37.0	0.2%
ME 4	36 54 17	2005	Above Normal	May	--	19,568.3	19,524.3	44.0	0.2%	19,515.0	53.2	0.3%	19,489.6	78.7	0.4%
ME 4	36 54 17	2005	Above Normal	June	--	15,870.4	15,804.4	66.0	0.4%	15,792.8	77.5	0.5%	15,754.6	115.7	0.7%
ME 4	36 54 17	2005	Above Normal	July	--	2,864.2	2,805.2	59.0	2.1%	2,794.1	70.1	2.4%	2,760.8	103.5	3.6%
ME 4	36 54 17	2005	Above Normal	August	--	982.5	929.3	53.3	5.4%	918.8	63.7	6.5%	887.4	95.1	9.7%
ME 4	36 54 17	2005	Above Normal	September	Used in Summary Table Analysis	524.0	477.1	46.9	8.9%	467.8	56.2	10.7%	439.8	84.2	16.1%
ME 4	36 54 17	2006	Wet	October	Used in Summary Table Analysis	633.7	595.9	37.8	6.0%	588.3	45.3	7.2%	565.3	68.4	10.8%
ME 4	36 54 17	2006	Wet	November	Used in Summary Table Analysis	9,303.7	9,273.7	30.0	0.3%	9,267.7	36.0	0.4%	9,249.4	54.3	0.6%
ME 4	36 54 17	2006	Wet	December	--	43,491.9	43,464.1	27.8	0.1%	43,459.5	32.4	0.1%	43,442.1	49.8	0.1%
ME 4	36 54 17	2006	Wet	January	--	46,294.0	46,268.5	25.5	0.1%	46,263.9	30.1	0.1%	46,248.8	45.1	0.1%
ME 4	36 54 17	2006	Wet	February	--	26,618.1	26,596.1	22.0	0.1%	26,591.4	26.6	0.1%	26,577.5	40.5	0.2%
ME 4	36 54 17	2006	Wet	March	--	47,155.1	47,134.3	20.8	0.0%	47,129.6	25.5	0.1%	47,115.7	39.4	0.1%
ME 4	36 54 17	2006	Wet	April	--	30,428.2	30,408.6	19.7	0.1%	30,403.9	24.3	0.1%	30,392.4	35.9	0.1%
ME 4	36 54 17	2006	Wet	May	--	14,207.2	14,180.6	26.6	0.2%	14,174.8	32.4	0.2%	14,159.7	47.5	0.3%
ME 4	36 54 17	2006	Wet	June	--	3,547.7	3,494.2	53.5	1.5%	3,483.7	64.0	1.8%	3,452.9	94.8	2.7%
ME 4	36 54 17	2006	Wet	July	--	1,278.8	1,222.6	56.3	4.4%	1,211.5	67.4	5.3%	1,178.8	100.0	7.8%
ME 4	36 54 17	2006	Wet	August	--	664.7	610.3	54.4	8.2%	599.6	65.1	9.8%	567.5	97.3	14.6%
ME 4	36 54 17	2006	Wet	September	Used in Summary Table Analysis	425.7	378.3	47.4	11.1%	368.9	56.8	13.3%	340.5	85.1	20.0%
ME 4	36 54 17	2007	Above Normal	October	Used in Summary Table Analysis	273.9	235.5	38.5	14.0%	227.7	46.2	16.9%	204.3	69.7	25.4%
ME 4	36 54 17	2007	Above Normal	November	Used in Summary Table Analysis	8,664.6	8,633.4	31.1	0.4%	8,627.2	37.4	0.4%	8,608.0	56.6	0.7%
ME 4	36 54 17	2007	Above Normal	December	--	20,407.4	20,379.6	27.8	0.1%	20,373.8	33.6	0.2%	20,356.5	50.9	0.2%
ME 4	36 54 17	2007	Above Normal	January	--	10,251.0	10,226.5	24.5	0.2%	10,221.5	29.5	0.3%	10,206.4	44.7	0.4%
ME 4	36 54 17	2007	Above Normal	February	--	30,568.3	30,545.1	23.1	0.1%	30,539.4	28.9	0.1%	30,525.5	42.8	0.1%
ME 4	36 54 17	2007	Above Normal	March	--	13,101.9	13,079.9	22.0	0.2%	13,075.2	26.6	0.2%	13,061.3	40.5	0.3%
ME 4	36 54 17	2007	Above Normal	April	--	11,534.3	11,491.9	42.4	0.4%	11,483.3	50.9	0.4%	11,458.1	76.2	0.7%
ME 4	36 54 17	2007	Above Normal	May	--	4,139.7	4,089.4	50.3	1.2%	4,079.3	60.4	1.5%	4,049.2	90.5	2.2%
ME 4	36 54 17	2007	Above Normal	June	--	1,498.4	1,438.5	59.8	4.0%	1,426.7	71.6	4.8%	1,391.9	106.5	7.1%
ME 4	36 54 17	2007	Above Normal	July	--	495.9	436.2	59.7	12.0%	424.3	71.5	14.4%	389.7	106.1	21.4%
ME 4	36 54 17	2007	Above Normal	August	--	222.7	169.1	53.6	24.1%	158.4	64.2	28.8%	126.0	96.7	43.4%
ME 4	36 54 17	2007	Above Normal	September	Used in Summary Table Analysis	150.3	99.8	50.5	33.6%	89.8	60.5	40.3%	59.6	90.7	60.3%
ME 4	36 54 17	2008	Dry	October	Used in Summary Table Analysis	3,432.9	3,392.0	40.9	1.2%	3,383.8	49.1	1.4%	3,358.8	74.1	2.2%
ME 4	36 54 17	2008	Dry	November	Used in Summary Table Analysis	3,274.2	3,242.6	31.6	1.0%	3,236.2	38.0	1.2%	3,216.8	57.4	1.8%
ME 4	36 54 17	2008	Dry	December	--	23,122.7	23,094.9	27.8	0.1%	23,089.1	33.6	0.1%	23,071.8	50.9	0.2%
ME 4	36 54 17	2008	Dry	January	--	37,527.8	37,501.2	26.6	0.1%	37,496.5	31.3	0.1%	37,480.3	47.5	0.1%
ME 4	36 54 17	2008	Dry	February	--	26,270.8	26,248.8	22.0	0.1%	26,244.2	26.6	0.1%	26,230.3	40.5	0.2%
ME 4	36 54 17	2008	Dry	March	--	11,795.1	11,774.3	20.8	0.2%	11,769.7	25.5	0.2%	11,756.9	38.2	0.3%
ME 4	36 54 17	2008	Dry	April	--	9,016.7	8,973.6	43.1	0.5%	8,965.2	51.5	0.6%	8,939.5	77.2	0.9%
ME 4	36 54 17	2008	Dry	May	--	1,360.0	1,314.9	45.0	3.3%	1,306.1	53.8	4.0%	1,280.0	80.0	5.9%
ME 4	36 54 17	2008	Dry	June	--	437.7	372.9	64.8	14.8%	360.2	77.5	17.7%	322.6	115.0	26.3%
ME 4	36 54 17	2008	Dry	July	--	255.8	192.2	63.6	24.9%	179.6	76.1	29.8%	147.1	108.6	42.5%
ME 4	36 54 17	2008	Dry	August	--	179.1	117.6	61.5	34.3%	105.4	73.7	41.2%	68.4	110.7	61.8%
ME 4	36 54 17	2008	Dry	September	Used in Summary Table Analysis	140.8	81.9	58.8	41.8%	70.2	70.5	50.1%	36.2	104.5	74.3%
ME 4	36 54 17	2009	Critical	October	Used in Summary Table Analysis	923.7	877.8	45.9	5.0%	868.6	55.1	6.0%	840.5	83.2	9.0%
ME 4	36 54 17	2009	Critical	November	Used in Summary Table Analysis	5,510.5	5,474.8	35.8	0.6%	5,467.6	42.9	0.8%	5,442.9	67.6	1.2%
ME 4	36 54 17	2009	Critical	December	--	12,164.4	12,133.1	31.3	0.3%	12,127.3	37.0	0.3%	12,107.6	56.7	0.5%
ME 4	36 54 17	2009	Critical	January	--	8,796.3	8,767.9	28.4	0.3%	8,762.2	34.1	0.4%	8,744.7	51.6	0.6%
ME 4	36 54 17	2009	Critical	February	--	22,613.4	22,588.0	25.5	0.1%	22,583.3	30.1	0.1%	22,568.3	45.1	0.2%
ME 4	36 54 17	2009	Critical	March	--	21,121.5	21,098.4	23.1	0.1%	21,093.8	27.8	0.1%	21,079.9	41.7	0.2%
ME 4	36 54 17	2009	Critical	April	--	10,097.3	10,052.7	44.7	0.4%	10,043.9	53.5	0.5%	10,017.1	80.2	0.8%
ME 4	36 54 17	2009	Critical	May	--	15,583.3	15,528.9	54.4	0.3%	15,518.5	64.8	0.4%	15,486.1	97.2	0.6%
ME 4	36 54 17	2009	Critical	June	--	3,160.5	3,091.2	69.3	2.2%	3,077.9	82.6	2.6%	3,038.0	122.6	3.9%
ME 4	36 54 17	2009	Critical	July	--	1,262.7	1,198.5	64.2	5.1%	1,185.9	76.9	6.1%	1,153.2	109.5	8.7%
ME 4	36 54 17	2009	Critical	August	--	668.5	606.6	61.9	9.3%	594.3	74.2	11.1%	559.9	108.6	16.2%
ME 4	36 54 17	2009	Critical	September	Used in Summary Table Analysis	389.7	334.7	55.0	14.1%	323.8	65.9	16.9%	292.0	97.7	25.1%
ME 4	36 54 17	2010	Below Normal	October	Used in Summary Table Analysis	6,088.1	6,041.7	46.4	0.8%	6,032.3	55.8	0.9%	6,002.9	85.2	1.4%
ME 4	36 54 17	2010	Below Normal	November	Used in Summary Table Analysis	8,290.2	8,253.2	36.9	0.4%	8,245.7	44.4	0.5%	8,220.5	69.7	0.8%
ME 4	36 54 17	2010	Below Normal	December	--	12,355.3	12,324.1	31.3	0.3%	12,317.1	38.2	0.3%	12,297.5	57.9	0.5%
ME 4	36 54 17	2010	Below Normal	January	--	36,238.4	36,209.5	28.9	0.1%	36,203.7	34.7	0.1%	36,185.2	53.2	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 54 17	2010	Below Normal	February	--	27,247.7	27,221.1	26.6	0.1%	27,216.4	31.3	0.1%	27,200.2	47.5	0.2%
ME 4	36 54 17	2010	Below Normal	March	--	28,839.1	28,814.8	24.3	0.1%	28,810.2	28.9	0.1%	28,795.1	44.0	0.2%
ME 4	36 54 17	2010	Below Normal	April	--	40,017.4	39,994.2	23.1	0.1%	39,989.6	27.8	0.1%	39,974.5	42.8	0.1%
ME 4	36 54 17	2010	Below Normal	May	--	20,272.0	20,225.7	46.3	0.2%	20,216.4	55.6	0.3%	20,189.8	82.2	0.4%
ME 4	36 54 17	2010	Below Normal	June	--	9,352.8	9,286.6	66.2	0.7%	9,273.5	79.3	0.8%	9,234.8	117.9	1.3%
ME 4	36 54 17	2010	Below Normal	July	--	1,454.7	1,395.1	59.6	4.1%	1,383.6	71.2	4.9%	1,349.4	105.3	7.2%
ME 4	36 54 17	2010	Below Normal	August	--	568.6	514.0	54.6	9.6%	503.2	65.3	11.5%	471.1	97.5	17.1%
ME 4	36 54 17	2010	Below Normal	September	Used in Summary Table Analysis	650.6	598.6	51.9	8.0%	588.2	62.3	9.6%	557.2	93.4	14.4%
ME 4	36 54 17	2011	Wet	October	Used in Summary Table Analysis	9,635.8	9,596.6	39.1	0.4%	9,588.8	47.0	0.5%	9,565.0	70.7	0.7%
ME 4	36 54 17	2011	Wet	November	Used in Summary Table Analysis	14,223.4	14,192.1	31.3	0.2%	14,185.2	38.2	0.3%	14,166.7	56.7	0.4%
ME 4	36 54 17	2011	Wet	December	--	33,715.3	33,687.5	27.8	0.1%	33,681.7	33.6	0.1%	33,664.4	50.9	0.2%
ME 4	36 54 17	2011	Wet	January	--	14,159.7	14,135.4	24.3	0.2%	14,130.8	28.9	0.2%	14,115.7	44.0	0.3%
ME 4	36 54 17	2011	Wet	February	--	20,770.8	20,747.7	23.1	0.1%	20,743.1	27.8	0.1%	20,729.2	41.7	0.2%
ME 4	36 54 17	2011	Wet	March	--	52,016.2	51,994.2	22.0	0.0%	51,989.6	26.6	0.1%	51,975.7	40.5	0.1%
ME 4	36 54 17	2011	Wet	April	--	24,804.4	24,783.6	20.8	0.1%	24,778.9	25.5	0.1%	24,766.2	38.2	0.2%
ME 4	36 54 17	2011	Wet	May	--	11,385.0	11,341.0	44.0	0.4%	11,332.3	52.7	0.5%	11,306.0	78.9	0.7%
ME 4	36 54 17	2011	Wet	June	--	7,058.4	6,993.8	64.7	0.9%	6,980.9	77.5	1.1%	6,943.2	115.3	1.6%
ME 4	36 54 17	2011	Wet	July	--	1,828.8	1,764.9	63.9	3.5%	1,752.3	76.5	4.2%	1,716.2	112.6	6.2%
ME 4	36 54 17	2011	Wet	August	--	776.6	722.5	54.0	7.0%	711.9	64.7	8.3%	679.9	96.7	12.5%
ME 4	36 54 17	2011	Wet	September	Used in Summary Table Analysis	433.1	384.2	48.9	11.3%	374.4	58.6	13.5%	345.3	87.7	20.3%
ME 4	36 54 17	2012	Below Normal	October	Used in Summary Table Analysis	4,542.7	4,502.9	39.8	0.9%	4,494.8	47.9	1.1%	4,470.3	72.5	1.6%
ME 4	36 54 17	2012	Below Normal	November	Used in Summary Table Analysis	8,241.0	8,209.1	31.8	0.4%	8,202.7	38.3	0.5%	8,183.0	58.0	0.7%
ME 4	36 54 17	2012	Below Normal	December	--	5,184.8	5,157.3	27.5	0.5%	5,151.6	33.2	0.6%	5,134.7	50.1	1.0%
ME 4	36 54 17	2012	Below Normal	January	--	20,125.0	20,099.5	25.5	0.1%	20,094.9	30.1	0.1%	20,078.7	46.3	0.2%
ME 4	36 54 17	2012	Below Normal	February	--	18,216.4	18,193.3	23.1	0.1%	18,188.7	27.8	0.2%	18,173.6	42.8	0.2%
ME 4	36 54 17	2012	Below Normal	March	--	45,436.3	45,413.2	23.1	0.1%	45,408.6	27.8	0.1%	45,394.7	41.7	0.1%
ME 4	36 54 17	2012	Below Normal	April	--	26,864.6	26,843.8	20.8	0.1%	26,839.1	25.5	0.1%	26,825.2	39.4	0.1%
ME 4	36 54 17	2012	Below Normal	May	--	7,484.6	7,440.9	43.8	0.6%	7,432.1	52.5	0.7%	7,406.3	78.4	1.0%
ME 4	36 54 17	2012	Below Normal	June	--	5,517.5	5,451.5	66.0	1.2%	5,438.5	78.9	1.4%	5,400.3	117.1	2.1%
ME 4	36 54 17	2012	Below Normal	July	--	2,224.9	2,163.0	61.9	2.8%	2,150.7	74.2	3.3%	2,114.4	110.5	5.0%
ME 4	36 54 17	2012	Below Normal	August	--	388.2	338.8	49.4	12.7%	329.0	59.2	15.3%	299.5	88.7	22.9%
ME 4	36 54 17	2012	Below Normal	September	Used in Summary Table Analysis	248.7	204.9	43.8	17.6%	196.1	52.5	21.1%	170.0	78.7	31.6%
ME 4	36 54 17	2013	Below Normal	October	Used in Summary Table Analysis	1,912.6	1,874.4	38.2	2.0%	1,866.8	45.8	2.4%	1,843.6	69.0	3.6%
ME 4	36 54 17	2013	Below Normal	November	Used in Summary Table Analysis	14,691.0	14,660.9	30.1	0.2%	14,653.9	37.0	0.3%	14,635.4	55.6	0.4%
ME 4	36 54 17	2013	Below Normal	December	--	60,004.6	59,976.9	27.8	0.0%	59,971.1	33.6	0.1%	59,953.7	50.9	0.1%
ME 4	36 54 17	2013	Below Normal	January	--	22,206.0	22,182.9	23.1	0.1%	22,177.1	28.9	0.1%	22,163.2	42.8	0.2%
ME 4	36 54 17	2013	Below Normal	February	--	8,847.8	8,825.0	22.8	0.3%	8,820.4	27.4	0.3%	8,806.5	41.3	0.5%
ME 4	36 54 17	2013	Below Normal	March	--	10,333.0	10,310.9	22.1	0.2%	10,306.4	26.6	0.3%	10,293.1	39.9	0.4%
ME 4	36 54 17	2013	Below Normal	April	--	8,291.9	8,250.5	41.4	0.5%	8,242.1	49.8	0.6%	8,217.4	74.5	0.9%
ME 4	36 54 17	2013	Below Normal	May	--	4,431.9	4,381.7	50.2	1.1%	4,371.8	60.2	1.4%	4,341.9	90.0	2.0%
ME 4	36 54 17	2013	Below Normal	June	--	2,110.6	2,051.2	59.5	2.8%	2,039.5	71.2	3.4%	2,004.6	106.0	5.0%
ME 4	36 54 17	2013	Below Normal	July	--	718.1	661.1	57.1	7.9%	649.8	68.3	9.5%	616.9	101.3	14.1%
ME 4	36 54 17	2013	Below Normal	August	--	339.9	286.4	53.5	15.7%	275.8	64.2	18.9%	243.3	96.7	28.4%
ME 4	36 54 17	2013	Below Normal	September	Used in Summary Table Analysis	4,787.4	4,732.2	55.2	1.2%	4,721.1	66.3	1.4%	4,688.0	99.4	2.1%
ME 4	36 54 17	2014	Critical	October	Used in Summary Table Analysis	281.0	240.9	40.1	14.3%	232.8	48.2	17.2%	209.3	71.7	25.5%
ME 4	36 54 17	2014	Critical	November	Used in Summary Table Analysis	1,538.7	1,506.4	32.3	2.1%	1,499.9	38.8	2.5%	1,480.2	58.4	3.8%
ME 4	36 54 17	2014	Critical	December	--	1,590.0	1,561.7	28.4	1.8%	1,555.9	34.1	2.1%	1,538.5	51.5	3.2%
ME 4	36 54 17	2014	Critical	January	--	2,822.0	2,796.5	25.5	0.9%	2,791.4	30.6	1.1%	2,775.7	46.3	1.6%
ME 4	36 54 17	2014	Critical	February	--	15,754.6	15,731.5	23.1	0.1%	15,726.9	27.8	0.2%	15,711.8	42.8	0.3%
ME 4	36 54 17	2014	Critical	March	--	31,489.6	31,466.4	23.1	0.1%	31,461.8	27.8	0.1%	31,447.9	41.7	0.1%
ME 4	36 54 17	2014	Critical	April	--	12,991.9	12,946.8	45.1	0.3%	12,938.7	53.2	0.4%	12,912.0	79.9	0.6%
ME 4	36 54 17	2014	Critical	May	--	5,188.9	5,136.1	52.8	1.0%	5,125.6	63.3	1.2%	5,093.9	95.0	1.8%
ME 4	36 54 17	2014	Critical	June	--	1,198.1	1,127.0	71.1	5.9%	1,113.1	85.0	7.1%	1,073.0	125.2	10.4%
ME 4	36 54 17	2014	Critical	July	--	545.9	480.6	65.4	12.0%	467.6	78.4	14.4%	433.8	112.1	20.5%
ME 4	36 54 17	2014	Critical	August	--	347.9	285.7	62.2	17.9%	273.2	74.6	21.5%	238.3	109.5	31.5%
ME 4	36 54 17	2014	Critical	September	Used in Summary Table Analysis	2,573.8	2,513.3	60.5	2.4%	2,501.3	72.6	2.8%	2,465.7	108.1	4.2%
ME 4	36 54 17	2015	Dry	October	Used in Summary Table Analysis	11,364.8	11,317.9	46.9	0.4%	11,308.8	56.0	0.5%	11,280.9	83.9	0.7%
ME 4	36 54 17	2015	Dry	November	Used in Summary Table Analysis	9,042.7	9,007.4	35.3	0.4%	9,000.2	42.5	0.5%	8,975.7	67.0	0.7%
ME 4	36 54 17	2015	Dry	December	--	32,631.9	32,601.9	30.1	0.1%	32,594.9	37.0	0.1%	32,575.2	56.7	0.2%
ME 4	36 54 17	2015	Dry	January	--	14,581.0	14,553.2	27.8	0.2%	14,547.5	33.6	0.2%	14,530.1	50.9	0.3%
ME 4	36 54 17	2015	Dry	February	--	27,239.6	27,215.3	24.3	0.1%	27,210.6	28.9	0.1%	27,194.4	45.1	0.2%
ME 4	36 54 17	2015	Dry	March	--	11,572.7	11,550.7	22.0	0.2%	11,546.1	26.6	0.2%	11,532.4	40.3	0.3%
ME 4	36 54 17	2015	Dry	April	--	8,390.5	8,346.4	44.1	0.5%	8,337.6	52.9	0.6%	8,311.2	79.3	0.9%
ME 4	36 54 17	2015	Dry	May	--	1,509.3	1,457.3	52.0	3.4%	1,447.0	62.3	4.1%	1,417.1	92.1	6.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 54 17	2015	Dry	June	--	652.6	586.9	65.7	10.1%	574.0	78.6	12.0%	535.8	116.8	17.9%
ME 4	36 54 17	2015	Dry	July	--	268.6	204.4	64.1	23.9%	191.7	76.8	28.6%	158.9	109.7	40.8%
ME 4	36 54 17	2015	Dry	August	--	166.2	104.4	61.9	37.2%	92.0	74.2	44.6%	57.7	108.5	65.3%
ME 4	36 54 17	2015	Dry	September	Used in Summary Table Analysis	120.5	62.8	57.7	47.9%	50.9	69.6	57.7%	16.5	104.0	86.3%
ME 4	36 54 17	2016	Above Normal	October	Used in Summary Table Analysis	85.8	37.9	48.0	55.9%	28.7	57.2	66.6%	0.0	85.8	100.0%
ME 4	36 54 17	2016	Above Normal	November	Used in Summary Table Analysis	3,868.8	3,832.1	36.7	0.9%	3,824.5	44.2	1.1%	3,797.8	70.9	1.8%
ME 4	36 54 17	2016	Above Normal	December	--	36,636.6	36,604.2	32.4	0.1%	36,597.2	39.4	0.1%	36,576.4	60.2	0.2%
ME 4	36 54 17	2016	Above Normal	January	--	57,335.6	57,305.6	30.1	0.1%	57,299.8	35.9	0.1%	57,280.1	55.6	0.1%
ME 4	36 54 17	2016	Above Normal	February	--	24,273.1	24,247.7	25.5	0.1%	24,243.1	30.1	0.1%	24,228.0	45.1	0.2%
ME 4	36 54 17	2016	Above Normal	March	--	41,785.9	41,761.6	24.3	0.1%	41,756.9	28.9	0.1%	41,741.9	44.0	0.1%
ME 4	36 54 17	2016	Above Normal	April	--	18,540.5	18,518.5	22.0	0.1%	18,515.0	25.5	0.1%	18,501.2	39.4	0.2%
ME 4	36 54 17	2016	Above Normal	May	--	5,216.6	5,189.4	27.2	0.5%	5,183.8	32.8	0.6%	5,167.2	49.3	0.9%
ME 4	36 54 17	2016	Above Normal	June	--	1,509.6	1,458.6	51.0	3.4%	1,449.5	60.1	4.0%	1,423.1	86.5	5.7%
ME 4	36 54 17	2016	Above Normal	July	--	822.9	766.3	56.6	6.9%	755.0	67.9	8.2%	721.9	101.0	12.3%
ME 4	36 54 17	2016	Above Normal	August	--	491.4	436.3	55.1	11.2%	425.4	66.1	13.4%	392.7	98.7	20.1%
ME 4	36 54 17	2016	Above Normal	September	Used in Summary Table Analysis	327.7	276.5	51.2	15.6%	266.1	61.6	18.8%	235.0	92.7	28.3%
ME 4	36 54 17	2017	Wet	October	Used in Summary Table Analysis	18,289.4	18,250.0	39.4	0.2%	18,241.9	47.5	0.3%	18,217.6	71.8	0.4%
ME 4	36 54 17	2017	Wet	November	Used in Summary Table Analysis	18,831.0	18,799.8	31.3	0.2%	18,792.8	38.2	0.2%	18,774.3	56.7	0.3%
ME 4	36 54 17	2017	Wet	December	--	24,121.5	24,094.9	26.6	0.1%	24,089.1	32.4	0.1%	24,072.9	48.6	0.2%
ME 4	36 54 17	2017	Wet	January	--	106,928.2	106,902.8	25.5	0.0%	106,898.1	30.1	0.0%	106,881.9	46.3	0.0%
ME 4	36 54 17	2017	Wet	February	--	81,856.5	81,832.2	24.3	0.0%	81,827.5	28.9	0.0%	81,813.7	42.8	0.1%
ME 4	36 54 17	2017	Wet	March	--	27,281.3	27,259.3	22.0	0.1%	27,254.6	26.6	0.1%	27,241.9	39.4	0.1%
ME 4	36 54 17	2017	Wet	April	--	22,942.1	22,922.5	19.7	0.1%	22,917.8	24.3	0.1%	22,906.3	35.9	0.2%
ME 4	36 54 17	2017	Wet	May	--	6,273.8	6,246.5	27.3	0.4%	6,241.1	32.8	0.5%	6,224.7	49.2	0.8%
ME 4	36 54 17	2017	Wet	June	--	2,116.9	2,064.1	52.8	2.5%	2,053.7	63.2	3.0%	2,022.9	94.0	4.4%
ME 4	36 54 17	2017	Wet	July	--	934.2	877.3	56.9	6.1%	866.1	68.1	7.3%	833.1	101.1	10.8%
ME 4	36 54 17	2017	Wet	August	--	506.3	451.3	54.9	10.8%	440.4	65.8	13.0%	407.9	98.3	19.4%
ME 4	36 54 17	2017	Wet	September	Used in Summary Table Analysis	322.4	271.8	50.6	15.7%	261.7	60.7	18.8%	231.4	91.0	28.2%
ME 4	36 54 17	2018	Above Normal	October	Used in Summary Table Analysis	275.1	235.2	39.9	14.5%	227.2	47.9	17.4%	203.1	72.1	26.2%
ME 4	36 54 17	2018	Above Normal	November	Used in Summary Table Analysis	10,794.3	10,763.2	31.1	0.3%	10,756.8	37.5	0.3%	10,737.6	56.7	0.5%
ME 4	36 54 17	2018	Above Normal	December	--	5,446.6	5,420.0	26.6	0.5%	5,414.6	32.1	0.6%	5,398.3	48.4	0.9%
ME 4	36 54 17	2018	Above Normal	January	--	17,785.9	17,761.6	24.3	0.1%	17,756.9	28.9	0.2%	17,741.9	44.0	0.2%
ME 4	36 54 17	2018	Above Normal	February	--	7,598.4	7,576.6	21.8	0.3%	7,572.1	26.3	0.3%	7,558.6	39.8	0.5%
ME 4	36 54 17	2018	Above Normal	March	--	20,703.7	20,682.9	20.8	0.1%	20,678.2	25.5	0.1%	20,665.5	38.2	0.2%
ME 4	36 54 17	2018	Above Normal	April	--	32,206.0	32,186.3	19.7	0.1%	32,182.9	23.1	0.1%	32,170.1	35.9	0.1%
ME 4	36 54 17	2018	Above Normal	May	--	6,989.6	6,948.1	41.4	0.6%	6,940.0	49.5	0.7%	6,915.0	74.5	1.1%
ME 4	36 54 17	2018	Above Normal	June	--	1,914.1	1,860.9	53.2	2.8%	1,850.6	63.5	3.3%	1,819.8	94.3	4.9%
ME 4	36 54 17	2018	Above Normal	July	--	781.2	724.1	57.1	7.3%	712.8	68.4	8.8%	679.1	102.1	13.1%
ME 4	36 54 17	2018	Above Normal	August	--	442.3	389.4	53.0	12.0%	378.8	63.5	14.4%	347.2	95.2	21.5%
ME 4	36 54 17	2018	Above Normal	September	Used in Summary Table Analysis	299.7	249.1	50.7	16.9%	238.9	60.8	20.3%	208.5	91.2	30.4%
ME 4	36 54 17	2019	Below Normal	October	Used in Summary Table Analysis	207.6	168.3	39.3	18.9%	160.4	47.3	22.8%	136.4	71.2	34.3%
ME 4	36 54 17	2019	Below Normal	November	Used in Summary Table Analysis	6,625.3	6,593.9	31.5	0.5%	6,587.5	37.8	0.6%	6,568.3	57.1	0.9%
ME 4	36 54 17	2019	Below Normal	December	--	14,669.0	14,642.4	26.6	0.2%	14,636.6	32.4	0.2%	14,620.4	48.6	0.3%
ME 4	36 54 17	2019	Below Normal	January	--	35,226.9	35,202.5	24.3	0.1%	35,197.9	28.9	0.1%	35,182.9	44.0	0.1%
ME 4	36 54 17	2019	Below Normal	February	--	141,932.9	141,909.7	23.1	0.0%	141,898.1	34.7	0.0%	141,886.6	46.3	0.0%
ME 4	36 54 17	2019	Below Normal	March	--	42,327.5	42,307.9	19.7	0.0%	42,303.2	24.3	0.1%	42,290.5	37.0	0.1%
ME 4	36 54 17	2019	Below Normal	April	--	15,275.5	15,255.8	19.7	0.1%	15,251.2	24.3	0.2%	15,239.6	35.9	0.2%
ME 4	36 54 17	2019	Below Normal	May	--	16,946.8	16,902.8	44.0	0.3%	16,893.5	53.2	0.3%	16,868.1	78.7	0.5%
ME 4	36 54 17	2019	Below Normal	June	--	4,243.8	4,187.7	56.0	1.3%	4,177.1	66.7	1.6%	4,145.6	98.1	2.3%
ME 4	36 54 17	2019	Below Normal	July	--	1,361.1	1,303.8	57.3	4.2%	1,292.5	68.6	5.0%	1,258.9	102.2	7.5%
ME 4	36 54 17	2019	Below Normal	August	--	596.2	541.9	54.3	9.1%	531.0	65.1	10.9%	499.0	97.2	16.3%
ME 4	36 54 17	2019	Below Normal	September	Used in Summary Table Analysis	462.4	411.9	50.5	10.9%	401.8	60.6	13.1%	371.5	90.9	19.7%
ME 4	36 54 17	2020	Dry	October	Used in Summary Table Analysis	355.6	317.8	37.8	10.6%	310.1	45.5	12.8%	287.1	68.5	19.3%
ME 4	36 54 17	2020	Dry	November	Used in Summary Table Analysis	319.1	289.5	29.6	9.3%	283.4	35.6	11.2%	265.4	53.7	16.8%
ME 4	36 54 17	2020	Dry	December	--	13,289.4	13,262.7	26.6	0.2%	13,256.9	32.4	0.2%	13,240.7	48.6	0.4%
ME 4	36 54 17	2020	Dry	January	--	22,334.5	22,309.0	25.5	0.1%	22,304.4	30.1	0.1%	22,289.4	45.1	0.2%
ME 4	36 54 17	2020	Dry	February	--	7,415.5	7,393.3	22.2	0.3%	7,388.7	26.9	0.4%	7,374.9	40.6	0.5%
ME 4	36 54 17	2020	Dry	March	--	7,244.8	7,223.7	21.1	0.3%	7,219.4	25.3	0.3%	7,206.6	38.2	0.5%
ME 4	36 54 17	2020	Dry	April	--	5,483.6	5,439.7	43.9	0.8%	5,430.9	52.7	1.0%	5,404.9	78.7	1.4%
ME 4	36 54 17	2020	Dry	May	--	7,377.5	7,325.0	52.5	0.7%	7,314.6	63.0	0.9%	7,283.2	94.3	1.3%
ME 4	36 54 17	2020	Dry	June	--	2,104.7	2,038.4	66.3	3.2%	2,025.6	79.2	3.8%	1,987.8	116.9	5.6%
ME 4	36 54 17	2020	Dry	July	--	796.3	729.6	66.7	8.4%	716.4	79.9	10.0%	682.4	113.9	14.3%
ME 4	36 54 17	2020	Dry	August	--	398.9	333.5	65.4	16.4%	320.5	78.4	19.7%	284.4	114.5	28.7%
ME 4	36 54 17	2020	Dry	September	Used in Summary Table Analysis	248.3	187.3	61.0	24.6%	174.8	73.4	29.6%	138.5	109.8	44.2%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 53 18	2000	Above Normal	October	Used in Summary Table Analysis	816.4	776.8	39.6	4.9%	768.8	47.6	5.8%	744.8	71.7	8.8%
ME 4	36 53 18	2000	Above Normal	November	Used in Summary Table Analysis	12,135.4	12,104.2	31.3	0.3%	12,097.2	38.2	0.3%	12,078.7	56.7	0.5%
ME 4	36 53 18	2000	Above Normal	December	--	10,819.6	10,792.4	27.2	0.3%	10,786.8	32.8	0.3%	10,770.1	49.4	0.5%
ME 4	36 53 18	2000	Above Normal	January	--	28,605.3	28,579.9	25.5	0.1%	28,575.2	30.1	0.1%	28,560.2	45.1	0.2%
ME 4	36 53 18	2000	Above Normal	February	--	37,060.2	37,037.0	23.1	0.1%	37,032.4	27.8	0.1%	37,018.5	41.7	0.1%
ME 4	36 53 18	2000	Above Normal	March	--	18,321.8	18,300.9	20.8	0.1%	18,296.3	25.5	0.1%	18,283.6	38.2	0.2%
ME 4	36 53 18	2000	Above Normal	April	--	12,318.3	12,297.5	20.8	0.2%	12,294.0	24.3	0.2%	12,281.3	37.0	0.3%
ME 4	36 53 18	2000	Above Normal	May	--	7,097.8	7,054.6	43.2	0.6%	7,045.9	51.9	0.7%	7,020.1	77.7	1.1%
ME 4	36 53 18	2000	Above Normal	June	--	2,612.2	2,548.5	63.7	2.4%	2,535.9	76.3	2.9%	2,498.6	113.5	4.3%
ME 4	36 53 18	2000	Above Normal	July	--	991.7	934.5	57.2	5.8%	923.3	68.5	6.9%	889.7	102.1	10.3%
ME 4	36 53 18	2000	Above Normal	August	--	521.8	468.2	53.7	10.3%	457.5	64.3	12.3%	425.5	96.3	18.5%
ME 4	36 53 18	2000	Above Normal	September	Used in Summary Table Analysis	295.2	247.7	47.4	16.1%	238.3	56.9	19.3%	209.8	85.4	28.9%
ME 4	36 53 18	2001	Dry	October	Used in Summary Table Analysis	3,818.6	3,779.5	39.1	1.0%	3,771.6	47.0	1.2%	3,747.8	70.8	1.9%
ME 4	36 53 18	2001	Dry	November	Used in Summary Table Analysis	6,130.3	6,098.8	31.5	0.5%	6,092.5	37.8	0.6%	6,073.3	57.1	0.9%
ME 4	36 53 18	2001	Dry	December	--	8,844.7	8,817.2	27.4	0.3%	8,811.6	33.1	0.4%	8,794.9	49.8	0.6%
ME 4	36 53 18	2001	Dry	January	--	12,803.2	12,778.9	24.3	0.2%	12,773.1	30.1	0.2%	12,758.1	45.1	0.4%
ME 4	36 53 18	2001	Dry	February	--	17,479.2	17,456.0	23.1	0.1%	17,451.4	27.8	0.2%	17,437.5	41.7	0.2%
ME 4	36 53 18	2001	Dry	March	--	12,299.8	12,278.9	20.8	0.2%	12,274.3	25.5	0.2%	12,261.6	38.2	0.3%
ME 4	36 53 18	2001	Dry	April	--	10,975.6	10,931.1	44.4	0.4%	10,922.3	53.2	0.5%	10,895.9	79.6	0.7%
ME 4	36 53 18	2001	Dry	May	--	2,636.5	2,584.1	52.3	2.0%	2,573.7	62.7	2.4%	2,542.5	94.0	3.6%
ME 4	36 53 18	2001	Dry	June	--	2,650.2	2,580.0	70.3	2.7%	2,566.2	84.0	3.2%	2,525.8	124.4	4.7%
ME 4	36 53 18	2001	Dry	July	--	718.2	652.4	65.8	9.2%	639.3	78.9	11.0%	605.5	112.6	15.7%
ME 4	36 53 18	2001	Dry	August	--	172.3	108.4	64.0	37.1%	95.6	76.7	44.5%	60.0	112.3	65.2%
ME 4	36 53 18	2001	Dry	September	Used in Summary Table Analysis	95.3	38.4	56.8	59.7%	27.1	68.2	71.5%	0.0	95.3	100.0%
ME 4	36 53 18	2002	Below Normal	October	Used in Summary Table Analysis	265.0	217.6	47.4	17.9%	208.0	57.0	21.5%	179.3	85.7	32.3%
ME 4	36 53 18	2002	Below Normal	November	Used in Summary Table Analysis	12,033.6	11,996.5	37.0	0.3%	11,989.6	44.0	0.4%	11,964.1	69.4	0.6%
ME 4	36 53 18	2002	Below Normal	December	--	35,708.3	35,675.9	32.4	0.1%	35,669.0	39.4	0.1%	35,648.1	60.2	0.2%
ME 4	36 53 18	2002	Below Normal	January	--	30,893.5	30,864.6	28.9	0.1%	30,858.8	34.7	0.1%	30,840.3	53.2	0.2%
ME 4	36 53 18	2002	Below Normal	February	--	24,686.3	24,659.7	26.6	0.1%	24,653.9	32.4	0.1%	24,637.7	48.6	0.2%
ME 4	36 53 18	2002	Below Normal	March	--	17,785.9	17,760.4	25.5	0.1%	17,755.8	30.1	0.2%	17,740.7	45.1	0.3%
ME 4	36 53 18	2002	Below Normal	April	--	9,927.1	9,882.6	44.4	0.4%	9,873.8	53.2	0.5%	9,847.3	79.7	0.8%
ME 4	36 53 18	2002	Below Normal	May	--	3,319.7	3,267.2	52.4	1.6%	3,256.8	62.8	1.9%	3,225.6	94.1	2.8%
ME 4	36 53 18	2002	Below Normal	June	--	853.7	795.1	58.6	6.9%	783.5	70.1	8.2%	749.3	104.4	12.2%
ME 4	36 53 18	2002	Below Normal	July	--	362.3	303.1	59.2	16.3%	291.3	70.9	19.6%	257.1	105.1	29.0%
ME 4	36 53 18	2002	Below Normal	August	--	227.0	171.6	55.5	24.4%	160.5	66.6	29.3%	126.8	100.2	44.1%
ME 4	36 53 18	2002	Below Normal	September	Used in Summary Table Analysis	163.8	111.6	52.2	31.9%	101.2	62.6	38.2%	69.1	94.7	57.8%
ME 4	36 53 18	2003	Wet	October	Used in Summary Table Analysis	128.8	86.1	42.7	33.1%	77.6	51.3	39.8%	51.6	77.2	59.9%
ME 4	36 53 18	2003	Wet	November	Used in Summary Table Analysis	896.3	862.1	34.2	3.8%	855.2	41.2	4.6%	834.2	62.2	6.9%
ME 4	36 53 18	2003	Wet	December	--	56,880.8	56,850.7	30.1	0.1%	56,844.9	35.9	0.1%	56,826.4	54.4	0.1%
ME 4	36 53 18	2003	Wet	January	--	31,542.8	31,515.0	27.8	0.1%	31,510.4	32.4	0.1%	31,493.1	49.8	0.2%
ME 4	36 53 18	2003	Wet	February	--	20,358.8	20,334.5	24.3	0.1%	20,329.9	28.9	0.1%	20,314.8	44.0	0.2%
ME 4	36 53 18	2003	Wet	March	--	24,042.8	24,019.7	23.1	0.1%	24,015.0	27.8	0.1%	24,001.2	41.7	0.2%
ME 4	36 53 18	2003	Wet	April	--	42,937.5	42,915.5	22.0	0.1%	42,910.9	26.6	0.1%	42,897.0	40.5	0.1%
ME 4	36 53 18	2003	Wet	May	--	12,226.9	12,181.7	45.1	0.4%	12,172.5	54.4	0.4%	12,145.8	81.0	0.7%
ME 4	36 53 18	2003	Wet	June	--	3,166.6	3,110.5	56.0	1.8%	3,099.7	66.9	2.1%	3,067.4	99.2	3.1%
ME 4	36 53 18	2003	Wet	July	--	1,474.2	1,415.5	58.7	4.0%	1,403.9	70.3	4.8%	1,369.4	104.7	7.1%
ME 4	36 53 18	2003	Wet	August	--	760.2	702.9	57.3	7.5%	691.1	69.1	9.1%	654.4	105.7	13.9%
ME 4	36 53 18	2003	Wet	September	Used in Summary Table Analysis	458.0	409.8	48.2	10.5%	400.1	57.8	12.6%	370.1	87.9	19.2%
ME 4	36 53 18	2004	Wet	October	Used in Summary Table Analysis	324.9	285.1	39.8	12.2%	277.1	47.8	14.7%	252.8	72.1	22.2%
ME 4	36 53 18	2004	Wet	November	Used in Summary Table Analysis	5,810.8	5,778.5	32.3	0.6%	5,771.9	38.9	0.7%	5,752.1	58.7	1.0%
ME 4	36 53 18	2004	Wet	December	--	36,348.4	36,320.6	27.8	0.1%	36,314.8	33.6	0.1%	36,296.3	52.1	0.1%
ME 4	36 53 18	2004	Wet	January	--	31,500.0	31,474.5	25.5	0.1%	31,468.8	31.3	0.1%	31,453.7	46.3	0.1%
ME 4	36 53 18	2004	Wet	February	--	38,260.4	38,237.3	23.1	0.1%	38,232.6	27.8	0.1%	38,217.6	42.8	0.1%
ME 4	36 53 18	2004	Wet	March	--	16,527.8	16,505.8	22.0	0.1%	16,501.2	26.6	0.2%	16,488.4	39.4	0.2%
ME 4	36 53 18	2004	Wet	April	--	9,452.7	9,431.9	20.7	0.2%	9,427.7	25.0	0.3%	9,414.9	37.7	0.4%
ME 4	36 53 18	2004	Wet	May	--	3,421.8	3,378.2	43.5	1.3%	3,369.7	52.1	1.5%	3,343.8	78.0	2.3%
ME 4	36 53 18	2004	Wet	June	--	691.7	637.8	53.9	7.8%	627.2	64.5	9.3%	595.9	95.8	13.8%
ME 4	36 53 18	2004	Wet	July	--	356.1	298.5	57.6	16.2%	287.1	69.1	19.4%	253.1	103.0	28.9%
ME 4	36 53 18	2004	Wet	August	--	225.1	171.0	54.2	24.1%	160.2	64.9	28.8%	127.9	97.3	43.2%
ME 4	36 53 18	2004	Wet	September	Used in Summary Table Analysis	162.2	110.8	51.4	31.7%	100.5	61.6	38.0%	69.6	92.5	57.1%
ME 4	36 53 18	2005	Above Normal	October	Used in Summary Table Analysis	7,692.8	7,652.2	40.6	0.5%	7,644.0	48.8	0.6%	7,619.2	73.6	1.0%
ME 4	36 53 18	2005	Above Normal	November	Used in Summary Table Analysis	2,257.6	2,225.8	31.8	1.4%	2,219.3	38.3	1.7%	2,199.9	57.8	2.6%
ME 4	36 53 18	2005	Above Normal	December	--	21,059.0	21,031.3	27.8	0.1%	21,025.5	33.6	0.2%	21,009.3	49.8	0.2%
ME 4	36 53 18	2005	Above Normal	January	--	22,410.9	22,385.4	25.5	0.1%	22,379.6	31.3	0.1%	22,364.6	46.3	0.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 53 18	2005	Above Normal	February	--	14,015.0	13,991.9	23.1	0.2%	13,987.3	27.8	0.2%	13,973.4	41.7	0.3%
ME 4	36 53 18	2005	Above Normal	March	--	28,585.6	28,564.8	20.8	0.1%	28,560.2	25.5	0.1%	28,546.3	39.4	0.1%
ME 4	36 53 18	2005	Above Normal	April	--	21,457.2	21,436.3	20.8	0.1%	21,432.9	24.3	0.1%	21,420.1	37.0	0.2%
ME 4	36 53 18	2005	Above Normal	May	--	19,584.5	19,540.5	44.0	0.2%	19,531.3	53.2	0.3%	19,504.6	79.9	0.4%
ME 4	36 53 18	2005	Above Normal	June	--	15,890.0	15,824.1	66.0	0.4%	15,811.3	78.7	0.5%	15,773.1	116.9	0.7%
ME 4	36 53 18	2005	Above Normal	July	--	2,863.4	2,803.9	59.5	2.1%	2,792.7	70.7	2.5%	2,759.0	104.4	3.6%
ME 4	36 53 18	2005	Above Normal	August	--	983.0	929.2	53.8	5.5%	918.6	64.4	6.6%	886.8	96.2	9.8%
ME 4	36 53 18	2005	Above Normal	September	Used in Summary Table Analysis	524.6	477.1	47.5	9.1%	467.6	56.9	10.9%	439.3	85.3	16.3%
ME 4	36 53 18	2006	Wet	October	Used in Summary Table Analysis	634.5	596.1	38.4	6.0%	588.4	46.1	7.3%	565.0	69.5	10.9%
ME 4	36 53 18	2006	Wet	November	Used in Summary Table Analysis	9,320.4	9,289.9	30.4	0.3%	9,283.8	36.6	0.4%	9,265.2	55.2	0.6%
ME 4	36 53 18	2006	Wet	December	--	43,547.5	43,520.8	26.6	0.1%	43,515.0	32.4	0.1%	43,497.7	49.8	0.1%
ME 4	36 53 18	2006	Wet	January	--	46,343.8	46,318.3	25.5	0.1%	46,313.7	30.1	0.1%	46,297.5	46.3	0.1%
ME 4	36 53 18	2006	Wet	February	--	26,637.7	26,615.7	22.0	0.1%	26,611.1	26.6	0.1%	26,597.2	40.5	0.2%
ME 4	36 53 18	2006	Wet	March	--	47,194.4	47,172.5	22.0	0.0%	47,167.8	26.6	0.1%	47,155.1	39.4	0.1%
ME 4	36 53 18	2006	Wet	April	--	30,442.1	30,421.3	20.8	0.1%	30,417.8	24.3	0.1%	30,406.3	35.9	0.1%
ME 4	36 53 18	2006	Wet	May	--	14,215.3	14,187.5	27.8	0.2%	14,182.9	32.4	0.2%	14,166.7	48.6	0.3%
ME 4	36 53 18	2006	Wet	June	--	3,547.6	3,493.9	53.7	1.5%	3,483.3	64.2	1.8%	3,452.3	95.3	2.7%
ME 4	36 53 18	2006	Wet	July	--	1,279.4	1,222.7	56.7	4.4%	1,211.6	67.8	5.3%	1,178.6	100.8	7.9%
ME 4	36 53 18	2006	Wet	August	--	665.5	610.5	55.0	8.3%	599.6	65.8	9.9%	567.1	98.3	14.8%
ME 4	36 53 18	2006	Wet	September	Used in Summary Table Analysis	426.4	378.3	48.0	11.3%	368.8	57.6	13.5%	340.1	86.3	20.2%
ME 4	36 53 18	2007	Above Normal	October	Used in Summary Table Analysis	274.5	235.4	39.1	14.2%	227.5	46.9	17.1%	203.7	70.8	25.8%
ME 4	36 53 18	2007	Above Normal	November	Used in Summary Table Analysis	8,679.3	8,647.6	31.7	0.4%	8,641.1	38.2	0.4%	8,621.6	57.6	0.7%
ME 4	36 53 18	2007	Above Normal	December	--	20,437.5	20,408.6	28.9	0.1%	20,402.8	34.7	0.2%	20,385.4	52.1	0.3%
ME 4	36 53 18	2007	Above Normal	January	--	10,258.0	10,233.1	24.9	0.2%	10,228.0	30.0	0.3%	10,212.6	45.4	0.4%
ME 4	36 53 18	2007	Above Normal	February	--	30,601.9	30,577.5	24.3	0.1%	30,572.9	28.9	0.1%	30,557.9	44.0	0.1%
ME 4	36 53 18	2007	Above Normal	March	--	13,106.5	13,083.3	23.1	0.2%	13,078.7	27.8	0.2%	13,064.8	41.7	0.3%
ME 4	36 53 18	2007	Above Normal	April	--	11,538.7	11,495.9	42.7	0.4%	11,487.4	51.3	0.4%	11,462.0	76.6	0.7%
ME 4	36 53 18	2007	Above Normal	May	--	4,141.2	4,090.5	50.7	1.2%	4,080.3	60.9	1.5%	4,050.1	91.1	2.2%
ME 4	36 53 18	2007	Above Normal	June	--	1,499.3	1,439.1	60.2	4.0%	1,427.3	72.0	4.8%	1,392.1	107.2	7.1%
ME 4	36 53 18	2007	Above Normal	July	--	496.0	435.7	60.2	12.1%	423.8	72.2	14.6%	388.9	107.1	21.6%
ME 4	36 53 18	2007	Above Normal	August	--	223.1	168.9	54.2	24.3%	158.1	64.9	29.1%	125.3	97.8	43.8%
ME 4	36 53 18	2007	Above Normal	September	Used in Summary Table Analysis	150.7	99.6	51.1	33.9%	89.5	61.3	40.6%	58.9	91.8	60.9%
ME 4	36 53 18	2008	Dry	October	Used in Summary Table Analysis	3,437.8	3,396.3	41.6	1.2%	3,388.0	49.9	1.5%	3,362.6	75.2	2.2%
ME 4	36 53 18	2008	Dry	November	Used in Summary Table Analysis	3,278.8	3,246.6	32.2	1.0%	3,240.2	38.7	1.2%	3,220.4	58.4	1.8%
ME 4	36 53 18	2008	Dry	December	--	23,162.0	23,133.1	28.9	0.1%	23,127.3	34.7	0.1%	23,110.0	52.1	0.2%
ME 4	36 53 18	2008	Dry	January	--	37,564.8	37,538.2	26.6	0.1%	37,532.4	32.4	0.1%	37,516.2	48.6	0.1%
ME 4	36 53 18	2008	Dry	February	--	26,278.9	26,255.8	23.1	0.1%	26,251.2	27.8	0.1%	26,236.1	42.8	0.2%
ME 4	36 53 18	2008	Dry	March	--	11,797.5	11,776.6	20.8	0.2%	11,772.0	25.5	0.2%	11,759.3	38.2	0.3%
ME 4	36 53 18	2008	Dry	April	--	9,019.0	8,975.7	43.3	0.5%	8,967.1	51.9	0.6%	8,941.2	77.8	0.9%
ME 4	36 53 18	2008	Dry	May	--	1,358.8	1,313.4	45.4	3.3%	1,304.6	54.2	4.0%	1,278.1	80.7	5.9%
ME 4	36 53 18	2008	Dry	June	--	437.8	372.6	65.2	14.9%	359.8	78.0	17.8%	322.0	115.9	26.5%
ME 4	36 53 18	2008	Dry	July	--	256.0	191.7	64.2	25.1%	179.1	76.9	30.0%	146.2	109.8	42.9%
ME 4	36 53 18	2008	Dry	August	--	179.4	117.2	62.2	34.7%	104.8	74.6	41.6%	67.4	112.0	62.4%
ME 4	36 53 18	2008	Dry	September	Used in Summary Table Analysis	141.1	81.4	59.6	42.3%	69.6	71.5	50.7%	35.1	105.9	75.1%
ME 4	36 53 18	2009	Critical	October	Used in Summary Table Analysis	924.4	877.7	46.7	5.1%	868.4	56.1	6.1%	839.8	84.7	9.2%
ME 4	36 53 18	2009	Critical	November	Used in Summary Table Analysis	5,519.9	5,483.4	36.5	0.7%	5,476.0	43.9	0.8%	5,451.0	68.9	1.2%
ME 4	36 53 18	2009	Critical	December	--	12,184.0	12,152.8	31.3	0.3%	12,145.8	38.2	0.3%	12,126.2	57.9	0.5%
ME 4	36 53 18	2009	Critical	January	--	8,801.3	8,772.3	28.9	0.3%	8,766.4	34.8	0.4%	8,748.6	52.7	0.6%
ME 4	36 53 18	2009	Critical	February	--	22,629.6	22,604.2	25.5	0.1%	22,599.5	30.1	0.1%	22,583.3	46.3	0.2%
ME 4	36 53 18	2009	Critical	March	--	21,133.1	21,110.0	23.1	0.1%	21,105.3	27.8	0.1%	21,090.3	42.8	0.2%
ME 4	36 53 18	2009	Critical	April	--	10,097.6	10,052.5	45.0	0.4%	10,043.6	53.9	0.5%	10,016.8	80.8	0.8%
ME 4	36 53 18	2009	Critical	May	--	15,589.1	15,534.7	54.4	0.3%	15,523.1	66.0	0.4%	15,490.7	98.4	0.6%
ME 4	36 53 18	2009	Critical	June	--	3,160.4	3,090.7	69.7	2.2%	3,077.2	83.2	2.6%	3,037.0	123.4	3.9%
ME 4	36 53 18	2009	Critical	July	--	1,262.8	1,198.0	64.8	5.1%	1,185.3	77.5	6.1%	1,152.2	110.7	8.8%
ME 4	36 53 18	2009	Critical	August	--	668.9	606.2	62.7	9.4%	593.8	75.1	11.2%	558.9	110.0	16.4%
ME 4	36 53 18	2009	Critical	September	Used in Summary Table Analysis	390.0	334.2	55.8	14.3%	323.1	66.9	17.1%	290.9	99.2	25.4%
ME 4	36 53 18	2010	Below Normal	October	Used in Summary Table Analysis	6,088.9	6,041.6	47.3	0.8%	6,032.1	56.8	0.9%	6,002.3	86.6	1.4%
ME 4	36 53 18	2010	Below Normal	November	Used in Summary Table Analysis	8,296.1	8,258.3	37.7	0.5%	8,250.8	45.3	0.5%	8,225.1	70.9	0.9%
ME 4	36 53 18	2010	Below Normal	December	--	12,368.1	12,335.6	32.4	0.3%	12,329.9	38.2	0.3%	12,309.0	59.0	0.5%
ME 4	36 53 18	2010	Below Normal	January	--	36,282.4	36,253.5	28.9	0.1%	36,247.7	34.7	0.1%	36,229.2	53.2	0.1%
ME 4	36 53 18	2010	Below Normal	February	--	27,258.1	27,232.6	25.5	0.1%	27,226.9	31.3	0.1%	27,210.6	47.5	0.2%
ME 4	36 53 18	2010	Below Normal	March	--	28,848.4	28,824.1	24.3	0.1%	28,819.4	28.9	0.1%	28,804.4	44.0	0.2%
ME 4	36 53 18	2010	Below Normal	April	--	40,035.9	40,012.7	23.1	0.1%	40,008.1	27.8	0.1%	39,993.1	42.8	0.1%
ME 4	36 53 18	2010	Below Normal	May	--	20,287.0	20,240.7	46.3	0.2%	20,231.5	55.6	0.3%	20,203.7	83.3	0.4%

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Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 53 18	2010	Below Normal	June	--	9,364.5	9,297.7	66.8	0.7%	9,284.6	79.9	0.9%	9,245.6	118.9	1.3%
ME 4	36 53 18	2010	Below Normal	July	--	1,454.6	1,394.4	60.2	4.1%	1,382.9	71.8	4.9%	1,348.4	106.3	7.3%
ME 4	36 53 18	2010	Below Normal	August	--	569.1	513.9	55.2	9.7%	503.0	66.1	11.6%	470.5	98.6	17.3%
ME 4	36 53 18	2010	Below Normal	September	Used in Summary Table Analysis	651.3	598.6	52.6	8.1%	588.1	63.1	9.7%	556.7	94.6	14.5%
ME 4	36 53 18	2011	Wet	October	Used in Summary Table Analysis	9,645.1	9,605.3	39.8	0.4%	9,597.3	47.8	0.5%	9,573.1	72.0	0.7%
ME 4	36 53 18	2011	Wet	November	Used in Summary Table Analysis	14,233.8	14,201.4	32.4	0.2%	14,195.6	38.2	0.3%	14,175.9	57.9	0.4%
ME 4	36 53 18	2011	Wet	December	--	33,760.4	33,732.6	27.8	0.1%	33,725.7	34.7	0.1%	33,709.5	50.9	0.2%
ME 4	36 53 18	2011	Wet	January	--	14,166.7	14,142.4	24.3	0.2%	14,137.7	28.9	0.2%	14,121.5	45.1	0.3%
ME 4	36 53 18	2011	Wet	February	--	20,777.8	20,754.6	23.1	0.1%	20,750.0	27.8	0.1%	20,735.0	42.8	0.2%
ME 4	36 53 18	2011	Wet	March	--	52,045.1	52,022.0	23.1	0.0%	52,018.5	26.6	0.1%	52,003.5	41.7	0.1%
ME 4	36 53 18	2011	Wet	April	--	24,812.5	24,791.7	20.8	0.1%	24,787.0	25.5	0.1%	24,774.3	38.2	0.2%
ME 4	36 53 18	2011	Wet	May	--	11,388.5	11,344.3	44.2	0.4%	11,335.5	53.0	0.5%	11,309.1	79.4	0.7%
ME 4	36 53 18	2011	Wet	June	--	7,062.4	6,997.3	65.0	0.9%	6,984.4	78.0	1.1%	6,946.4	116.0	1.6%
ME 4	36 53 18	2011	Wet	July	--	1,828.5	1,764.0	64.5	3.5%	1,751.4	77.1	4.2%	1,714.9	113.5	6.2%
ME 4	36 53 18	2011	Wet	August	--	776.9	722.3	54.6	7.0%	711.5	65.4	8.4%	679.1	97.8	12.6%
ME 4	36 53 18	2011	Wet	September	Used in Summary Table Analysis	433.5	384.0	49.5	11.4%	374.1	59.4	13.7%	344.7	88.8	20.5%
ME 4	36 53 18	2012	Below Normal	October	Used in Summary Table Analysis	4,547.2	4,506.8	40.4	0.9%	4,498.6	48.6	1.1%	4,473.7	73.5	1.6%
ME 4	36 53 18	2012	Below Normal	November	Used in Summary Table Analysis	8,250.8	8,218.4	32.4	0.4%	8,211.8	39.0	0.5%	8,191.8	59.0	0.7%
ME 4	36 53 18	2012	Below Normal	December	--	5,188.5	5,160.5	28.0	0.5%	5,154.9	33.7	0.6%	5,137.6	50.9	1.0%
ME 4	36 53 18	2012	Below Normal	January	--	20,153.9	20,128.5	25.5	0.1%	20,123.8	30.1	0.1%	20,107.6	46.3	0.2%
ME 4	36 53 18	2012	Below Normal	February	--	18,223.4	18,200.2	23.1	0.1%	18,195.6	27.8	0.2%	18,180.6	42.8	0.2%
ME 4	36 53 18	2012	Below Normal	March	--	45,471.1	45,447.9	23.1	0.1%	45,443.3	27.8	0.1%	45,428.2	42.8	0.1%
ME 4	36 53 18	2012	Below Normal	April	--	26,875.0	26,854.2	20.8	0.1%	26,849.5	25.5	0.1%	26,835.6	39.4	0.1%
ME 4	36 53 18	2012	Below Normal	May	--	7,486.3	7,442.4	44.0	0.6%	7,433.6	52.8	0.7%	7,407.5	78.8	1.1%
ME 4	36 53 18	2012	Below Normal	June	--	5,521.4	5,455.1	66.3	1.2%	5,442.1	79.3	1.4%	5,403.7	117.7	2.1%
ME 4	36 53 18	2012	Below Normal	July	--	2,227.1	2,164.7	62.4	2.8%	2,152.3	74.8	3.4%	2,115.7	111.3	5.0%
ME 4	36 53 18	2012	Below Normal	August	--	388.3	338.3	50.0	12.9%	328.4	59.9	15.4%	298.6	89.7	23.1%
ME 4	36 53 18	2012	Below Normal	September	Used in Summary Table Analysis	249.1	204.7	44.4	17.8%	195.9	53.2	21.4%	169.4	79.7	32.0%
ME 4	36 53 18	2013	Below Normal	October	Used in Summary Table Analysis	1,915.5	1,876.7	38.8	2.0%	1,869.0	46.5	2.4%	1,845.5	70.0	3.7%
ME 4	36 53 18	2013	Below Normal	November	Used in Summary Table Analysis	14,709.5	14,678.2	31.3	0.2%	14,672.5	37.0	0.3%	14,653.9	55.6	0.4%
ME 4	36 53 18	2013	Below Normal	December	--	60,046.3	60,018.5	27.8	0.0%	60,011.6	34.7	0.1%	59,994.2	52.1	0.1%
ME 4	36 53 18	2013	Below Normal	January	--	22,216.4	22,193.3	23.1	0.1%	22,187.5	28.9	0.1%	22,173.6	42.8	0.2%
ME 4	36 53 18	2013	Below Normal	February	--	8,852.4	8,829.4	23.0	0.3%	8,824.7	27.8	0.3%	8,810.5	41.9	0.5%
ME 4	36 53 18	2013	Below Normal	March	--	10,340.9	10,318.5	22.3	0.2%	10,314.0	26.9	0.3%	10,300.5	40.4	0.4%
ME 4	36 53 18	2013	Below Normal	April	--	8,293.5	8,251.9	41.7	0.5%	8,243.5	50.0	0.6%	8,218.5	75.0	0.9%
ME 4	36 53 18	2013	Below Normal	May	--	4,434.6	4,384.1	50.5	1.1%	4,374.1	60.5	1.4%	4,344.0	90.6	2.0%
ME 4	36 53 18	2013	Below Normal	June	--	2,111.0	2,051.2	59.8	2.8%	2,039.4	71.6	3.4%	2,004.3	106.7	5.1%
ME 4	36 53 18	2013	Below Normal	July	--	718.0	660.4	57.6	8.0%	649.1	69.0	9.6%	615.8	102.2	14.2%
ME 4	36 53 18	2013	Below Normal	August	--	340.2	286.1	54.1	15.9%	275.3	64.9	19.1%	242.5	97.7	28.7%
ME 4	36 53 18	2013	Below Normal	September	Used in Summary Table Analysis	4,792.1	4,736.2	55.9	1.2%	4,725.0	67.1	1.4%	4,691.6	100.6	2.1%
ME 4	36 53 18	2014	Critical	October	Used in Summary Table Analysis	280.5	239.8	40.7	14.5%	231.6	48.9	17.4%	207.7	72.8	26.0%
ME 4	36 53 18	2014	Critical	November	Used in Summary Table Analysis	1,541.0	1,508.1	32.9	2.1%	1,501.5	39.5	2.6%	1,481.5	59.5	3.9%
ME 4	36 53 18	2014	Critical	December	--	1,591.2	1,562.3	28.9	1.8%	1,556.5	34.7	2.2%	1,538.8	52.4	3.3%
ME 4	36 53 18	2014	Critical	January	--	2,824.4	2,798.5	25.9	0.9%	2,793.3	31.1	1.1%	2,777.2	47.2	1.7%
ME 4	36 53 18	2014	Critical	February	--	15,762.7	15,739.6	23.1	0.1%	15,733.8	28.9	0.2%	15,718.8	44.0	0.3%
ME 4	36 53 18	2014	Critical	March	--	31,498.8	31,476.9	22.0	0.1%	31,471.1	27.8	0.1%	31,457.2	41.7	0.1%
ME 4	36 53 18	2014	Critical	April	--	12,994.2	12,949.1	45.1	0.3%	12,941.0	53.2	0.4%	12,913.2	81.0	0.6%
ME 4	36 53 18	2014	Critical	May	--	5,190.3	5,137.2	53.1	1.0%	5,126.6	63.7	1.2%	5,094.7	95.6	1.8%
ME 4	36 53 18	2014	Critical	June	--	1,198.4	1,126.8	71.6	6.0%	1,112.8	85.6	7.1%	1,072.4	126.0	10.5%
ME 4	36 53 18	2014	Critical	July	--	546.0	480.0	66.0	12.1%	466.9	79.1	14.5%	432.7	113.2	20.7%
ME 4	36 53 18	2014	Critical	August	--	348.2	285.3	62.9	18.1%	272.7	75.5	21.7%	237.3	110.8	31.8%
ME 4	36 53 18	2014	Critical	September	Used in Summary Table Analysis	2,575.9	2,514.6	61.3	2.4%	2,502.4	73.5	2.9%	2,466.3	109.6	4.3%
ME 4	36 53 18	2015	Dry	October	Used in Summary Table Analysis	11,373.6	11,326.2	47.5	0.4%	11,316.8	56.8	0.5%	11,288.4	85.2	0.7%
ME 4	36 53 18	2015	Dry	November	Used in Summary Table Analysis	9,051.9	9,015.9	36.0	0.4%	9,008.6	43.3	0.5%	8,983.7	68.2	0.8%
ME 4	36 53 18	2015	Dry	December	--	32,669.0	32,637.7	31.3	0.1%	32,630.8	38.2	0.1%	32,611.1	57.9	0.2%
ME 4	36 53 18	2015	Dry	January	--	14,584.5	14,556.7	27.8	0.2%	14,550.9	33.6	0.2%	14,533.6	50.9	0.3%
ME 4	36 53 18	2015	Dry	February	--	27,253.5	27,228.0	25.5	0.1%	27,223.4	30.1	0.1%	27,207.2	46.3	0.2%
ME 4	36 53 18	2015	Dry	March	--	11,575.2	11,552.4	22.8	0.2%	11,547.8	27.4	0.2%	11,533.8	41.4	0.4%
ME 4	36 53 18	2015	Dry	April	--	8,399.3	8,354.9	44.4	0.5%	8,345.9	53.4	0.6%	8,319.3	80.0	1.0%
ME 4	36 53 18	2015	Dry	May	--	1,508.6	1,456.3	52.3	3.5%	1,445.9	62.6	4.2%	1,415.9	92.7	6.1%
ME 4	36 53 18	2015	Dry	June	--	652.5	586.3	66.2	10.1%	573.3	79.2	12.1%	534.8	117.7	18.0%
ME 4	36 53 18	2015	Dry	July	--	268.6	203.8	64.8	24.1%	191.0	77.7	28.9%	157.8	110.8	41.3%
ME 4	36 53 18	2015	Dry	August	--	166.5	103.9	62.6	37.6%	91.4	75.1	45.1%	56.7	109.8	66.0%
ME 4	36 53 18	2015	Dry	September	Used in Summary Table Analysis	120.7	62.2	58.5	48.5%	50.2	70.5	58.4%	15.3	105.4	87.3%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	36 53 18	2016	Above Normal	October	Used in Summary Table Analysis	86.0	37.3	48.7	56.7%	27.9	58.1	67.6%	0.0	86.0	100.0%
ME 4	36 53 18	2016	Above Normal	November	Used in Summary Table Analysis	3,877.1	3,839.6	37.5	1.0%	3,831.9	45.1	1.2%	3,804.6	72.5	1.9%
ME 4	36 53 18	2016	Above Normal	December	--	36,679.4	36,647.0	32.4	0.1%	36,640.0	39.4	0.1%	36,618.1	61.3	0.2%
ME 4	36 53 18	2016	Above Normal	January	--	57,379.6	57,349.5	30.1	0.1%	57,343.8	35.9	0.1%	57,324.1	55.6	0.1%
ME 4	36 53 18	2016	Above Normal	February	--	24,277.8	24,253.5	24.3	0.1%	24,247.7	30.1	0.1%	24,232.6	45.1	0.2%
ME 4	36 53 18	2016	Above Normal	March	--	41,805.6	41,781.3	24.3	0.1%	41,775.5	30.1	0.1%	41,761.6	44.0	0.1%
ME 4	36 53 18	2016	Above Normal	April	--	18,545.1	18,523.1	22.0	0.1%	18,518.5	26.6	0.1%	18,504.6	40.5	0.2%
ME 4	36 53 18	2016	Above Normal	May	--	5,217.5	5,189.9	27.5	0.5%	5,184.4	33.1	0.6%	5,167.6	49.9	1.0%
ME 4	36 53 18	2016	Above Normal	June	--	1,509.6	1,458.3	51.3	3.4%	1,449.2	60.4	4.0%	1,422.6	87.0	5.8%
ME 4	36 53 18	2016	Above Normal	July	--	823.2	766.1	57.2	6.9%	754.7	68.5	8.3%	721.3	101.9	12.4%
ME 4	36 53 18	2016	Above Normal	August	--	491.9	436.2	55.7	11.3%	425.1	66.8	13.6%	392.0	99.9	20.3%
ME 4	36 53 18	2016	Above Normal	September	Used in Summary Table Analysis	328.2	276.3	51.9	15.8%	265.7	62.5	19.0%	234.3	93.9	28.6%
ME 4	36 53 18	2017	Wet	October	Used in Summary Table Analysis	18,306.7	18,265.0	41.7	0.2%	18,256.9	49.8	0.3%	18,232.6	74.1	0.4%
ME 4	36 53 18	2017	Wet	November	Used in Summary Table Analysis	18,848.4	18,817.1	31.3	0.2%	18,810.2	38.2	0.2%	18,791.7	56.7	0.3%
ME 4	36 53 18	2017	Wet	December	--	24,150.5	24,122.7	27.8	0.1%	24,116.9	33.6	0.1%	24,100.7	49.8	0.2%
ME 4	36 53 18	2017	Wet	January	--	107,015.0	106,988.4	26.6	0.0%	106,983.8	31.3	0.0%	106,967.6	47.5	0.0%
ME 4	36 53 18	2017	Wet	February	--	81,905.1	81,880.8	24.3	0.0%	81,876.2	28.9	0.0%	81,861.1	44.0	0.1%
ME 4	36 53 18	2017	Wet	March	--	27,295.1	27,273.1	22.0	0.1%	27,268.5	26.6	0.1%	27,254.6	40.5	0.1%
ME 4	36 53 18	2017	Wet	April	--	22,958.3	22,937.5	20.8	0.1%	22,934.0	24.3	0.1%	22,921.3	37.0	0.2%
ME 4	36 53 18	2017	Wet	May	--	6,273.0	6,245.5	27.5	0.4%	6,239.9	33.1	0.5%	6,223.4	49.7	0.8%
ME 4	36 53 18	2017	Wet	June	--	2,118.3	2,065.2	53.1	2.5%	2,054.6	63.7	3.0%	2,023.7	94.6	4.5%
ME 4	36 53 18	2017	Wet	July	--	934.8	877.4	57.4	6.1%	866.2	68.7	7.3%	832.9	102.0	10.9%
ME 4	36 53 18	2017	Wet	August	--	507.0	451.5	55.5	11.0%	440.5	66.6	13.1%	407.6	99.4	19.6%
ME 4	36 53 18	2017	Wet	September	Used in Summary Table Analysis	323.0	271.8	51.2	15.9%	261.5	61.5	19.0%	230.8	92.2	28.5%
ME 4	36 53 18	2018	Above Normal	October	Used in Summary Table Analysis	275.8	235.2	40.5	14.7%	227.1	48.7	17.7%	202.6	73.2	26.5%
ME 4	36 53 18	2018	Above Normal	November	Used in Summary Table Analysis	10,813.9	10,782.1	31.8	0.3%	10,775.6	38.3	0.4%	10,756.1	57.8	0.5%
ME 4	36 53 18	2018	Above Normal	December	--	5,447.6	5,420.5	27.1	0.5%	5,414.9	32.6	0.6%	5,398.3	49.3	0.9%
ME 4	36 53 18	2018	Above Normal	January	--	17,819.4	17,795.1	24.3	0.1%	17,790.5	28.9	0.2%	17,775.5	44.0	0.2%
ME 4	36 53 18	2018	Above Normal	February	--	7,598.8	7,576.6	22.2	0.3%	7,572.1	26.7	0.4%	7,558.3	40.5	0.5%
ME 4	36 53 18	2018	Above Normal	March	--	20,724.5	20,703.7	20.8	0.1%	20,699.1	25.5	0.1%	20,686.3	38.2	0.2%
ME 4	36 53 18	2018	Above Normal	April	--	32,230.3	32,210.6	19.7	0.1%	32,207.2	23.1	0.1%	32,194.4	35.9	0.1%
ME 4	36 53 18	2018	Above Normal	May	--	6,989.1	6,947.5	41.7	0.6%	6,939.2	49.9	0.7%	6,914.2	74.9	1.1%
ME 4	36 53 18	2018	Above Normal	June	--	1,914.2	1,860.8	53.5	2.8%	1,850.2	64.0	3.3%	1,819.3	94.9	5.0%
ME 4	36 53 18	2018	Above Normal	July	--	781.7	724.0	57.7	7.4%	712.6	69.1	8.8%	678.6	103.0	13.2%
ME 4	36 53 18	2018	Above Normal	August	--	442.9	389.4	53.6	12.1%	378.7	64.3	14.5%	346.7	96.2	21.7%
ME 4	36 53 18	2018	Above Normal	September	Used in Summary Table Analysis	300.3	248.9	51.3	17.1%	238.7	61.6	20.5%	207.9	92.3	30.8%
ME 4	36 53 18	2019	Below Normal	October	Used in Summary Table Analysis	208.0	168.0	39.9	19.2%	159.9	48.0	23.1%	135.6	72.3	34.8%
ME 4	36 53 18	2019	Below Normal	November	Used in Summary Table Analysis	6,638.0	6,606.0	31.9	0.5%	6,599.5	38.4	0.6%	6,579.9	58.1	0.9%
ME 4	36 53 18	2019	Below Normal	December	--	14,691.0	14,663.2	27.8	0.2%	14,657.4	33.6	0.2%	14,641.2	49.8	0.3%
ME 4	36 53 18	2019	Below Normal	January	--	35,272.0	35,246.5	25.5	0.1%	35,240.7	31.3	0.1%	35,225.7	46.3	0.1%
ME 4	36 53 18	2019	Below Normal	February	--	141,979.2	141,956.0	23.1	0.0%	141,944.4	34.7	0.0%	141,932.9	46.3	0.0%
ME 4	36 53 18	2019	Below Normal	March	--	42,349.5	42,328.7	20.8	0.0%	42,325.2	24.3	0.1%	42,312.5	37.0	0.1%
ME 4	36 53 18	2019	Below Normal	April	--	15,280.1	15,260.4	19.7	0.1%	15,255.8	24.3	0.2%	15,244.2	35.9	0.2%
ME 4	36 53 18	2019	Below Normal	May	--	16,980.3	16,935.2	45.1	0.3%	16,927.1	53.2	0.3%	16,900.5	79.9	0.5%
ME 4	36 53 18	2019	Below Normal	June	--	4,242.6	4,186.2	56.4	1.3%	4,175.5	67.1	1.6%	4,143.9	98.7	2.3%
ME 4	36 53 18	2019	Below Normal	July	--	1,361.7	1,303.8	57.9	4.2%	1,292.4	69.3	5.1%	1,258.6	103.1	7.6%
ME 4	36 53 18	2019	Below Normal	August	--	596.9	541.9	54.9	9.2%	531.0	65.9	11.0%	498.6	98.3	16.5%
ME 4	36 53 18	2019	Below Normal	September	Used in Summary Table Analysis	462.9	411.8	51.1	11.0%	401.6	61.3	13.3%	370.9	92.0	19.9%
ME 4	36 53 18	2020	Dry	October	Used in Summary Table Analysis	355.9	317.5	38.4	10.8%	309.7	46.2	13.0%	286.3	69.6	19.6%
ME 4	36 53 18	2020	Dry	November	Used in Summary Table Analysis	320.3	290.1	30.2	9.4%	284.0	36.3	11.3%	265.6	54.7	17.1%
ME 4	36 53 18	2020	Dry	December	--	13,321.8	13,294.0	27.8	0.2%	13,288.2	33.6	0.3%	13,272.0	49.8	0.4%
ME 4	36 53 18	2020	Dry	January	--	22,358.8	22,333.3	25.5	0.1%	22,328.7	30.1	0.1%	22,312.5	46.3	0.2%
ME 4	36 53 18	2020	Dry	February	--	7,415.4	7,392.7	22.7	0.3%	7,388.0	27.4	0.4%	7,374.1	41.3	0.6%
ME 4	36 53 18	2020	Dry	March	--	7,248.6	7,227.2	21.4	0.3%	7,222.8	25.8	0.4%	7,209.7	38.9	0.5%
ME 4	36 53 18	2020	Dry	April	--	5,487.8	5,443.6	44.2	0.8%	5,434.8	53.0	1.0%	5,408.6	79.3	1.4%
ME 4	36 53 18	2020	Dry	May	--	7,383.3	7,330.4	52.9	0.7%	7,319.9	63.4	0.9%	7,288.4	94.9	1.3%
ME 4	36 53 18	2020	Dry	June	--	2,104.2	2,037.4	66.8	3.2%	2,024.4	79.7	3.8%	1,986.5	117.7	5.6%
ME 4	36 53 18	2020	Dry	July	--	796.5	729.2	67.3	8.5%	715.8	80.6	10.1%	681.5	115.0	14.4%
ME 4	36 53 18	2020	Dry	August	--	399.2	333.1	66.1	16.6%	320.0	79.3	19.9%	283.4	115.8	29.0%
ME 4	36 53 18	2020	Dry	September	Used in Summary Table Analysis	248.6	186.9	61.8	24.8%	174.2	74.4	29.9%	137.4	111.2	44.7%
ME 4	35 53 19	2000	Above Normal	October	Used in Summary Table Analysis	817.3	776.5	40.8	5.0%	768.3	49.0	6.0%	743.6	73.7	9.0%
ME 4	35 53 19	2000	Above Normal	November	Used in Summary Table Analysis	12,153.9	12,120.4	33.6	0.3%	12,114.6	39.4	0.3%	12,093.8	60.2	0.5%
ME 4	35 53 19	2000	Above Normal	December	--	10,829.3	10,801.2	28.1	0.3%	10,795.5	33.8	0.3%	10,778.2	51.0	0.5%
ME 4	35 53 19	2000	Above Normal	January	--	28,635.4	28,610.0	25.5	0.1%	28,604.2	31.3	0.1%	28,589.1	46.3	0.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	35 53 19	2000	Above Normal	February	--	37,079.9	37,056.7	23.1	0.1%	37,052.1	27.8	0.1%	37,037.0	42.8	0.1%
ME 4	35 53 19	2000	Above Normal	March	--	18,328.7	18,306.7	22.0	0.1%	18,302.1	26.6	0.1%	18,289.4	39.4	0.2%
ME 4	35 53 19	2000	Above Normal	April	--	12,322.9	12,302.1	20.8	0.2%	12,298.6	24.3	0.2%	12,285.9	37.0	0.3%
ME 4	35 53 19	2000	Above Normal	May	--	7,102.0	7,058.3	43.6	0.6%	7,049.5	52.4	0.7%	7,023.6	78.4	1.1%
ME 4	35 53 19	2000	Above Normal	June	--	2,613.8	2,549.5	64.2	2.5%	2,536.8	77.0	2.9%	2,499.2	114.6	4.4%
ME 4	35 53 19	2000	Above Normal	July	--	992.4	934.3	58.0	5.8%	922.9	69.5	7.0%	888.8	103.6	10.4%
ME 4	35 53 19	2000	Above Normal	August	--	522.5	467.8	54.7	10.5%	456.9	65.5	12.5%	424.4	98.1	18.8%
ME 4	35 53 19	2000	Above Normal	September	Used in Summary Table Analysis	295.6	247.1	48.5	16.4%	237.4	58.2	19.7%	208.3	87.3	29.5%
ME 4	35 53 19	2001	Dry	October	Used in Summary Table Analysis	3,822.6	3,782.4	40.2	1.1%	3,774.2	48.4	1.3%	3,749.8	72.8	1.9%
ME 4	35 53 19	2001	Dry	November	Used in Summary Table Analysis	6,136.9	6,104.5	32.4	0.5%	6,097.9	39.0	0.6%	6,078.1	58.8	1.0%
ME 4	35 53 19	2001	Dry	December	--	8,851.4	8,823.1	28.2	0.3%	8,817.5	33.9	0.4%	8,800.2	51.2	0.6%
ME 4	35 53 19	2001	Dry	January	--	12,816.0	12,790.5	25.5	0.2%	12,785.9	30.1	0.2%	12,769.7	46.3	0.4%
ME 4	35 53 19	2001	Dry	February	--	17,487.3	17,464.1	23.1	0.1%	17,459.5	27.8	0.2%	17,445.6	41.7	0.2%
ME 4	35 53 19	2001	Dry	March	--	12,304.4	12,283.6	20.8	0.2%	12,278.9	25.5	0.2%	12,265.0	39.4	0.3%
ME 4	35 53 19	2001	Dry	April	--	10,980.1	10,935.3	44.8	0.4%	10,926.4	53.7	0.5%	10,899.8	80.3	0.7%
ME 4	35 53 19	2001	Dry	May	--	2,636.6	2,583.8	52.8	2.0%	2,573.3	63.3	2.4%	2,541.8	94.8	3.6%
ME 4	35 53 19	2001	Dry	June	--	2,653.0	2,581.9	71.1	2.7%	2,568.1	85.0	3.2%	2,527.2	125.8	4.7%
ME 4	35 53 19	2001	Dry	July	--	718.3	651.4	66.9	9.3%	638.1	80.2	11.2%	603.7	114.6	16.0%
ME 4	35 53 19	2001	Dry	August	--	172.7	107.4	65.2	37.8%	94.4	78.2	45.3%	58.1	114.6	66.4%
ME 4	35 53 19	2001	Dry	September	Used in Summary Table Analysis	95.6	37.4	58.2	60.9%	25.8	69.8	73.0%	0.0	95.6	100.0%
ME 4	35 53 19	2002	Below Normal	October	Used in Summary Table Analysis	265.3	216.6	48.8	18.4%	206.7	58.6	22.1%	177.2	88.1	33.2%
ME 4	35 53 19	2002	Below Normal	November	Used in Summary Table Analysis	12,042.8	12,004.6	38.2	0.3%	11,996.5	46.3	0.4%	11,969.9	72.9	0.6%
ME 4	35 53 19	2002	Below Normal	December	--	35,736.1	35,701.4	34.7	0.1%	35,694.4	41.7	0.1%	35,673.6	62.5	0.2%
ME 4	35 53 19	2002	Below Normal	January	--	30,910.9	30,880.8	30.1	0.1%	30,875.0	35.9	0.1%	30,856.5	54.4	0.2%
ME 4	35 53 19	2002	Below Normal	February	--	24,696.8	24,670.1	26.6	0.1%	24,664.4	32.4	0.1%	24,647.0	49.8	0.2%
ME 4	35 53 19	2002	Below Normal	March	--	17,794.0	17,768.5	25.5	0.1%	17,762.7	31.3	0.2%	17,747.7	46.3	0.3%
ME 4	35 53 19	2002	Below Normal	April	--	9,930.3	9,885.4	44.9	0.5%	9,876.5	53.8	0.5%	9,849.7	80.7	0.8%
ME 4	35 53 19	2002	Below Normal	May	--	3,320.8	3,267.9	52.9	1.6%	3,257.3	63.5	1.9%	3,225.8	95.0	2.9%
ME 4	35 53 19	2002	Below Normal	June	--	854.2	794.8	59.3	6.9%	783.1	71.0	8.3%	748.4	105.7	12.4%
ME 4	35 53 19	2002	Below Normal	July	--	362.7	302.4	60.2	16.6%	290.5	72.2	19.9%	255.7	107.0	29.5%
ME 4	35 53 19	2002	Below Normal	August	--	227.5	170.8	56.7	24.9%	159.5	68.0	29.9%	125.2	102.3	45.0%
ME 4	35 53 19	2002	Below Normal	September	Used in Summary Table Analysis	164.2	110.7	53.5	32.6%	100.0	64.1	39.1%	67.2	97.0	59.1%
ME 4	35 53 19	2003	Wet	October	Used in Summary Table Analysis	129.1	85.2	43.9	34.0%	76.3	52.8	40.9%	49.7	79.4	61.5%
ME 4	35 53 19	2003	Wet	November	Used in Summary Table Analysis	896.8	861.5	35.3	3.9%	854.3	42.5	4.7%	832.6	64.2	7.2%
ME 4	35 53 19	2003	Wet	December	--	56,945.6	56,914.4	31.3	0.1%	56,907.4	38.2	0.1%	56,888.9	56.7	0.1%
ME 4	35 53 19	2003	Wet	January	--	31,555.6	31,527.8	27.8	0.1%	31,522.0	33.6	0.1%	31,505.8	49.8	0.2%
ME 4	35 53 19	2003	Wet	February	--	20,366.9	20,341.4	25.5	0.1%	20,336.8	30.1	0.1%	20,320.6	46.3	0.2%
ME 4	35 53 19	2003	Wet	March	--	24,054.4	24,030.1	24.3	0.1%	24,025.5	28.9	0.1%	24,011.6	42.8	0.2%
ME 4	35 53 19	2003	Wet	April	--	42,965.3	42,942.1	23.1	0.1%	42,937.5	27.8	0.1%	42,923.6	41.7	0.1%
ME 4	35 53 19	2003	Wet	May	--	12,230.3	12,185.2	45.1	0.4%	12,177.1	53.2	0.4%	12,149.3	81.0	0.7%
ME 4	35 53 19	2003	Wet	June	--	3,167.6	3,111.0	56.6	1.8%	3,099.9	67.7	2.1%	3,067.2	100.3	3.2%
ME 4	35 53 19	2003	Wet	July	--	1,475.1	1,415.5	59.6	4.0%	1,403.7	71.4	4.8%	1,368.6	106.5	7.2%
ME 4	35 53 19	2003	Wet	August	--	760.9	702.5	58.4	7.7%	690.5	70.4	9.3%	653.2	107.7	14.2%
ME 4	35 53 19	2003	Wet	September	Used in Summary Table Analysis	458.5	409.2	49.4	10.8%	399.3	59.3	12.9%	368.6	90.0	19.6%
ME 4	35 53 19	2004	Wet	October	Used in Summary Table Analysis	325.4	284.4	40.9	12.6%	276.2	49.2	15.1%	251.2	74.2	22.8%
ME 4	35 53 19	2004	Wet	November	Used in Summary Table Analysis	5,817.7	5,784.4	33.3	0.6%	5,777.7	40.0	0.7%	5,757.1	60.6	1.0%
ME 4	35 53 19	2004	Wet	December	--	36,380.8	36,351.9	28.9	0.1%	36,344.9	35.9	0.1%	36,327.5	53.2	0.1%
ME 4	35 53 19	2004	Wet	January	--	31,522.0	31,496.5	25.5	0.1%	31,490.7	31.3	0.1%	31,474.5	47.5	0.2%
ME 4	35 53 19	2004	Wet	February	--	38,282.4	38,258.1	24.3	0.1%	38,253.5	28.9	0.1%	38,238.4	44.0	0.1%
ME 4	35 53 19	2004	Wet	March	--	16,531.3	16,509.3	22.0	0.1%	16,504.6	26.6	0.2%	16,490.7	40.5	0.2%
ME 4	35 53 19	2004	Wet	April	--	9,455.7	9,434.5	21.2	0.2%	9,430.2	25.5	0.3%	9,417.1	38.5	0.4%
ME 4	35 53 19	2004	Wet	May	--	3,424.1	3,380.2	43.9	1.3%	3,371.5	52.5	1.5%	3,345.4	78.7	2.3%
ME 4	35 53 19	2004	Wet	June	--	692.1	637.7	54.5	7.9%	627.0	65.2	9.4%	595.3	96.8	14.0%
ME 4	35 53 19	2004	Wet	July	--	356.7	298.1	58.6	16.4%	286.5	70.2	19.7%	252.0	104.7	29.3%
ME 4	35 53 19	2004	Wet	August	--	225.6	170.3	55.2	24.5%	159.4	66.2	29.4%	126.4	99.2	44.0%
ME 4	35 53 19	2004	Wet	September	Used in Summary Table Analysis	162.5	110.0	52.5	32.3%	99.4	63.0	38.8%	67.9	94.6	58.2%
ME 4	35 53 19	2005	Above Normal	October	Used in Summary Table Analysis	7,702.0	7,660.2	41.8	0.5%	7,651.7	50.2	0.7%	7,626.4	75.6	1.0%
ME 4	35 53 19	2005	Above Normal	November	Used in Summary Table Analysis	2,258.8	2,226.0	32.8	1.5%	2,219.3	39.5	1.7%	2,199.3	59.5	2.6%
ME 4	35 53 19	2005	Above Normal	December	--	21,086.8	21,057.9	28.9	0.1%	21,052.1	34.7	0.2%	21,034.7	52.1	0.2%
ME 4	35 53 19	2005	Above Normal	January	--	22,431.7	22,406.3	25.5	0.1%	22,400.5	31.3	0.1%	22,384.3	47.5	0.2%
ME 4	35 53 19	2005	Above Normal	February	--	14,018.5	13,995.4	23.1	0.2%	13,990.7	27.8	0.2%	13,976.9	41.7	0.3%
ME 4	35 53 19	2005	Above Normal	March	--	28,603.0	28,581.0	22.0	0.1%	28,576.4	26.6	0.1%	28,562.5	40.5	0.1%
ME 4	35 53 19	2005	Above Normal	April	--	21,468.8	21,446.8	22.0	0.1%	21,443.3	25.5	0.1%	21,430.6	38.2	0.2%
ME 4	35 53 19	2005	Above Normal	May	--	19,598.4	19,553.2	45.1	0.2%	19,544.0	54.4	0.3%	19,517.4	81.0	0.4%

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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	35 53 19	2005	Above Normal	June	--	15,905.1	15,839.1	66.0	0.4%	15,826.4	78.7	0.5%	15,788.2	116.9	0.7%
ME 4	35 53 19	2005	Above Normal	July	--	2,863.9	2,803.5	60.4	2.1%	2,792.0	71.9	2.5%	2,757.9	106.0	3.7%
ME 4	35 53 19	2005	Above Normal	August	--	983.9	929.0	54.8	5.6%	918.2	65.6	6.7%	885.9	98.0	10.0%
ME 4	35 53 19	2005	Above Normal	September	Used in Summary Table Analysis	525.3	476.7	48.6	9.2%	467.1	58.2	11.1%	438.1	87.2	16.6%
ME 4	35 53 19	2006	Wet	October	Used in Summary Table Analysis	635.2	595.8	39.4	6.2%	587.9	47.3	7.5%	563.9	71.4	11.2%
ME 4	35 53 19	2006	Wet	November	Used in Summary Table Analysis	9,332.6	9,301.3	31.4	0.3%	9,294.9	37.7	0.4%	9,275.7	56.9	0.6%
ME 4	35 53 19	2006	Wet	December	--	43,589.1	43,561.3	27.8	0.1%	43,555.6	33.6	0.1%	43,537.0	52.1	0.1%
ME 4	35 53 19	2006	Wet	January	--	46,380.8	46,355.3	25.5	0.1%	46,349.5	31.3	0.1%	46,333.3	47.5	0.1%
ME 4	35 53 19	2006	Wet	February	--	26,653.9	26,631.9	22.0	0.1%	26,627.3	26.6	0.1%	26,612.3	41.7	0.2%
ME 4	35 53 19	2006	Wet	March	--	47,223.4	47,201.4	22.0	0.0%	47,196.8	26.6	0.1%	47,184.0	39.4	0.1%
ME 4	35 53 19	2006	Wet	April	--	30,453.7	30,434.0	19.7	0.1%	30,429.4	24.3	0.1%	30,417.8	35.9	0.1%
ME 4	35 53 19	2006	Wet	May	--	14,222.2	14,194.4	27.8	0.2%	14,189.8	32.4	0.2%	14,173.6	48.6	0.3%
ME 4	35 53 19	2006	Wet	June	--	3,548.6	3,494.4	54.2	1.5%	3,483.8	64.8	1.8%	3,452.4	96.2	2.7%
ME 4	35 53 19	2006	Wet	July	--	1,280.4	1,222.9	57.5	4.5%	1,211.7	68.8	5.4%	1,178.2	102.2	8.0%
ME 4	35 53 19	2006	Wet	August	--	666.4	610.4	56.0	8.4%	599.3	67.1	10.1%	566.2	100.2	15.0%
ME 4	35 53 19	2006	Wet	September	Used in Summary Table Analysis	427.1	377.9	49.2	11.5%	368.2	58.9	13.8%	338.8	88.3	20.7%
ME 4	35 53 19	2007	Above Normal	October	Used in Summary Table Analysis	275.0	234.8	40.2	14.6%	226.7	48.3	17.6%	202.2	72.8	26.5%
ME 4	35 53 19	2007	Above Normal	November	Used in Summary Table Analysis	8,689.9	8,657.2	32.8	0.4%	8,650.6	39.4	0.5%	8,630.4	59.5	0.7%
ME 4	35 53 19	2007	Above Normal	December	--	20,459.5	20,430.6	28.9	0.1%	20,424.8	34.7	0.2%	20,406.3	53.2	0.3%
ME 4	35 53 19	2007	Above Normal	January	--	10,264.0	10,238.5	25.5	0.2%	10,233.3	30.7	0.3%	10,217.4	46.6	0.5%
ME 4	35 53 19	2007	Above Normal	February	--	30,627.3	30,603.0	24.3	0.1%	30,597.2	30.1	0.1%	30,582.2	45.1	0.1%
ME 4	35 53 19	2007	Above Normal	March	--	13,111.1	13,088.0	23.1	0.2%	13,083.3	27.8	0.2%	13,069.4	41.7	0.3%
ME 4	35 53 19	2007	Above Normal	April	--	11,542.8	11,499.8	43.1	0.4%	11,491.2	51.6	0.4%	11,465.5	77.3	0.7%
ME 4	35 53 19	2007	Above Normal	May	--	4,143.2	4,092.0	51.2	1.2%	4,081.7	61.5	1.5%	4,051.2	92.0	2.2%
ME 4	35 53 19	2007	Above Normal	June	--	1,500.6	1,439.7	60.9	4.1%	1,427.7	72.9	4.9%	1,392.1	108.4	7.2%
ME 4	35 53 19	2007	Above Normal	July	--	496.4	435.2	61.2	12.3%	423.1	73.3	14.8%	387.6	108.8	21.9%
ME 4	35 53 19	2007	Above Normal	August	--	223.6	168.3	55.2	24.7%	157.3	66.2	29.6%	123.9	99.7	44.6%
ME 4	35 53 19	2007	Above Normal	September	Used in Summary Table Analysis	151.2	98.9	52.3	34.6%	88.5	62.7	41.4%	57.2	93.9	62.1%
ME 4	35 53 19	2008	Dry	October	Used in Summary Table Analysis	3,441.6	3,398.8	42.7	1.2%	3,390.3	51.3	1.5%	3,364.1	77.4	2.2%
ME 4	35 53 19	2008	Dry	November	Used in Summary Table Analysis	3,282.4	3,249.3	33.1	1.0%	3,242.6	39.8	1.2%	3,222.1	60.3	1.8%
ME 4	35 53 19	2008	Dry	December	--	23,191.0	23,162.0	28.9	0.1%	23,155.1	35.9	0.2%	23,137.7	53.2	0.2%
ME 4	35 53 19	2008	Dry	January	--	37,593.8	37,566.0	27.8	0.1%	37,560.2	33.6	0.1%	37,542.8	50.9	0.1%
ME 4	35 53 19	2008	Dry	February	--	26,285.9	26,261.6	24.3	0.1%	26,256.9	28.9	0.1%	26,243.1	42.8	0.2%
ME 4	35 53 19	2008	Dry	March	--	11,800.9	11,778.9	22.0	0.2%	11,775.5	25.5	0.2%	11,761.6	39.4	0.3%
ME 4	35 53 19	2008	Dry	April	--	9,021.6	8,977.9	43.8	0.5%	8,969.2	52.4	0.6%	8,943.1	78.6	0.9%
ME 4	35 53 19	2008	Dry	May	--	1,358.7	1,312.7	45.9	3.4%	1,303.8	54.9	4.0%	1,277.1	81.6	6.0%
ME 4	35 53 19	2008	Dry	June	--	438.3	372.3	66.0	15.1%	359.4	79.0	18.0%	321.0	117.3	26.8%
ME 4	35 53 19	2008	Dry	July	--	256.3	190.9	65.4	25.5%	178.0	78.3	30.5%	144.5	111.8	43.6%
ME 4	35 53 19	2008	Dry	August	--	179.7	116.2	63.5	35.4%	103.5	76.2	42.4%	65.4	114.4	63.6%
ME 4	35 53 19	2008	Dry	September	Used in Summary Table Analysis	141.3	80.2	61.1	43.2%	68.1	73.2	51.8%	32.8	108.5	76.8%
ME 4	35 53 19	2009	Critical	October	Used in Summary Table Analysis	924.9	876.8	48.2	5.2%	867.1	57.8	6.3%	837.7	87.3	9.4%
ME 4	35 53 19	2009	Critical	November	Used in Summary Table Analysis	5,526.6	5,488.9	37.7	0.7%	5,481.4	45.3	0.8%	5,455.6	71.1	1.3%
ME 4	35 53 19	2009	Critical	December	--	12,199.1	12,166.7	32.4	0.3%	12,159.7	39.4	0.3%	12,138.9	60.2	0.5%
ME 4	35 53 19	2009	Critical	January	--	8,805.6	8,775.8	29.7	0.3%	8,769.8	35.8	0.4%	8,751.4	54.2	0.6%
ME 4	35 53 19	2009	Critical	February	--	22,642.4	22,615.7	26.6	0.1%	22,611.1	31.3	0.1%	22,594.9	47.5	0.2%
ME 4	35 53 19	2009	Critical	March	--	21,142.4	21,119.2	23.1	0.1%	21,113.4	28.9	0.1%	21,098.4	44.0	0.2%
ME 4	35 53 19	2009	Critical	April	--	10,099.0	10,053.5	45.5	0.5%	10,044.4	54.5	0.5%	10,017.1	81.8	0.8%
ME 4	35 53 19	2009	Critical	May	--	15,593.8	15,538.2	55.6	0.4%	15,527.8	66.0	0.4%	15,494.2	99.5	0.6%
ME 4	35 53 19	2009	Critical	June	--	3,161.2	3,090.6	70.6	2.2%	3,077.1	84.1	2.7%	3,036.3	124.9	4.0%
ME 4	35 53 19	2009	Critical	July	--	1,263.5	1,197.5	66.1	5.2%	1,184.5	79.1	6.3%	1,150.7	112.9	8.9%
ME 4	35 53 19	2009	Critical	August	--	669.4	605.4	64.0	9.6%	592.7	76.7	11.5%	557.0	112.4	16.8%
ME 4	35 53 19	2009	Critical	September	Used in Summary Table Analysis	390.4	333.1	57.3	14.7%	321.8	68.6	17.6%	288.6	101.8	26.1%
ME 4	35 53 19	2010	Below Normal	October	Used in Summary Table Analysis	6,089.8	6,041.0	48.8	0.8%	6,031.1	58.7	1.0%	6,000.5	89.4	1.5%
ME 4	35 53 19	2010	Below Normal	November	Used in Summary Table Analysis	8,300.7	8,261.7	39.0	0.5%	8,253.8	46.9	0.6%	8,227.3	73.4	0.9%
ME 4	35 53 19	2010	Below Normal	December	--	12,378.5	12,344.9	33.6	0.3%	12,338.0	40.5	0.3%	12,317.1	61.3	0.5%
ME 4	35 53 19	2010	Below Normal	January	--	36,316.0	36,285.9	30.1	0.1%	36,278.9	37.0	0.1%	36,260.4	55.6	0.2%
ME 4	35 53 19	2010	Below Normal	February	--	27,268.5	27,240.7	27.8	0.1%	27,236.1	32.4	0.1%	27,218.8	49.8	0.2%
ME 4	35 53 19	2010	Below Normal	March	--	28,856.5	28,832.2	24.3	0.1%	28,826.4	30.1	0.1%	28,811.3	45.1	0.2%
ME 4	35 53 19	2010	Below Normal	April	--	40,052.1	40,027.8	24.3	0.1%	40,022.0	30.1	0.1%	40,008.1	44.0	0.1%
ME 4	35 53 19	2010	Below Normal	May	--	20,298.6	20,251.2	47.5	0.2%	20,243.1	55.6	0.3%	20,214.1	84.5	0.4%
ME 4	35 53 19	2010	Below Normal	June	--	9,373.8	9,306.5	67.4	0.7%	9,293.3	80.6	0.9%	9,253.8	120.0	1.3%
ME 4	35 53 19	2010	Below Normal	July	--	1,455.4	1,394.2	61.2	4.2%	1,382.4	73.0	5.0%	1,347.3	108.1	7.4%
ME 4	35 53 19	2010	Below Normal	August	--	569.9	513.6	56.3	9.9%	502.6	67.4	11.8%	469.4	100.5	17.6%
ME 4	35 53 19	2010	Below Normal	September	Used in Summary Table Analysis	652.0	598.3	53.8	8.2%	587.5	64.5	9.9%	555.4	96.7	14.8%

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Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	35 53 19	2011	Wet	October	Used in Summary Table Analysis	9,652.2	9,611.3	40.9	0.4%	9,603.1	49.1	0.5%	9,578.2	74.0	0.8%
ME 4	35 53 19	2011	Wet	November	Used in Summary Table Analysis	14,241.9	14,209.5	32.4	0.2%	14,202.5	39.4	0.3%	14,181.7	60.2	0.4%
ME 4	35 53 19	2011	Wet	December	--	33,794.0	33,765.0	28.9	0.1%	33,759.3	34.7	0.1%	33,740.7	53.2	0.2%
ME 4	35 53 19	2011	Wet	January	--	14,173.6	14,148.1	25.5	0.2%	14,143.5	30.1	0.2%	14,127.3	46.3	0.3%
ME 4	35 53 19	2011	Wet	February	--	20,784.7	20,760.4	24.3	0.1%	20,755.8	28.9	0.1%	20,740.7	44.0	0.2%
ME 4	35 53 19	2011	Wet	March	--	52,067.1	52,044.0	23.1	0.0%	52,039.4	27.8	0.1%	52,025.5	41.7	0.1%
ME 4	35 53 19	2011	Wet	April	--	24,821.8	24,799.8	22.0	0.1%	24,795.1	26.6	0.1%	24,781.3	40.5	0.2%
ME 4	35 53 19	2011	Wet	May	--	11,392.6	11,348.0	44.6	0.4%	11,339.1	53.5	0.5%	11,312.5	80.1	0.7%
ME 4	35 53 19	2011	Wet	June	--	7,066.1	7,000.5	65.6	0.9%	6,987.5	78.6	1.1%	6,949.2	116.9	1.7%
ME 4	35 53 19	2011	Wet	July	--	1,828.9	1,763.5	65.4	3.6%	1,750.7	78.2	4.3%	1,713.8	115.2	6.3%
ME 4	35 53 19	2011	Wet	August	--	777.5	721.9	55.6	7.2%	710.9	66.6	8.6%	678.0	99.5	12.8%
ME 4	35 53 19	2011	Wet	September	Used in Summary Table Analysis	434.1	383.5	50.6	11.6%	373.4	60.6	14.0%	343.3	90.8	20.9%
ME 4	35 53 19	2012	Below Normal	October	Used in Summary Table Analysis	4,550.8	4,509.3	41.6	0.9%	4,500.8	50.0	1.1%	4,475.2	75.6	1.7%
ME 4	35 53 19	2012	Below Normal	November	Used in Summary Table Analysis	8,258.2	8,224.9	33.3	0.4%	8,218.2	40.0	0.5%	8,197.6	60.6	0.7%
ME 4	35 53 19	2012	Below Normal	December	--	5,191.9	5,163.2	28.7	0.6%	5,157.3	34.6	0.7%	5,139.6	52.3	1.0%
ME 4	35 53 19	2012	Below Normal	January	--	20,175.9	20,150.5	25.5	0.1%	20,144.7	31.3	0.2%	20,128.5	47.5	0.2%
ME 4	35 53 19	2012	Below Normal	February	--	18,230.3	18,206.0	24.3	0.1%	18,201.4	28.9	0.2%	18,186.3	44.0	0.2%
ME 4	35 53 19	2012	Below Normal	March	--	45,496.5	45,473.4	23.1	0.1%	45,468.8	27.8	0.1%	45,453.7	42.8	0.1%
ME 4	35 53 19	2012	Below Normal	April	--	26,885.4	26,863.4	22.0	0.1%	26,858.8	26.6	0.1%	26,844.9	40.5	0.2%
ME 4	35 53 19	2012	Below Normal	May	--	7,488.9	7,444.6	44.3	0.6%	7,435.8	53.1	0.7%	7,409.5	79.4	1.1%
ME 4	35 53 19	2012	Below Normal	June	--	5,525.1	5,458.2	66.9	1.2%	5,445.1	80.0	1.4%	5,406.4	118.8	2.1%
ME 4	35 53 19	2012	Below Normal	July	--	2,229.3	2,166.1	63.2	2.8%	2,153.6	75.7	3.4%	2,116.4	112.8	5.1%
ME 4	35 53 19	2012	Below Normal	August	--	388.8	337.8	50.9	13.1%	327.7	61.0	15.7%	297.3	91.4	23.5%
ME 4	35 53 19	2012	Below Normal	September	Used in Summary Table Analysis	249.6	204.2	45.4	18.2%	195.2	54.4	21.8%	168.1	81.5	32.7%
ME 4	35 53 19	2013	Below Normal	October	Used in Summary Table Analysis	1,917.7	1,878.0	39.7	2.1%	1,870.0	47.7	2.5%	1,845.9	71.8	3.7%
ME 4	35 53 19	2013	Below Normal	November	Used in Summary Table Analysis	14,723.4	14,691.0	32.4	0.2%	14,685.2	38.2	0.3%	14,665.5	57.9	0.4%
ME 4	35 53 19	2013	Below Normal	December	--	60,077.5	60,048.6	28.9	0.0%	60,042.8	34.7	0.1%	60,024.3	53.2	0.1%
ME 4	35 53 19	2013	Below Normal	January	--	22,226.9	22,202.5	24.3	0.1%	22,196.8	30.1	0.1%	22,181.7	45.1	0.2%
ME 4	35 53 19	2013	Below Normal	February	--	8,856.9	8,833.4	23.5	0.3%	8,828.6	28.4	0.3%	8,814.2	42.7	0.5%
ME 4	35 53 19	2013	Below Normal	March	--	10,347.5	10,324.8	22.7	0.2%	10,320.3	27.2	0.3%	10,306.4	41.1	0.4%
ME 4	35 53 19	2013	Below Normal	April	--	8,295.6	8,253.6	42.0	0.5%	8,245.1	50.5	0.6%	8,220.0	75.6	0.9%
ME 4	35 53 19	2013	Below Normal	May	--	4,437.2	4,386.2	50.9	1.1%	4,376.2	61.0	1.4%	4,345.8	91.3	2.1%
ME 4	35 53 19	2013	Below Normal	June	--	2,111.9	2,051.4	60.5	2.9%	2,039.5	72.5	3.4%	2,003.9	108.0	5.1%
ME 4	35 53 19	2013	Below Normal	July	--	718.3	659.8	58.5	8.1%	648.3	70.1	9.8%	614.5	103.8	14.5%
ME 4	35 53 19	2013	Below Normal	August	--	340.6	285.5	55.1	16.2%	274.5	66.1	19.4%	241.0	99.6	29.2%
ME 4	35 53 19	2013	Below Normal	September	Used in Summary Table Analysis	4,795.7	4,738.7	57.1	1.2%	4,727.2	68.5	1.4%	4,693.1	102.7	2.1%
ME 4	35 53 19	2014	Critical	October	Used in Summary Table Analysis	280.5	238.7	41.8	14.9%	230.2	50.2	17.9%	205.7	74.8	26.7%
ME 4	35 53 19	2014	Critical	November	Used in Summary Table Analysis	1,542.7	1,509.0	33.7	2.2%	1,502.2	40.5	2.6%	1,481.6	61.1	4.0%
ME 4	35 53 19	2014	Critical	December	--	1,592.1	1,562.5	29.6	1.9%	1,556.5	35.6	2.2%	1,538.3	53.8	3.4%
ME 4	35 53 19	2014	Critical	January	--	2,826.3	2,799.8	26.5	0.9%	2,794.3	31.9	1.1%	2,777.9	48.4	1.7%
ME 4	35 53 19	2014	Critical	February	--	15,768.5	15,744.2	24.3	0.2%	15,739.6	28.9	0.2%	15,724.5	44.0	0.3%
ME 4	35 53 19	2014	Critical	March	--	31,506.9	31,483.8	23.1	0.1%	31,479.2	27.8	0.1%	31,464.1	42.8	0.1%
ME 4	35 53 19	2014	Critical	April	--	12,997.7	12,952.5	45.1	0.3%	12,943.3	54.4	0.4%	12,915.5	82.2	0.6%
ME 4	35 53 19	2014	Critical	May	--	5,192.1	5,138.5	53.6	1.0%	5,127.8	64.4	1.2%	5,095.5	96.6	1.9%
ME 4	35 53 19	2014	Critical	June	--	1,199.1	1,126.7	72.3	6.0%	1,112.6	86.5	7.2%	1,071.7	127.4	10.6%
ME 4	35 53 19	2014	Critical	July	--	546.3	479.2	67.1	12.3%	465.9	80.4	14.7%	431.1	115.2	21.1%
ME 4	35 53 19	2014	Critical	August	--	348.5	284.4	64.1	18.4%	271.6	76.9	22.1%	235.5	113.1	32.4%
ME 4	35 53 19	2014	Critical	September	Used in Summary Table Analysis	2,577.5	2,514.7	62.8	2.4%	2,502.3	75.2	2.9%	2,465.4	112.2	4.4%
ME 4	35 53 19	2015	Dry	October	Used in Summary Table Analysis	11,380.4	11,331.5	49.0	0.4%	11,321.9	58.6	0.5%	11,292.7	87.7	0.8%
ME 4	35 53 19	2015	Dry	November	Used in Summary Table Analysis	9,059.1	9,022.0	37.2	0.4%	9,014.5	44.7	0.5%	8,988.8	70.4	0.8%
ME 4	35 53 19	2015	Dry	December	--	32,695.6	32,664.4	31.3	0.1%	32,657.4	38.2	0.1%	32,636.6	59.0	0.2%
ME 4	35 53 19	2015	Dry	January	--	14,589.1	14,560.2	28.9	0.2%	14,554.4	34.7	0.2%	14,535.9	53.2	0.4%
ME 4	35 53 19	2015	Dry	February	--	27,263.9	27,238.4	25.5	0.1%	27,233.8	30.1	0.1%	27,217.6	46.3	0.2%
ME 4	35 53 19	2015	Dry	March	--	11,577.5	11,554.6	22.9	0.2%	11,550.0	27.5	0.2%	11,535.6	41.9	0.4%
ME 4	35 53 19	2015	Dry	April	--	8,406.4	8,361.6	44.8	0.5%	8,352.5	53.8	0.6%	8,325.6	80.8	1.0%
ME 4	35 53 19	2015	Dry	May	--	1,508.8	1,455.9	52.9	3.5%	1,445.5	63.3	4.2%	1,415.0	93.8	6.2%
ME 4	35 53 19	2015	Dry	June	--	652.8	585.7	67.0	10.3%	572.5	80.2	12.3%	533.6	119.2	18.3%
ME 4	35 53 19	2015	Dry	July	--	268.8	202.8	66.0	24.5%	189.8	79.1	29.4%	155.9	112.9	42.0%
ME 4	35 53 19	2015	Dry	August	--	166.8	102.9	63.9	38.3%	90.1	76.7	46.0%	54.6	112.2	67.3%
ME 4	35 53 19	2015	Dry	September	Used in Summary Table Analysis	120.9	60.9	60.0	49.6%	48.6	72.3	59.8%	12.9	108.0	89.4%
ME 4	35 53 19	2016	Above Normal	October	Used in Summary Table Analysis	86.1	36.0	50.2	58.2%	26.3	59.8	69.5%	0.0	86.1	100.0%
ME 4	35 53 19	2016	Above Normal	November	Used in Summary Table Analysis	3,883.2	3,844.3	38.9	1.0%	3,836.5	46.8	1.2%	3,808.2	75.0	1.9%
ME 4	35 53 19	2016	Above Normal	December	--	36,711.8	36,677.1	34.7	0.1%	36,670.1	41.7	0.1%	36,648.1	63.7	0.2%
ME 4	35 53 19	2016	Above Normal	January	--	57,414.4	57,383.1	31.3	0.1%	57,376.2	38.2	0.1%	57,356.5	57.9	0.1%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 4	35 53 19	2016	Above Normal	February	--	24,284.7	24,258.1	26.6	0.1%	24,253.5	31.3	0.1%	24,237.3	47.5	0.2%
ME 4	35 53 19	2016	Above Normal	March	--	41,821.8	41,796.3	25.5	0.1%	41,791.7	30.1	0.1%	41,775.5	46.3	0.1%
ME 4	35 53 19	2016	Above Normal	April	--	18,549.8	18,527.8	22.0	0.1%	18,523.1	26.6	0.1%	18,509.3	40.5	0.2%
ME 4	35 53 19	2016	Above Normal	May	--	5,219.3	5,191.3	28.0	0.5%	5,185.6	33.7	0.6%	5,168.6	50.7	1.0%
ME 4	35 53 19	2016	Above Normal	June	--	1,510.3	1,458.4	51.9	3.4%	1,449.3	61.0	4.0%	1,422.2	88.1	5.8%
ME 4	35 53 19	2016	Above Normal	July	--	823.9	765.8	58.1	7.0%	754.3	69.6	8.4%	720.3	103.6	12.6%
ME 4	35 53 19	2016	Above Normal	August	--	492.5	435.6	56.9	11.5%	424.3	68.2	13.8%	390.6	101.9	20.7%
ME 4	35 53 19	2016	Above Normal	September	Used in Summary Table Analysis	328.7	275.6	53.1	16.2%	264.8	63.9	19.5%	232.6	96.1	29.2%
ME 4	35 53 19	2017	Wet	October	Used in Summary Table Analysis	18,319.4	18,276.6	42.8	0.2%	18,268.5	50.9	0.3%	18,243.1	76.4	0.4%
ME 4	35 53 19	2017	Wet	November	Used in Summary Table Analysis	18,862.3	18,829.9	32.4	0.2%	18,822.9	39.4	0.2%	18,803.2	59.0	0.3%
ME 4	35 53 19	2017	Wet	December	--	24,172.5	24,143.5	28.9	0.1%	24,137.7	34.7	0.1%	24,120.4	52.1	0.2%
ME 4	35 53 19	2017	Wet	January	--	107,078.7	107,052.1	26.6	0.0%	107,046.3	32.4	0.0%	107,030.1	48.6	0.0%
ME 4	35 53 19	2017	Wet	February	--	81,942.1	81,917.8	24.3	0.0%	81,913.2	28.9	0.0%	81,898.1	44.0	0.1%
ME 4	35 53 19	2017	Wet	March	--	27,307.9	27,284.7	23.1	0.1%	27,280.1	27.8	0.1%	27,266.2	41.7	0.2%
ME 4	35 53 19	2017	Wet	April	--	22,971.1	22,950.2	20.8	0.1%	22,945.6	25.5	0.1%	22,934.0	37.0	0.2%
ME 4	35 53 19	2017	Wet	May	--	6,274.1	6,246.1	28.0	0.4%	6,240.5	33.6	0.5%	6,223.6	50.5	0.8%
ME 4	35 53 19	2017	Wet	June	--	2,120.1	2,066.6	53.6	2.5%	2,055.9	64.2	3.0%	2,024.7	95.5	4.5%
ME 4	35 53 19	2017	Wet	July	--	935.9	877.7	58.2	6.2%	866.2	69.7	7.4%	832.4	103.4	11.1%
ME 4	35 53 19	2017	Wet	August	--	508.0	451.4	56.6	11.1%	440.2	67.8	13.3%	406.7	101.3	19.9%
ME 4	35 53 19	2017	Wet	September	Used in Summary Table Analysis	323.7	271.3	52.3	16.2%	260.8	62.8	19.4%	229.5	94.2	29.1%
ME 4	35 53 19	2018	Above Normal	October	Used in Summary Table Analysis	276.4	234.7	41.6	15.1%	226.3	50.0	18.1%	201.2	75.2	27.2%
ME 4	35 53 19	2018	Above Normal	November	Used in Summary Table Analysis	10,828.1	10,795.3	32.9	0.3%	10,788.5	39.6	0.4%	10,768.4	59.7	0.6%
ME 4	35 53 19	2018	Above Normal	December	--	5,449.1	5,421.1	28.0	0.5%	5,415.4	33.7	0.6%	5,398.1	50.9	0.9%
ME 4	35 53 19	2018	Above Normal	January	--	17,844.9	17,819.4	25.5	0.1%	17,813.7	31.3	0.2%	17,798.6	46.3	0.3%
ME 4	35 53 19	2018	Above Normal	February	--	7,600.2	7,577.4	22.8	0.3%	7,572.8	27.4	0.4%	7,558.7	41.6	0.5%
ME 4	35 53 19	2018	Above Normal	March	--	20,740.7	20,718.8	22.0	0.1%	20,714.1	26.6	0.1%	20,701.4	39.4	0.2%
ME 4	35 53 19	2018	Above Normal	April	--	32,248.8	32,229.2	19.7	0.1%	32,225.7	23.1	0.1%	32,213.0	35.9	0.1%
ME 4	35 53 19	2018	Above Normal	May	--	6,990.2	6,948.1	42.0	0.6%	6,939.9	50.2	0.7%	6,914.6	75.6	1.1%
ME 4	35 53 19	2018	Above Normal	June	--	1,915.0	1,861.0	54.1	2.8%	1,850.5	64.6	3.4%	1,819.1	95.9	5.0%
ME 4	35 53 19	2018	Above Normal	July	--	782.5	723.9	58.6	7.5%	712.2	70.2	9.0%	677.7	104.7	13.4%
ME 4	35 53 19	2018	Above Normal	August	--	443.6	388.9	54.6	12.3%	378.0	65.5	14.8%	345.4	98.1	22.1%
ME 4	35 53 19	2018	Above Normal	September	Used in Summary Table Analysis	300.8	248.3	52.5	17.4%	237.8	63.0	20.9%	206.4	94.4	31.4%
ME 4	35 53 19	2019	Below Normal	October	Used in Summary Table Analysis	208.3	167.2	41.1	19.7%	158.9	49.4	23.7%	133.9	74.4	35.7%
ME 4	35 53 19	2019	Below Normal	November	Used in Summary Table Analysis	6,647.2	6,614.1	33.1	0.5%	6,607.4	39.8	0.6%	6,587.2	60.1	0.9%
ME 4	35 53 19	2019	Below Normal	December	--	14,707.2	14,678.2	28.9	0.2%	14,672.5	34.7	0.2%	14,655.1	52.1	0.4%
ME 4	35 53 19	2019	Below Normal	January	--	35,304.4	35,278.9	25.5	0.1%	35,273.1	31.3	0.1%	35,256.9	47.5	0.1%
ME 4	35 53 19	2019	Below Normal	February	--	142,013.9	141,990.7	23.1	0.0%	141,979.2	34.7	0.0%	141,967.6	46.3	0.0%
ME 4	35 53 19	2019	Below Normal	March	--	42,368.1	42,347.2	20.8	0.0%	42,342.6	25.5	0.1%	42,329.9	38.2	0.1%
ME 4	35 53 19	2019	Below Normal	April	--	15,285.9	15,265.0	20.8	0.1%	15,261.6	24.3	0.2%	15,248.8	37.0	0.2%
ME 4	35 53 19	2019	Below Normal	May	--	17,005.8	16,960.6	45.1	0.3%	16,951.4	54.4	0.3%	16,924.8	81.0	0.5%
ME 4	35 53 19	2019	Below Normal	June	--	4,243.1	4,186.1	56.9	1.3%	4,175.2	67.8	1.6%	4,143.2	99.9	2.4%
ME 4	35 53 19	2019	Below Normal	July	--	1,362.8	1,304.1	58.8	4.3%	1,292.4	70.5	5.2%	1,258.0	104.9	7.7%
ME 4	35 53 19	2019	Below Normal	August	--	597.8	541.8	56.0	9.4%	530.6	67.1	11.2%	497.6	100.1	16.8%
ME 4	35 53 19	2019	Below Normal	September	Used in Summary Table Analysis	463.6	411.3	52.2	11.3%	400.9	62.7	13.5%	369.5	94.0	20.3%
ME 4	35 53 19	2020	Dry	October	Used in Summary Table Analysis	356.3	316.7	39.5	11.1%	308.7	47.6	13.3%	284.7	71.6	20.1%
ME 4	35 53 19	2020	Dry	November	Used in Summary Table Analysis	321.3	290.1	31.2	9.7%	283.7	37.5	11.7%	264.7	56.6	17.6%
ME 4	35 53 19	2020	Dry	December	--	13,344.9	13,317.1	27.8	0.2%	13,311.3	33.6	0.3%	13,294.0	50.9	0.4%
ME 4	35 53 19	2020	Dry	January	--	22,377.3	22,351.9	25.5	0.1%	22,346.1	31.3	0.1%	22,329.9	47.5	0.2%
ME 4	35 53 19	2020	Dry	February	--	7,416.4	7,393.2	23.3	0.3%	7,388.3	28.1	0.4%	7,374.0	42.5	0.6%
ME 4	35 53 19	2020	Dry	March	--	7,252.1	7,230.1	22.0	0.3%	7,225.6	26.5	0.4%	7,212.2	39.9	0.6%
ME 4	35 53 19	2020	Dry	April	--	5,491.7	5,447.0	44.7	0.8%	5,438.1	53.6	1.0%	5,411.5	80.2	1.5%
ME 4	35 53 19	2020	Dry	May	--	7,388.2	7,334.7	53.5	0.7%	7,324.1	64.1	0.9%	7,292.1	96.1	1.3%
ME 4	35 53 19	2020	Dry	June	--	2,104.3	2,036.7	67.6	3.2%	2,023.6	80.7	3.8%	1,985.2	119.1	5.7%
ME 4	35 53 19	2020	Dry	July	--	797.0	728.5	68.4	8.6%	715.0	82.0	10.3%	680.0	117.0	14.7%
ME 4	35 53 19	2020	Dry	August	--	399.7	332.2	67.4	16.9%	318.8	80.8	20.2%	281.6	118.1	29.5%
ME 4	35 53 19	2020	Dry	September	Used in Summary Table Analysis	249.0	185.8	63.2	25.4%	172.9	76.1	30.6%	135.3	113.7	45.7%
ME 5	33 52 21	2000	Above Normal	October	Used in Summary Table Analysis	821.6	779.4	42.2	5.1%	770.8	50.8	6.2%	745.2	76.3	9.3%
ME 5	33 52 21	2000	Above Normal	November	Used in Summary Table Analysis	12,211.8	12,177.1	34.7	0.3%	12,170.1	41.7	0.3%	12,149.3	62.5	0.5%
ME 5	33 52 21	2000	Above Normal	December	--	10,860.0	10,830.8	29.2	0.3%	10,824.9	35.1	0.3%	10,807.1	52.9	0.5%
ME 5	33 52 21	2000	Above Normal	January	--	28,731.5	28,704.9	26.6	0.1%	28,699.1	32.4	0.1%	28,682.9	48.6	0.2%
ME 5	33 52 21	2000	Above Normal	February	--	37,142.4	37,118.1	24.3	0.1%	37,113.4	28.9	0.1%	37,098.4	44.0	0.1%
ME 5	33 52 21	2000	Above Normal	March	--	18,347.2	18,325.2	22.0	0.1%	18,320.6	26.6	0.1%	18,306.7	40.5	0.2%
ME 5	33 52 21	2000	Above Normal	April	--	12,338.0	12,317.1	20.8	0.2%	12,312.5	25.5	0.2%	12,299.8	38.2	0.3%
ME 5	33 52 21	2000	Above Normal	May	--	7,114.4	7,070.4	44.0	0.6%	7,061.5	52.9	0.7%	7,035.2	79.2	1.1%

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Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 52 21	2000	Above Normal	June	--	2,619.0	2,554.1	64.9	2.5%	2,541.2	77.8	3.0%	2,503.2	115.7	4.4%
ME 5	33 52 21	2000	Above Normal	July	--	995.4	936.3	59.1	5.9%	924.6	70.8	7.1%	889.8	105.6	10.6%
ME 5	33 52 21	2000	Above Normal	August	--	525.8	469.9	55.9	10.6%	458.7	67.0	12.7%	425.5	100.3	19.1%
ME 5	33 52 21	2000	Above Normal	September	Used in Summary Table Analysis	298.7	248.8	49.8	16.7%	238.9	59.8	20.0%	209.0	89.7	30.0%
ME 5	33 52 21	2001	Dry	October	Used in Summary Table Analysis	3,836.8	3,795.3	41.6	1.1%	3,786.8	50.0	1.3%	3,761.6	75.2	2.0%
ME 5	33 52 21	2001	Dry	November	Used in Summary Table Analysis	6,159.1	6,125.5	33.7	0.5%	6,118.8	40.4	0.7%	6,098.3	60.9	1.0%
ME 5	33 52 21	2001	Dry	December	--	8,873.6	8,844.4	29.2	0.3%	8,838.5	35.1	0.4%	8,820.7	52.9	0.6%
ME 5	33 52 21	2001	Dry	January	--	12,857.6	12,832.2	25.5	0.2%	12,826.4	31.3	0.2%	12,810.2	47.5	0.4%
ME 5	33 52 21	2001	Dry	February	--	17,513.9	17,489.6	24.3	0.1%	17,485.0	28.9	0.2%	17,469.9	44.0	0.3%
ME 5	33 52 21	2001	Dry	March	--	12,318.3	12,296.3	22.0	0.2%	12,291.7	26.6	0.2%	12,277.8	40.5	0.3%
ME 5	33 52 21	2001	Dry	April	--	10,994.3	10,949.1	45.3	0.4%	10,940.0	54.3	0.5%	10,913.1	81.3	0.7%
ME 5	33 52 21	2001	Dry	May	--	2,637.3	2,583.9	53.4	2.0%	2,573.3	64.0	2.4%	2,541.4	95.8	3.6%
ME 5	33 52 21	2001	Dry	June	--	2,662.6	2,590.6	72.0	2.7%	2,576.5	86.1	3.2%	2,535.1	127.5	4.8%
ME 5	33 52 21	2001	Dry	July	--	720.1	651.8	68.3	9.5%	638.2	81.9	11.4%	603.0	117.1	16.3%
ME 5	33 52 21	2001	Dry	August	--	175.3	108.5	66.8	38.1%	95.2	80.1	45.7%	58.0	117.4	66.9%
ME 5	33 52 21	2001	Dry	September	Used in Summary Table Analysis	98.5	38.5	60.0	60.9%	26.6	71.9	73.0%	0.0	98.5	100.0%
ME 5	33 52 21	2002	Below Normal	October	Used in Summary Table Analysis	268.6	218.0	50.6	18.8%	207.8	60.8	22.6%	177.2	91.4	34.0%
ME 5	33 52 21	2002	Below Normal	November	Used in Summary Table Analysis	12,072.9	12,032.4	40.5	0.3%	12,024.3	48.6	0.4%	11,997.7	75.2	0.6%
ME 5	33 52 21	2002	Below Normal	December	--	35,821.8	35,787.0	34.7	0.1%	35,780.1	41.7	0.1%	35,756.9	64.8	0.2%
ME 5	33 52 21	2002	Below Normal	January	--	30,965.3	30,934.0	31.3	0.1%	30,927.1	38.2	0.1%	30,908.6	56.7	0.2%
ME 5	33 52 21	2002	Below Normal	February	--	24,729.2	24,701.4	27.8	0.1%	24,695.6	33.6	0.1%	24,677.1	52.1	0.2%
ME 5	33 52 21	2002	Below Normal	March	--	17,819.4	17,792.8	26.6	0.1%	17,787.0	32.4	0.2%	17,770.8	48.6	0.3%
ME 5	33 52 21	2002	Below Normal	April	--	9,940.0	9,894.4	45.6	0.5%	9,885.4	54.6	0.5%	9,858.2	81.8	0.8%
ME 5	33 52 21	2002	Below Normal	May	--	3,324.7	3,271.1	53.6	1.6%	3,260.3	64.4	1.9%	3,228.4	96.3	2.9%
ME 5	33 52 21	2002	Below Normal	June	--	856.5	796.2	60.3	7.0%	784.3	72.2	8.4%	749.0	107.4	12.5%
ME 5	33 52 21	2002	Below Normal	July	--	365.3	303.8	61.5	16.8%	291.6	73.7	20.2%	256.0	109.3	29.9%
ME 5	33 52 21	2002	Below Normal	August	--	230.6	172.5	58.1	25.2%	160.9	69.7	30.2%	125.7	104.9	45.5%
ME 5	33 52 21	2002	Below Normal	September	Used in Summary Table Analysis	167.2	112.1	55.1	32.9%	101.2	66.1	39.5%	67.4	99.8	59.7%
ME 5	33 52 21	2003	Wet	October	Used in Summary Table Analysis	132.1	86.6	45.6	34.5%	77.4	54.7	41.4%	49.8	82.3	62.3%
ME 5	33 52 21	2003	Wet	November	Used in Summary Table Analysis	900.6	863.7	36.8	4.1%	856.2	44.4	4.9%	833.6	66.9	7.4%
ME 5	33 52 21	2003	Wet	December	--	57,149.3	57,116.9	32.4	0.1%	57,110.0	39.4	0.1%	57,089.1	60.2	0.1%
ME 5	33 52 21	2003	Wet	January	--	31,596.1	31,567.1	28.9	0.1%	31,561.3	34.7	0.1%	31,544.0	52.1	0.2%
ME 5	33 52 21	2003	Wet	February	--	20,387.7	20,362.3	25.5	0.1%	20,356.5	31.3	0.2%	20,340.3	47.5	0.2%
ME 5	33 52 21	2003	Wet	March	--	24,088.0	24,063.7	24.3	0.1%	24,059.0	28.9	0.1%	24,044.0	44.0	0.2%
ME 5	33 52 21	2003	Wet	April	--	43,048.6	43,025.5	23.1	0.1%	43,019.7	28.9	0.1%	43,005.8	42.8	0.1%
ME 5	33 52 21	2003	Wet	May	--	12,240.7	12,195.6	45.1	0.4%	12,186.3	54.4	0.4%	12,158.6	82.2	0.7%
ME 5	33 52 21	2003	Wet	June	--	3,170.3	3,112.8	57.4	1.8%	3,101.6	68.6	2.2%	3,068.5	101.7	3.2%
ME 5	33 52 21	2003	Wet	July	--	1,478.6	1,417.7	60.9	4.1%	1,405.7	72.9	4.9%	1,369.9	108.7	7.4%
ME 5	33 52 21	2003	Wet	August	--	764.4	704.6	59.8	7.8%	692.3	72.1	9.4%	654.1	110.2	14.4%
ME 5	33 52 21	2003	Wet	September	Used in Summary Table Analysis	461.9	411.0	50.9	11.0%	400.8	61.1	13.2%	369.2	92.7	20.1%
ME 5	33 52 21	2004	Wet	October	Used in Summary Table Analysis	328.7	286.2	42.4	12.9%	277.7	51.0	15.5%	251.8	76.9	23.4%
ME 5	33 52 21	2004	Wet	November	Used in Summary Table Analysis	5,841.8	5,807.1	34.7	0.6%	5,800.0	41.8	0.7%	5,778.7	63.1	1.1%
ME 5	33 52 21	2004	Wet	December	--	36,485.0	36,453.7	31.3	0.1%	36,447.9	37.0	0.1%	36,429.4	55.6	0.2%
ME 5	33 52 21	2004	Wet	January	--	31,591.4	31,564.8	26.6	0.1%	31,559.0	32.4	0.1%	31,541.7	49.8	0.2%
ME 5	33 52 21	2004	Wet	February	--	38,349.5	38,324.1	25.5	0.1%	38,319.4	30.1	0.1%	38,303.2	46.3	0.1%
ME 5	33 52 21	2004	Wet	March	--	16,542.8	16,519.7	23.1	0.1%	16,515.0	27.8	0.2%	16,501.2	41.7	0.3%
ME 5	33 52 21	2004	Wet	April	--	9,464.4	9,442.7	21.6	0.2%	9,438.3	26.0	0.3%	9,424.9	39.5	0.4%
ME 5	33 52 21	2004	Wet	May	--	3,431.4	3,387.0	44.3	1.3%	3,378.2	53.1	1.5%	3,351.9	79.5	2.3%
ME 5	33 52 21	2004	Wet	June	--	694.3	639.1	55.2	7.9%	628.3	66.0	9.5%	596.2	98.1	14.1%
ME 5	33 52 21	2004	Wet	July	--	359.7	300.0	59.7	16.6%	288.2	71.6	19.9%	253.0	106.8	29.7%
ME 5	33 52 21	2004	Wet	August	--	228.6	172.0	56.6	24.7%	160.8	67.8	29.7%	127.0	101.6	44.4%
ME 5	33 52 21	2004	Wet	September	Used in Summary Table Analysis	165.4	111.4	54.0	32.6%	100.6	64.8	39.2%	68.2	97.2	58.8%
ME 5	33 52 21	2005	Above Normal	October	Used in Summary Table Analysis	7,733.0	7,689.6	43.4	0.6%	7,680.9	52.1	0.7%	7,654.6	78.4	1.0%
ME 5	33 52 21	2005	Above Normal	November	Used in Summary Table Analysis	2,263.8	2,229.6	34.1	1.5%	2,222.8	41.0	1.8%	2,201.9	61.9	2.7%
ME 5	33 52 21	2005	Above Normal	December	--	21,173.6	21,143.5	30.1	0.1%	21,137.7	35.9	0.2%	21,119.2	54.4	0.3%
ME 5	33 52 21	2005	Above Normal	January	--	22,500.0	22,473.4	26.6	0.1%	22,467.6	32.4	0.1%	22,450.2	49.8	0.2%
ME 5	33 52 21	2005	Above Normal	February	--	14,031.3	14,006.9	24.3	0.2%	14,002.3	28.9	0.2%	13,987.3	44.0	0.3%
ME 5	33 52 21	2005	Above Normal	March	--	28,653.9	28,631.9	22.0	0.1%	28,627.3	26.6	0.1%	28,612.3	41.7	0.1%
ME 5	33 52 21	2005	Above Normal	April	--	21,502.3	21,480.3	22.0	0.1%	21,475.7	26.6	0.1%	21,463.0	39.4	0.2%
ME 5	33 52 21	2005	Above Normal	May	--	19,637.7	19,592.6	45.1	0.2%	19,583.3	54.4	0.3%	19,556.7	81.0	0.4%
ME 5	33 52 21	2005	Above Normal	June	--	15,952.5	15,886.6	66.0	0.4%	15,872.7	79.9	0.5%	15,834.5	118.1	0.7%
ME 5	33 52 21	2005	Above Normal	July	--	2,864.6	2,803.1	61.5	2.1%	2,791.4	73.1	2.6%	2,756.6	108.0	3.8%
ME 5	33 52 21	2005	Above Normal	August	--	987.2	931.2	56.1	5.7%	920.1	67.1	6.8%	887.0	100.2	10.1%
ME 5	33 52 21	2005	Above Normal	September	Used in Summary Table Analysis	528.8	478.9	49.9	9.4%	468.9	59.8	11.3%	439.2	89.6	16.9%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 52 21	2006	Wet	October	Used in Summary Table Analysis	639.2	598.5	40.8	6.4%	590.3	49.0	7.7%	565.4	73.8	11.5%
ME 5	33 52 21	2006	Wet	November	Used in Summary Table Analysis	9,373.0	9,340.5	32.5	0.3%	9,333.9	39.1	0.4%	9,313.9	59.1	0.6%
ME 5	33 52 21	2006	Wet	December	--	43,719.9	43,689.8	30.1	0.1%	43,684.0	35.9	0.1%	43,665.5	54.4	0.1%
ME 5	33 52 21	2006	Wet	January	--	46,497.7	46,471.1	26.6	0.1%	46,465.3	32.4	0.1%	46,449.1	48.6	0.1%
ME 5	33 52 21	2006	Wet	February	--	26,703.7	26,680.6	23.1	0.1%	26,674.8	28.9	0.1%	26,660.9	42.8	0.2%
ME 5	33 52 21	2006	Wet	March	--	47,316.0	47,294.0	22.0	0.0%	47,289.4	26.6	0.1%	47,275.5	40.5	0.1%
ME 5	33 52 21	2006	Wet	April	--	30,489.6	30,468.8	20.8	0.1%	30,464.1	25.5	0.1%	30,451.4	38.2	0.1%
ME 5	33 52 21	2006	Wet	May	--	14,243.1	14,215.3	27.8	0.2%	14,209.5	33.6	0.2%	14,193.3	49.8	0.3%
ME 5	33 52 21	2006	Wet	June	--	3,550.9	3,496.2	54.7	1.5%	3,485.4	65.5	1.8%	3,453.7	97.2	2.7%
ME 5	33 52 21	2006	Wet	July	--	1,284.1	1,225.6	58.6	4.6%	1,214.1	70.0	5.5%	1,180.1	104.1	8.1%
ME 5	33 52 21	2006	Wet	August	--	670.3	613.0	57.3	8.6%	601.6	68.7	10.2%	567.7	102.6	15.3%
ME 5	33 52 21	2006	Wet	September	Used in Summary Table Analysis	430.8	380.2	50.6	11.7%	370.2	60.7	14.1%	339.9	90.9	21.1%
ME 5	33 52 21	2007	Above Normal	October	Used in Summary Table Analysis	278.3	236.7	41.6	15.0%	228.3	50.0	18.0%	203.0	75.4	27.1%
ME 5	33 52 21	2007	Above Normal	November	Used in Summary Table Analysis	8,725.7	8,691.6	34.1	0.4%	8,684.7	41.0	0.5%	8,663.8	61.9	0.7%
ME 5	33 52 21	2007	Above Normal	December	--	20,531.3	20,500.0	31.3	0.2%	20,494.2	37.0	0.2%	20,475.7	55.6	0.3%
ME 5	33 52 21	2007	Above Normal	January	--	10,282.8	10,256.3	26.5	0.3%	10,250.9	31.8	0.3%	10,234.5	48.3	0.5%
ME 5	33 52 21	2007	Above Normal	February	--	30,706.0	30,681.7	24.3	0.1%	30,675.9	30.1	0.1%	30,660.9	45.1	0.1%
ME 5	33 52 21	2007	Above Normal	March	--	13,123.8	13,100.7	23.1	0.2%	13,096.1	27.8	0.2%	13,081.0	42.8	0.3%
ME 5	33 52 21	2007	Above Normal	April	--	11,555.8	11,512.3	43.5	0.4%	11,503.5	52.3	0.5%	11,477.4	78.4	0.7%
ME 5	33 52 21	2007	Above Normal	May	--	4,149.2	4,097.3	51.9	1.2%	4,087.0	62.2	1.5%	4,056.0	93.2	2.2%
ME 5	33 52 21	2007	Above Normal	June	--	1,505.2	1,443.5	61.7	4.1%	1,431.4	73.8	4.9%	1,395.3	110.0	7.3%
ME 5	33 52 21	2007	Above Normal	July	--	498.9	436.6	62.3	12.5%	424.2	74.7	15.0%	388.0	111.0	22.2%
ME 5	33 52 21	2007	Above Normal	August	--	226.7	170.1	56.5	24.9%	158.9	67.8	29.9%	124.6	102.1	45.0%
ME 5	33 52 21	2007	Above Normal	September	Used in Summary Table Analysis	154.3	100.6	53.7	34.8%	89.9	64.4	41.7%	57.8	96.6	62.6%
ME 5	33 52 21	2008	Dry	October	Used in Summary Table Analysis	3,455.2	3,411.0	44.2	1.3%	3,402.1	53.1	1.5%	3,375.1	80.1	2.3%
ME 5	33 52 21	2008	Dry	November	Used in Summary Table Analysis	3,295.4	3,260.9	34.5	1.0%	3,253.9	41.4	1.3%	3,232.6	62.7	1.9%
ME 5	33 52 21	2008	Dry	December	--	23,283.6	23,253.5	30.1	0.1%	23,246.5	37.0	0.2%	23,229.2	54.4	0.2%
ME 5	33 52 21	2008	Dry	January	--	37,681.7	37,652.8	28.9	0.1%	37,647.0	34.7	0.1%	37,629.6	52.1	0.1%
ME 5	33 52 21	2008	Dry	February	--	26,305.6	26,282.4	23.1	0.1%	26,276.6	28.9	0.1%	26,261.6	44.0	0.2%
ME 5	33 52 21	2008	Dry	March	--	11,810.2	11,788.2	22.0	0.2%	11,783.6	26.6	0.2%	11,770.8	39.4	0.3%
ME 5	33 52 21	2008	Dry	April	--	9,029.7	8,985.5	44.2	0.5%	8,976.7	53.0	0.6%	8,950.2	79.5	0.9%
ME 5	33 52 21	2008	Dry	May	--	1,358.4	1,311.9	46.5	3.4%	1,302.9	55.6	4.1%	1,275.7	82.8	6.1%
ME 5	33 52 21	2008	Dry	June	--	440.9	374.0	67.0	15.2%	360.8	80.1	18.2%	321.9	119.1	27.0%
ME 5	33 52 21	2008	Dry	July	--	258.9	192.1	66.8	25.8%	178.9	80.0	30.9%	144.6	114.3	44.2%
ME 5	33 52 21	2008	Dry	August	--	182.5	117.3	65.2	35.7%	104.3	78.2	42.8%	65.2	117.3	64.3%
ME 5	33 52 21	2008	Dry	September	Used in Summary Table Analysis	144.1	81.2	63.0	43.7%	68.7	75.5	52.4%	32.3	111.8	77.6%
ME 5	33 52 21	2009	Critical	October	Used in Summary Table Analysis	928.7	878.6	50.1	5.4%	868.6	60.1	6.5%	838.0	90.7	9.8%
ME 5	33 52 21	2009	Critical	November	Used in Summary Table Analysis	5,550.2	5,510.9	39.4	0.7%	5,502.9	47.3	0.9%	5,476.0	74.2	1.3%
ME 5	33 52 21	2009	Critical	December	--	12,246.5	12,213.0	33.6	0.3%	12,206.0	40.5	0.3%	12,185.2	61.3	0.5%
ME 5	33 52 21	2009	Critical	January	--	8,819.6	8,788.8	30.8	0.3%	8,782.5	37.0	0.4%	8,763.4	56.1	0.6%
ME 5	33 52 21	2009	Critical	February	--	22,682.9	22,655.1	27.8	0.1%	22,650.5	32.4	0.1%	22,633.1	49.8	0.2%
ME 5	33 52 21	2009	Critical	March	--	21,172.5	21,148.1	24.3	0.1%	21,142.4	30.1	0.1%	21,127.3	45.1	0.2%
ME 5	33 52 21	2009	Critical	April	--	10,102.4	10,056.3	46.2	0.5%	10,047.1	55.3	0.5%	10,019.4	83.0	0.8%
ME 5	33 52 21	2009	Critical	May	--	15,610.0	15,553.2	56.7	0.4%	15,542.8	67.1	0.4%	15,509.3	100.7	0.6%
ME 5	33 52 21	2009	Critical	June	--	3,163.8	3,092.1	71.6	2.3%	3,078.4	85.4	2.7%	3,036.9	126.9	4.0%
ME 5	33 52 21	2009	Critical	July	--	1,266.2	1,198.7	67.5	5.3%	1,185.4	80.8	6.4%	1,150.8	115.4	9.1%
ME 5	33 52 21	2009	Critical	August	--	672.5	606.7	65.7	9.8%	593.7	78.8	11.7%	557.0	115.4	17.2%
ME 5	33 52 21	2009	Critical	September	Used in Summary Table Analysis	393.4	334.2	59.1	15.0%	322.5	70.9	18.0%	288.3	105.1	26.7%
ME 5	33 52 21	2010	Below Normal	October	Used in Summary Table Analysis	6,094.2	6,043.4	50.8	0.8%	6,033.2	61.0	1.0%	6,001.4	92.8	1.5%
ME 5	33 52 21	2010	Below Normal	November	Used in Summary Table Analysis	8,316.9	8,276.0	40.9	0.5%	8,267.9	49.0	0.6%	8,240.4	76.5	0.9%
ME 5	33 52 21	2010	Below Normal	December	--	12,409.7	12,375.0	34.7	0.3%	12,368.1	41.7	0.3%	12,346.1	63.7	0.5%
ME 5	33 52 21	2010	Below Normal	January	--	36,421.3	36,388.9	32.4	0.1%	36,383.1	38.2	0.1%	36,363.4	57.9	0.2%
ME 5	33 52 21	2010	Below Normal	February	--	27,297.5	27,269.7	27.8	0.1%	27,263.9	33.6	0.1%	27,246.5	50.9	0.2%
ME 5	33 52 21	2010	Below Normal	March	--	28,881.9	28,856.5	25.5	0.1%	28,850.7	31.3	0.1%	28,834.5	47.5	0.2%
ME 5	33 52 21	2010	Below Normal	April	--	40,098.4	40,074.1	24.3	0.1%	40,068.3	30.1	0.1%	40,053.2	45.1	0.1%
ME 5	33 52 21	2010	Below Normal	May	--	20,334.5	20,287.0	47.5	0.2%	20,277.8	56.7	0.3%	20,250.0	84.5	0.4%
ME 5	33 52 21	2010	Below Normal	June	--	9,402.8	9,334.6	68.2	0.7%	9,321.2	81.6	0.9%	9,281.3	121.5	1.3%
ME 5	33 52 21	2010	Below Normal	July	--	1,457.6	1,395.4	62.3	4.3%	1,383.2	74.4	5.1%	1,347.5	110.2	7.6%
ME 5	33 52 21	2010	Below Normal	August	--	573.4	515.8	57.6	10.0%	504.4	69.0	12.0%	470.5	102.9	18.0%
ME 5	33 52 21	2010	Below Normal	September	Used in Summary Table Analysis	655.8	600.6	55.2	8.4%	589.5	66.3	10.1%	556.5	99.3	15.1%
ME 5	33 52 21	2011	Wet	October	Used in Summary Table Analysis	9,676.0	9,633.8	42.2	0.4%	9,625.2	50.8	0.5%	9,599.5	76.5	0.8%
ME 5	33 52 21	2011	Wet	November	Used in Summary Table Analysis	14,268.5	14,235.0	33.6	0.2%	14,226.9	41.7	0.3%	14,206.0	62.5	0.4%
ME 5	33 52 21	2011	Wet	December	--	33,900.5	33,870.4	30.1	0.1%	33,864.6	35.9	0.1%	33,846.1	54.4	0.2%
ME 5	33 52 21	2011	Wet	January	--	14,193.3	14,166.7	26.6	0.2%	14,162.0	31.3	0.2%	14,145.8	47.5	0.3%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 52 21	2011	Wet	February	--	20,804.4	20,780.1	24.3	0.1%	20,774.3	30.1	0.1%	20,759.3	45.1	0.2%
ME 5	33 52 21	2011	Wet	March	--	52,136.6	52,113.4	23.1	0.0%	52,108.8	27.8	0.1%	52,093.8	42.8	0.1%
ME 5	33 52 21	2011	Wet	April	--	24,843.8	24,821.8	22.0	0.1%	24,817.1	26.6	0.1%	24,803.2	40.5	0.2%
ME 5	33 52 21	2011	Wet	May	--	11,403.8	11,358.8	45.0	0.4%	11,349.8	54.1	0.5%	11,322.8	81.0	0.7%
ME 5	33 52 21	2011	Wet	June	--	7,077.7	7,011.3	66.3	0.9%	6,998.1	79.5	1.1%	6,959.4	118.3	1.7%
ME 5	33 52 21	2011	Wet	July	--	1,830.7	1,764.1	66.6	3.6%	1,751.2	79.5	4.3%	1,713.5	117.1	6.4%
ME 5	33 52 21	2011	Wet	August	--	780.6	723.7	56.8	7.3%	712.5	68.1	8.7%	678.8	101.8	13.0%
ME 5	33 52 21	2011	Wet	September	Used in Summary Table Analysis	437.2	385.3	51.9	11.9%	375.0	62.3	14.2%	344.0	93.2	21.3%
ME 5	33 52 21	2012	Below Normal	October	Used in Summary Table Analysis	4,563.5	4,520.6	42.9	0.9%	4,511.9	51.6	1.1%	4,485.5	78.0	1.7%
ME 5	33 52 21	2012	Below Normal	November	Used in Summary Table Analysis	8,283.0	8,248.5	34.5	0.4%	8,241.4	41.6	0.5%	8,220.1	62.8	0.8%
ME 5	33 52 21	2012	Below Normal	December	--	5,203.0	5,173.4	29.6	0.6%	5,167.4	35.6	0.7%	5,149.1	53.9	1.0%
ME 5	33 52 21	2012	Below Normal	January	--	20,245.4	20,218.8	26.6	0.1%	20,213.0	32.4	0.2%	20,196.8	48.6	0.2%
ME 5	33 52 21	2012	Below Normal	February	--	18,250.0	18,224.5	25.5	0.1%	18,219.9	30.1	0.2%	18,204.9	45.1	0.2%
ME 5	33 52 21	2012	Below Normal	March	--	45,577.5	45,553.2	24.3	0.1%	45,548.6	28.9	0.1%	45,533.6	44.0	0.1%
ME 5	33 52 21	2012	Below Normal	April	--	26,914.4	26,891.2	23.1	0.1%	26,886.6	27.8	0.1%	26,872.7	41.7	0.2%
ME 5	33 52 21	2012	Below Normal	May	--	7,495.6	7,450.9	44.7	0.6%	7,442.0	53.6	0.7%	7,415.5	80.1	1.1%
ME 5	33 52 21	2012	Below Normal	June	--	5,536.7	5,469.2	67.5	1.2%	5,455.9	80.8	1.5%	5,416.8	119.9	2.2%
ME 5	33 52 21	2012	Below Normal	July	--	2,236.9	2,172.6	64.4	2.9%	2,159.8	77.1	3.4%	2,122.0	114.9	5.1%
ME 5	33 52 21	2012	Below Normal	August	--	391.2	339.1	52.1	13.3%	328.7	62.4	16.0%	297.7	93.5	23.9%
ME 5	33 52 21	2012	Below Normal	September	Used in Summary Table Analysis	252.7	206.1	46.6	18.5%	196.8	55.9	22.1%	169.0	83.8	33.1%
ME 5	33 52 21	2013	Below Normal	October	Used in Summary Table Analysis	1,926.5	1,885.5	41.0	2.1%	1,877.2	49.3	2.6%	1,852.4	74.1	3.8%
ME 5	33 52 21	2013	Below Normal	November	Used in Summary Table Analysis	14,768.5	14,735.0	33.6	0.2%	14,729.2	39.4	0.3%	14,708.3	60.2	0.4%
ME 5	33 52 21	2013	Below Normal	December	--	60,177.1	60,147.0	30.1	0.1%	60,140.0	37.0	0.1%	60,121.5	55.6	0.1%
ME 5	33 52 21	2013	Below Normal	January	--	22,254.6	22,229.2	25.5	0.1%	22,223.4	31.3	0.1%	22,208.3	46.3	0.2%
ME 5	33 52 21	2013	Below Normal	February	--	8,870.4	8,846.2	24.2	0.3%	8,841.3	29.1	0.3%	8,826.5	43.9	0.5%
ME 5	33 52 21	2013	Below Normal	March	--	10,368.4	10,345.1	23.3	0.2%	10,340.5	27.9	0.3%	10,326.3	42.1	0.4%
ME 5	33 52 21	2013	Below Normal	April	--	8,302.2	8,259.7	42.5	0.5%	8,251.2	51.0	0.6%	8,225.7	76.5	0.9%
ME 5	33 52 21	2013	Below Normal	May	--	4,445.7	4,394.3	51.4	1.2%	4,384.0	61.7	1.4%	4,353.4	92.4	2.1%
ME 5	33 52 21	2013	Below Normal	June	--	2,115.3	2,053.9	61.3	2.9%	2,041.9	73.4	3.5%	2,005.9	109.4	5.2%
ME 5	33 52 21	2013	Below Normal	July	--	720.4	660.8	59.6	8.3%	649.0	71.4	9.9%	614.6	105.9	14.7%
ME 5	33 52 21	2013	Below Normal	August	--	343.4	287.0	56.4	16.4%	275.8	67.7	19.7%	241.6	101.9	29.7%
ME 5	33 52 21	2013	Below Normal	September	Used in Summary Table Analysis	4,808.8	4,750.3	58.4	1.2%	4,738.7	70.1	1.5%	4,703.6	105.2	2.2%
ME 5	33 52 21	2014	Critical	October	Used in Summary Table Analysis	281.7	238.5	43.2	15.3%	229.8	51.9	18.4%	204.4	77.3	27.4%
ME 5	33 52 21	2014	Critical	November	Used in Summary Table Analysis	1,550.2	1,515.3	35.0	2.3%	1,508.2	42.0	2.7%	1,486.9	63.3	4.1%
ME 5	33 52 21	2014	Critical	December	--	1,597.0	1,566.4	30.6	1.9%	1,560.2	36.8	2.3%	1,541.3	55.7	3.5%
ME 5	33 52 21	2014	Critical	January	--	2,833.9	2,806.7	27.2	1.0%	2,801.0	32.9	1.2%	2,784.0	49.9	1.8%
ME 5	33 52 21	2014	Critical	February	--	15,789.4	15,765.0	24.3	0.2%	15,759.3	30.1	0.2%	15,743.1	46.3	0.3%
ME 5	33 52 21	2014	Critical	March	--	31,533.6	31,509.3	24.3	0.1%	31,504.6	28.9	0.1%	31,489.6	44.0	0.1%
ME 5	33 52 21	2014	Critical	April	--	13,005.8	12,959.5	46.3	0.4%	12,951.4	54.4	0.4%	12,923.6	82.2	0.6%
ME 5	33 52 21	2014	Critical	May	--	5,197.9	5,143.6	54.3	1.0%	5,132.9	65.0	1.3%	5,100.2	97.7	1.9%
ME 5	33 52 21	2014	Critical	June	--	1,202.0	1,128.7	73.2	6.1%	1,114.4	87.6	7.3%	1,072.9	129.1	10.7%
ME 5	33 52 21	2014	Critical	July	--	548.6	480.2	68.4	12.5%	466.6	82.0	14.9%	431.0	117.6	21.4%
ME 5	33 52 21	2014	Critical	August	--	351.4	285.8	65.6	18.7%	272.6	78.8	22.4%	235.5	115.9	33.0%
ME 5	33 52 21	2014	Critical	September	Used in Summary Table Analysis	2,584.5	2,519.9	64.6	2.5%	2,507.2	77.3	3.0%	2,469.1	115.4	4.5%
ME 5	33 52 21	2015	Dry	October	Used in Summary Table Analysis	11,403.5	11,352.8	50.7	0.4%	11,342.8	60.6	0.5%	11,312.5	91.0	0.8%
ME 5	33 52 21	2015	Dry	November	Used in Summary Table Analysis	9,082.6	9,044.1	38.5	0.4%	9,036.2	46.4	0.5%	9,009.6	73.0	0.8%
ME 5	33 52 21	2015	Dry	December	--	32,783.6	32,750.0	33.6	0.1%	32,743.1	40.5	0.1%	32,722.2	61.3	0.2%
ME 5	33 52 21	2015	Dry	January	--	14,601.9	14,571.8	30.1	0.2%	14,566.0	35.9	0.2%	14,547.5	54.4	0.4%
ME 5	33 52 21	2015	Dry	February	--	27,298.6	27,272.0	26.6	0.1%	27,266.2	32.4	0.1%	27,250.0	48.6	0.2%
ME 5	33 52 21	2015	Dry	March	--	11,585.6	11,561.8	23.8	0.2%	11,556.9	28.7	0.2%	11,542.1	43.5	0.4%
ME 5	33 52 21	2015	Dry	April	--	8,428.8	8,383.4	45.4	0.5%	8,374.3	54.5	0.6%	8,347.0	81.8	1.0%
ME 5	33 52 21	2015	Dry	May	--	1,509.8	1,456.4	53.5	3.5%	1,445.7	64.1	4.2%	1,414.8	95.0	6.3%
ME 5	33 52 21	2015	Dry	June	--	654.7	586.7	68.0	10.4%	573.3	81.4	12.4%	533.7	121.0	18.5%
ME 5	33 52 21	2015	Dry	July	--	271.1	203.6	67.5	24.9%	190.3	80.8	29.8%	155.6	115.5	42.6%
ME 5	33 52 21	2015	Dry	August	--	169.6	104.0	65.6	38.7%	90.9	78.7	46.4%	54.4	115.2	67.9%
ME 5	33 52 21	2015	Dry	September	Used in Summary Table Analysis	123.4	61.6	61.8	50.1%	48.9	74.5	60.4%	12.1	111.3	90.2%
ME 5	33 52 21	2016	Above Normal	October	Used in Summary Table Analysis	88.6	36.6	52.0	58.7%	26.6	62.0	70.0%	0.0	88.6	100.0%
ME 5	33 52 21	2016	Above Normal	November	Used in Summary Table Analysis	3,904.4	3,863.9	40.5	1.0%	3,855.6	48.8	1.3%	3,826.2	78.2	2.0%
ME 5	33 52 21	2016	Above Normal	December	--	36,814.8	36,778.9	35.9	0.1%	36,770.8	44.0	0.1%	36,747.7	67.1	0.2%
ME 5	33 52 21	2016	Above Normal	January	--	57,519.7	57,487.3	32.4	0.1%	57,480.3	39.4	0.1%	57,459.5	60.2	0.1%
ME 5	33 52 21	2016	Above Normal	February	--	24,299.8	24,273.1	26.6	0.1%	24,268.5	31.3	0.1%	24,251.2	48.6	0.2%
ME 5	33 52 21	2016	Above Normal	March	--	41,870.4	41,844.9	25.5	0.1%	41,839.1	31.3	0.1%	41,824.1	46.3	0.1%
ME 5	33 52 21	2016	Above Normal	April	--	18,562.5	18,539.4	23.1	0.1%	18,534.7	27.8	0.1%	18,520.8	41.7	0.2%
ME 5	33 52 21	2016	Above Normal	May	--	5,224.1	5,195.5	28.6	0.5%	5,189.7	34.4	0.7%	5,172.2	51.9	1.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 52 21	2016	Above Normal	June	--	1,512.8	1,460.3	52.5	3.5%	1,451.0	61.8	4.1%	1,423.5	89.4	5.9%
ME 5	33 52 21	2016	Above Normal	July	--	826.9	767.7	59.2	7.2%	756.0	70.9	8.6%	721.3	105.6	12.8%
ME 5	33 52 21	2016	Above Normal	August	--	495.7	437.5	58.3	11.8%	425.8	69.9	14.1%	391.3	104.5	21.1%
ME 5	33 52 21	2016	Above Normal	September	Used in Summary Table Analysis	331.9	277.2	54.7	16.5%	266.1	65.8	19.8%	233.0	98.9	29.8%
ME 5	33 52 21	2017	Wet	October	Used in Summary Table Analysis	18,360.0	18,316.0	44.0	0.2%	18,306.7	53.2	0.3%	18,281.3	78.7	0.4%
ME 5	33 52 21	2017	Wet	November	Used in Summary Table Analysis	18,906.3	18,872.7	33.6	0.2%	18,865.7	40.5	0.2%	18,844.9	61.3	0.3%
ME 5	33 52 21	2017	Wet	December	--	24,240.7	24,211.8	28.9	0.1%	24,204.9	35.9	0.1%	24,187.5	53.2	0.2%
ME 5	33 52 21	2017	Wet	January	--	107,278.9	107,251.2	27.8	0.0%	107,245.4	33.6	0.0%	107,229.2	49.8	0.0%
ME 5	33 52 21	2017	Wet	February	--	82,056.7	82,032.4	24.3	0.0%	82,026.6	30.1	0.0%	82,011.6	45.1	0.1%
ME 5	33 52 21	2017	Wet	March	--	27,342.6	27,319.4	23.1	0.1%	27,314.8	27.8	0.1%	27,299.8	42.8	0.2%
ME 5	33 52 21	2017	Wet	April	--	23,009.3	22,988.4	20.8	0.1%	22,983.8	25.5	0.1%	22,971.1	38.2	0.2%
ME 5	33 52 21	2017	Wet	May	--	6,274.9	6,246.4	28.5	0.5%	6,240.7	34.1	0.5%	6,223.6	51.3	0.8%
ME 5	33 52 21	2017	Wet	June	--	2,125.5	2,071.3	54.2	2.5%	2,060.6	64.8	3.0%	2,029.1	96.4	4.5%
ME 5	33 52 21	2017	Wet	July	--	939.6	880.4	59.2	6.3%	868.7	70.9	7.5%	834.3	105.3	11.2%
ME 5	33 52 21	2017	Wet	August	--	511.8	454.0	57.9	11.3%	442.5	69.4	13.6%	408.2	103.6	20.2%
ME 5	33 52 21	2017	Wet	September	Used in Summary Table Analysis	327.2	273.4	53.8	16.4%	262.6	64.6	19.7%	230.4	96.8	29.6%
ME 5	33 52 21	2018	Above Normal	October	Used in Summary Table Analysis	279.9	236.9	43.1	15.4%	228.2	51.8	18.5%	202.1	77.8	27.8%
ME 5	33 52 21	2018	Above Normal	November	Used in Summary Table Analysis	10,874.8	10,840.6	34.1	0.3%	10,833.7	41.1	0.4%	10,812.7	62.0	0.6%
ME 5	33 52 21	2018	Above Normal	December	--	5,453.8	5,424.8	29.1	0.5%	5,418.9	35.0	0.6%	5,400.9	52.9	1.0%
ME 5	33 52 21	2018	Above Normal	January	--	17,923.6	17,897.0	26.6	0.1%	17,892.4	31.3	0.2%	17,876.2	47.5	0.3%
ME 5	33 52 21	2018	Above Normal	February	--	7,604.1	7,580.7	23.4	0.3%	7,575.8	28.2	0.4%	7,561.2	42.8	0.6%
ME 5	33 52 21	2018	Above Normal	March	--	20,791.7	20,769.7	22.0	0.1%	20,765.0	26.6	0.1%	20,751.2	40.5	0.2%
ME 5	33 52 21	2018	Above Normal	April	--	32,307.9	32,288.2	19.7	0.1%	32,283.6	24.3	0.1%	32,270.8	37.0	0.1%
ME 5	33 52 21	2018	Above Normal	May	--	6,991.9	6,949.4	42.5	0.6%	6,941.1	50.8	0.7%	6,915.4	76.5	1.1%
ME 5	33 52 21	2018	Above Normal	June	--	1,917.8	1,863.0	54.9	2.9%	1,852.3	65.5	3.4%	1,820.5	97.3	5.1%
ME 5	33 52 21	2018	Above Normal	July	--	785.8	726.0	59.7	7.6%	714.2	71.6	9.1%	678.9	106.8	13.6%
ME 5	33 52 21	2018	Above Normal	August	--	447.0	391.1	56.0	12.5%	379.9	67.2	15.0%	346.4	100.6	22.5%
ME 5	33 52 21	2018	Above Normal	September	Used in Summary Table Analysis	304.1	250.2	53.9	17.7%	239.4	64.7	21.3%	207.1	97.1	31.9%
ME 5	33 52 21	2019	Below Normal	October	Used in Summary Table Analysis	211.1	168.6	42.5	20.1%	160.0	51.1	24.2%	134.1	77.0	36.5%
ME 5	33 52 21	2019	Below Normal	November	Used in Summary Table Analysis	6,678.4	6,644.0	34.4	0.5%	6,636.9	41.4	0.6%	6,615.9	62.5	0.9%
ME 5	33 52 21	2019	Below Normal	December	--	14,758.1	14,729.2	28.9	0.2%	14,723.4	34.7	0.2%	14,704.9	53.2	0.4%
ME 5	33 52 21	2019	Below Normal	January	--	35,407.4	35,380.8	26.6	0.1%	35,376.2	31.3	0.1%	35,358.8	48.6	0.1%
ME 5	33 52 21	2019	Below Normal	February	--	142,118.1	142,094.9	23.1	0.0%	142,094.9	23.1	0.0%	142,071.8	46.3	0.0%
ME 5	33 52 21	2019	Below Normal	March	--	42,421.3	42,400.5	20.8	0.0%	42,395.8	25.5	0.1%	42,381.9	39.4	0.1%
ME 5	33 52 21	2019	Below Normal	April	--	15,300.9	15,280.1	20.8	0.1%	15,275.5	25.5	0.2%	15,262.7	38.2	0.2%
ME 5	33 52 21	2019	Below Normal	May	--	17,083.3	17,038.2	45.1	0.3%	17,028.9	54.4	0.3%	17,002.3	81.0	0.5%
ME 5	33 52 21	2019	Below Normal	June	--	4,243.1	4,185.4	57.6	1.4%	4,174.3	68.8	1.6%	4,141.9	101.2	2.4%
ME 5	33 52 21	2019	Below Normal	July	--	1,366.6	1,306.6	60.0	4.4%	1,294.8	71.8	5.3%	1,259.6	106.9	7.8%
ME 5	33 52 21	2019	Below Normal	August	--	601.5	544.2	57.3	9.5%	532.8	68.7	11.4%	499.0	102.5	17.0%
ME 5	33 52 21	2019	Below Normal	September	Used in Summary Table Analysis	467.0	413.3	53.7	11.5%	402.5	64.4	13.8%	370.3	96.6	20.7%
ME 5	33 52 21	2020	Dry	October	Used in Summary Table Analysis	359.1	318.1	41.0	11.4%	309.8	49.3	13.7%	284.9	74.2	20.7%
ME 5	33 52 21	2020	Dry	November	Used in Summary Table Analysis	326.2	293.7	32.5	10.0%	287.0	39.1	12.0%	267.2	58.9	18.1%
ME 5	33 52 21	2020	Dry	December	--	13,420.1	13,391.2	28.9	0.2%	13,385.4	34.7	0.3%	13,366.9	53.2	0.4%
ME 5	33 52 21	2020	Dry	January	--	22,436.3	22,409.7	26.6	0.1%	22,403.9	32.4	0.1%	22,387.7	48.6	0.2%
ME 5	33 52 21	2020	Dry	February	--	7,418.9	7,394.9	24.0	0.3%	7,389.9	28.9	0.4%	7,375.0	43.9	0.6%
ME 5	33 52 21	2020	Dry	March	--	7,263.2	7,240.6	22.6	0.3%	7,236.0	27.2	0.4%	7,222.2	41.0	0.6%
ME 5	33 52 21	2020	Dry	April	--	5,504.1	5,458.8	45.3	0.8%	5,449.8	54.3	1.0%	5,422.8	81.3	1.5%
ME 5	33 52 21	2020	Dry	May	--	7,404.1	7,349.9	54.2	0.7%	7,339.1	64.9	0.9%	7,306.7	97.3	1.3%
ME 5	33 52 21	2020	Dry	June	--	2,105.4	2,036.8	68.6	3.3%	2,023.6	81.8	3.9%	1,984.5	120.9	5.7%
ME 5	33 52 21	2020	Dry	July	--	799.7	729.8	69.8	8.7%	716.0	83.7	10.5%	680.2	119.5	14.9%
ME 5	33 52 21	2020	Dry	August	--	402.6	333.6	69.1	17.1%	319.8	82.8	20.6%	281.7	121.0	30.0%
ME 5	33 52 21	2020	Dry	September	Used in Summary Table Analysis	252.0	187.0	65.0	25.8%	173.7	78.3	31.1%	135.1	116.9	46.4%
ME 5	33 51 22	2000	Above Normal	October	Used in Summary Table Analysis	822.2	779.9	42.3	5.2%	771.3	50.9	6.2%	745.7	76.6	9.3%
ME 5	33 51 22	2000	Above Normal	November	Used in Summary Table Analysis	12,221.1	12,187.5	33.6	0.3%	12,180.6	40.5	0.3%	12,159.7	61.3	0.5%
ME 5	33 51 22	2000	Above Normal	December	--	10,865.6	10,836.3	29.3	0.3%	10,830.3	35.3	0.3%	10,812.4	53.2	0.5%
ME 5	33 51 22	2000	Above Normal	January	--	28,747.7	28,721.1	26.6	0.1%	28,716.4	31.3	0.1%	28,699.1	48.6	0.2%
ME 5	33 51 22	2000	Above Normal	February	--	37,153.9	37,129.6	24.3	0.1%	37,125.0	28.9	0.1%	37,110.0	44.0	0.1%
ME 5	33 51 22	2000	Above Normal	March	--	18,351.9	18,329.9	22.0	0.1%	18,325.2	26.6	0.1%	18,311.3	40.5	0.2%
ME 5	33 51 22	2000	Above Normal	April	--	12,341.4	12,320.6	20.8	0.2%	12,316.0	25.5	0.2%	12,303.2	38.2	0.3%
ME 5	33 51 22	2000	Above Normal	May	--	7,117.4	7,073.3	44.1	0.6%	7,064.4	53.0	0.7%	7,038.1	79.3	1.1%
ME 5	33 51 22	2000	Above Normal	June	--	2,620.5	2,555.4	65.0	2.5%	2,542.6	77.9	3.0%	2,504.6	115.9	4.4%
ME 5	33 51 22	2000	Above Normal	July	--	996.2	937.0	59.2	5.9%	925.3	70.9	7.1%	890.5	105.7	10.6%
ME 5	33 51 22	2000	Above Normal	August	--	526.4	470.4	56.0	10.6%	459.3	67.1	12.8%	425.9	100.5	19.1%
ME 5	33 51 22	2000	Above Normal	September	Used in Summary Table Analysis	299.1	249.2	50.0	16.7%	239.2	59.9	20.0%	209.2	89.9	30.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 51 22	2001	Dry	October	Used in Summary Table Analysis	3,839.1	3,797.5	41.7	1.1%	3,789.0	50.1	1.3%	3,763.7	75.5	2.0%
ME 5	33 51 22	2001	Dry	November	Used in Summary Table Analysis	6,162.8	6,129.2	33.7	0.5%	6,122.5	40.4	0.7%	6,101.9	61.0	1.0%
ME 5	33 51 22	2001	Dry	December	--	8,877.5	8,848.3	29.3	0.3%	8,842.4	35.2	0.4%	8,824.4	53.1	0.6%
ME 5	33 51 22	2001	Dry	January	--	12,865.7	12,839.1	26.6	0.2%	12,833.3	32.4	0.3%	12,817.1	48.6	0.4%
ME 5	33 51 22	2001	Dry	February	--	17,518.5	17,495.4	23.1	0.1%	17,489.6	28.9	0.2%	17,475.7	42.8	0.2%
ME 5	33 51 22	2001	Dry	March	--	12,321.8	12,298.6	23.1	0.2%	12,294.0	27.8	0.2%	12,281.3	40.5	0.3%
ME 5	33 51 22	2001	Dry	April	--	10,997.6	10,952.2	45.4	0.4%	10,943.2	54.4	0.5%	10,916.2	81.4	0.7%
ME 5	33 51 22	2001	Dry	May	--	2,638.0	2,584.5	53.5	2.0%	2,573.8	64.1	2.4%	2,542.0	95.9	3.6%
ME 5	33 51 22	2001	Dry	June	--	2,664.5	2,592.4	72.1	2.7%	2,578.2	86.2	3.2%	2,536.8	127.7	4.8%
ME 5	33 51 22	2001	Dry	July	--	720.5	652.1	68.4	9.5%	638.5	82.0	11.4%	603.2	117.3	16.3%
ME 5	33 51 22	2001	Dry	August	--	175.7	108.8	66.9	38.1%	95.5	80.2	45.7%	58.1	117.6	66.9%
ME 5	33 51 22	2001	Dry	September	Used in Summary Table Analysis	98.8	38.7	60.1	60.8%	26.7	72.1	72.9%	0.1	98.7	99.9%
ME 5	33 51 22	2002	Below Normal	October	Used in Summary Table Analysis	268.9	218.1	50.7	18.9%	207.8	61.0	22.7%	177.2	91.7	34.1%
ME 5	33 51 22	2002	Below Normal	November	Used in Summary Table Analysis	12,077.5	12,037.0	40.5	0.3%	12,028.9	48.6	0.4%	12,001.2	76.4	0.6%
ME 5	33 51 22	2002	Below Normal	December	--	35,836.8	35,802.1	34.7	0.1%	35,794.0	42.8	0.1%	35,772.0	64.8	0.2%
ME 5	33 51 22	2002	Below Normal	January	--	30,975.7	30,944.4	31.3	0.1%	30,937.5	38.2	0.1%	30,919.0	56.7	0.2%
ME 5	33 51 22	2002	Below Normal	February	--	24,736.1	24,708.3	27.8	0.1%	24,702.5	33.6	0.1%	24,684.0	52.1	0.2%
ME 5	33 51 22	2002	Below Normal	March	--	17,825.2	17,798.6	26.6	0.1%	17,792.8	32.4	0.2%	17,776.6	48.6	0.3%
ME 5	33 51 22	2002	Below Normal	April	--	9,942.8	9,897.1	45.7	0.5%	9,888.1	54.7	0.6%	9,860.8	82.1	0.8%
ME 5	33 51 22	2002	Below Normal	May	--	3,326.0	3,272.3	53.7	1.6%	3,261.6	64.5	1.9%	3,229.5	96.5	2.9%
ME 5	33 51 22	2002	Below Normal	June	--	857.2	796.8	60.4	7.0%	784.9	72.3	8.4%	749.6	107.6	12.6%
ME 5	33 51 22	2002	Below Normal	July	--	365.8	304.2	61.6	16.8%	291.9	73.8	20.2%	256.3	109.5	29.9%
ME 5	33 51 22	2002	Below Normal	August	--	231.0	172.8	58.2	25.2%	161.2	69.8	30.2%	125.9	105.1	45.5%
ME 5	33 51 22	2002	Below Normal	September	Used in Summary Table Analysis	167.5	112.3	55.2	33.0%	101.3	66.2	39.5%	67.5	100.1	59.7%
ME 5	33 51 22	2003	Wet	October	Used in Summary Table Analysis	132.4	86.7	45.7	34.5%	77.5	54.9	41.5%	49.8	82.6	62.4%
ME 5	33 51 22	2003	Wet	November	Used in Summary Table Analysis	900.9	863.9	37.0	4.1%	856.4	44.5	4.9%	833.7	67.2	7.5%
ME 5	33 51 22	2003	Wet	December	--	57,182.9	57,150.5	32.4	0.1%	57,143.5	39.4	0.1%	57,122.7	60.2	0.1%
ME 5	33 51 22	2003	Wet	January	--	31,605.3	31,576.4	28.9	0.1%	31,570.6	34.7	0.1%	31,552.1	53.2	0.2%
ME 5	33 51 22	2003	Wet	February	--	20,393.5	20,366.9	26.6	0.1%	20,362.3	31.3	0.2%	20,346.1	47.5	0.2%
ME 5	33 51 22	2003	Wet	March	--	24,094.9	24,070.6	24.3	0.1%	24,064.8	30.1	0.1%	24,049.8	45.1	0.2%
ME 5	33 51 22	2003	Wet	April	--	43,063.7	43,040.5	23.1	0.1%	43,035.9	27.8	0.1%	43,020.8	42.8	0.1%
ME 5	33 51 22	2003	Wet	May	--	12,245.4	12,199.1	46.3	0.4%	12,189.8	55.6	0.5%	12,162.0	83.3	0.7%
ME 5	33 51 22	2003	Wet	June	--	3,171.8	3,114.2	57.5	1.8%	3,103.0	68.8	2.2%	3,069.9	101.9	3.2%
ME 5	33 51 22	2003	Wet	July	--	1,479.6	1,418.6	61.0	4.1%	1,406.6	73.0	4.9%	1,370.7	108.9	7.4%
ME 5	33 51 22	2003	Wet	August	--	765.1	705.2	59.9	7.8%	692.9	72.2	9.4%	654.7	110.4	14.4%
ME 5	33 51 22	2003	Wet	September	Used in Summary Table Analysis	462.4	411.4	51.0	11.0%	401.2	61.2	13.2%	369.5	92.9	20.1%
ME 5	33 51 22	2004	Wet	October	Used in Summary Table Analysis	329.1	286.6	42.6	12.9%	278.0	51.2	15.5%	252.1	77.1	23.4%
ME 5	33 51 22	2004	Wet	November	Used in Summary Table Analysis	5,845.7	5,810.9	34.8	0.6%	5,803.8	41.9	0.7%	5,782.3	63.4	1.1%
ME 5	33 51 22	2004	Wet	December	--	36,502.3	36,472.2	30.1	0.1%	36,465.3	37.0	0.1%	36,446.8	55.6	0.2%
ME 5	33 51 22	2004	Wet	January	--	31,604.2	31,577.5	26.6	0.1%	31,571.8	32.4	0.1%	31,555.6	48.6	0.2%
ME 5	33 51 22	2004	Wet	February	--	38,362.3	38,336.8	25.5	0.1%	38,332.2	30.1	0.1%	38,316.0	46.3	0.1%
ME 5	33 51 22	2004	Wet	March	--	16,546.3	16,523.1	23.1	0.1%	16,518.5	27.8	0.2%	16,504.6	41.7	0.3%
ME 5	33 51 22	2004	Wet	April	--	9,467.0	9,445.3	21.8	0.2%	9,440.9	26.2	0.3%	9,427.4	39.6	0.4%
ME 5	33 51 22	2004	Wet	May	--	3,433.3	3,388.9	44.4	1.3%	3,380.1	53.2	1.6%	3,353.7	79.6	2.3%
ME 5	33 51 22	2004	Wet	June	--	695.0	639.8	55.3	7.9%	628.9	66.1	9.5%	596.8	98.3	14.1%
ME 5	33 51 22	2004	Wet	July	--	360.3	300.5	59.8	16.6%	288.6	71.7	19.9%	253.4	106.9	29.7%
ME 5	33 51 22	2004	Wet	August	--	229.0	172.3	56.7	24.7%	161.1	67.9	29.7%	127.2	101.8	44.4%
ME 5	33 51 22	2004	Wet	September	Used in Summary Table Analysis	165.7	111.6	54.1	32.7%	100.8	64.9	39.2%	68.3	97.4	58.8%
ME 5	33 51 22	2005	Above Normal	October	Used in Summary Table Analysis	7,738.0	7,694.6	43.4	0.6%	7,685.8	52.2	0.7%	7,659.4	78.6	1.0%
ME 5	33 51 22	2005	Above Normal	November	Used in Summary Table Analysis	2,264.7	2,230.4	34.3	1.5%	2,223.6	41.1	1.8%	2,202.7	62.0	2.7%
ME 5	33 51 22	2005	Above Normal	December	--	21,188.7	21,158.6	30.1	0.1%	21,151.6	37.0	0.2%	21,133.1	55.6	0.3%
ME 5	33 51 22	2005	Above Normal	January	--	22,511.6	22,485.0	26.6	0.1%	22,479.2	32.4	0.1%	22,463.0	48.6	0.2%
ME 5	33 51 22	2005	Above Normal	February	--	14,034.7	14,010.4	24.3	0.2%	14,005.8	28.9	0.2%	13,990.7	44.0	0.3%
ME 5	33 51 22	2005	Above Normal	March	--	28,663.2	28,641.2	22.0	0.1%	28,636.6	26.6	0.1%	28,622.7	40.5	0.1%
ME 5	33 51 22	2005	Above Normal	April	--	21,509.3	21,487.3	22.0	0.1%	21,482.6	26.6	0.1%	21,469.9	39.4	0.2%
ME 5	33 51 22	2005	Above Normal	May	--	19,645.8	19,600.7	45.1	0.2%	19,591.4	54.4	0.3%	19,564.8	81.0	0.4%
ME 5	33 51 22	2005	Above Normal	June	--	15,961.8	15,894.7	67.1	0.4%	15,881.9	79.9	0.5%	15,842.6	119.2	0.7%
ME 5	33 51 22	2005	Above Normal	July	--	2,865.5	2,803.9	61.6	2.1%	2,792.2	73.3	2.6%	2,757.4	108.1	3.8%
ME 5	33 51 22	2005	Above Normal	August	--	988.1	931.9	56.2	5.7%	920.9	67.2	6.8%	887.7	100.4	10.2%
ME 5	33 51 22	2005	Above Normal	September	Used in Summary Table Analysis	529.4	479.4	50.0	9.4%	469.5	60.0	11.3%	439.6	89.8	17.0%
ME 5	33 51 22	2006	Wet	October	Used in Summary Table Analysis	639.8	598.9	40.9	6.4%	590.7	49.1	7.7%	565.8	74.0	11.6%
ME 5	33 51 22	2006	Wet	November	Used in Summary Table Analysis	9,379.7	9,347.1	32.6	0.3%	9,340.4	39.4	0.4%	9,320.4	59.4	0.6%
ME 5	33 51 22	2006	Wet	December	--	43,741.9	43,711.8	30.1	0.1%	43,706.0	35.9	0.1%	43,687.5	54.4	0.1%
ME 5	33 51 22	2006	Wet	January	--	46,518.5	46,491.9	26.6	0.1%	46,486.1	32.4	0.1%	46,469.9	48.6	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
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Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 51 22	2006	Wet	February	--	26,714.1	26,691.0	23.1	0.1%	26,686.3	27.8	0.1%	26,671.3	42.8	0.2%
ME 5	33 51 22	2006	Wet	March	--	47,333.3	47,311.3	22.0	0.0%	47,306.7	26.6	0.1%	47,291.7	41.7	0.1%
ME 5	33 51 22	2006	Wet	April	--	30,497.7	30,476.9	20.8	0.1%	30,472.2	25.5	0.1%	30,460.6	37.0	0.1%
ME 5	33 51 22	2006	Wet	May	--	14,247.7	14,219.9	27.8	0.2%	14,215.3	32.4	0.2%	14,197.9	49.8	0.3%
ME 5	33 51 22	2006	Wet	June	--	3,552.4	3,497.6	54.9	1.5%	3,486.8	65.6	1.8%	3,455.2	97.2	2.7%
ME 5	33 51 22	2006	Wet	July	--	1,285.3	1,226.7	58.6	4.6%	1,215.2	70.1	5.5%	1,181.1	104.2	8.1%
ME 5	33 51 22	2006	Wet	August	--	671.2	613.8	57.5	8.6%	602.4	68.8	10.3%	568.4	102.8	15.3%
ME 5	33 51 22	2006	Wet	September	Used in Summary Table Analysis	431.5	380.8	50.7	11.8%	370.7	60.8	14.1%	340.4	91.1	21.1%
ME 5	33 51 22	2007	Above Normal	October	Used in Summary Table Analysis	278.8	237.1	41.7	15.0%	228.7	50.1	18.0%	203.3	75.6	27.1%
ME 5	33 51 22	2007	Above Normal	November	Used in Summary Table Analysis	8,731.6	8,697.3	34.3	0.4%	8,690.4	41.2	0.5%	8,669.4	62.2	0.7%
ME 5	33 51 22	2007	Above Normal	December	--	20,542.8	20,512.7	30.1	0.1%	20,505.8	37.0	0.2%	20,487.3	55.6	0.3%
ME 5	33 51 22	2007	Above Normal	January	--	10,286.8	10,260.3	26.5	0.3%	10,254.9	31.9	0.3%	10,238.3	48.5	0.5%
ME 5	33 51 22	2007	Above Normal	February	--	30,721.1	30,695.6	25.5	0.1%	30,689.8	31.3	0.1%	30,674.8	46.3	0.2%
ME 5	33 51 22	2007	Above Normal	March	--	13,127.3	13,104.2	23.1	0.2%	13,099.5	27.8	0.2%	13,084.5	42.8	0.3%
ME 5	33 51 22	2007	Above Normal	April	--	11,558.9	11,515.3	43.6	0.4%	11,506.6	52.3	0.5%	11,480.4	78.5	0.7%
ME 5	33 51 22	2007	Above Normal	May	--	4,150.9	4,099.1	51.9	1.2%	4,088.7	62.3	1.5%	4,057.6	93.3	2.2%
ME 5	33 51 22	2007	Above Normal	June	--	1,506.4	1,444.6	61.8	4.1%	1,432.4	74.0	4.9%	1,396.3	110.1	7.3%
ME 5	33 51 22	2007	Above Normal	July	--	499.5	437.0	62.4	12.5%	424.7	74.8	15.0%	388.3	111.1	22.3%
ME 5	33 51 22	2007	Above Normal	August	--	227.1	170.5	56.6	24.9%	159.2	67.9	29.9%	124.8	102.3	45.0%
ME 5	33 51 22	2007	Above Normal	September	Used in Summary Table Analysis	154.7	100.9	53.8	34.8%	90.2	64.5	41.7%	57.9	96.8	62.6%
ME 5	33 51 22	2008	Dry	October	Used in Summary Table Analysis	3,457.3	3,413.0	44.3	1.3%	3,404.1	53.2	1.5%	3,376.9	80.4	2.3%
ME 5	33 51 22	2008	Dry	November	Used in Summary Table Analysis	3,297.5	3,263.0	34.5	1.0%	3,255.9	41.6	1.3%	3,234.6	62.8	1.9%
ME 5	33 51 22	2008	Dry	December	--	23,299.8	23,268.5	31.3	0.1%	23,262.7	37.0	0.2%	23,244.2	55.6	0.2%
ME 5	33 51 22	2008	Dry	January	--	37,696.8	37,669.0	27.8	0.1%	37,663.2	33.6	0.1%	37,645.8	50.9	0.1%
ME 5	33 51 22	2008	Dry	February	--	26,311.3	26,287.0	24.3	0.1%	26,282.4	28.9	0.1%	26,267.4	44.0	0.2%
ME 5	33 51 22	2008	Dry	March	--	11,813.7	11,791.7	22.0	0.2%	11,787.0	26.6	0.2%	11,773.1	40.5	0.3%
ME 5	33 51 22	2008	Dry	April	--	9,031.9	8,987.7	44.2	0.5%	8,978.8	53.1	0.6%	8,952.3	79.6	0.9%
ME 5	33 51 22	2008	Dry	May	--	1,359.0	1,312.4	46.6	3.4%	1,303.4	55.7	4.1%	1,276.2	82.9	6.1%
ME 5	33 51 22	2008	Dry	June	--	441.5	374.5	67.1	15.2%	361.3	80.2	18.2%	322.3	119.2	27.0%
ME 5	33 51 22	2008	Dry	July	--	259.3	192.4	66.9	25.8%	179.2	80.2	30.9%	144.8	114.5	44.2%
ME 5	33 51 22	2008	Dry	August	--	182.9	117.5	65.4	35.7%	104.5	78.4	42.9%	65.3	117.6	64.3%
ME 5	33 51 22	2008	Dry	September	Used in Summary Table Analysis	144.4	81.3	63.1	43.7%	68.7	75.6	52.4%	32.3	112.1	77.6%
ME 5	33 51 22	2009	Critical	October	Used in Summary Table Analysis	929.1	878.8	50.3	5.4%	868.8	60.3	6.5%	838.1	91.0	9.8%
ME 5	33 51 22	2009	Critical	November	Used in Summary Table Analysis	5,553.9	5,514.5	39.5	0.7%	5,506.5	47.5	0.9%	5,479.5	74.4	1.3%
ME 5	33 51 22	2009	Critical	December	--	12,254.6	12,221.1	33.6	0.3%	12,214.1	40.5	0.3%	12,192.1	62.5	0.5%
ME 5	33 51 22	2009	Critical	January	--	8,822.2	8,791.3	30.9	0.4%	8,785.1	37.2	0.4%	8,765.9	56.4	0.6%
ME 5	33 51 22	2009	Critical	February	--	22,689.8	22,663.2	26.6	0.1%	22,657.4	32.4	0.1%	22,640.0	49.8	0.2%
ME 5	33 51 22	2009	Critical	March	--	21,178.2	21,153.9	24.3	0.1%	21,148.1	30.1	0.1%	21,133.1	45.1	0.2%
ME 5	33 51 22	2009	Critical	April	--	10,104.1	10,057.9	46.2	0.5%	10,048.7	55.3	0.5%	10,020.9	83.1	0.8%
ME 5	33 51 22	2009	Critical	May	--	15,613.4	15,556.7	56.7	0.4%	15,546.3	67.1	0.4%	15,511.6	101.9	0.7%
ME 5	33 51 22	2009	Critical	June	--	3,164.9	3,093.2	71.8	2.3%	3,079.4	85.5	2.7%	3,038.0	127.0	4.0%
ME 5	33 51 22	2009	Critical	July	--	1,267.0	1,199.3	67.7	5.3%	1,186.0	81.0	6.4%	1,151.3	115.7	9.1%
ME 5	33 51 22	2009	Critical	August	--	673.0	607.1	65.9	9.8%	594.1	78.9	11.7%	557.3	115.7	17.2%
ME 5	33 51 22	2009	Critical	September	Used in Summary Table Analysis	393.7	334.4	59.3	15.1%	322.7	71.1	18.1%	288.4	105.4	26.8%
ME 5	33 51 22	2010	Below Normal	October	Used in Summary Table Analysis	6,094.8	6,043.9	50.9	0.8%	6,033.6	61.2	1.0%	6,001.7	93.1	1.5%
ME 5	33 51 22	2010	Below Normal	November	Used in Summary Table Analysis	8,319.7	8,278.8	40.9	0.5%	8,270.5	49.2	0.6%	8,242.9	76.7	0.9%
ME 5	33 51 22	2010	Below Normal	December	--	12,415.5	12,379.6	35.9	0.3%	12,372.7	42.8	0.3%	12,350.7	64.8	0.5%
ME 5	33 51 22	2010	Below Normal	January	--	36,438.7	36,407.4	31.3	0.1%	36,400.5	38.2	0.1%	36,380.8	57.9	0.2%
ME 5	33 51 22	2010	Below Normal	February	--	27,303.2	27,275.5	27.8	0.1%	27,269.7	33.6	0.1%	27,252.3	50.9	0.2%
ME 5	33 51 22	2010	Below Normal	March	--	28,887.7	28,862.3	25.5	0.1%	28,856.5	31.3	0.1%	28,840.3	47.5	0.2%
ME 5	33 51 22	2010	Below Normal	April	--	40,107.6	40,083.3	24.3	0.1%	40,077.5	30.1	0.1%	40,062.5	45.1	0.1%
ME 5	33 51 22	2010	Below Normal	May	--	20,342.6	20,295.1	47.5	0.2%	20,285.9	56.7	0.3%	20,256.9	85.6	0.4%
ME 5	33 51 22	2010	Below Normal	June	--	9,408.9	9,340.5	68.4	0.7%	9,327.1	81.8	0.9%	9,287.2	121.8	1.3%
ME 5	33 51 22	2010	Below Normal	July	--	1,458.8	1,396.4	62.4	4.3%	1,384.3	74.5	5.1%	1,348.4	110.4	7.6%
ME 5	33 51 22	2010	Below Normal	August	--	574.3	516.5	57.7	10.1%	505.2	69.1	12.0%	471.1	103.1	18.0%
ME 5	33 51 22	2010	Below Normal	September	Used in Summary Table Analysis	656.4	601.1	55.3	8.4%	590.0	66.4	10.1%	556.9	99.5	15.2%
ME 5	33 51 22	2011	Wet	October	Used in Summary Table Analysis	9,680.0	9,637.6	42.4	0.4%	9,629.1	50.9	0.5%	9,603.2	76.7	0.8%
ME 5	33 51 22	2011	Wet	November	Used in Summary Table Analysis	14,273.1	14,239.6	33.6	0.2%	14,232.6	40.5	0.3%	14,210.6	62.5	0.4%
ME 5	33 51 22	2011	Wet	December	--	33,919.0	33,888.9	30.1	0.1%	33,881.9	37.0	0.1%	33,863.4	55.6	0.2%
ME 5	33 51 22	2011	Wet	January	--	14,197.9	14,171.3	26.6	0.2%	14,166.7	31.3	0.2%	14,150.5	47.5	0.3%
ME 5	33 51 22	2011	Wet	February	--	20,807.9	20,783.6	24.3	0.1%	20,778.9	28.9	0.1%	20,763.9	44.0	0.2%
ME 5	33 51 22	2011	Wet	March	--	52,149.3	52,126.2	23.1	0.0%	52,121.5	27.8	0.1%	52,106.5	42.8	0.1%
ME 5	33 51 22	2011	Wet	April	--	24,850.7	24,827.5	23.1	0.1%	24,822.9	27.8	0.1%	24,809.0	41.7	0.2%
ME 5	33 51 22	2011	Wet	May	--	11,407.1	11,362.0	45.0	0.4%	11,353.0	54.1	0.5%	11,326.0	81.0	0.7%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 51 22	2011	Wet	June	--	7,080.6	7,014.1	66.4	0.9%	7,000.9	79.6	1.1%	6,962.0	118.5	1.7%
ME 5	33 51 22	2011	Wet	July	--	1,831.5	1,764.9	66.6	3.6%	1,751.9	79.6	4.3%	1,714.2	117.2	6.4%
ME 5	33 51 22	2011	Wet	August	--	781.3	724.3	56.9	7.3%	713.1	68.2	8.7%	679.3	102.0	13.1%
ME 5	33 51 22	2011	Wet	September	Used in Summary Table Analysis	437.8	385.7	52.0	11.9%	375.4	62.4	14.3%	344.4	93.4	21.3%
ME 5	33 51 22	2012	Below Normal	October	Used in Summary Table Analysis	4,565.6	4,522.6	43.1	0.9%	4,513.9	51.7	1.1%	4,487.4	78.2	1.7%
ME 5	33 51 22	2012	Below Normal	November	Used in Summary Table Analysis	8,287.2	8,252.7	34.5	0.4%	8,245.6	41.6	0.5%	8,224.2	63.0	0.8%
ME 5	33 51 22	2012	Below Normal	December	--	5,205.2	5,175.5	29.7	0.6%	5,169.4	35.8	0.7%	5,151.0	54.2	1.0%
ME 5	33 51 22	2012	Below Normal	January	--	20,256.9	20,230.3	26.6	0.1%	20,224.5	32.4	0.2%	20,208.3	48.6	0.2%
ME 5	33 51 22	2012	Below Normal	February	--	18,253.5	18,229.2	24.3	0.1%	18,224.5	28.9	0.2%	18,209.5	44.0	0.2%
ME 5	33 51 22	2012	Below Normal	March	--	45,592.6	45,568.3	24.3	0.1%	45,563.7	28.9	0.1%	45,548.6	44.0	0.1%
ME 5	33 51 22	2012	Below Normal	April	--	26,920.1	26,898.1	22.0	0.1%	26,893.5	26.6	0.1%	26,879.6	40.5	0.2%
ME 5	33 51 22	2012	Below Normal	May	--	7,498.3	7,453.4	44.9	0.6%	7,444.4	53.8	0.7%	7,417.9	80.3	1.1%
ME 5	33 51 22	2012	Below Normal	June	--	5,539.4	5,471.8	67.6	1.2%	5,458.4	80.9	1.5%	5,419.3	120.0	2.2%
ME 5	33 51 22	2012	Below Normal	July	--	2,238.5	2,174.2	64.4	2.9%	2,161.3	77.2	3.4%	2,123.5	115.0	5.1%
ME 5	33 51 22	2012	Below Normal	August	--	391.7	339.6	52.2	13.3%	329.2	62.6	16.0%	298.0	93.7	23.9%
ME 5	33 51 22	2012	Below Normal	September	Used in Summary Table Analysis	253.2	206.4	46.7	18.5%	197.1	56.1	22.1%	169.2	83.9	33.2%
ME 5	33 51 22	2013	Below Normal	October	Used in Summary Table Analysis	1,927.8	1,886.7	41.1	2.1%	1,878.4	49.4	2.6%	1,853.6	74.2	3.8%
ME 5	33 51 22	2013	Below Normal	November	Used in Summary Table Analysis	14,775.5	14,743.1	32.4	0.2%	14,736.1	39.4	0.3%	14,715.3	60.2	0.4%
ME 5	33 51 22	2013	Below Normal	December	--	60,194.4	60,163.2	31.3	0.1%	60,157.4	37.0	0.1%	60,138.9	55.6	0.1%
ME 5	33 51 22	2013	Below Normal	January	--	22,260.4	22,236.1	24.3	0.1%	22,230.3	30.1	0.1%	22,214.1	46.3	0.2%
ME 5	33 51 22	2013	Below Normal	February	--	8,873.8	8,849.7	24.2	0.3%	8,844.7	29.2	0.3%	8,829.9	44.0	0.5%
ME 5	33 51 22	2013	Below Normal	March	--	10,372.6	10,349.3	23.3	0.2%	10,344.7	27.9	0.3%	10,330.4	42.1	0.4%
ME 5	33 51 22	2013	Below Normal	April	--	8,304.1	8,261.5	42.6	0.5%	8,253.0	51.0	0.6%	8,227.4	76.6	0.9%
ME 5	33 51 22	2013	Below Normal	May	--	4,447.7	4,396.2	51.5	1.2%	4,385.9	61.8	1.4%	4,355.2	92.5	2.1%
ME 5	33 51 22	2013	Below Normal	June	--	2,116.1	2,054.7	61.3	2.9%	2,042.6	73.5	3.5%	2,006.6	109.5	5.2%
ME 5	33 51 22	2013	Below Normal	July	--	720.8	661.1	59.7	8.3%	649.3	71.5	9.9%	614.8	106.0	14.7%
ME 5	33 51 22	2013	Below Normal	August	--	343.8	287.3	56.5	16.4%	276.0	67.8	19.7%	241.7	102.1	29.7%
ME 5	33 51 22	2013	Below Normal	September	Used in Summary Table Analysis	4,810.9	4,752.2	58.7	1.2%	4,740.5	70.4	1.5%	4,705.4	105.4	2.2%
ME 5	33 51 22	2014	Critical	October	Used in Summary Table Analysis	281.9	238.6	43.3	15.4%	229.9	52.0	18.5%	204.4	77.5	27.5%
ME 5	33 51 22	2014	Critical	November	Used in Summary Table Analysis	1,551.3	1,516.2	35.1	2.3%	1,509.1	42.1	2.7%	1,487.7	63.5	4.1%
ME 5	33 51 22	2014	Critical	December	--	1,597.6	1,566.9	30.7	1.9%	1,560.6	36.9	2.3%	1,541.8	55.8	3.5%
ME 5	33 51 22	2014	Critical	January	--	2,835.1	2,807.6	27.4	1.0%	2,802.1	33.0	1.2%	2,785.0	50.1	1.8%
ME 5	33 51 22	2014	Critical	February	--	15,792.8	15,768.5	24.3	0.2%	15,762.7	30.1	0.2%	15,746.5	46.3	0.3%
ME 5	33 51 22	2014	Critical	March	--	31,538.2	31,513.9	24.3	0.1%	31,509.3	28.9	0.1%	31,494.2	44.0	0.1%
ME 5	33 51 22	2014	Critical	April	--	13,008.1	12,963.0	45.1	0.3%	12,953.7	54.4	0.4%	12,925.9	82.2	0.6%
ME 5	33 51 22	2014	Critical	May	--	5,199.4	5,145.0	54.4	1.0%	5,134.3	65.2	1.3%	5,101.5	97.9	1.9%
ME 5	33 51 22	2014	Critical	June	--	1,202.7	1,129.3	73.3	6.1%	1,115.0	87.7	7.3%	1,073.4	129.2	10.7%
ME 5	33 51 22	2014	Critical	July	--	549.0	480.4	68.5	12.5%	466.8	82.1	15.0%	431.1	117.8	21.5%
ME 5	33 51 22	2014	Critical	August	--	351.7	285.9	65.8	18.7%	272.8	79.0	22.4%	235.6	116.2	33.0%
ME 5	33 51 22	2014	Critical	September	Used in Summary Table Analysis	2,585.3	2,520.7	64.6	2.5%	2,507.9	77.4	3.0%	2,469.7	115.6	4.5%
ME 5	33 51 22	2015	Dry	October	Used in Summary Table Analysis	11,407.2	11,356.5	50.7	0.4%	11,346.4	60.8	0.5%	11,316.0	91.2	0.8%
ME 5	33 51 22	2015	Dry	November	Used in Summary Table Analysis	9,086.8	9,048.1	38.7	0.4%	9,040.3	46.5	0.5%	9,013.5	73.3	0.8%
ME 5	33 51 22	2015	Dry	December	--	32,797.5	32,765.0	32.4	0.1%	32,758.1	39.4	0.1%	32,736.1	61.3	0.2%
ME 5	33 51 22	2015	Dry	January	--	14,605.3	14,575.2	30.1	0.2%	14,569.4	35.9	0.2%	14,549.8	55.6	0.4%
ME 5	33 51 22	2015	Dry	February	--	27,305.6	27,278.9	26.6	0.1%	27,273.1	32.4	0.1%	27,256.9	48.6	0.2%
ME 5	33 51 22	2015	Dry	March	--	11,588.0	11,564.2	23.7	0.2%	11,559.4	28.6	0.2%	11,544.6	43.4	0.4%
ME 5	33 51 22	2015	Dry	April	--	8,433.3	8,387.8	45.5	0.5%	8,378.7	54.6	0.6%	8,351.3	82.1	1.0%
ME 5	33 51 22	2015	Dry	May	--	1,510.4	1,456.8	53.6	3.5%	1,446.2	64.2	4.3%	1,415.3	95.1	6.3%
ME 5	33 51 22	2015	Dry	June	--	655.1	587.0	68.1	10.4%	573.6	81.5	12.4%	533.9	121.2	18.5%
ME 5	33 51 22	2015	Dry	July	--	271.3	203.7	67.6	24.9%	190.3	81.0	29.8%	155.6	115.8	42.7%
ME 5	33 51 22	2015	Dry	August	--	169.8	104.0	65.8	38.7%	90.9	78.9	46.5%	54.4	115.4	68.0%
ME 5	33 51 22	2015	Dry	September	Used in Summary Table Analysis	123.5	61.5	62.0	50.2%	48.8	74.7	60.5%	11.9	111.6	90.3%
ME 5	33 51 22	2016	Above Normal	October	Used in Summary Table Analysis	88.6	36.5	52.1	58.8%	26.4	62.2	70.2%	0.0	88.6	100.0%
ME 5	33 51 22	2016	Above Normal	November	Used in Summary Table Analysis	3,907.5	3,866.9	40.6	1.0%	3,858.6	49.0	1.3%	3,828.9	78.6	2.0%
ME 5	33 51 22	2016	Above Normal	December	--	36,831.0	36,795.1	35.9	0.1%	36,788.2	42.8	0.1%	36,765.0	66.0	0.2%
ME 5	33 51 22	2016	Above Normal	January	--	57,538.2	57,505.8	32.4	0.1%	57,498.8	39.4	0.1%	57,478.0	60.2	0.1%
ME 5	33 51 22	2016	Above Normal	February	--	24,305.6	24,278.9	26.6	0.1%	24,273.1	32.4	0.1%	24,255.8	49.8	0.2%
ME 5	33 51 22	2016	Above Normal	March	--	41,880.8	41,854.2	26.6	0.1%	41,848.4	32.4	0.1%	41,833.3	47.5	0.1%
ME 5	33 51 22	2016	Above Normal	April	--	18,567.1	18,544.0	23.1	0.1%	18,539.4	27.8	0.1%	18,524.3	42.8	0.2%
ME 5	33 51 22	2016	Above Normal	May	--	5,225.8	5,197.2	28.6	0.5%	5,191.4	34.4	0.7%	5,174.0	51.9	1.0%
ME 5	33 51 22	2016	Above Normal	June	--	1,513.7	1,461.1	52.5	3.5%	1,451.7	61.9	4.1%	1,424.2	89.5	5.9%
ME 5	33 51 22	2016	Above Normal	July	--	827.5	768.2	59.3	7.2%	756.5	71.0	8.6%	721.7	105.8	12.8%
ME 5	33 51 22	2016	Above Normal	August	--	496.2	437.8	58.4	11.8%	426.2	70.0	14.1%	391.5	104.7	21.1%
ME 5	33 51 22	2016	Above Normal	September	Used in Summary Table Analysis	332.2	277.4	54.8	16.5%	266.3	66.0	19.9%	233.1	99.2	29.9%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
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Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 51 22	2017	Wet	October	Used in Summary Table Analysis	18,366.9	18,322.9	44.0	0.2%	18,313.7	53.2	0.3%	18,287.0	79.9	0.4%
ME 5	33 51 22	2017	Wet	November	Used in Summary Table Analysis	18,914.4	18,880.8	33.6	0.2%	18,873.8	40.5	0.2%	18,853.0	61.3	0.3%
ME 5	33 51 22	2017	Wet	December	--	24,253.5	24,223.4	30.1	0.1%	24,217.6	35.9	0.1%	24,199.1	54.4	0.2%
ME 5	33 51 22	2017	Wet	January	--	107,313.7	107,285.9	27.8	0.0%	107,280.1	33.6	0.0%	107,263.9	49.8	0.0%
ME 5	33 51 22	2017	Wet	February	--	82,079.9	82,055.6	24.3	0.0%	82,049.8	30.1	0.0%	82,034.7	45.1	0.1%
ME 5	33 51 22	2017	Wet	March	--	27,351.9	27,327.5	24.3	0.1%	27,322.9	28.9	0.1%	27,309.0	42.8	0.2%
ME 5	33 51 22	2017	Wet	April	--	23,018.5	22,996.5	22.0	0.1%	22,991.9	26.6	0.1%	22,979.2	39.4	0.2%
ME 5	33 51 22	2017	Wet	May	--	6,276.6	6,248.1	28.5	0.5%	6,242.4	34.3	0.5%	6,225.2	51.4	0.8%
ME 5	33 51 22	2017	Wet	June	--	2,127.1	2,072.8	54.3	2.6%	2,062.2	64.9	3.1%	2,030.4	96.6	4.5%
ME 5	33 51 22	2017	Wet	July	--	940.5	881.2	59.3	6.3%	869.5	71.0	7.5%	835.1	105.5	11.2%
ME 5	33 51 22	2017	Wet	August	--	512.6	454.6	58.0	11.3%	443.1	69.5	13.6%	408.7	103.8	20.3%
ME 5	33 51 22	2017	Wet	September	Used in Summary Table Analysis	327.7	273.8	53.9	16.4%	263.0	64.7	19.7%	230.7	97.0	29.6%
ME 5	33 51 22	2018	Above Normal	October	Used in Summary Table Analysis	280.3	237.1	43.2	15.4%	228.4	51.9	18.5%	202.3	78.0	27.8%
ME 5	33 51 22	2018	Above Normal	November	Used in Summary Table Analysis	10,882.4	10,848.1	34.3	0.3%	10,841.2	41.2	0.4%	10,820.1	62.3	0.6%
ME 5	33 51 22	2018	Above Normal	December	--	5,455.0	5,425.8	29.2	0.5%	5,419.9	35.1	0.6%	5,401.9	53.1	1.0%
ME 5	33 51 22	2018	Above Normal	January	--	17,937.5	17,910.9	26.6	0.1%	17,905.1	32.4	0.2%	17,888.9	48.6	0.3%
ME 5	33 51 22	2018	Above Normal	February	--	7,605.6	7,582.1	23.5	0.3%	7,577.2	28.4	0.4%	7,562.5	43.1	0.6%
ME 5	33 51 22	2018	Above Normal	March	--	20,800.9	20,777.8	23.1	0.1%	20,774.3	26.6	0.1%	20,760.4	40.5	0.2%
ME 5	33 51 22	2018	Above Normal	April	--	32,319.4	32,298.6	20.8	0.1%	32,295.1	24.3	0.1%	32,282.4	37.0	0.1%
ME 5	33 51 22	2018	Above Normal	May	--	6,993.5	6,950.9	42.6	0.6%	6,942.5	51.0	0.7%	6,916.8	76.7	1.1%
ME 5	33 51 22	2018	Above Normal	June	--	1,918.8	1,863.9	54.9	2.9%	1,853.1	65.6	3.4%	1,821.3	97.5	5.1%
ME 5	33 51 22	2018	Above Normal	July	--	786.4	726.6	59.8	7.6%	714.7	71.7	9.1%	679.4	107.0	13.6%
ME 5	33 51 22	2018	Above Normal	August	--	447.5	391.4	56.1	12.5%	380.2	67.3	15.0%	346.7	100.8	22.5%
ME 5	33 51 22	2018	Above Normal	September	Used in Summary Table Analysis	304.5	250.4	54.0	17.7%	239.6	64.9	21.3%	207.2	97.3	31.9%
ME 5	33 51 22	2019	Below Normal	October	Used in Summary Table Analysis	211.3	168.7	42.6	20.2%	160.1	51.3	24.3%	134.1	77.2	36.5%
ME 5	33 51 22	2019	Below Normal	November	Used in Summary Table Analysis	6,683.2	6,648.7	34.5	0.5%	6,641.7	41.6	0.6%	6,620.6	62.6	0.9%
ME 5	33 51 22	2019	Below Normal	December	--	14,767.4	14,737.3	30.1	0.2%	14,731.5	35.9	0.2%	14,713.0	54.4	0.4%
ME 5	33 51 22	2019	Below Normal	January	--	35,425.9	35,399.3	26.6	0.1%	35,393.5	32.4	0.1%	35,377.3	48.6	0.1%
ME 5	33 51 22	2019	Below Normal	February	--	142,141.2	142,118.1	23.1	0.0%	142,106.5	34.7	0.0%	142,094.9	46.3	0.0%
ME 5	33 51 22	2019	Below Normal	March	--	42,434.0	42,413.2	20.8	0.0%	42,408.6	25.5	0.1%	42,394.7	39.4	0.1%
ME 5	33 51 22	2019	Below Normal	April	--	15,305.6	15,284.7	20.8	0.1%	15,280.1	25.5	0.2%	15,267.4	38.2	0.2%
ME 5	33 51 22	2019	Below Normal	May	--	17,098.4	17,052.1	46.3	0.3%	17,044.0	54.4	0.3%	17,016.2	82.2	0.5%
ME 5	33 51 22	2019	Below Normal	June	--	4,244.1	4,186.5	57.6	1.4%	4,175.3	68.8	1.6%	4,142.9	101.2	2.4%
ME 5	33 51 22	2019	Below Normal	July	--	1,367.6	1,307.6	60.0	4.4%	1,295.7	71.9	5.3%	1,260.5	107.1	7.8%
ME 5	33 51 22	2019	Below Normal	August	--	602.3	544.8	57.4	9.5%	533.4	68.8	11.4%	499.5	102.7	17.1%
ME 5	33 51 22	2019	Below Normal	September	Used in Summary Table Analysis	467.5	413.7	53.8	11.5%	402.9	64.6	13.8%	370.6	96.9	20.7%
ME 5	33 51 22	2020	Dry	October	Used in Summary Table Analysis	359.4	318.4	41.1	11.4%	310.0	49.4	13.7%	285.0	74.4	20.7%
ME 5	33 51 22	2020	Dry	November	Used in Summary Table Analysis	326.7	294.1	32.6	10.0%	287.5	39.2	12.0%	267.6	59.1	18.1%
ME 5	33 51 22	2020	Dry	December	--	13,432.9	13,402.8	30.1	0.2%	13,397.0	35.9	0.3%	13,379.6	53.2	0.4%
ME 5	33 51 22	2020	Dry	January	--	22,446.8	22,419.0	27.8	0.1%	22,414.4	32.4	0.1%	22,397.0	49.8	0.2%
ME 5	33 51 22	2020	Dry	February	--	7,420.4	7,396.2	24.2	0.3%	7,391.2	29.2	0.4%	7,376.3	44.1	0.6%
ME 5	33 51 22	2020	Dry	March	--	7,265.6	7,242.9	22.7	0.3%	7,238.3	27.3	0.4%	7,224.4	41.2	0.6%
ME 5	33 51 22	2020	Dry	April	--	5,506.5	5,461.1	45.4	0.8%	5,452.1	54.4	1.0%	5,425.1	81.4	1.5%
ME 5	33 51 22	2020	Dry	May	--	7,406.9	7,352.7	54.3	0.7%	7,341.8	65.2	0.9%	7,309.5	97.5	1.3%
ME 5	33 51 22	2020	Dry	June	--	2,105.8	2,037.2	68.6	3.3%	2,024.0	81.8	3.9%	1,984.7	121.1	5.7%
ME 5	33 51 22	2020	Dry	July	--	800.1	730.2	70.0	8.7%	716.3	83.8	10.5%	680.4	119.7	15.0%
ME 5	33 51 22	2020	Dry	August	--	403.0	333.8	69.2	17.2%	320.0	82.9	20.6%	281.8	121.2	30.1%
ME 5	33 51 22	2020	Dry	September	Used in Summary Table Analysis	252.2	187.0	65.2	25.8%	173.8	78.4	31.1%	135.0	117.2	46.5%
ME 5	33 50 23	2000	Above Normal	October	Used in Summary Table Analysis	824.4	781.7	42.7	5.2%	773.1	51.3	6.2%	747.2	77.1	9.4%
ME 5	33 50 23	2000	Above Normal	November	Used in Summary Table Analysis	12,250.0	12,215.3	34.7	0.3%	12,208.3	41.7	0.3%	12,187.5	62.5	0.5%
ME 5	33 50 23	2000	Above Normal	December	--	10,880.6	10,851.2	29.4	0.3%	10,845.1	35.4	0.3%	10,827.0	53.6	0.5%
ME 5	33 50 23	2000	Above Normal	January	--	28,795.1	28,768.5	26.6	0.1%	28,762.7	32.4	0.1%	28,746.5	48.6	0.2%
ME 5	33 50 23	2000	Above Normal	February	--	37,184.0	37,159.7	24.3	0.1%	37,155.1	28.9	0.1%	37,140.0	44.0	0.1%
ME 5	33 50 23	2000	Above Normal	March	--	18,360.0	18,338.0	22.0	0.1%	18,333.3	26.6	0.1%	18,319.4	40.5	0.2%
ME 5	33 50 23	2000	Above Normal	April	--	12,348.4	12,327.5	20.8	0.2%	12,322.9	25.5	0.2%	12,309.0	39.4	0.3%
ME 5	33 50 23	2000	Above Normal	May	--	7,123.0	7,078.8	44.2	0.6%	7,069.9	53.1	0.7%	7,043.5	79.5	1.1%
ME 5	33 50 23	2000	Above Normal	June	--	2,622.7	2,557.5	65.2	2.5%	2,544.7	78.0	3.0%	2,506.5	116.2	4.4%
ME 5	33 50 23	2000	Above Normal	July	--	997.4	938.0	59.5	6.0%	926.2	71.2	7.1%	891.2	106.2	10.6%
ME 5	33 50 23	2000	Above Normal	August	--	527.9	471.6	56.3	10.7%	460.4	67.5	12.8%	426.9	101.0	19.1%
ME 5	33 50 23	2000	Above Normal	September	Used in Summary Table Analysis	300.6	250.3	50.2	16.7%	240.3	60.3	20.1%	210.1	90.4	30.1%
ME 5	33 50 23	2001	Dry	October	Used in Summary Table Analysis	3,846.3	3,804.3	42.0	1.1%	3,795.7	50.6	1.3%	3,770.1	76.2	2.0%
ME 5	33 50 23	2001	Dry	November	Used in Summary Table Analysis	6,174.0	6,139.9	34.0	0.6%	6,133.1	40.9	0.7%	6,112.4	61.6	1.0%
ME 5	33 50 23	2001	Dry	December	--	8,888.5	8,859.0	29.5	0.3%	8,853.0	35.5	0.4%	8,835.1	53.5	0.6%
ME 5	33 50 23	2001	Dry	January	--	12,885.4	12,858.8	26.6	0.2%	12,854.2	31.3	0.2%	12,838.0	47.5	0.4%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 50 23	2001	Dry	February	--	17,531.3	17,508.1	23.1	0.1%	17,502.3	28.9	0.2%	17,488.4	42.8	0.2%
ME 5	33 50 23	2001	Dry	March	--	12,327.5	12,305.6	22.0	0.2%	12,300.9	26.6	0.2%	12,287.0	40.5	0.3%
ME 5	33 50 23	2001	Dry	April	--	11,004.3	10,958.9	45.4	0.4%	10,949.8	54.5	0.5%	10,922.8	81.5	0.7%
ME 5	33 50 23	2001	Dry	May	--	2,638.0	2,584.4	53.6	2.0%	2,573.7	64.2	2.4%	2,541.8	96.2	3.6%
ME 5	33 50 23	2001	Dry	June	--	2,669.1	2,596.8	72.3	2.7%	2,582.6	86.5	3.2%	2,541.0	128.1	4.8%
ME 5	33 50 23	2001	Dry	July	--	721.2	652.5	68.7	9.5%	638.8	82.4	11.4%	603.3	117.9	16.3%
ME 5	33 50 23	2001	Dry	August	--	176.9	109.7	67.2	38.0%	96.3	80.6	45.6%	58.7	118.2	66.8%
ME 5	33 50 23	2001	Dry	September	Used in Summary Table Analysis	100.2	39.7	60.5	60.3%	27.7	72.5	72.4%	0.8	99.4	99.2%
ME 5	33 50 23	2002	Below Normal	October	Used in Summary Table Analysis	270.5	219.4	51.1	18.9%	209.0	61.5	22.7%	178.1	92.4	34.1%
ME 5	33 50 23	2002	Below Normal	November	Used in Summary Table Analysis	12,092.6	12,052.1	40.5	0.3%	12,044.0	48.6	0.4%	12,016.2	76.4	0.6%
ME 5	33 50 23	2002	Below Normal	December	--	35,879.6	35,843.8	35.9	0.1%	35,836.8	42.8	0.1%	35,813.7	66.0	0.2%
ME 5	33 50 23	2002	Below Normal	January	--	31,001.2	30,969.9	31.3	0.1%	30,964.1	37.0	0.1%	30,944.4	56.7	0.2%
ME 5	33 50 23	2002	Below Normal	February	--	24,751.2	24,723.4	27.8	0.1%	24,717.6	33.6	0.1%	24,699.1	52.1	0.2%
ME 5	33 50 23	2002	Below Normal	March	--	17,836.8	17,810.2	26.6	0.1%	17,804.4	32.4	0.2%	17,788.2	48.6	0.3%
ME 5	33 50 23	2002	Below Normal	April	--	9,947.1	9,901.4	45.7	0.5%	9,892.2	54.9	0.6%	9,864.8	82.3	0.8%
ME 5	33 50 23	2002	Below Normal	May	--	3,327.5	3,273.6	53.9	1.6%	3,262.8	64.7	1.9%	3,230.8	96.8	2.9%
ME 5	33 50 23	2002	Below Normal	June	--	858.1	797.5	60.6	7.1%	785.5	72.5	8.5%	750.1	108.0	12.6%
ME 5	33 50 23	2002	Below Normal	July	--	366.9	305.0	61.9	16.9%	292.7	74.2	20.2%	256.9	110.0	30.0%
ME 5	33 50 23	2002	Below Normal	August	--	232.5	173.9	58.6	25.2%	162.2	70.2	30.2%	126.8	105.7	45.5%
ME 5	33 50 23	2002	Below Normal	September	Used in Summary Table Analysis	169.0	113.5	55.6	32.9%	102.4	66.6	39.4%	68.4	100.7	59.6%
ME 5	33 50 23	2003	Wet	October	Used in Summary Table Analysis	133.9	87.9	46.0	34.4%	78.6	55.3	41.3%	50.7	83.2	62.1%
ME 5	33 50 23	2003	Wet	November	Used in Summary Table Analysis	903.0	865.6	37.3	4.1%	858.0	44.9	5.0%	835.1	67.8	7.5%
ME 5	33 50 23	2003	Wet	December	--	57,283.6	57,250.0	33.6	0.1%	57,243.1	40.5	0.1%	57,223.4	60.2	0.1%
ME 5	33 50 23	2003	Wet	January	--	31,625.0	31,594.9	30.1	0.1%	31,589.1	35.9	0.1%	31,571.8	53.2	0.2%
ME 5	33 50 23	2003	Wet	February	--	20,402.8	20,377.3	25.5	0.1%	20,371.5	31.3	0.2%	20,355.3	47.5	0.2%
ME 5	33 50 23	2003	Wet	March	--	24,111.1	24,086.8	24.3	0.1%	24,081.0	30.1	0.1%	24,066.0	45.1	0.2%
ME 5	33 50 23	2003	Wet	April	--	43,105.3	43,081.0	24.3	0.1%	43,076.4	28.9	0.1%	43,061.3	44.0	0.1%
ME 5	33 50 23	2003	Wet	May	--	12,248.8	12,202.5	46.3	0.4%	12,193.3	55.6	0.5%	12,166.7	82.2	0.7%
ME 5	33 50 23	2003	Wet	June	--	3,172.5	3,114.8	57.6	1.8%	3,103.5	69.0	2.2%	3,070.3	102.2	3.2%
ME 5	33 50 23	2003	Wet	July	--	1,481.0	1,419.7	61.3	4.1%	1,407.5	73.5	5.0%	1,371.6	109.4	7.4%
ME 5	33 50 23	2003	Wet	August	--	766.6	706.4	60.2	7.9%	694.1	72.6	9.5%	655.6	111.0	14.5%
ME 5	33 50 23	2003	Wet	September	Used in Summary Table Analysis	464.0	412.6	51.4	11.1%	402.3	61.6	13.3%	370.4	93.5	20.2%
ME 5	33 50 23	2004	Wet	October	Used in Summary Table Analysis	330.7	287.8	42.9	13.0%	279.2	51.6	15.6%	253.0	77.7	23.5%
ME 5	33 50 23	2004	Wet	November	Used in Summary Table Analysis	5,857.8	5,822.6	35.2	0.6%	5,815.4	42.4	0.7%	5,793.8	64.0	1.1%
ME 5	33 50 23	2004	Wet	December	--	36,553.2	36,523.1	30.1	0.1%	36,516.2	37.0	0.1%	36,496.5	56.7	0.2%
ME 5	33 50 23	2004	Wet	January	--	31,637.7	31,611.1	26.6	0.1%	31,605.3	32.4	0.1%	31,588.0	49.8	0.2%
ME 5	33 50 23	2004	Wet	February	--	38,394.7	38,369.2	25.5	0.1%	38,363.4	31.3	0.1%	38,348.4	46.3	0.1%
ME 5	33 50 23	2004	Wet	March	--	16,550.9	16,527.8	23.1	0.1%	16,523.1	27.8	0.2%	16,509.3	41.7	0.3%
ME 5	33 50 23	2004	Wet	April	--	9,470.8	9,449.0	21.9	0.2%	9,444.6	26.3	0.3%	9,431.0	39.8	0.4%
ME 5	33 50 23	2004	Wet	May	--	3,436.5	3,392.0	44.4	1.3%	3,383.1	53.4	1.6%	3,356.6	79.9	2.3%
ME 5	33 50 23	2004	Wet	June	--	695.8	640.4	55.4	8.0%	629.5	66.3	9.5%	597.2	98.6	14.2%
ME 5	33 50 23	2004	Wet	July	--	361.6	301.6	60.1	16.6%	289.6	72.0	19.9%	254.2	107.4	29.7%
ME 5	33 50 23	2004	Wet	August	--	230.4	173.4	57.0	24.7%	162.1	68.3	29.6%	128.1	102.3	44.4%
ME 5	33 50 23	2004	Wet	September	Used in Summary Table Analysis	167.1	112.7	54.4	32.6%	101.8	65.3	39.1%	69.1	98.0	58.6%
ME 5	33 50 23	2005	Above Normal	October	Used in Summary Table Analysis	7,753.5	7,709.6	43.9	0.6%	7,700.8	52.7	0.7%	7,674.2	79.3	1.0%
ME 5	33 50 23	2005	Above Normal	November	Used in Summary Table Analysis	2,267.0	2,232.5	34.5	1.5%	2,225.6	41.4	1.8%	2,204.5	62.5	2.8%
ME 5	33 50 23	2005	Above Normal	December	--	21,231.5	21,200.2	31.3	0.1%	21,194.4	37.0	0.2%	21,175.9	55.6	0.3%
ME 5	33 50 23	2005	Above Normal	January	--	22,544.0	22,517.4	26.6	0.1%	22,511.6	32.4	0.1%	22,495.4	48.6	0.2%
ME 5	33 50 23	2005	Above Normal	February	--	14,039.4	14,015.0	24.3	0.2%	14,010.4	28.9	0.2%	13,995.4	44.0	0.3%
ME 5	33 50 23	2005	Above Normal	March	--	28,688.7	28,666.7	22.0	0.1%	28,662.0	26.6	0.1%	28,647.0	41.7	0.1%
ME 5	33 50 23	2005	Above Normal	April	--	21,524.3	21,503.5	20.8	0.1%	21,498.8	25.5	0.1%	21,485.0	39.4	0.2%
ME 5	33 50 23	2005	Above Normal	May	--	19,665.5	19,620.4	45.1	0.2%	19,611.1	54.4	0.3%	19,583.3	82.2	0.4%
ME 5	33 50 23	2005	Above Normal	June	--	15,985.0	15,917.8	67.1	0.4%	15,905.1	79.9	0.5%	15,865.7	119.2	0.7%
ME 5	33 50 23	2005	Above Normal	July	--	2,865.4	2,803.6	61.8	2.2%	2,791.8	73.6	2.6%	2,756.8	108.6	3.8%
ME 5	33 50 23	2005	Above Normal	August	--	989.4	933.0	56.4	5.7%	921.9	67.6	6.8%	888.6	100.9	10.2%
ME 5	33 50 23	2005	Above Normal	September	Used in Summary Table Analysis	531.0	480.7	50.3	9.5%	470.7	60.3	11.4%	440.6	90.3	17.0%
ME 5	33 50 23	2006	Wet	October	Used in Summary Table Analysis	641.8	600.6	41.2	6.4%	592.3	49.5	7.7%	567.2	74.6	11.6%
ME 5	33 50 23	2006	Wet	November	Used in Summary Table Analysis	9,399.8	9,366.8	33.0	0.4%	9,360.2	39.6	0.4%	9,339.9	59.8	0.6%
ME 5	33 50 23	2006	Wet	December	--	43,805.6	43,776.6	28.9	0.1%	43,769.7	35.9	0.1%	43,751.2	54.4	0.1%
ME 5	33 50 23	2006	Wet	January	--	46,575.2	46,548.6	26.6	0.1%	46,542.8	32.4	0.1%	46,525.5	49.8	0.1%
ME 5	33 50 23	2006	Wet	February	--	26,737.3	26,714.1	23.1	0.1%	26,708.3	28.9	0.1%	26,694.4	42.8	0.2%
ME 5	33 50 23	2006	Wet	March	--	47,378.5	47,355.3	23.1	0.0%	47,350.7	27.8	0.1%	47,336.8	41.7	0.1%
ME 5	33 50 23	2006	Wet	April	--	30,513.9	30,493.1	20.8	0.1%	30,489.6	24.3	0.1%	30,476.9	37.0	0.1%
ME 5	33 50 23	2006	Wet	May	--	14,256.9	14,229.2	27.8	0.2%	14,223.4	33.6	0.2%	14,207.2	49.8	0.3%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 50 23	2006	Wet	June	--	3,552.9	3,497.9	55.0	1.5%	3,487.2	65.7	1.9%	3,455.4	97.5	2.7%
ME 5	33 50 23	2006	Wet	July	--	1,286.7	1,227.9	58.8	4.6%	1,216.3	70.4	5.5%	1,182.1	104.6	8.1%
ME 5	33 50 23	2006	Wet	August	--	672.9	615.1	57.7	8.6%	603.7	69.2	10.3%	569.6	103.3	15.4%
ME 5	33 50 23	2006	Wet	September	Used in Summary Table Analysis	433.2	382.2	51.0	11.8%	372.0	61.2	14.1%	341.5	91.7	21.2%
ME 5	33 50 23	2007	Above Normal	October	Used in Summary Table Analysis	280.4	238.3	42.1	15.0%	229.9	50.5	18.0%	204.2	76.1	27.2%
ME 5	33 50 23	2007	Above Normal	November	Used in Summary Table Analysis	8,749.3	8,714.8	34.5	0.4%	8,707.8	41.6	0.5%	8,686.6	62.7	0.7%
ME 5	33 50 23	2007	Above Normal	December	--	20,577.5	20,547.5	30.1	0.1%	20,540.5	37.0	0.2%	20,522.0	55.6	0.3%
ME 5	33 50 23	2007	Above Normal	January	--	10,295.6	10,268.9	26.7	0.3%	10,263.4	32.2	0.3%	10,246.8	48.8	0.5%
ME 5	33 50 23	2007	Above Normal	February	--	30,759.3	30,733.8	25.5	0.1%	30,729.2	30.1	0.1%	30,713.0	46.3	0.2%
ME 5	33 50 23	2007	Above Normal	March	--	13,133.1	13,110.0	23.1	0.2%	13,105.3	27.8	0.2%	13,090.3	42.8	0.3%
ME 5	33 50 23	2007	Above Normal	April	--	11,565.0	11,521.3	43.8	0.4%	11,512.5	52.5	0.5%	11,486.3	78.7	0.7%
ME 5	33 50 23	2007	Above Normal	May	--	4,153.5	4,101.5	52.0	1.3%	4,091.1	62.4	1.5%	4,060.0	93.5	2.3%
ME 5	33 50 23	2007	Above Normal	June	--	1,508.3	1,446.4	61.9	4.1%	1,434.1	74.2	4.9%	1,397.9	110.4	7.3%
ME 5	33 50 23	2007	Above Normal	July	--	500.5	437.8	62.7	12.5%	425.4	75.1	15.0%	388.9	111.6	22.3%
ME 5	33 50 23	2007	Above Normal	August	--	228.5	171.6	56.9	24.9%	160.3	68.2	29.9%	125.7	102.8	45.0%
ME 5	33 50 23	2007	Above Normal	September	Used in Summary Table Analysis	156.2	102.1	54.1	34.7%	91.3	64.9	41.5%	58.9	97.4	62.3%
ME 5	33 50 23	2008	Dry	October	Used in Summary Table Analysis	3,464.1	3,419.4	44.7	1.3%	3,410.5	53.6	1.5%	3,383.1	81.0	2.3%
ME 5	33 50 23	2008	Dry	November	Used in Summary Table Analysis	3,303.9	3,269.1	34.8	1.1%	3,262.0	41.9	1.3%	3,240.5	63.4	1.9%
ME 5	33 50 23	2008	Dry	December	--	23,344.9	23,314.8	30.1	0.1%	23,307.9	37.0	0.2%	23,289.4	55.6	0.2%
ME 5	33 50 23	2008	Dry	January	--	37,740.7	37,711.8	28.9	0.1%	37,706.0	34.7	0.1%	37,688.7	52.1	0.1%
ME 5	33 50 23	2008	Dry	February	--	26,320.6	26,296.3	24.3	0.1%	26,291.7	28.9	0.1%	26,276.6	44.0	0.2%
ME 5	33 50 23	2008	Dry	March	--	11,818.3	11,795.1	23.1	0.2%	11,790.5	27.8	0.2%	11,777.8	40.5	0.3%
ME 5	33 50 23	2008	Dry	April	--	9,035.8	8,991.3	44.4	0.5%	8,982.5	53.2	0.6%	8,955.9	79.9	0.9%
ME 5	33 50 23	2008	Dry	May	--	1,358.4	1,311.8	46.6	3.4%	1,302.7	55.8	4.1%	1,275.3	83.1	6.1%
ME 5	33 50 23	2008	Dry	June	--	442.6	375.3	67.3	15.2%	362.1	80.5	18.2%	323.0	119.6	27.0%
ME 5	33 50 23	2008	Dry	July	--	260.5	193.3	67.3	25.8%	180.0	80.5	30.9%	145.4	115.1	44.2%
ME 5	33 50 23	2008	Dry	August	--	184.2	118.5	65.7	35.7%	105.4	78.8	42.8%	66.0	118.2	64.2%
ME 5	33 50 23	2008	Dry	September	Used in Summary Table Analysis	145.8	82.3	63.5	43.6%	69.7	76.1	52.2%	33.0	112.8	77.4%
ME 5	33 50 23	2009	Critical	October	Used in Summary Table Analysis	931.1	880.4	50.7	5.4%	870.2	60.8	6.5%	839.3	91.7	9.9%
ME 5	33 50 23	2009	Critical	November	Used in Summary Table Analysis	5,565.7	5,525.8	39.9	0.7%	5,517.7	48.0	0.9%	5,490.6	75.1	1.3%
ME 5	33 50 23	2009	Critical	December	--	12,278.9	12,244.2	34.7	0.3%	12,237.3	41.7	0.3%	12,215.3	63.7	0.5%
ME 5	33 50 23	2009	Critical	January	--	8,829.2	8,797.9	31.3	0.4%	8,791.6	37.6	0.4%	8,772.2	56.9	0.6%
ME 5	33 50 23	2009	Critical	February	--	22,710.6	22,682.9	27.8	0.1%	22,677.1	33.6	0.1%	22,659.7	50.9	0.2%
ME 5	33 50 23	2009	Critical	March	--	21,192.1	21,167.8	24.3	0.1%	21,163.2	28.9	0.1%	21,147.0	45.1	0.2%
ME 5	33 50 23	2009	Critical	April	--	10,105.4	10,059.0	46.4	0.5%	10,049.9	55.6	0.5%	10,022.0	83.4	0.8%
ME 5	33 50 23	2009	Critical	May	--	15,620.4	15,564.8	55.6	0.4%	15,553.2	67.1	0.4%	15,519.7	100.7	0.6%
ME 5	33 50 23	2009	Critical	June	--	3,165.7	3,093.9	71.9	2.3%	3,080.0	85.8	2.7%	3,038.3	127.4	4.0%
ME 5	33 50 23	2009	Critical	July	--	1,268.1	1,200.1	67.9	5.4%	1,186.7	81.4	6.4%	1,151.8	116.2	9.2%
ME 5	33 50 23	2009	Critical	August	--	674.4	608.1	66.2	9.8%	595.0	79.4	11.8%	558.0	116.3	17.3%
ME 5	33 50 23	2009	Critical	September	Used in Summary Table Analysis	395.1	335.4	59.7	15.1%	323.6	71.6	18.1%	289.0	106.1	26.9%
ME 5	33 50 23	2010	Below Normal	October	Used in Summary Table Analysis	6,097.3	6,045.9	51.4	0.8%	6,035.5	61.8	1.0%	6,003.5	93.9	1.5%
ME 5	33 50 23	2010	Below Normal	November	Used in Summary Table Analysis	8,327.8	8,286.5	41.3	0.5%	8,278.2	49.5	0.6%	8,250.3	77.4	0.9%
ME 5	33 50 23	2010	Below Normal	December	--	12,430.6	12,395.8	34.7	0.3%	12,388.9	41.7	0.3%	12,365.7	64.8	0.5%
ME 5	33 50 23	2010	Below Normal	January	--	36,490.7	36,458.3	32.4	0.1%	36,451.4	39.4	0.1%	36,431.7	59.0	0.2%
ME 5	33 50 23	2010	Below Normal	February	--	27,317.1	27,289.4	27.8	0.1%	27,283.6	33.6	0.1%	27,266.2	50.9	0.2%
ME 5	33 50 23	2010	Below Normal	March	--	28,900.5	28,873.8	26.6	0.1%	28,868.1	32.4	0.1%	28,851.9	48.6	0.2%
ME 5	33 50 23	2010	Below Normal	April	--	40,130.8	40,106.5	24.3	0.1%	40,100.7	30.1	0.1%	40,085.6	45.1	0.1%
ME 5	33 50 23	2010	Below Normal	May	--	20,360.0	20,311.3	48.6	0.2%	20,302.1	57.9	0.3%	20,274.3	85.6	0.4%
ME 5	33 50 23	2010	Below Normal	June	--	9,422.3	9,353.9	68.4	0.7%	9,340.4	81.9	0.9%	9,300.2	122.1	1.3%
ME 5	33 50 23	2010	Below Normal	July	--	1,459.4	1,396.6	62.7	4.3%	1,384.5	74.9	5.1%	1,348.5	110.9	7.6%
ME 5	33 50 23	2010	Below Normal	August	--	575.7	517.7	58.0	10.1%	506.2	69.5	12.1%	472.0	103.7	18.0%
ME 5	33 50 23	2010	Below Normal	September	Used in Summary Table Analysis	658.2	602.5	55.7	8.5%	591.4	66.8	10.2%	558.1	100.1	15.2%
ME 5	33 50 23	2011	Wet	October	Used in Summary Table Analysis	9,692.0	9,649.3	42.7	0.4%	9,640.6	51.4	0.5%	9,614.6	77.4	0.8%
ME 5	33 50 23	2011	Wet	November	Used in Summary Table Analysis	14,285.9	14,252.3	33.6	0.2%	14,245.4	40.5	0.3%	14,223.4	62.5	0.4%
ME 5	33 50 23	2011	Wet	December	--	33,971.1	33,941.0	30.1	0.1%	33,934.0	37.0	0.1%	33,915.5	55.6	0.2%
ME 5	33 50 23	2011	Wet	January	--	14,207.2	14,180.6	26.6	0.2%	14,174.8	32.4	0.2%	14,158.6	48.6	0.3%
ME 5	33 50 23	2011	Wet	February	--	20,818.3	20,794.0	24.3	0.1%	20,788.2	30.1	0.1%	20,773.1	45.1	0.2%
ME 5	33 50 23	2011	Wet	March	--	52,184.0	52,160.9	23.1	0.0%	52,156.3	27.8	0.1%	52,141.2	42.8	0.1%
ME 5	33 50 23	2011	Wet	April	--	24,861.1	24,838.0	23.1	0.1%	24,833.3	27.8	0.1%	24,819.4	41.7	0.2%
ME 5	33 50 23	2011	Wet	May	--	11,411.9	11,366.8	45.1	0.4%	11,357.8	54.2	0.5%	11,330.7	81.3	0.7%
ME 5	33 50 23	2011	Wet	June	--	7,085.8	7,019.2	66.6	0.9%	7,006.0	79.7	1.1%	6,967.0	118.8	1.7%
ME 5	33 50 23	2011	Wet	July	--	1,831.9	1,765.2	66.8	3.6%	1,752.0	80.0	4.4%	1,714.2	117.7	6.4%
ME 5	33 50 23	2011	Wet	August	--	782.5	725.3	57.2	7.3%	714.0	68.6	8.8%	680.1	102.5	13.1%
ME 5	33 50 23	2011	Wet	September	Used in Summary Table Analysis	439.2	386.9	52.3	11.9%	376.4	62.8	14.3%	345.3	93.9	21.4%

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At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 50 23	2012	Below Normal	October	Used in Summary Table Analysis	4,572.0	4,528.6	43.4	0.9%	4,519.9	52.1	1.1%	4,493.2	78.8	1.7%
ME 5	33 50 23	2012	Below Normal	November	Used in Summary Table Analysis	8,299.4	8,264.7	34.7	0.4%	8,257.5	41.9	0.5%	8,236.0	63.4	0.8%
ME 5	33 50 23	2012	Below Normal	December	--	5,210.5	5,180.7	29.9	0.6%	5,174.5	36.0	0.7%	5,156.0	54.5	1.0%
ME 5	33 50 23	2012	Below Normal	January	--	20,291.7	20,265.0	26.6	0.1%	20,259.3	32.4	0.2%	20,241.9	49.8	0.2%
ME 5	33 50 23	2012	Below Normal	February	--	18,263.9	18,238.4	25.5	0.1%	18,233.8	30.1	0.2%	18,218.8	45.1	0.2%
ME 5	33 50 23	2012	Below Normal	March	--	45,631.9	45,607.6	24.3	0.1%	45,603.0	28.9	0.1%	45,588.0	44.0	0.1%
ME 5	33 50 23	2012	Below Normal	April	--	26,934.0	26,912.0	22.0	0.1%	26,907.4	26.6	0.1%	26,892.4	41.7	0.2%
ME 5	33 50 23	2012	Below Normal	May	--	7,500.8	7,455.8	45.0	0.6%	7,446.9	53.9	0.7%	7,420.3	80.6	1.1%
ME 5	33 50 23	2012	Below Normal	June	--	5,544.7	5,477.0	67.7	1.2%	5,463.7	81.0	1.5%	5,424.3	120.4	2.2%
ME 5	33 50 23	2012	Below Normal	July	--	2,242.0	2,177.3	64.7	2.9%	2,164.5	77.5	3.5%	2,126.5	115.5	5.2%
ME 5	33 50 23	2012	Below Normal	August	--	392.7	340.3	52.4	13.4%	329.8	62.9	16.0%	298.5	94.2	24.0%
ME 5	33 50 23	2012	Below Normal	September	Used in Summary Table Analysis	254.6	207.6	47.0	18.5%	198.2	56.4	22.1%	170.2	84.4	33.2%
ME 5	33 50 23	2013	Below Normal	October	Used in Summary Table Analysis	1,932.2	1,890.7	41.4	2.1%	1,882.4	49.8	2.6%	1,857.4	74.8	3.9%
ME 5	33 50 23	2013	Below Normal	November	Used in Summary Table Analysis	14,798.6	14,765.0	33.6	0.2%	14,758.1	40.5	0.3%	14,737.3	61.3	0.4%
ME 5	33 50 23	2013	Below Normal	December	--	60,243.1	60,213.0	30.1	0.0%	60,206.0	37.0	0.1%	60,187.5	55.6	0.1%
ME 5	33 50 23	2013	Below Normal	January	--	22,273.1	22,247.7	25.5	0.1%	22,243.1	30.1	0.1%	22,226.9	46.3	0.2%
ME 5	33 50 23	2013	Below Normal	February	--	8,879.7	8,855.4	24.3	0.3%	8,850.5	29.3	0.3%	8,835.5	44.2	0.5%
ME 5	33 50 23	2013	Below Normal	March	--	10,382.6	10,359.3	23.4	0.2%	10,354.5	28.1	0.3%	10,340.2	42.5	0.4%
ME 5	33 50 23	2013	Below Normal	April	--	8,307.1	8,264.5	42.6	0.5%	8,255.9	51.2	0.6%	8,230.3	76.7	0.9%
ME 5	33 50 23	2013	Below Normal	May	--	4,451.6	4,400.0	51.6	1.2%	4,389.7	61.9	1.4%	4,358.9	92.7	2.1%
ME 5	33 50 23	2013	Below Normal	June	--	2,117.7	2,056.0	61.7	2.9%	2,044.0	73.7	3.5%	2,007.9	109.8	5.2%
ME 5	33 50 23	2013	Below Normal	July	--	721.7	661.7	60.0	8.3%	649.9	71.9	10.0%	615.2	106.5	14.8%
ME 5	33 50 23	2013	Below Normal	August	--	345.1	288.3	56.8	16.5%	277.0	68.1	19.7%	242.5	102.6	29.7%
ME 5	33 50 23	2013	Below Normal	September	Used in Summary Table Analysis	4,817.5	4,758.6	58.9	1.2%	4,746.8	70.7	1.5%	4,711.5	106.0	2.2%
ME 5	33 50 23	2014	Critical	October	Used in Summary Table Analysis	282.4	238.8	43.6	15.4%	230.0	52.4	18.5%	204.4	78.0	27.6%
ME 5	33 50 23	2014	Critical	November	Used in Summary Table Analysis	1,555.0	1,519.7	35.3	2.3%	1,512.6	42.4	2.7%	1,491.0	64.0	4.1%
ME 5	33 50 23	2014	Critical	December	--	1,600.0	1,569.2	30.8	1.9%	1,562.8	37.2	2.3%	1,543.8	56.3	3.5%
ME 5	33 50 23	2014	Critical	January	--	2,839.0	2,811.5	27.5	1.0%	2,805.8	33.2	1.2%	2,788.5	50.5	1.8%
ME 5	33 50 23	2014	Critical	February	--	15,804.4	15,778.9	25.5	0.2%	15,773.1	31.3	0.2%	15,756.9	47.5	0.3%
ME 5	33 50 23	2014	Critical	March	--	31,550.9	31,527.8	23.1	0.1%	31,522.0	28.9	0.1%	31,506.9	44.0	0.1%
ME 5	33 50 23	2014	Critical	April	--	13,011.6	12,966.4	45.1	0.3%	12,957.2	54.4	0.4%	12,929.4	82.2	0.6%
ME 5	33 50 23	2014	Critical	May	--	5,202.0	5,147.5	54.5	1.0%	5,136.6	65.4	1.3%	5,103.8	98.1	1.9%
ME 5	33 50 23	2014	Critical	June	--	1,203.8	1,130.3	73.5	6.1%	1,115.9	87.9	7.3%	1,074.3	129.5	10.8%
ME 5	33 50 23	2014	Critical	July	--	550.0	481.2	68.8	12.5%	467.5	82.5	15.0%	431.6	118.4	21.5%
ME 5	33 50 23	2014	Critical	August	--	353.1	287.0	66.1	18.7%	273.8	79.4	22.5%	236.3	116.8	33.1%
ME 5	33 50 23	2014	Critical	September	Used in Summary Table Analysis	2,588.9	2,523.8	65.0	2.5%	2,511.0	77.9	3.0%	2,472.6	116.3	4.5%
ME 5	33 50 23	2015	Dry	October	Used in Summary Table Analysis	11,418.9	11,367.7	51.2	0.4%	11,357.6	61.2	0.5%	11,327.0	91.9	0.8%
ME 5	33 50 23	2015	Dry	November	Used in Summary Table Analysis	9,098.4	9,059.4	39.0	0.4%	9,051.5	46.9	0.5%	9,024.5	73.8	0.8%
ME 5	33 50 23	2015	Dry	December	--	32,840.3	32,806.7	33.6	0.1%	32,799.8	40.5	0.1%	32,778.9	61.3	0.2%
ME 5	33 50 23	2015	Dry	January	--	14,611.1	14,581.0	30.1	0.2%	14,575.2	35.9	0.2%	14,555.6	55.6	0.4%
ME 5	33 50 23	2015	Dry	February	--	27,321.8	27,295.1	26.6	0.1%	27,289.4	32.4	0.1%	27,273.1	48.6	0.2%
ME 5	33 50 23	2015	Dry	March	--	11,591.4	11,567.5	24.0	0.2%	11,562.6	28.8	0.2%	11,547.7	43.8	0.4%
ME 5	33 50 23	2015	Dry	April	--	8,444.0	8,398.4	45.6	0.5%	8,389.2	54.7	0.6%	8,361.8	82.2	1.0%
ME 5	33 50 23	2015	Dry	May	--	1,510.6	1,456.8	53.8	3.6%	1,446.2	64.5	4.3%	1,415.2	95.5	6.3%
ME 5	33 50 23	2015	Dry	June	--	655.9	587.6	68.3	10.4%	574.1	81.8	12.5%	534.3	121.6	18.5%
ME 5	33 50 23	2015	Dry	July	--	272.3	204.4	67.9	24.9%	191.0	81.4	29.9%	156.0	116.4	42.7%
ME 5	33 50 23	2015	Dry	August	--	171.1	105.0	66.1	38.6%	91.8	79.3	46.4%	55.0	116.1	67.8%
ME 5	33 50 23	2015	Dry	September	Used in Summary Table Analysis	124.8	62.4	62.4	50.0%	49.6	75.2	60.2%	12.5	112.3	90.0%
ME 5	33 50 23	2016	Above Normal	October	Used in Summary Table Analysis	89.9	37.4	52.5	58.4%	27.2	62.7	69.7%	0.5	89.4	99.5%
ME 5	33 50 23	2016	Above Normal	November	Used in Summary Table Analysis	3,918.2	3,877.1	41.1	1.0%	3,868.8	49.4	1.3%	3,838.9	79.3	2.0%
ME 5	33 50 23	2016	Above Normal	December	--	36,881.9	36,846.1	35.9	0.1%	36,838.0	44.0	0.1%	36,814.8	67.1	0.2%
ME 5	33 50 23	2016	Above Normal	January	--	57,590.3	57,556.7	33.6	0.1%	57,549.8	40.5	0.1%	57,528.9	61.3	0.1%
ME 5	33 50 23	2016	Above Normal	February	--	24,312.5	24,285.9	26.6	0.1%	24,280.1	32.4	0.1%	24,262.7	49.8	0.2%
ME 5	33 50 23	2016	Above Normal	March	--	41,905.1	41,878.5	26.6	0.1%	41,872.7	32.4	0.1%	41,856.5	48.6	0.1%
ME 5	33 50 23	2016	Above Normal	April	--	18,571.8	18,548.6	23.1	0.1%	18,544.0	27.8	0.1%	18,530.1	41.7	0.2%
ME 5	33 50 23	2016	Above Normal	May	--	5,227.5	5,198.8	28.7	0.5%	5,192.9	34.6	0.7%	5,175.3	52.2	1.0%
ME 5	33 50 23	2016	Above Normal	June	--	1,514.6	1,461.8	52.8	3.5%	1,452.4	62.2	4.1%	1,424.8	89.8	5.9%
ME 5	33 50 23	2016	Above Normal	July	--	828.8	769.2	59.5	7.2%	757.4	71.3	8.6%	722.5	106.3	12.8%
ME 5	33 50 23	2016	Above Normal	August	--	497.7	439.0	58.7	11.8%	427.3	70.4	14.1%	392.4	105.3	21.1%
ME 5	33 50 23	2016	Above Normal	September	Used in Summary Table Analysis	333.8	278.6	55.1	16.5%	267.4	66.4	19.9%	234.0	99.8	29.9%
ME 5	33 50 23	2017	Wet	October	Used in Summary Table Analysis	18,386.6	18,342.6	44.0	0.2%	18,333.3	53.2	0.3%	18,307.9	78.7	0.4%
ME 5	33 50 23	2017	Wet	November	Used in Summary Table Analysis	18,936.3	18,901.6	34.7	0.2%	18,894.7	41.7	0.2%	18,873.8	62.5	0.3%
ME 5	33 50 23	2017	Wet	December	--	24,287.0	24,256.9	30.1	0.1%	24,250.0	37.0	0.2%	24,231.5	55.6	0.2%
ME 5	33 50 23	2017	Wet	January	--	107,412.0	107,384.3	27.8	0.0%	107,378.5	33.6	0.0%	107,361.1	50.9	0.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	33 50 23	2017	Wet	February	--	82,135.4	82,110.0	25.5	0.0%	82,104.2	31.3	0.0%	82,089.1	46.3	0.1%
ME 5	33 50 23	2017	Wet	March	--	27,366.9	27,343.8	23.1	0.1%	27,339.1	27.8	0.1%	27,324.1	42.8	0.2%
ME 5	33 50 23	2017	Wet	April	--	23,035.9	23,015.0	20.8	0.1%	23,010.4	25.5	0.1%	22,997.7	38.2	0.2%
ME 5	33 50 23	2017	Wet	May	--	6,276.2	6,247.6	28.6	0.5%	6,241.8	34.4	0.5%	6,224.7	51.5	0.8%
ME 5	33 50 23	2017	Wet	June	--	2,129.2	2,074.8	54.4	2.6%	2,064.0	65.2	3.1%	2,032.3	96.9	4.5%
ME 5	33 50 23	2017	Wet	July	--	942.0	882.5	59.6	6.3%	870.8	71.3	7.6%	836.1	105.9	11.2%
ME 5	33 50 23	2017	Wet	August	--	514.3	456.0	58.3	11.3%	444.4	69.8	13.6%	409.9	104.3	20.3%
ME 5	33 50 23	2017	Wet	September	Used in Summary Table Analysis	329.3	275.1	54.2	16.5%	264.2	65.1	19.8%	231.7	97.6	29.6%
ME 5	33 50 23	2018	Above Normal	October	Used in Summary Table Analysis	282.0	238.5	43.5	15.4%	229.7	52.3	18.5%	203.4	78.6	27.9%
ME 5	33 50 23	2018	Above Normal	November	Used in Summary Table Analysis	10,905.6	10,871.1	34.5	0.3%	10,864.0	41.6	0.4%	10,842.8	62.7	0.6%
ME 5	33 50 23	2018	Above Normal	December	--	5,457.3	5,427.9	29.4	0.5%	5,421.9	35.4	0.6%	5,403.7	53.6	1.0%
ME 5	33 50 23	2018	Above Normal	January	--	17,975.7	17,949.1	26.6	0.1%	17,943.3	32.4	0.2%	17,927.1	48.6	0.3%
ME 5	33 50 23	2018	Above Normal	February	--	7,607.2	7,583.4	23.7	0.3%	7,578.6	28.6	0.4%	7,563.8	43.4	0.6%
ME 5	33 50 23	2018	Above Normal	March	--	20,825.2	20,803.2	22.0	0.1%	20,798.6	26.6	0.1%	20,784.7	40.5	0.2%
ME 5	33 50 23	2018	Above Normal	April	--	32,348.4	32,327.5	20.8	0.1%	32,324.1	24.3	0.1%	32,311.3	37.0	0.1%
ME 5	33 50 23	2018	Above Normal	May	--	6,993.6	6,951.0	42.6	0.6%	6,942.6	51.0	0.7%	6,916.8	76.9	1.1%
ME 5	33 50 23	2018	Above Normal	June	--	1,919.7	1,864.6	55.1	2.9%	1,853.8	65.9	3.4%	1,821.9	97.8	5.1%
ME 5	33 50 23	2018	Above Normal	July	--	787.8	727.7	60.1	7.6%	715.8	72.1	9.1%	680.3	107.5	13.6%
ME 5	33 50 23	2018	Above Normal	August	--	449.1	392.7	56.4	12.6%	381.5	67.6	15.1%	347.8	101.3	22.6%
ME 5	33 50 23	2018	Above Normal	September	Used in Summary Table Analysis	306.1	251.7	54.4	17.8%	240.8	65.3	21.3%	208.2	97.9	32.0%
ME 5	33 50 23	2019	Below Normal	October	Used in Summary Table Analysis	212.8	169.8	43.0	20.2%	161.1	51.7	24.3%	135.0	77.8	36.6%
ME 5	33 50 23	2019	Below Normal	November	Used in Summary Table Analysis	6,698.8	6,664.0	34.8	0.5%	6,656.8	42.0	0.6%	6,635.5	63.3	0.9%
ME 5	33 50 23	2019	Below Normal	December	--	14,792.8	14,762.7	30.1	0.2%	14,756.9	35.9	0.2%	14,738.4	54.4	0.4%
ME 5	33 50 23	2019	Below Normal	January	--	35,476.9	35,449.1	27.8	0.1%	35,443.3	33.6	0.1%	35,427.1	49.8	0.1%
ME 5	33 50 23	2019	Below Normal	February	--	142,199.1	142,164.4	34.7	0.0%	142,164.4	34.7	0.0%	142,152.8	46.3	0.0%
ME 5	33 50 23	2019	Below Normal	March	--	42,459.5	42,437.5	22.0	0.1%	42,432.9	26.6	0.1%	42,419.0	40.5	0.1%
ME 5	33 50 23	2019	Below Normal	April	--	15,311.3	15,290.5	20.8	0.1%	15,285.9	25.5	0.2%	15,273.1	38.2	0.2%
ME 5	33 50 23	2019	Below Normal	May	--	17,135.4	17,090.3	45.1	0.3%	17,081.0	54.4	0.3%	17,054.4	81.0	0.5%
ME 5	33 50 23	2019	Below Normal	June	--	4,243.4	4,185.5	57.9	1.4%	4,174.5	68.9	1.6%	4,141.9	101.5	2.4%
ME 5	33 50 23	2019	Below Normal	July	--	1,369.0	1,308.7	60.3	4.4%	1,296.8	72.2	5.3%	1,261.5	107.5	7.9%
ME 5	33 50 23	2019	Below Normal	August	--	603.8	546.1	57.7	9.6%	534.7	69.2	11.5%	500.6	103.2	17.1%
ME 5	33 50 23	2019	Below Normal	September	Used in Summary Table Analysis	469.1	414.9	54.1	11.5%	404.1	65.0	13.9%	371.6	97.4	20.8%
ME 5	33 50 23	2020	Dry	October	Used in Summary Table Analysis	360.8	319.4	41.4	11.5%	311.0	49.8	13.8%	285.8	75.0	20.8%
ME 5	33 50 23	2020	Dry	November	Used in Summary Table Analysis	329.1	296.2	32.9	10.0%	289.5	39.6	12.0%	269.4	59.7	18.1%
ME 5	33 50 23	2020	Dry	December	--	13,469.9	13,439.8	30.1	0.2%	13,434.0	35.9	0.3%	13,415.5	54.4	0.4%
ME 5	33 50 23	2020	Dry	January	--	22,475.7	22,447.9	27.8	0.1%	22,442.1	33.6	0.1%	22,425.9	49.8	0.2%
ME 5	33 50 23	2020	Dry	February	--	7,421.1	7,396.8	24.3	0.3%	7,391.8	29.3	0.4%	7,376.7	44.3	0.6%
ME 5	33 50 23	2020	Dry	March	--	7,270.9	7,248.1	22.8	0.3%	7,243.4	27.5	0.4%	7,229.4	41.6	0.6%
ME 5	33 50 23	2020	Dry	April	--	5,512.4	5,466.9	45.5	0.8%	5,457.9	54.5	1.0%	5,430.8	81.6	1.5%
ME 5	33 50 23	2020	Dry	May	--	7,414.7	7,360.3	54.4	0.7%	7,349.4	65.3	0.9%	7,316.9	97.8	1.3%
ME 5	33 50 23	2020	Dry	June	--	2,106.1	2,037.3	68.9	3.3%	2,024.0	82.2	3.9%	1,984.7	121.4	5.8%
ME 5	33 50 23	2020	Dry	July	--	801.3	731.0	70.3	8.8%	717.1	84.2	10.5%	681.0	120.3	15.0%
ME 5	33 50 23	2020	Dry	August	--	404.4	334.8	69.5	17.2%	321.0	83.4	20.6%	282.5	121.8	30.1%
ME 5	33 50 23	2020	Dry	September	Used in Summary Table Analysis	253.7	188.1	65.6	25.8%	174.8	78.9	31.1%	135.8	117.9	46.5%
ME 5	32 50 24	2000	Above Normal	October	Used in Summary Table Analysis	825.8	782.0	43.8	5.3%	773.2	52.6	6.4%	746.7	79.1	9.6%
ME 5	32 50 24	2000	Above Normal	November	Used in Summary Table Analysis	12,267.4	12,232.6	34.7	0.3%	12,224.5	42.8	0.3%	12,203.7	63.7	0.5%
ME 5	32 50 24	2000	Above Normal	December	--	10,890.3	10,860.1	30.2	0.3%	10,853.8	36.5	0.3%	10,835.3	55.0	0.5%
ME 5	32 50 24	2000	Above Normal	January	--	28,825.2	28,797.5	27.8	0.1%	28,791.7	33.6	0.1%	28,775.5	49.8	0.2%
ME 5	32 50 24	2000	Above Normal	February	--	37,203.7	37,178.2	25.5	0.1%	37,173.6	30.1	0.1%	37,158.6	45.1	0.1%
ME 5	32 50 24	2000	Above Normal	March	--	18,366.9	18,343.8	23.1	0.1%	18,339.1	27.8	0.2%	18,325.2	41.7	0.2%
ME 5	32 50 24	2000	Above Normal	April	--	12,353.0	12,332.2	20.8	0.2%	12,327.5	25.5	0.2%	12,313.7	39.4	0.3%
ME 5	32 50 24	2000	Above Normal	May	--	7,127.2	7,082.8	44.4	0.6%	7,073.7	53.5	0.8%	7,047.1	80.1	1.1%
ME 5	32 50 24	2000	Above Normal	June	--	2,624.7	2,559.0	65.6	2.5%	2,545.9	78.7	3.0%	2,507.5	117.1	4.5%
ME 5	32 50 24	2000	Above Normal	July	--	998.6	938.3	60.3	6.0%	926.4	72.3	7.2%	890.9	107.8	10.8%
ME 5	32 50 24	2000	Above Normal	August	--	529.1	471.9	57.2	10.8%	460.5	68.6	13.0%	426.5	102.7	19.4%
ME 5	32 50 24	2000	Above Normal	September	Used in Summary Table Analysis	301.7	250.4	51.3	17.0%	240.2	61.5	20.4%	209.4	92.3	30.6%
ME 5	32 50 24	2001	Dry	October	Used in Summary Table Analysis	3,850.7	3,807.6	43.1	1.1%	3,799.0	51.7	1.3%	3,772.7	78.0	2.0%
ME 5	32 50 24	2001	Dry	November	Used in Summary Table Analysis	6,180.8	6,145.9	34.8	0.6%	6,139.0	41.8	0.7%	6,117.7	63.1	1.0%
ME 5	32 50 24	2001	Dry	December	--	8,895.4	8,865.3	30.1	0.3%	8,859.1	36.2	0.4%	8,840.7	54.6	0.6%
ME 5	32 50 24	2001	Dry	January	--	12,898.1	12,871.5	26.6	0.2%	12,865.7	32.4	0.3%	12,849.5	48.6	0.4%
ME 5	32 50 24	2001	Dry	February	--	17,539.4	17,515.0	24.3	0.1%	17,510.4	28.9	0.2%	17,495.4	44.0	0.3%
ME 5	32 50 24	2001	Dry	March	--	12,332.2	12,309.0	23.1	0.2%	12,304.4	27.8	0.2%	12,290.5	41.7	0.3%
ME 5	32 50 24	2001	Dry	April	--	11,008.8	10,963.1	45.7	0.4%	10,953.9	54.9	0.5%	10,926.7	82.1	0.7%
ME 5	32 50 24	2001	Dry	May	--	2,638.5	2,584.5	54.1	2.0%	2,573.7	64.8	2.5%	2,541.6	97.0	3.7%

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Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 50 24	2001	Dry	June	--	2,672.3	2,599.2	73.1	2.7%	2,584.8	87.5	3.3%	2,542.8	129.5	4.8%
ME 5	32 50 24	2001	Dry	July	--	722.0	652.1	69.9	9.7%	638.2	83.7	11.6%	602.0	119.9	16.6%
ME 5	32 50 24	2001	Dry	August	--	178.0	109.5	68.4	38.5%	95.9	82.1	46.1%	57.6	120.4	67.7%
ME 5	32 50 24	2001	Dry	September	Used in Summary Table Analysis	101.3	39.5	61.8	61.0%	27.2	74.1	73.2%	0.0	101.3	100.0%
ME 5	32 50 24	2002	Below Normal	October	Used in Summary Table Analysis	271.6	219.1	52.5	19.3%	208.5	63.1	23.2%	176.8	94.8	34.9%
ME 5	32 50 24	2002	Below Normal	November	Used in Summary Table Analysis	12,100.7	12,059.0	41.7	0.3%	12,050.9	49.8	0.4%	12,023.1	77.5	0.6%
ME 5	32 50 24	2002	Below Normal	December	--	35,906.3	35,869.2	37.0	0.1%	35,862.3	44.0	0.1%	35,839.1	67.1	0.2%
ME 5	32 50 24	2002	Below Normal	January	--	31,018.5	30,986.1	32.4	0.1%	30,979.2	39.4	0.1%	30,959.5	59.0	0.2%
ME 5	32 50 24	2002	Below Normal	February	--	24,761.6	24,732.6	28.9	0.1%	24,726.9	34.7	0.1%	24,708.3	53.2	0.2%
ME 5	32 50 24	2002	Below Normal	March	--	17,844.9	17,817.1	27.8	0.2%	17,812.5	32.4	0.2%	17,795.1	49.8	0.3%
ME 5	32 50 24	2002	Below Normal	April	--	9,950.3	9,904.2	46.2	0.5%	9,895.0	55.3	0.6%	9,867.4	83.0	0.8%
ME 5	32 50 24	2002	Below Normal	May	--	3,329.1	3,274.8	54.3	1.6%	3,263.9	65.2	2.0%	3,231.4	97.7	2.9%
ME 5	32 50 24	2002	Below Normal	June	--	859.1	797.8	61.3	7.1%	785.7	73.4	8.5%	749.8	109.3	12.7%
ME 5	32 50 24	2002	Below Normal	July	--	368.0	305.1	62.9	17.1%	292.6	75.4	20.5%	256.2	111.8	30.4%
ME 5	32 50 24	2002	Below Normal	August	--	233.6	174.0	59.7	25.5%	162.0	71.6	30.6%	125.9	107.7	46.1%
ME 5	32 50 24	2002	Below Normal	September	Used in Summary Table Analysis	170.1	113.3	56.8	33.4%	102.0	68.1	40.0%	67.3	102.9	60.5%
ME 5	32 50 24	2003	Wet	October	Used in Summary Table Analysis	134.9	87.7	47.3	35.0%	78.2	56.8	42.1%	49.6	85.4	63.3%
ME 5	32 50 24	2003	Wet	November	Used in Summary Table Analysis	904.1	865.6	38.4	4.3%	857.8	46.3	5.1%	834.3	69.8	7.7%
ME 5	32 50 24	2003	Wet	December	--	57,346.1	57,311.3	34.7	0.1%	57,304.4	41.7	0.1%	57,283.6	62.5	0.1%
ME 5	32 50 24	2003	Wet	January	--	31,637.7	31,607.6	30.1	0.1%	31,600.7	37.0	0.1%	31,582.2	55.6	0.2%
ME 5	32 50 24	2003	Wet	February	--	20,409.7	20,383.1	26.6	0.1%	20,377.3	32.4	0.2%	20,361.1	48.6	0.2%
ME 5	32 50 24	2003	Wet	March	--	24,121.5	24,096.1	25.5	0.1%	24,091.4	30.1	0.1%	24,076.4	45.1	0.2%
ME 5	32 50 24	2003	Wet	April	--	43,130.8	43,106.5	24.3	0.1%	43,101.9	28.9	0.1%	43,086.8	44.0	0.1%
ME 5	32 50 24	2003	Wet	May	--	12,252.3	12,206.0	46.3	0.4%	12,196.8	55.6	0.5%	12,169.0	83.3	0.7%
ME 5	32 50 24	2003	Wet	June	--	3,173.7	3,115.5	58.2	1.8%	3,104.2	69.6	2.2%	3,070.5	103.2	3.3%
ME 5	32 50 24	2003	Wet	July	--	1,482.4	1,420.1	62.3	4.2%	1,407.9	74.5	5.0%	1,371.3	111.1	7.5%
ME 5	32 50 24	2003	Wet	August	--	768.0	706.7	61.2	8.0%	694.1	73.8	9.6%	655.1	112.9	14.7%
ME 5	32 50 24	2003	Wet	September	Used in Summary Table Analysis	465.2	412.7	52.5	11.3%	402.2	63.0	13.5%	369.6	95.6	20.5%
ME 5	32 50 24	2004	Wet	October	Used in Summary Table Analysis	331.9	287.9	44.0	13.3%	279.0	52.9	15.9%	252.2	79.7	24.0%
ME 5	32 50 24	2004	Wet	November	Used in Summary Table Analysis	5,865.0	5,828.9	36.1	0.6%	5,821.5	43.5	0.7%	5,799.3	65.7	1.1%
ME 5	32 50 24	2004	Wet	December	--	36,585.6	36,553.2	32.4	0.1%	36,547.5	38.2	0.1%	36,526.6	59.0	0.2%
ME 5	32 50 24	2004	Wet	January	--	31,659.7	31,631.9	27.8	0.1%	31,626.2	33.6	0.1%	31,608.8	50.9	0.2%
ME 5	32 50 24	2004	Wet	February	--	38,415.5	38,388.9	26.6	0.1%	38,384.3	31.3	0.1%	38,368.1	47.5	0.1%
ME 5	32 50 24	2004	Wet	March	--	16,554.4	16,531.3	23.1	0.1%	16,526.6	27.8	0.2%	16,511.6	42.8	0.3%
ME 5	32 50 24	2004	Wet	April	--	9,473.8	9,451.6	22.2	0.2%	9,447.1	26.7	0.3%	9,433.3	40.5	0.4%
ME 5	32 50 24	2004	Wet	May	--	3,439.1	3,394.3	44.8	1.3%	3,385.4	53.7	1.6%	3,358.8	80.3	2.3%
ME 5	32 50 24	2004	Wet	June	--	696.8	640.8	56.0	8.0%	629.8	67.0	9.6%	597.2	99.6	14.3%
ME 5	32 50 24	2004	Wet	July	--	362.8	301.8	61.0	16.8%	289.7	73.1	20.1%	253.8	109.1	30.1%
ME 5	32 50 24	2004	Wet	August	--	231.5	173.5	58.0	25.0%	162.0	69.5	30.0%	127.4	104.1	45.0%
ME 5	32 50 24	2004	Wet	September	Used in Summary Table Analysis	168.1	112.6	55.5	33.0%	101.5	66.6	39.6%	68.1	100.0	59.5%
ME 5	32 50 24	2005	Above Normal	October	Used in Summary Table Analysis	7,763.0	7,717.9	45.0	0.6%	7,708.9	54.1	0.7%	7,681.6	81.4	1.0%
ME 5	32 50 24	2005	Above Normal	November	Used in Summary Table Analysis	2,268.6	2,233.3	35.3	1.6%	2,226.2	42.5	1.9%	2,204.4	64.2	2.8%
ME 5	32 50 24	2005	Above Normal	December	--	21,258.1	21,226.9	31.3	0.1%	21,221.1	37.0	0.2%	21,201.4	56.7	0.3%
ME 5	32 50 24	2005	Above Normal	January	--	22,566.0	22,538.2	27.8	0.1%	22,532.4	33.6	0.1%	22,515.0	50.9	0.2%
ME 5	32 50 24	2005	Above Normal	February	--	14,044.0	14,018.5	25.5	0.2%	14,013.9	30.1	0.2%	13,998.8	45.1	0.3%
ME 5	32 50 24	2005	Above Normal	March	--	28,704.9	28,681.7	23.1	0.1%	28,677.1	27.8	0.1%	28,662.0	42.8	0.1%
ME 5	32 50 24	2005	Above Normal	April	--	21,534.7	21,512.7	22.0	0.1%	21,508.1	26.6	0.1%	21,495.4	39.4	0.2%
ME 5	32 50 24	2005	Above Normal	May	--	19,678.2	19,631.9	46.3	0.2%	19,622.7	55.6	0.3%	19,596.1	82.2	0.4%
ME 5	32 50 24	2005	Above Normal	June	--	16,000.0	15,932.9	67.1	0.4%	15,919.0	81.0	0.5%	15,879.6	120.4	0.8%
ME 5	32 50 24	2005	Above Normal	July	--	2,866.1	2,803.4	62.7	2.2%	2,791.6	74.5	2.6%	2,756.0	110.1	3.8%
ME 5	32 50 24	2005	Above Normal	August	--	990.9	933.5	57.4	5.8%	922.2	68.7	6.9%	888.3	102.5	10.3%
ME 5	32 50 24	2005	Above Normal	September	Used in Summary Table Analysis	532.3	481.0	51.3	9.6%	470.8	61.5	11.6%	440.2	92.2	17.3%
ME 5	32 50 24	2006	Wet	October	Used in Summary Table Analysis	643.2	601.0	42.2	6.6%	592.5	50.7	7.9%	566.8	76.4	11.9%
ME 5	32 50 24	2006	Wet	November	Used in Summary Table Analysis	9,412.2	9,378.5	33.7	0.4%	9,371.5	40.6	0.4%	9,350.7	61.5	0.7%
ME 5	32 50 24	2006	Wet	December	--	43,846.1	43,816.0	30.1	0.1%	43,809.0	37.0	0.1%	43,790.5	55.6	0.1%
ME 5	32 50 24	2006	Wet	January	--	46,611.1	46,584.5	26.6	0.1%	46,578.7	32.4	0.1%	46,561.3	49.8	0.1%
ME 5	32 50 24	2006	Wet	February	--	26,752.3	26,729.2	23.1	0.1%	26,723.4	28.9	0.1%	26,709.5	42.8	0.2%
ME 5	32 50 24	2006	Wet	March	--	47,406.3	47,384.3	22.0	0.0%	47,378.5	27.8	0.1%	47,364.6	41.7	0.1%
ME 5	32 50 24	2006	Wet	April	--	30,525.5	30,504.6	20.8	0.1%	30,500.0	25.5	0.1%	30,487.3	38.2	0.1%
ME 5	32 50 24	2006	Wet	May	--	14,263.9	14,236.1	27.8	0.2%	14,230.3	33.6	0.2%	14,214.1	49.8	0.3%
ME 5	32 50 24	2006	Wet	June	--	3,554.1	3,498.7	55.3	1.6%	3,487.8	66.2	1.9%	3,455.8	98.3	2.8%
ME 5	32 50 24	2006	Wet	July	--	1,288.3	1,228.6	59.7	4.6%	1,216.9	71.4	5.5%	1,182.2	106.1	8.2%
ME 5	32 50 24	2006	Wet	August	--	674.4	615.6	58.8	8.7%	604.0	70.4	10.4%	569.3	105.1	15.6%
ME 5	32 50 24	2006	Wet	September	Used in Summary Table Analysis	434.6	382.4	52.1	12.0%	372.1	62.5	14.4%	340.9	93.7	21.6%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 50 24	2007	Above Normal	October	Used in Summary Table Analysis	281.6	238.5	43.1	15.3%	229.8	51.8	18.4%	203.5	78.1	27.7%
ME 5	32 50 24	2007	Above Normal	November	Used in Summary Table Analysis	8,760.2	8,724.8	35.4	0.4%	8,717.6	42.6	0.5%	8,695.7	64.5	0.7%
ME 5	32 50 24	2007	Above Normal	December	--	20,600.7	20,568.3	32.4	0.2%	20,562.5	38.2	0.2%	20,542.8	57.9	0.3%
ME 5	32 50 24	2007	Above Normal	January	--	10,301.5	10,274.3	27.2	0.3%	10,268.8	32.8	0.3%	10,251.7	49.8	0.5%
ME 5	32 50 24	2007	Above Normal	February	--	30,784.7	30,758.1	26.6	0.1%	30,753.5	31.3	0.1%	30,737.3	47.5	0.2%
ME 5	32 50 24	2007	Above Normal	March	--	13,137.7	13,113.4	24.3	0.2%	13,108.8	28.9	0.2%	13,093.8	44.0	0.3%
ME 5	32 50 24	2007	Above Normal	April	--	11,569.2	11,525.0	44.2	0.4%	11,516.2	53.0	0.5%	11,489.8	79.4	0.7%
ME 5	32 50 24	2007	Above Normal	May	--	4,155.7	4,103.2	52.4	1.3%	4,092.7	63.0	1.5%	4,061.5	94.2	2.3%
ME 5	32 50 24	2007	Above Normal	June	--	1,510.2	1,447.5	62.7	4.2%	1,435.1	75.1	5.0%	1,398.5	111.7	7.4%
ME 5	32 50 24	2007	Above Normal	July	--	501.6	438.0	63.6	12.7%	425.3	76.2	15.2%	388.3	113.3	22.6%
ME 5	32 50 24	2007	Above Normal	August	--	229.7	171.8	57.9	25.2%	160.3	69.4	30.2%	125.1	104.6	45.6%
ME 5	32 50 24	2007	Above Normal	September	Used in Summary Table Analysis	157.3	102.1	55.2	35.1%	91.1	66.2	42.1%	58.0	99.4	63.1%
ME 5	32 50 24	2008	Dry	October	Used in Summary Table Analysis	3,468.3	3,422.6	45.7	1.3%	3,413.3	55.0	1.6%	3,385.3	83.0	2.4%
ME 5	32 50 24	2008	Dry	November	Used in Summary Table Analysis	3,307.9	3,272.1	35.8	1.1%	3,264.9	42.9	1.3%	3,242.8	65.0	2.0%
ME 5	32 50 24	2008	Dry	December	--	23,373.8	23,342.6	31.3	0.1%	23,335.6	38.2	0.2%	23,316.0	57.9	0.2%
ME 5	32 50 24	2008	Dry	January	--	37,767.4	37,738.4	28.9	0.1%	37,732.6	34.7	0.1%	37,714.1	53.2	0.1%
ME 5	32 50 24	2008	Dry	February	--	26,327.5	26,302.1	25.5	0.1%	26,297.5	30.1	0.1%	26,282.4	45.1	0.2%
ME 5	32 50 24	2008	Dry	March	--	11,820.6	11,798.6	22.0	0.2%	11,794.0	26.6	0.2%	11,780.1	40.5	0.3%
ME 5	32 50 24	2008	Dry	April	--	9,038.4	8,993.6	44.8	0.5%	8,984.7	53.7	0.6%	8,957.9	80.6	0.9%
ME 5	32 50 24	2008	Dry	May	--	1,358.8	1,311.6	47.2	3.5%	1,302.4	56.4	4.1%	1,274.9	83.9	6.2%
ME 5	32 50 24	2008	Dry	June	--	443.7	375.6	68.1	15.3%	362.3	81.5	18.4%	322.7	121.0	27.3%
ME 5	32 50 24	2008	Dry	July	--	261.5	193.1	68.4	26.2%	179.6	81.9	31.3%	144.3	117.2	44.8%
ME 5	32 50 24	2008	Dry	August	--	185.2	118.2	67.0	36.2%	104.9	80.4	43.4%	64.7	120.5	65.1%
ME 5	32 50 24	2008	Dry	September	Used in Summary Table Analysis	146.8	81.8	64.9	44.2%	68.9	77.9	53.0%	31.4	115.3	78.6%
ME 5	32 50 24	2009	Critical	October	Used in Summary Table Analysis	932.2	880.1	52.1	5.6%	869.7	62.6	6.7%	837.9	94.3	10.1%
ME 5	32 50 24	2009	Critical	November	Used in Summary Table Analysis	5,572.9	5,531.8	41.1	0.7%	5,523.5	49.4	0.9%	5,495.5	77.4	1.4%
ME 5	32 50 24	2009	Critical	December	--	12,294.0	12,258.1	35.9	0.3%	12,251.2	42.8	0.3%	12,229.2	64.8	0.5%
ME 5	32 50 24	2009	Critical	January	--	8,833.6	8,801.6	31.9	0.4%	8,795.1	38.4	0.4%	8,775.3	58.2	0.7%
ME 5	32 50 24	2009	Critical	February	--	22,722.2	22,694.4	27.8	0.1%	22,688.7	33.6	0.1%	22,670.1	52.1	0.2%
ME 5	32 50 24	2009	Critical	March	--	21,201.4	21,177.1	24.3	0.1%	21,171.3	30.1	0.1%	21,155.1	46.3	0.2%
ME 5	32 50 24	2009	Critical	April	--	10,106.6	10,059.8	46.8	0.5%	10,050.6	56.0	0.6%	10,022.5	84.1	0.8%
ME 5	32 50 24	2009	Critical	May	--	15,625.0	15,568.3	56.7	0.4%	15,557.9	67.1	0.4%	15,523.1	101.9	0.7%
ME 5	32 50 24	2009	Critical	June	--	3,166.8	3,094.1	72.7	2.3%	3,080.0	86.8	2.7%	3,038.0	128.8	4.1%
ME 5	32 50 24	2009	Critical	July	--	1,269.2	1,200.1	69.1	5.4%	1,186.5	82.8	6.5%	1,150.8	118.4	9.3%
ME 5	32 50 24	2009	Critical	August	--	675.5	608.0	67.5	10.0%	594.6	81.0	12.0%	556.9	118.7	17.6%
ME 5	32 50 24	2009	Critical	September	Used in Summary Table Analysis	396.2	335.1	61.1	15.4%	322.9	73.3	18.5%	287.5	108.7	27.4%
ME 5	32 50 24	2010	Below Normal	October	Used in Summary Table Analysis	6,098.4	6,045.6	52.8	0.9%	6,035.0	63.4	1.0%	6,002.0	96.4	1.6%
ME 5	32 50 24	2010	Below Normal	November	Used in Summary Table Analysis	8,332.6	8,290.0	42.6	0.5%	8,281.5	51.2	0.6%	8,252.8	79.9	1.0%
ME 5	32 50 24	2010	Below Normal	December	--	12,441.0	12,403.9	37.0	0.3%	12,397.0	44.0	0.4%	12,373.8	67.1	0.5%
ME 5	32 50 24	2010	Below Normal	January	--	36,523.1	36,489.6	33.6	0.1%	36,482.6	40.5	0.1%	36,461.8	61.3	0.2%
ME 5	32 50 24	2010	Below Normal	February	--	27,326.4	27,297.5	28.9	0.1%	27,291.7	34.7	0.1%	27,273.1	53.2	0.2%
ME 5	32 50 24	2010	Below Normal	March	--	28,907.4	28,880.8	26.6	0.1%	28,875.0	32.4	0.1%	28,858.8	48.6	0.2%
ME 5	32 50 24	2010	Below Normal	April	--	40,145.8	40,120.4	25.5	0.1%	40,114.6	31.3	0.1%	40,099.5	46.3	0.1%
ME 5	32 50 24	2010	Below Normal	May	--	20,371.5	20,322.9	48.6	0.2%	20,313.7	57.9	0.3%	20,284.7	86.8	0.4%
ME 5	32 50 24	2010	Below Normal	June	--	9,431.8	9,362.6	69.2	0.7%	9,349.1	82.8	0.9%	9,308.6	123.3	1.3%
ME 5	32 50 24	2010	Below Normal	July	--	1,460.5	1,396.9	63.7	4.4%	1,384.6	75.9	5.2%	1,347.9	112.6	7.7%
ME 5	32 50 24	2010	Below Normal	August	--	577.1	518.1	59.0	10.2%	506.5	70.7	12.2%	471.6	105.5	18.3%
ME 5	32 50 24	2010	Below Normal	September	Used in Summary Table Analysis	659.6	602.9	56.7	8.6%	591.5	68.1	10.3%	557.5	102.0	15.5%
ME 5	32 50 24	2011	Wet	October	Used in Summary Table Analysis	9,699.2	9,655.4	43.8	0.5%	9,646.6	52.5	0.5%	9,619.9	79.3	0.8%
ME 5	32 50 24	2011	Wet	November	Used in Summary Table Analysis	14,294.0	14,259.3	34.7	0.2%	14,252.3	41.7	0.3%	14,230.3	63.7	0.4%
ME 5	32 50 24	2011	Wet	December	--	34,003.5	33,973.4	30.1	0.1%	33,966.4	37.0	0.1%	33,947.9	55.6	0.2%
ME 5	32 50 24	2011	Wet	January	--	14,213.0	14,186.3	26.6	0.2%	14,180.6	32.4	0.2%	14,164.4	48.6	0.3%
ME 5	32 50 24	2011	Wet	February	--	20,824.1	20,799.8	24.3	0.1%	20,794.0	30.1	0.1%	20,778.9	45.1	0.2%
ME 5	32 50 24	2011	Wet	March	--	52,204.9	52,181.7	23.1	0.0%	52,175.9	28.9	0.1%	52,160.9	44.0	0.1%
ME 5	32 50 24	2011	Wet	April	--	24,868.1	24,844.9	23.1	0.1%	24,840.3	27.8	0.1%	24,826.4	41.7	0.2%
ME 5	32 50 24	2011	Wet	May	--	11,415.7	11,370.3	45.5	0.4%	11,361.1	54.6	0.5%	11,333.9	81.8	0.7%
ME 5	32 50 24	2011	Wet	June	--	7,089.6	7,022.6	67.0	0.9%	7,009.3	80.3	1.1%	6,969.9	119.7	1.7%
ME 5	32 50 24	2011	Wet	July	--	1,832.8	1,765.2	67.6	3.7%	1,751.9	80.9	4.4%	1,713.5	119.2	6.5%
ME 5	32 50 24	2011	Wet	August	--	783.8	725.6	58.2	7.4%	714.1	69.7	8.9%	679.6	104.2	13.3%
ME 5	32 50 24	2011	Wet	September	Used in Summary Table Analysis	440.4	387.1	53.3	12.1%	376.4	64.0	14.5%	344.6	95.8	21.7%
ME 5	32 50 24	2012	Below Normal	October	Used in Summary Table Analysis	4,575.9	4,531.6	44.3	1.0%	4,522.6	53.4	1.2%	4,495.3	80.7	1.8%
ME 5	32 50 24	2012	Below Normal	November	Used in Summary Table Analysis	8,307.1	8,271.4	35.6	0.4%	8,264.1	42.9	0.5%	8,242.1	64.9	0.8%
ME 5	32 50 24	2012	Below Normal	December	--	5,214.1	5,183.6	30.6	0.6%	5,177.3	36.8	0.7%	5,158.4	55.7	1.1%
ME 5	32 50 24	2012	Below Normal	January	--	20,313.7	20,285.9	27.8	0.1%	20,280.1	33.6	0.2%	20,262.7	50.9	0.3%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 50 24	2012	Below Normal	February	--	18,269.7	18,244.2	25.5	0.1%	18,239.6	30.1	0.2%	18,223.4	46.3	0.3%
ME 5	32 50 24	2012	Below Normal	March	--	45,657.4	45,631.9	25.5	0.1%	45,627.3	30.1	0.1%	45,612.3	45.1	0.1%
ME 5	32 50 24	2012	Below Normal	April	--	26,943.3	26,920.1	23.1	0.1%	26,915.5	27.8	0.1%	26,901.6	41.7	0.2%
ME 5	32 50 24	2012	Below Normal	May	--	7,503.2	7,458.0	45.3	0.6%	7,449.0	54.3	0.7%	7,422.2	81.0	1.1%
ME 5	32 50 24	2012	Below Normal	June	--	5,548.6	5,480.3	68.3	1.2%	5,466.9	81.7	1.5%	5,427.3	121.3	2.2%
ME 5	32 50 24	2012	Below Normal	July	--	2,244.7	2,179.2	65.5	2.9%	2,166.1	78.6	3.5%	2,127.5	117.1	5.2%
ME 5	32 50 24	2012	Below Normal	August	--	393.8	340.5	53.3	13.5%	329.8	63.9	16.2%	298.0	95.8	24.3%
ME 5	32 50 24	2012	Below Normal	September	Used in Summary Table Analysis	255.8	207.9	47.9	18.7%	198.3	57.5	22.5%	169.7	86.1	33.7%
ME 5	32 50 24	2013	Below Normal	October	Used in Summary Table Analysis	1,935.0	1,892.6	42.4	2.2%	1,884.1	50.8	2.6%	1,858.6	76.4	3.9%
ME 5	32 50 24	2013	Below Normal	November	Used in Summary Table Analysis	14,811.3	14,777.8	33.6	0.2%	14,770.8	40.5	0.3%	14,750.0	61.3	0.4%
ME 5	32 50 24	2013	Below Normal	December	--	60,273.1	60,241.9	31.3	0.1%	60,235.0	38.2	0.1%	60,216.4	56.7	0.1%
ME 5	32 50 24	2013	Below Normal	January	--	22,282.4	22,256.9	25.5	0.1%	22,251.2	31.3	0.1%	22,235.0	47.5	0.2%
ME 5	32 50 24	2013	Below Normal	February	--	8,884.1	8,859.5	24.7	0.3%	8,854.5	29.6	0.3%	8,839.4	44.8	0.5%
ME 5	32 50 24	2013	Below Normal	March	--	10,389.2	10,365.5	23.7	0.2%	10,360.8	28.5	0.3%	10,346.3	42.9	0.4%
ME 5	32 50 24	2013	Below Normal	April	--	8,309.3	8,266.3	42.9	0.5%	8,257.6	51.6	0.6%	8,231.9	77.3	0.9%
ME 5	32 50 24	2013	Below Normal	May	--	4,454.5	4,402.5	52.0	1.2%	4,392.1	62.4	1.4%	4,361.1	93.4	2.1%
ME 5	32 50 24	2013	Below Normal	June	--	2,119.0	2,056.7	62.3	2.9%	2,044.4	74.5	3.5%	2,008.0	111.0	5.2%
ME 5	32 50 24	2013	Below Normal	July	--	722.6	661.7	60.9	8.4%	649.7	72.9	10.1%	614.5	108.1	15.0%
ME 5	32 50 24	2013	Below Normal	August	--	346.2	288.4	57.8	16.7%	276.9	69.3	20.0%	241.9	104.3	30.1%
ME 5	32 50 24	2013	Below Normal	September	Used in Summary Table Analysis	4,821.5	4,761.5	60.1	1.2%	4,749.4	72.1	1.5%	4,713.4	108.1	2.2%
ME 5	32 50 24	2014	Critical	October	Used in Summary Table Analysis	282.9	238.3	44.6	15.8%	229.4	53.6	18.9%	203.1	79.9	28.2%
ME 5	32 50 24	2014	Critical	November	Used in Summary Table Analysis	1,557.4	1,521.3	36.1	2.3%	1,514.0	43.4	2.8%	1,491.9	65.5	4.2%
ME 5	32 50 24	2014	Critical	December	--	1,601.6	1,570.0	31.6	2.0%	1,563.7	38.0	2.4%	1,544.1	57.5	3.6%
ME 5	32 50 24	2014	Critical	January	--	2,841.3	2,813.3	28.0	1.0%	2,807.5	33.8	1.2%	2,789.8	51.5	1.8%
ME 5	32 50 24	2014	Critical	February	--	15,810.2	15,783.6	26.6	0.2%	15,778.9	31.3	0.2%	15,761.6	48.6	0.3%
ME 5	32 50 24	2014	Critical	March	--	31,559.0	31,534.7	24.3	0.1%	31,530.1	28.9	0.1%	31,513.9	45.1	0.1%
ME 5	32 50 24	2014	Critical	April	--	13,015.0	12,968.8	46.3	0.4%	12,959.5	55.6	0.4%	12,931.7	83.3	0.6%
ME 5	32 50 24	2014	Critical	May	--	5,204.1	5,149.1	55.0	1.1%	5,138.2	65.9	1.3%	5,105.1	99.0	1.9%
ME 5	32 50 24	2014	Critical	June	--	1,205.1	1,130.8	74.3	6.2%	1,116.2	88.9	7.4%	1,074.1	131.0	10.9%
ME 5	32 50 24	2014	Critical	July	--	550.9	481.0	69.9	12.7%	467.1	83.8	15.2%	430.5	120.4	21.9%
ME 5	32 50 24	2014	Critical	August	--	354.2	286.9	67.3	19.0%	273.4	80.8	22.8%	235.2	119.0	33.6%
ME 5	32 50 24	2014	Critical	September	Used in Summary Table Analysis	2,591.1	2,524.7	66.4	2.6%	2,511.6	79.5	3.1%	2,472.2	118.9	4.6%
ME 5	32 50 24	2015	Dry	October	Used in Summary Table Analysis	11,425.7	11,373.3	52.4	0.5%	11,362.8	62.8	0.6%	11,331.3	94.4	0.8%
ME 5	32 50 24	2015	Dry	November	Used in Summary Table Analysis	9,105.7	9,065.6	40.0	0.4%	9,057.5	48.1	0.5%	9,029.9	75.8	0.8%
ME 5	32 50 24	2015	Dry	December	--	32,868.1	32,833.3	34.7	0.1%	32,826.4	41.7	0.1%	32,803.2	64.8	0.2%
ME 5	32 50 24	2015	Dry	January	--	14,615.7	14,584.5	31.3	0.2%	14,578.7	37.0	0.3%	14,559.0	56.7	0.4%
ME 5	32 50 24	2015	Dry	February	--	27,332.2	27,305.6	26.6	0.1%	27,299.8	32.4	0.1%	27,282.4	49.8	0.2%
ME 5	32 50 24	2015	Dry	March	--	11,593.8	11,569.7	24.1	0.2%	11,564.7	29.1	0.3%	11,549.4	44.3	0.4%
ME 5	32 50 24	2015	Dry	April	--	8,451.3	8,405.3	45.9	0.5%	8,396.1	55.2	0.7%	8,368.3	83.0	1.0%
ME 5	32 50 24	2015	Dry	May	--	1,511.2	1,457.1	54.2	3.6%	1,446.3	64.9	4.3%	1,414.9	96.3	6.4%
ME 5	32 50 24	2015	Dry	June	--	656.8	587.6	69.2	10.5%	574.0	82.8	12.6%	533.7	123.1	18.7%
ME 5	32 50 24	2015	Dry	July	--	273.3	204.2	69.1	25.3%	190.5	82.8	30.3%	154.8	118.5	43.4%
ME 5	32 50 24	2015	Dry	August	--	172.2	104.8	67.4	39.2%	91.3	80.9	47.0%	53.7	118.4	68.8%
ME 5	32 50 24	2015	Dry	September	Used in Summary Table Analysis	125.7	62.0	63.8	50.7%	48.9	76.9	61.1%	10.9	114.9	91.4%
ME 5	32 50 24	2016	Above Normal	October	Used in Summary Table Analysis	90.8	36.9	53.9	59.3%	26.5	64.3	70.8%	0.0	90.8	100.0%
ME 5	32 50 24	2016	Above Normal	November	Used in Summary Table Analysis	3,924.8	3,882.5	42.2	1.1%	3,873.7	51.0	1.3%	3,843.1	81.7	2.1%
ME 5	32 50 24	2016	Above Normal	December	--	36,913.2	36,876.2	37.0	0.1%	36,868.1	45.1	0.1%	36,843.8	69.4	0.2%
ME 5	32 50 24	2016	Above Normal	January	--	57,622.7	57,589.1	33.6	0.1%	57,581.0	41.7	0.1%	57,560.2	62.5	0.1%
ME 5	32 50 24	2016	Above Normal	February	--	24,317.1	24,289.4	27.8	0.1%	24,283.6	33.6	0.1%	24,266.2	50.9	0.2%
ME 5	32 50 24	2016	Above Normal	March	--	41,919.0	41,892.4	26.6	0.1%	41,886.6	32.4	0.1%	41,870.4	48.6	0.1%
ME 5	32 50 24	2016	Above Normal	April	--	18,576.4	18,553.2	23.1	0.1%	18,547.5	28.9	0.2%	18,533.6	42.8	0.2%
ME 5	32 50 24	2016	Above Normal	May	--	5,229.4	5,200.5	28.9	0.6%	5,194.4	35.0	0.7%	5,176.6	52.8	1.0%
ME 5	32 50 24	2016	Above Normal	June	--	1,515.7	1,462.5	53.2	3.5%	1,453.0	62.7	4.1%	1,425.0	90.7	6.0%
ME 5	32 50 24	2016	Above Normal	July	--	830.0	769.6	60.4	7.3%	757.6	72.4	8.7%	722.1	107.9	13.0%
ME 5	32 50 24	2016	Above Normal	August	--	498.9	439.1	59.8	12.0%	427.2	71.7	14.4%	391.7	107.2	21.5%
ME 5	32 50 24	2016	Above Normal	September	Used in Summary Table Analysis	334.9	278.6	56.3	16.8%	267.2	67.8	20.2%	233.0	101.9	30.4%
ME 5	32 50 24	2017	Wet	October	Used in Summary Table Analysis	18,399.3	18,354.2	45.1	0.2%	18,344.9	54.4	0.3%	18,317.1	82.2	0.4%
ME 5	32 50 24	2017	Wet	November	Used in Summary Table Analysis	18,950.2	18,914.4	35.9	0.2%	18,907.4	42.8	0.2%	18,885.4	64.8	0.3%
ME 5	32 50 24	2017	Wet	December	--	24,307.9	24,277.8	30.1	0.1%	24,270.8	37.0	0.2%	24,252.3	55.6	0.2%
ME 5	32 50 24	2017	Wet	January	--	107,474.5	107,445.6	28.9	0.0%	107,439.8	34.7	0.0%	107,422.5	52.1	0.0%
ME 5	32 50 24	2017	Wet	February	--	82,171.3	82,145.8	25.5	0.0%	82,140.0	31.3	0.0%	82,123.8	47.5	0.1%
ME 5	32 50 24	2017	Wet	March	--	27,378.5	27,354.2	24.3	0.1%	27,349.5	28.9	0.1%	27,335.6	42.8	0.2%
ME 5	32 50 24	2017	Wet	April	--	23,048.6	23,026.6	22.0	0.1%	23,022.0	26.6	0.1%	23,009.3	39.4	0.2%
ME 5	32 50 24	2017	Wet	May	--	6,277.0	6,248.1	28.8	0.5%	6,242.4	34.6	0.6%	6,224.9	52.1	0.8%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 50 24	2017	Wet	June	--	2,131.4	2,076.5	54.9	2.6%	2,065.7	65.6	3.1%	2,033.7	97.7	4.6%
ME 5	32 50 24	2017	Wet	July	--	943.6	883.2	60.4	6.4%	871.4	72.2	7.7%	836.2	107.4	11.4%
ME 5	32 50 24	2017	Wet	August	--	515.8	456.5	59.2	11.5%	444.8	71.0	13.8%	409.7	106.1	20.6%
ME 5	32 50 24	2017	Wet	September	Used in Summary Table Analysis	330.6	275.3	55.3	16.7%	264.2	66.4	20.1%	231.1	99.6	30.1%
ME 5	32 50 24	2018	Above Normal	October	Used in Summary Table Analysis	283.3	238.7	44.6	15.7%	229.7	53.6	18.9%	202.8	80.5	28.4%
ME 5	32 50 24	2018	Above Normal	November	Used in Summary Table Analysis	10,919.9	10,884.4	35.5	0.3%	10,877.2	42.7	0.4%	10,855.3	64.6	0.6%
ME 5	32 50 24	2018	Above Normal	December	--	5,458.9	5,428.7	30.2	0.6%	5,422.6	36.3	0.7%	5,403.9	55.0	1.0%
ME 5	32 50 24	2018	Above Normal	January	--	18,001.2	17,973.4	27.8	0.2%	17,967.6	33.6	0.2%	17,951.4	49.8	0.3%
ME 5	32 50 24	2018	Above Normal	February	--	7,608.4	7,584.4	24.1	0.3%	7,579.4	29.1	0.4%	7,564.4	44.1	0.6%
ME 5	32 50 24	2018	Above Normal	March	--	20,841.4	20,818.3	23.1	0.1%	20,813.7	27.8	0.1%	20,799.8	41.7	0.2%
ME 5	32 50 24	2018	Above Normal	April	--	32,366.9	32,346.1	20.8	0.1%	32,341.4	25.5	0.1%	32,328.7	38.2	0.1%
ME 5	32 50 24	2018	Above Normal	May	--	6,994.6	6,951.6	42.9	0.6%	6,943.1	51.5	0.7%	6,917.1	77.4	1.1%
ME 5	32 50 24	2018	Above Normal	June	--	1,920.9	1,865.4	55.6	2.9%	1,854.4	66.6	3.5%	1,822.1	98.8	5.1%
ME 5	32 50 24	2018	Above Normal	July	--	789.2	728.2	61.0	7.7%	716.0	73.2	9.3%	680.0	109.2	13.8%
ME 5	32 50 24	2018	Above Normal	August	--	450.4	393.0	57.4	12.7%	381.5	68.9	15.3%	347.2	103.2	22.9%
ME 5	32 50 24	2018	Above Normal	September	Used in Summary Table Analysis	307.3	251.8	55.5	18.1%	240.7	66.6	21.7%	207.4	99.9	32.5%
ME 5	32 50 24	2019	Below Normal	October	Used in Summary Table Analysis	213.8	169.7	44.1	20.6%	160.8	53.0	24.8%	134.0	79.8	37.3%
ME 5	32 50 24	2019	Below Normal	November	Used in Summary Table Analysis	6,708.3	6,672.6	35.8	0.5%	6,665.2	43.2	0.6%	6,643.3	65.0	1.0%
ME 5	32 50 24	2019	Below Normal	December	--	14,809.0	14,777.8	31.3	0.2%	14,772.0	37.0	0.3%	14,752.3	56.7	0.4%
ME 5	32 50 24	2019	Below Normal	January	--	35,508.1	35,481.5	26.6	0.1%	35,475.7	32.4	0.1%	35,458.3	49.8	0.1%
ME 5	32 50 24	2019	Below Normal	February	--	142,222.2	142,199.1	23.1	0.0%	142,199.1	23.1	0.0%	142,175.9	46.3	0.0%
ME 5	32 50 24	2019	Below Normal	March	--	42,476.9	42,454.9	22.0	0.1%	42,450.2	26.6	0.1%	42,436.3	40.5	0.1%
ME 5	32 50 24	2019	Below Normal	April	--	15,317.1	15,295.1	22.0	0.1%	15,290.5	26.6	0.2%	15,277.8	39.4	0.3%
ME 5	32 50 24	2019	Below Normal	May	--	17,160.9	17,114.6	46.3	0.3%	17,105.3	55.6	0.3%	17,078.7	82.2	0.5%
ME 5	32 50 24	2019	Below Normal	June	--	4,244.0	4,185.5	58.4	1.4%	4,174.3	69.7	1.6%	4,141.4	102.5	2.4%
ME 5	32 50 24	2019	Below Normal	July	--	1,370.6	1,309.5	61.1	4.5%	1,297.3	73.3	5.3%	1,261.5	109.1	8.0%
ME 5	32 50 24	2019	Below Normal	August	--	605.4	546.7	58.7	9.7%	535.0	70.4	11.6%	500.3	105.1	17.4%
ME 5	32 50 24	2019	Below Normal	September	Used in Summary Table Analysis	470.4	415.2	55.2	11.7%	404.1	66.3	14.1%	371.0	99.4	21.1%
ME 5	32 50 24	2020	Dry	October	Used in Summary Table Analysis	361.9	319.4	42.5	11.7%	310.8	51.1	14.1%	284.9	76.9	21.3%
ME 5	32 50 24	2020	Dry	November	Used in Summary Table Analysis	330.8	296.9	33.9	10.2%	290.0	40.8	12.3%	269.4	61.4	18.6%
ME 5	32 50 24	2020	Dry	December	--	13,493.1	13,463.0	30.1	0.2%	13,456.0	37.0	0.3%	13,437.5	55.6	0.4%
ME 5	32 50 24	2020	Dry	January	--	22,494.2	22,466.4	27.8	0.1%	22,460.6	33.6	0.1%	22,443.3	50.9	0.2%
ME 5	32 50 24	2020	Dry	February	--	7,422.1	7,397.3	24.8	0.3%	7,392.1	30.0	0.4%	7,376.9	45.3	0.6%
ME 5	32 50 24	2020	Dry	March	--	7,274.5	7,251.3	23.3	0.3%	7,246.5	28.0	0.4%	7,232.3	42.2	0.6%
ME 5	32 50 24	2020	Dry	April	--	5,516.4	5,470.6	45.8	0.8%	5,461.5	55.0	1.0%	5,434.0	82.4	1.5%
ME 5	32 50 24	2020	Dry	May	--	7,419.7	7,364.8	54.9	0.7%	7,353.8	65.9	0.9%	7,320.9	98.7	1.3%
ME 5	32 50 24	2020	Dry	June	--	2,106.7	2,037.0	69.7	3.3%	2,023.6	83.1	3.9%	1,983.8	122.9	5.8%
ME 5	32 50 24	2020	Dry	July	--	802.4	731.0	71.4	8.9%	716.8	85.6	10.7%	680.1	122.3	15.2%
ME 5	32 50 24	2020	Dry	August	--	405.5	334.7	70.8	17.5%	320.6	84.9	20.9%	281.4	124.1	30.6%
ME 5	32 50 24	2020	Dry	September	Used in Summary Table Analysis	254.7	187.8	67.0	26.3%	174.2	80.6	31.6%	134.4	120.3	47.2%
ME 5	32 49 25	2000	Above Normal	October	Used in Summary Table Analysis	827.4	783.6	43.8	5.3%	774.7	52.7	6.4%	748.2	79.2	9.6%
ME 5	32 49 25	2000	Above Normal	November	Used in Summary Table Analysis	12,281.3	12,245.4	35.9	0.3%	12,238.4	42.8	0.3%	12,217.6	63.7	0.5%
ME 5	32 49 25	2000	Above Normal	December	--	10,898.1	10,867.8	30.3	0.3%	10,861.7	36.5	0.3%	10,843.1	55.1	0.5%
ME 5	32 49 25	2000	Above Normal	January	--	28,847.2	28,820.6	26.6	0.1%	28,814.8	32.4	0.1%	28,797.5	49.8	0.2%
ME 5	32 49 25	2000	Above Normal	February	--	37,218.8	37,194.4	24.3	0.1%	37,189.8	28.9	0.1%	37,173.6	45.1	0.1%
ME 5	32 49 25	2000	Above Normal	March	--	18,372.7	18,349.5	23.1	0.1%	18,344.9	27.8	0.2%	18,331.0	41.7	0.2%
ME 5	32 49 25	2000	Above Normal	April	--	12,357.6	12,335.6	22.0	0.2%	12,332.2	25.5	0.2%	12,318.3	39.4	0.3%
ME 5	32 49 25	2000	Above Normal	May	--	7,131.1	7,086.6	44.6	0.6%	7,077.7	53.5	0.7%	7,051.0	80.1	1.1%
ME 5	32 49 25	2000	Above Normal	June	--	2,626.7	2,561.1	65.6	2.5%	2,548.0	78.7	3.0%	2,509.6	117.1	4.5%
ME 5	32 49 25	2000	Above Normal	July	--	1,000.1	939.7	60.4	6.0%	927.8	72.3	7.2%	892.3	107.8	10.8%
ME 5	32 49 25	2000	Above Normal	August	--	530.6	473.3	57.2	10.8%	461.9	68.6	12.9%	427.8	102.7	19.4%
ME 5	32 49 25	2000	Above Normal	September	Used in Summary Table Analysis	303.0	251.7	51.3	16.9%	241.4	61.6	20.3%	210.7	92.3	30.5%
ME 5	32 49 25	2001	Dry	October	Used in Summary Table Analysis	3,854.5	3,811.5	43.1	1.1%	3,802.7	51.9	1.3%	3,776.5	78.0	2.0%
ME 5	32 49 25	2001	Dry	November	Used in Summary Table Analysis	6,186.6	6,151.7	34.8	0.6%	6,144.7	41.9	0.7%	6,123.4	63.2	1.0%
ME 5	32 49 25	2001	Dry	December	--	8,901.2	8,871.1	30.1	0.3%	8,864.9	36.2	0.4%	8,846.4	54.7	0.6%
ME 5	32 49 25	2001	Dry	January	--	12,908.6	12,881.9	26.6	0.2%	12,876.2	32.4	0.3%	12,860.0	48.6	0.4%
ME 5	32 49 25	2001	Dry	February	--	17,547.5	17,522.0	25.5	0.1%	17,517.4	30.1	0.2%	17,502.3	45.1	0.3%
ME 5	32 49 25	2001	Dry	March	--	12,335.6	12,313.7	22.0	0.2%	12,309.0	26.6	0.2%	12,295.1	40.5	0.3%
ME 5	32 49 25	2001	Dry	April	--	11,013.1	10,967.4	45.7	0.4%	10,958.2	54.9	0.5%	10,930.9	82.2	0.7%
ME 5	32 49 25	2001	Dry	May	--	2,639.6	2,585.5	54.1	2.0%	2,574.8	64.8	2.5%	2,542.5	97.1	3.7%
ME 5	32 49 25	2001	Dry	June	--	2,675.2	2,602.1	73.1	2.7%	2,587.7	87.5	3.3%	2,545.6	129.6	4.8%
ME 5	32 49 25	2001	Dry	July	--	723.1	653.2	69.9	9.7%	639.3	83.8	11.6%	603.1	120.0	16.6%
ME 5	32 49 25	2001	Dry	August	--	179.2	110.7	68.5	38.2%	97.0	82.2	45.9%	58.7	120.5	67.3%
ME 5	32 49 25	2001	Dry	September	Used in Summary Table Analysis	102.5	40.6	61.9	60.4%	28.3	74.2	72.4%	1.1	101.4	98.9%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 49 25	2002	Below Normal	October	Used in Summary Table Analysis	272.8	220.3	52.6	19.3%	209.6	63.2	23.2%	177.9	94.9	34.8%
ME 5	32 49 25	2002	Below Normal	November	Used in Summary Table Analysis	12,108.8	12,067.1	41.7	0.3%	12,057.9	50.9	0.4%	12,030.1	78.7	0.6%
ME 5	32 49 25	2002	Below Normal	December	--	35,927.1	35,890.0	37.0	0.1%	35,881.9	45.1	0.1%	35,858.8	68.3	0.2%
ME 5	32 49 25	2002	Below Normal	January	--	31,032.4	31,000.0	32.4	0.1%	30,993.1	39.4	0.1%	30,973.4	59.0	0.2%
ME 5	32 49 25	2002	Below Normal	February	--	24,770.8	24,740.7	30.1	0.1%	24,735.0	35.9	0.1%	24,717.6	53.2	0.2%
ME 5	32 49 25	2002	Below Normal	March	--	17,851.9	17,825.2	26.6	0.1%	17,819.4	32.4	0.2%	17,802.1	49.8	0.3%
ME 5	32 49 25	2002	Below Normal	April	--	9,953.7	9,907.5	46.2	0.5%	9,898.4	55.3	0.6%	9,870.7	83.0	0.8%
ME 5	32 49 25	2002	Below Normal	May	--	3,330.9	3,276.5	54.4	1.6%	3,265.6	65.3	2.0%	3,233.2	97.7	2.9%
ME 5	32 49 25	2002	Below Normal	June	--	860.4	799.1	61.3	7.1%	786.9	73.5	8.5%	751.0	109.4	12.7%
ME 5	32 49 25	2002	Below Normal	July	--	369.2	306.3	63.0	17.1%	293.8	75.5	20.4%	257.3	111.9	30.3%
ME 5	32 49 25	2002	Below Normal	August	--	234.9	175.2	59.7	25.4%	163.3	71.6	30.5%	127.1	107.8	45.9%
ME 5	32 49 25	2002	Below Normal	September	Used in Summary Table Analysis	171.4	114.5	56.8	33.2%	103.2	68.2	39.8%	68.4	103.0	60.1%
ME 5	32 49 25	2003	Wet	October	Used in Summary Table Analysis	136.2	88.8	47.3	34.8%	79.3	56.9	41.8%	50.7	85.5	62.8%
ME 5	32 49 25	2003	Wet	November	Used in Summary Table Analysis	905.5	867.0	38.5	4.3%	859.1	46.4	5.1%	835.5	70.0	7.7%
ME 5	32 49 25	2003	Wet	December	--	57,392.4	57,357.6	34.7	0.1%	57,350.7	41.7	0.1%	57,329.9	62.5	0.1%
ME 5	32 49 25	2003	Wet	January	--	31,648.1	31,618.1	30.1	0.1%	31,612.3	35.9	0.1%	31,593.8	54.4	0.2%
ME 5	32 49 25	2003	Wet	February	--	20,416.7	20,388.9	27.8	0.1%	20,384.3	32.4	0.2%	20,366.9	49.8	0.2%
ME 5	32 49 25	2003	Wet	March	--	24,130.8	24,105.3	25.5	0.1%	24,100.7	30.1	0.1%	24,084.5	46.3	0.2%
ME 5	32 49 25	2003	Wet	April	--	43,151.6	43,127.3	24.3	0.1%	43,121.5	30.1	0.1%	43,107.6	44.0	0.1%
ME 5	32 49 25	2003	Wet	May	--	12,256.9	12,209.5	47.5	0.4%	12,200.2	56.7	0.5%	12,172.5	84.5	0.7%
ME 5	32 49 25	2003	Wet	June	--	3,175.3	3,117.1	58.2	1.8%	3,105.8	69.6	2.2%	3,072.1	103.2	3.3%
ME 5	32 49 25	2003	Wet	July	--	1,484.0	1,421.8	62.3	4.2%	1,409.4	74.7	5.0%	1,372.8	111.2	7.5%
ME 5	32 49 25	2003	Wet	August	--	769.5	708.2	61.3	8.0%	695.6	73.9	9.6%	656.5	113.0	14.7%
ME 5	32 49 25	2003	Wet	September	Used in Summary Table Analysis	466.6	414.0	52.5	11.3%	403.5	63.1	13.5%	370.9	95.7	20.5%
ME 5	32 49 25	2004	Wet	October	Used in Summary Table Analysis	333.3	289.2	44.1	13.2%	280.3	53.0	15.9%	253.4	79.8	23.9%
ME 5	32 49 25	2004	Wet	November	Used in Summary Table Analysis	5,871.2	5,835.0	36.2	0.6%	5,827.5	43.6	0.7%	5,805.2	66.0	1.1%
ME 5	32 49 25	2004	Wet	December	--	36,610.0	36,577.5	32.4	0.1%	36,571.8	38.2	0.1%	36,550.9	59.0	0.2%
ME 5	32 49 25	2004	Wet	January	--	31,677.1	31,649.3	27.8	0.1%	31,643.5	33.6	0.1%	31,626.2	50.9	0.2%
ME 5	32 49 25	2004	Wet	February	--	38,431.7	38,406.3	25.5	0.1%	38,400.5	31.3	0.1%	38,384.3	47.5	0.1%
ME 5	32 49 25	2004	Wet	March	--	16,559.0	16,535.9	23.1	0.1%	16,531.3	27.8	0.2%	16,516.2	42.8	0.3%
ME 5	32 49 25	2004	Wet	April	--	9,477.0	9,454.7	22.2	0.2%	9,450.2	26.7	0.3%	9,436.5	40.5	0.4%
ME 5	32 49 25	2004	Wet	May	--	3,441.8	3,397.0	44.8	1.3%	3,388.1	53.7	1.6%	3,361.3	80.4	2.3%
ME 5	32 49 25	2004	Wet	June	--	698.1	642.1	56.0	8.0%	631.1	67.1	9.6%	598.4	99.7	14.3%
ME 5	32 49 25	2004	Wet	July	--	364.2	303.1	61.1	16.8%	291.0	73.2	20.1%	255.0	109.2	30.0%
ME 5	32 49 25	2004	Wet	August	--	232.8	174.8	58.0	24.9%	163.2	69.6	29.9%	128.6	104.2	44.8%
ME 5	32 49 25	2004	Wet	September	Used in Summary Table Analysis	169.3	113.7	55.6	32.8%	102.6	66.7	39.4%	69.3	100.1	59.1%
ME 5	32 49 25	2005	Above Normal	October	Used in Summary Table Analysis	7,770.6	7,725.6	45.0	0.6%	7,716.6	54.1	0.7%	7,689.1	81.5	1.0%
ME 5	32 49 25	2005	Above Normal	November	Used in Summary Table Analysis	2,270.5	2,235.1	35.4	1.6%	2,227.9	42.6	1.9%	2,206.1	64.4	2.8%
ME 5	32 49 25	2005	Above Normal	December	--	21,277.8	21,246.5	31.3	0.1%	21,240.7	37.0	0.2%	21,222.2	55.6	0.3%
ME 5	32 49 25	2005	Above Normal	January	--	22,582.2	22,554.4	27.8	0.1%	22,548.6	33.6	0.1%	22,531.3	50.9	0.2%
ME 5	32 49 25	2005	Above Normal	February	--	14,047.5	14,023.1	24.3	0.2%	14,017.4	30.1	0.2%	14,002.3	45.1	0.3%
ME 5	32 49 25	2005	Above Normal	March	--	28,717.6	28,694.4	23.1	0.1%	28,689.8	27.8	0.1%	28,675.9	41.7	0.1%
ME 5	32 49 25	2005	Above Normal	April	--	21,544.0	21,522.0	22.0	0.1%	21,517.4	26.6	0.1%	21,503.5	40.5	0.2%
ME 5	32 49 25	2005	Above Normal	May	--	19,688.7	19,642.4	46.3	0.2%	19,633.1	55.6	0.3%	19,606.5	82.2	0.4%
ME 5	32 49 25	2005	Above Normal	June	--	16,011.6	15,944.4	67.1	0.4%	15,930.6	81.0	0.5%	15,891.2	120.4	0.8%
ME 5	32 49 25	2005	Above Normal	July	--	2,867.2	2,804.5	62.7	2.2%	2,792.6	74.7	2.6%	2,757.1	110.2	3.8%
ME 5	32 49 25	2005	Above Normal	August	--	992.4	935.0	57.4	5.8%	923.6	68.8	6.9%	889.7	102.7	10.3%
ME 5	32 49 25	2005	Above Normal	September	Used in Summary Table Analysis	533.8	482.4	51.4	9.6%	472.2	61.6	11.5%	441.5	92.3	17.3%
ME 5	32 49 25	2006	Wet	October	Used in Summary Table Analysis	644.7	602.4	42.3	6.6%	593.9	50.8	7.9%	568.2	76.5	11.9%
ME 5	32 49 25	2006	Wet	November	Used in Summary Table Analysis	9,422.0	9,388.2	33.8	0.4%	9,381.3	40.7	0.4%	9,360.4	61.6	0.7%
ME 5	32 49 25	2006	Wet	December	--	43,876.2	43,846.1	30.1	0.1%	43,839.1	37.0	0.1%	43,820.6	55.6	0.1%
ME 5	32 49 25	2006	Wet	January	--	46,640.0	46,612.3	27.8	0.1%	46,606.5	33.6	0.1%	46,589.1	50.9	0.1%
ME 5	32 49 25	2006	Wet	February	--	26,766.2	26,741.9	24.3	0.1%	26,737.3	28.9	0.1%	26,722.2	44.0	0.2%
ME 5	32 49 25	2006	Wet	March	--	47,429.4	47,406.3	23.1	0.0%	47,401.6	27.8	0.1%	47,386.6	42.8	0.1%
ME 5	32 49 25	2006	Wet	April	--	30,535.9	30,513.9	22.0	0.1%	30,510.4	25.5	0.1%	30,497.7	38.2	0.1%
ME 5	32 49 25	2006	Wet	May	--	14,269.7	14,241.9	27.8	0.2%	14,236.1	33.6	0.2%	14,219.9	49.8	0.3%
ME 5	32 49 25	2006	Wet	June	--	3,555.8	3,500.3	55.4	1.6%	3,489.5	66.3	1.9%	3,457.4	98.4	2.8%
ME 5	32 49 25	2006	Wet	July	--	1,289.9	1,230.2	59.7	4.6%	1,218.5	71.4	5.5%	1,183.8	106.1	8.2%
ME 5	32 49 25	2006	Wet	August	--	676.0	617.2	58.8	8.7%	605.6	70.4	10.4%	570.8	105.2	15.6%
ME 5	32 49 25	2006	Wet	September	Used in Summary Table Analysis	436.1	383.9	52.2	12.0%	373.5	62.6	14.3%	342.3	93.8	21.5%
ME 5	32 49 25	2007	Above Normal	October	Used in Summary Table Analysis	283.0	239.8	43.2	15.3%	231.1	51.9	18.3%	204.8	78.2	27.6%
ME 5	32 49 25	2007	Above Normal	November	Used in Summary Table Analysis	8,769.0	8,733.4	35.5	0.4%	8,726.3	42.7	0.5%	8,704.4	64.6	0.7%
ME 5	32 49 25	2007	Above Normal	December	--	20,616.9	20,585.6	31.3	0.2%	20,578.7	38.2	0.2%	20,560.2	56.7	0.3%
ME 5	32 49 25	2007	Above Normal	January	--	10,306.9	10,279.6	27.3	0.3%	10,274.1	32.9	0.3%	10,256.9	50.0	0.5%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 49 25	2007	Above Normal	February	--	30,803.2	30,777.8	25.5	0.1%	30,772.0	31.3	0.1%	30,755.8	47.5	0.2%
ME 5	32 49 25	2007	Above Normal	March	--	13,142.4	13,118.1	24.3	0.2%	13,113.4	28.9	0.2%	13,098.4	44.0	0.3%
ME 5	32 49 25	2007	Above Normal	April	--	11,573.3	11,529.1	44.2	0.4%	11,520.3	53.0	0.5%	11,493.9	79.4	0.7%
ME 5	32 49 25	2007	Above Normal	May	--	4,158.0	4,105.6	52.4	1.3%	4,095.0	63.0	1.5%	4,063.7	94.3	2.3%
ME 5	32 49 25	2007	Above Normal	June	--	1,511.9	1,449.3	62.6	4.1%	1,436.9	75.0	5.0%	1,400.2	111.7	7.4%
ME 5	32 49 25	2007	Above Normal	July	--	502.8	439.1	63.7	12.7%	426.5	76.3	15.2%	389.4	113.4	22.6%
ME 5	32 49 25	2007	Above Normal	August	--	231.0	173.1	58.0	25.1%	161.5	69.5	30.1%	126.3	104.7	45.3%
ME 5	32 49 25	2007	Above Normal	September	Used in Summary Table Analysis	158.6	103.3	55.3	34.9%	92.3	66.3	41.8%	59.2	99.5	62.7%
ME 5	32 49 25	2008	Dry	October	Used in Summary Table Analysis	3,472.0	3,426.2	45.8	1.3%	3,416.9	55.1	1.6%	3,388.8	83.2	2.4%
ME 5	32 49 25	2008	Dry	November	Used in Summary Table Analysis	3,311.5	3,275.7	35.8	1.1%	3,268.4	43.1	1.3%	3,246.3	65.2	2.0%
ME 5	32 49 25	2008	Dry	December	--	23,395.8	23,363.4	32.4	0.1%	23,357.6	38.2	0.2%	23,338.0	57.9	0.2%
ME 5	32 49 25	2008	Dry	January	--	37,788.2	37,759.3	28.9	0.1%	37,753.5	34.7	0.1%	37,735.0	53.2	0.1%
ME 5	32 49 25	2008	Dry	February	--	26,334.5	26,309.0	25.5	0.1%	26,304.4	30.1	0.1%	26,288.2	46.3	0.2%
ME 5	32 49 25	2008	Dry	March	--	11,824.1	11,802.1	22.0	0.2%	11,797.5	26.6	0.2%	11,783.6	40.5	0.3%
ME 5	32 49 25	2008	Dry	April	--	9,041.3	8,996.5	44.8	0.5%	8,987.6	53.7	0.6%	8,960.8	80.6	0.9%
ME 5	32 49 25	2008	Dry	May	--	1,359.6	1,312.4	47.2	3.5%	1,303.2	56.4	4.1%	1,275.7	83.9	6.2%
ME 5	32 49 25	2008	Dry	June	--	445.0	376.9	68.1	15.3%	363.5	81.5	18.3%	323.9	121.1	27.2%
ME 5	32 49 25	2008	Dry	July	--	262.7	194.3	68.5	26.1%	180.7	82.0	31.2%	145.4	117.3	44.7%
ME 5	32 49 25	2008	Dry	August	--	186.4	119.3	67.1	36.0%	106.0	80.4	43.1%	65.8	120.6	64.7%
ME 5	32 49 25	2008	Dry	September	Used in Summary Table Analysis	148.0	82.9	65.0	43.9%	70.0	77.9	52.7%	32.5	115.5	78.0%
ME 5	32 49 25	2009	Critical	October	Used in Summary Table Analysis	933.6	881.4	52.2	5.6%	871.0	62.7	6.7%	839.2	94.5	10.1%
ME 5	32 49 25	2009	Critical	November	Used in Summary Table Analysis	5,578.9	5,537.6	41.3	0.7%	5,529.3	49.7	0.9%	5,501.3	77.7	1.4%
ME 5	32 49 25	2009	Critical	December	--	12,305.6	12,269.7	35.9	0.3%	12,262.7	42.8	0.3%	12,240.7	64.8	0.5%
ME 5	32 49 25	2009	Critical	January	--	8,837.6	8,805.7	31.9	0.4%	8,799.1	38.5	0.4%	8,779.3	58.3	0.7%
ME 5	32 49 25	2009	Critical	February	--	22,732.6	22,703.7	28.9	0.1%	22,697.9	34.7	0.2%	22,680.6	52.1	0.2%
ME 5	32 49 25	2009	Critical	March	--	21,209.5	21,184.0	25.5	0.1%	21,179.4	30.1	0.1%	21,163.2	46.3	0.2%
ME 5	32 49 25	2009	Critical	April	--	10,108.7	10,061.8	46.9	0.5%	10,052.5	56.1	0.6%	10,024.3	84.4	0.8%
ME 5	32 49 25	2009	Critical	May	--	15,629.6	15,572.9	56.7	0.4%	15,561.3	68.3	0.4%	15,527.8	101.9	0.7%
ME 5	32 49 25	2009	Critical	June	--	3,168.4	3,095.6	72.8	2.3%	3,081.6	86.8	2.7%	3,039.5	128.9	4.1%
ME 5	32 49 25	2009	Critical	July	--	1,270.6	1,201.4	69.2	5.4%	1,187.7	82.9	6.5%	1,152.1	118.5	9.3%
ME 5	32 49 25	2009	Critical	August	--	676.9	609.3	67.6	10.0%	595.8	81.0	12.0%	558.1	118.8	17.6%
ME 5	32 49 25	2009	Critical	September	Used in Summary Table Analysis	397.5	336.2	61.2	15.4%	324.1	73.4	18.5%	288.7	108.8	27.4%
ME 5	32 49 25	2010	Below Normal	October	Used in Summary Table Analysis	6,100.1	6,047.2	52.9	0.9%	6,036.6	63.5	1.0%	6,003.6	96.5	1.6%
ME 5	32 49 25	2010	Below Normal	November	Used in Summary Table Analysis	8,337.2	8,294.4	42.7	0.5%	8,285.9	51.3	0.6%	8,257.2	80.0	1.0%
ME 5	32 49 25	2010	Below Normal	December	--	12,449.1	12,412.0	37.0	0.3%	12,405.1	44.0	0.4%	12,381.9	67.1	0.5%
ME 5	32 49 25	2010	Below Normal	January	--	36,547.5	36,513.9	33.6	0.1%	36,508.1	39.4	0.1%	36,487.3	60.2	0.2%
ME 5	32 49 25	2010	Below Normal	February	--	27,334.5	27,305.6	28.9	0.1%	27,299.8	34.7	0.1%	27,281.3	53.2	0.2%
ME 5	32 49 25	2010	Below Normal	March	--	28,915.5	28,887.7	27.8	0.1%	28,883.1	32.4	0.1%	28,865.7	49.8	0.2%
ME 5	32 49 25	2010	Below Normal	April	--	40,157.4	40,131.9	25.5	0.1%	40,127.3	30.1	0.1%	40,111.1	46.3	0.1%
ME 5	32 49 25	2010	Below Normal	May	--	20,380.8	20,332.2	48.6	0.2%	20,322.9	57.9	0.3%	20,294.0	86.8	0.4%
ME 5	32 49 25	2010	Below Normal	June	--	9,439.6	9,370.4	69.2	0.7%	9,356.7	82.9	0.9%	9,316.2	123.4	1.3%
ME 5	32 49 25	2010	Below Normal	July	--	1,462.0	1,398.4	63.7	4.4%	1,386.0	76.0	5.2%	1,349.3	112.7	7.7%
ME 5	32 49 25	2010	Below Normal	August	--	578.6	519.6	59.1	10.2%	507.9	70.7	12.2%	473.1	105.6	18.2%
ME 5	32 49 25	2010	Below Normal	September	Used in Summary Table Analysis	661.1	604.3	56.8	8.6%	592.9	68.2	10.3%	558.9	102.2	15.5%
ME 5	32 49 25	2011	Wet	October	Used in Summary Table Analysis	9,705.3	9,661.6	43.8	0.5%	9,652.7	52.7	0.5%	9,625.9	79.4	0.8%
ME 5	32 49 25	2011	Wet	November	Used in Summary Table Analysis	14,300.9	14,266.2	34.7	0.2%	14,259.3	41.7	0.3%	14,237.3	63.7	0.4%
ME 5	32 49 25	2011	Wet	December	--	34,028.9	33,998.8	30.1	0.1%	33,991.9	37.0	0.1%	33,972.2	56.7	0.2%
ME 5	32 49 25	2011	Wet	January	--	14,218.8	14,192.1	26.6	0.2%	14,186.3	32.4	0.2%	14,170.1	48.6	0.3%
ME 5	32 49 25	2011	Wet	February	--	20,829.9	20,805.6	24.3	0.1%	20,799.8	30.1	0.1%	20,784.7	45.1	0.2%
ME 5	32 49 25	2011	Wet	March	--	52,222.2	52,197.9	24.3	0.0%	52,193.3	28.9	0.1%	52,178.2	44.0	0.1%
ME 5	32 49 25	2011	Wet	April	--	24,875.0	24,851.9	23.1	0.1%	24,847.2	27.8	0.1%	24,833.3	41.7	0.2%
ME 5	32 49 25	2011	Wet	May	--	11,419.6	11,374.1	45.5	0.4%	11,364.9	54.6	0.5%	11,337.7	81.8	0.7%
ME 5	32 49 25	2011	Wet	June	--	7,093.4	7,026.2	67.2	0.9%	7,012.8	80.6	1.1%	6,973.6	119.8	1.7%
ME 5	32 49 25	2011	Wet	July	--	1,834.0	1,766.4	67.6	3.7%	1,753.0	81.0	4.4%	1,714.7	119.3	6.5%
ME 5	32 49 25	2011	Wet	August	--	785.2	727.0	58.2	7.4%	715.5	69.7	8.9%	680.9	104.3	13.3%
ME 5	32 49 25	2011	Wet	September	Used in Summary Table Analysis	441.8	388.4	53.4	12.1%	377.7	64.1	14.5%	345.9	95.9	21.7%
ME 5	32 49 25	2012	Below Normal	October	Used in Summary Table Analysis	4,579.5	4,535.1	44.4	1.0%	4,526.0	53.5	1.2%	4,498.7	80.8	1.8%
ME 5	32 49 25	2012	Below Normal	November	Used in Summary Table Analysis	8,313.4	8,277.8	35.6	0.4%	8,270.5	42.9	0.5%	8,248.4	65.0	0.8%
ME 5	32 49 25	2012	Below Normal	December	--	5,217.5	5,186.9	30.6	0.6%	5,180.7	36.8	0.7%	5,161.7	55.8	1.1%
ME 5	32 49 25	2012	Below Normal	January	--	20,329.9	20,302.1	27.8	0.1%	20,296.3	33.6	0.2%	20,278.9	50.9	0.3%
ME 5	32 49 25	2012	Below Normal	February	--	18,275.5	18,250.0	25.5	0.1%	18,245.4	30.1	0.2%	18,229.2	46.3	0.3%
ME 5	32 49 25	2012	Below Normal	March	--	45,677.1	45,651.6	25.5	0.1%	45,647.0	30.1	0.1%	45,631.9	45.1	0.1%
ME 5	32 49 25	2012	Below Normal	April	--	26,951.4	26,928.2	23.1	0.1%	26,923.6	27.8	0.1%	26,909.7	41.7	0.2%
ME 5	32 49 25	2012	Below Normal	May	--	7,506.0	7,460.9	45.1	0.6%	7,451.9	54.2	0.7%	7,425.0	81.0	1.1%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 49 25	2012	Below Normal	June	--	5,552.2	5,483.9	68.3	1.2%	5,470.5	81.7	1.5%	5,430.8	121.4	2.2%
ME 5	32 49 25	2012	Below Normal	July	--	2,247.1	2,181.6	65.5	2.9%	2,168.6	78.5	3.5%	2,130.0	117.1	5.2%
ME 5	32 49 25	2012	Below Normal	August	--	395.0	341.6	53.4	13.5%	331.0	64.0	16.2%	299.2	95.8	24.3%
ME 5	32 49 25	2012	Below Normal	September	Used in Summary Table Analysis	257.1	209.1	48.0	18.7%	199.5	57.5	22.4%	170.9	86.2	33.5%
ME 5	32 49 25	2013	Below Normal	October	Used in Summary Table Analysis	1,937.5	1,895.1	42.4	2.2%	1,886.6	50.9	2.6%	1,861.0	76.5	3.9%
ME 5	32 49 25	2013	Below Normal	November	Used in Summary Table Analysis	14,822.9	14,788.2	34.7	0.2%	14,781.3	41.7	0.3%	14,760.4	62.5	0.4%
ME 5	32 49 25	2013	Below Normal	December	--	60,296.3	60,265.0	31.3	0.1%	60,258.1	38.2	0.1%	60,239.6	56.7	0.1%
ME 5	32 49 25	2013	Below Normal	January	--	22,290.5	22,265.0	25.5	0.1%	22,259.3	31.3	0.1%	22,243.1	47.5	0.2%
ME 5	32 49 25	2013	Below Normal	February	--	8,888.4	8,863.8	24.7	0.3%	8,858.7	29.7	0.3%	8,843.6	44.8	0.5%
ME 5	32 49 25	2013	Below Normal	March	--	10,395.0	10,371.3	23.7	0.2%	10,366.4	28.6	0.3%	10,352.0	43.1	0.4%
ME 5	32 49 25	2013	Below Normal	April	--	8,311.8	8,268.8	43.1	0.5%	8,260.2	51.6	0.6%	8,234.5	77.3	0.9%
ME 5	32 49 25	2013	Below Normal	May	--	4,457.3	4,405.3	52.0	1.2%	4,394.9	62.4	1.4%	4,363.9	93.4	2.1%
ME 5	32 49 25	2013	Below Normal	June	--	2,120.5	2,058.2	62.3	2.9%	2,045.9	74.5	3.5%	2,009.4	111.1	5.2%
ME 5	32 49 25	2013	Below Normal	July	--	723.8	662.8	60.9	8.4%	650.8	73.0	10.1%	615.6	108.2	14.9%
ME 5	32 49 25	2013	Below Normal	August	--	347.4	289.6	57.8	16.6%	278.1	69.3	20.0%	243.0	104.4	30.1%
ME 5	32 49 25	2013	Below Normal	September	Used in Summary Table Analysis	4,825.1	4,764.9	60.2	1.2%	4,752.9	72.2	1.5%	4,716.9	108.2	2.2%
ME 5	32 49 25	2014	Critical	October	Used in Summary Table Analysis	283.9	239.2	44.7	15.7%	230.2	53.6	18.9%	203.9	80.0	28.2%
ME 5	32 49 25	2014	Critical	November	Used in Summary Table Analysis	1,559.6	1,523.5	36.1	2.3%	1,516.2	43.4	2.8%	1,494.0	65.6	4.2%
ME 5	32 49 25	2014	Critical	December	--	1,603.2	1,571.6	31.6	2.0%	1,565.3	38.0	2.4%	1,545.6	57.6	3.6%
ME 5	32 49 25	2014	Critical	January	--	2,843.8	2,815.5	28.2	1.0%	2,809.8	33.9	1.2%	2,792.1	51.6	1.8%
ME 5	32 49 25	2014	Critical	February	--	15,814.8	15,789.4	25.5	0.2%	15,784.7	30.1	0.2%	15,767.4	47.5	0.3%
ME 5	32 49 25	2014	Critical	March	--	31,566.0	31,541.7	24.3	0.1%	31,537.0	28.9	0.1%	31,520.8	45.1	0.1%
ME 5	32 49 25	2014	Critical	April	--	13,018.5	12,972.2	46.3	0.4%	12,963.0	55.6	0.4%	12,935.2	83.3	0.6%
ME 5	32 49 25	2014	Critical	May	--	5,206.3	5,151.3	55.0	1.1%	5,140.3	66.0	1.3%	5,107.3	99.0	1.9%
ME 5	32 49 25	2014	Critical	June	--	1,206.5	1,132.1	74.4	6.2%	1,117.5	89.0	7.4%	1,075.3	131.1	10.9%
ME 5	32 49 25	2014	Critical	July	--	552.0	482.1	70.0	12.7%	468.2	83.9	15.2%	431.5	120.5	21.8%
ME 5	32 49 25	2014	Critical	August	--	355.3	288.0	67.3	18.9%	274.5	80.8	22.8%	236.3	119.1	33.5%
ME 5	32 49 25	2014	Critical	September	Used in Summary Table Analysis	2,593.2	2,526.7	66.4	2.6%	2,513.5	79.6	3.1%	2,474.2	119.0	4.6%
ME 5	32 49 25	2015	Dry	October	Used in Summary Table Analysis	11,431.7	11,379.2	52.5	0.5%	11,368.8	63.0	0.6%	11,337.2	94.6	0.8%
ME 5	32 49 25	2015	Dry	November	Used in Summary Table Analysis	9,111.8	9,071.8	40.0	0.4%	9,063.7	48.1	0.5%	9,035.9	75.9	0.8%
ME 5	32 49 25	2015	Dry	December	--	32,887.7	32,854.2	33.6	0.1%	32,846.1	41.7	0.1%	32,824.1	63.7	0.2%
ME 5	32 49 25	2015	Dry	January	--	14,619.2	14,589.1	30.1	0.2%	14,582.2	37.0	0.3%	14,562.5	56.7	0.4%
ME 5	32 49 25	2015	Dry	February	--	27,341.4	27,313.7	27.8	0.1%	27,309.0	32.4	0.1%	27,291.7	49.8	0.2%
ME 5	32 49 25	2015	Dry	March	--	11,597.2	11,572.7	24.5	0.2%	11,567.7	29.5	0.3%	11,552.4	44.8	0.4%
ME 5	32 49 25	2015	Dry	April	--	8,457.3	8,411.2	46.1	0.5%	8,402.0	55.3	0.7%	8,374.3	83.0	1.0%
ME 5	32 49 25	2015	Dry	May	--	1,512.3	1,458.1	54.2	3.6%	1,447.3	64.9	4.3%	1,415.9	96.4	6.4%
ME 5	32 49 25	2015	Dry	June	--	657.9	588.7	69.2	10.5%	575.0	82.9	12.6%	534.7	123.2	18.7%
ME 5	32 49 25	2015	Dry	July	--	274.3	205.2	69.2	25.2%	191.4	82.9	30.2%	155.7	118.6	43.2%
ME 5	32 49 25	2015	Dry	August	--	173.3	105.8	67.5	38.9%	92.3	81.0	46.7%	54.8	118.6	68.4%
ME 5	32 49 25	2015	Dry	September	Used in Summary Table Analysis	126.8	62.9	63.8	50.4%	49.8	77.0	60.7%	11.8	115.0	90.7%
ME 5	32 49 25	2016	Above Normal	October	Used in Summary Table Analysis	91.8	37.8	54.0	58.8%	27.4	64.4	70.2%	0.8	91.0	99.1%
ME 5	32 49 25	2016	Above Normal	November	Used in Summary Table Analysis	3,930.0	3,887.6	42.4	1.1%	3,878.9	51.0	1.3%	3,848.1	81.8	2.1%
ME 5	32 49 25	2016	Above Normal	December	--	36,937.5	36,899.3	38.2	0.1%	36,892.4	45.1	0.1%	36,868.1	69.4	0.2%
ME 5	32 49 25	2016	Above Normal	January	--	57,648.1	57,613.4	34.7	0.1%	57,606.5	41.7	0.1%	57,585.6	62.5	0.1%
ME 5	32 49 25	2016	Above Normal	February	--	24,322.9	24,295.1	27.8	0.1%	24,289.4	33.6	0.1%	24,272.0	50.9	0.2%
ME 5	32 49 25	2016	Above Normal	March	--	41,931.7	41,905.1	26.6	0.1%	41,899.3	32.4	0.1%	41,883.1	48.6	0.1%
ME 5	32 49 25	2016	Above Normal	April	--	18,581.0	18,556.7	24.3	0.1%	18,552.1	28.9	0.2%	18,537.0	44.0	0.2%
ME 5	32 49 25	2016	Above Normal	May	--	5,231.6	5,202.5	29.1	0.6%	5,196.6	35.0	0.7%	5,178.7	52.9	1.0%
ME 5	32 49 25	2016	Above Normal	June	--	1,517.1	1,463.8	53.4	3.5%	1,454.3	62.8	4.1%	1,426.3	90.9	6.0%
ME 5	32 49 25	2016	Above Normal	July	--	831.3	770.9	60.5	7.3%	758.9	72.5	8.7%	723.3	108.0	13.0%
ME 5	32 49 25	2016	Above Normal	August	--	500.3	440.4	59.9	12.0%	428.5	71.8	14.4%	392.9	107.3	21.5%
ME 5	32 49 25	2016	Above Normal	September	Used in Summary Table Analysis	336.2	279.8	56.4	16.8%	268.3	67.9	20.2%	234.1	102.1	30.4%
ME 5	32 49 25	2017	Wet	October	Used in Summary Table Analysis	18,409.7	18,363.4	46.3	0.3%	18,354.2	55.6	0.3%	18,327.5	82.2	0.4%
ME 5	32 49 25	2017	Wet	November	Used in Summary Table Analysis	18,960.6	18,925.9	34.7	0.2%	18,917.8	42.8	0.2%	18,895.8	64.8	0.3%
ME 5	32 49 25	2017	Wet	December	--	24,324.1	24,294.0	30.1	0.1%	24,287.0	37.0	0.2%	24,268.5	55.6	0.2%
ME 5	32 49 25	2017	Wet	January	--	107,520.8	107,491.9	28.9	0.0%	107,486.1	34.7	0.0%	107,468.8	52.1	0.0%
ME 5	32 49 25	2017	Wet	February	--	82,200.2	82,174.8	25.5	0.0%	82,169.0	31.3	0.0%	82,152.8	47.5	0.1%
ME 5	32 49 25	2017	Wet	March	--	27,388.9	27,364.6	24.3	0.1%	27,360.0	28.9	0.1%	27,344.9	44.0	0.2%
ME 5	32 49 25	2017	Wet	April	--	23,059.0	23,037.0	22.0	0.1%	23,032.4	26.6	0.1%	23,019.7	39.4	0.2%
ME 5	32 49 25	2017	Wet	May	--	6,278.5	6,249.7	28.8	0.5%	6,243.9	34.6	0.6%	6,226.4	52.1	0.8%
ME 5	32 49 25	2017	Wet	June	--	2,133.4	2,078.6	54.9	2.6%	2,067.8	65.6	3.1%	2,035.8	97.7	4.6%
ME 5	32 49 25	2017	Wet	July	--	945.2	884.8	60.4	6.4%	872.9	72.3	7.7%	837.7	107.5	11.4%
ME 5	32 49 25	2017	Wet	August	--	517.3	458.0	59.3	11.5%	446.2	71.1	13.7%	411.1	106.2	20.5%
ME 5	32 49 25	2017	Wet	September	Used in Summary Table Analysis	332.0	276.6	55.4	16.7%	265.5	66.5	20.0%	232.3	99.7	30.0%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 5	32 49 25	2018	Above Normal	October	Used in Summary Table Analysis	284.7	240.0	44.6	15.7%	231.0	53.6	18.8%	204.0	80.6	28.3%
ME 5	32 49 25	2018	Above Normal	November	Used in Summary Table Analysis	10,931.1	10,895.5	35.6	0.3%	10,888.3	42.8	0.4%	10,866.4	64.7	0.6%
ME 5	32 49 25	2018	Above Normal	December	--	5,460.9	5,430.7	30.2	0.6%	5,424.4	36.5	0.7%	5,405.8	55.1	1.0%
ME 5	32 49 25	2018	Above Normal	January	--	18,019.7	17,991.9	27.8	0.2%	17,986.1	33.6	0.2%	17,969.9	49.8	0.3%
ME 5	32 49 25	2018	Above Normal	February	--	7,610.5	7,586.3	24.2	0.3%	7,581.4	29.2	0.4%	7,566.3	44.2	0.6%
ME 5	32 49 25	2018	Above Normal	March	--	20,854.2	20,831.0	23.1	0.1%	20,826.4	27.8	0.1%	20,812.5	41.7	0.2%
ME 5	32 49 25	2018	Above Normal	April	--	32,381.9	32,360.0	22.0	0.1%	32,356.5	25.5	0.1%	32,343.8	38.2	0.1%
ME 5	32 49 25	2018	Above Normal	May	--	6,996.2	6,953.2	42.9	0.6%	6,944.7	51.5	0.7%	6,918.8	77.4	1.1%
ME 5	32 49 25	2018	Above Normal	June	--	1,922.3	1,866.8	55.6	2.9%	1,855.8	66.6	3.5%	1,823.5	98.8	5.1%
ME 5	32 49 25	2018	Above Normal	July	--	790.6	729.5	61.1	7.7%	717.3	73.2	9.3%	681.3	109.3	13.8%
ME 5	32 49 25	2018	Above Normal	August	--	451.8	394.3	57.4	12.7%	382.8	68.9	15.3%	348.5	103.3	22.9%
ME 5	32 49 25	2018	Above Normal	September	Used in Summary Table Analysis	308.6	253.0	55.5	18.0%	241.9	66.7	21.6%	208.6	100.0	32.4%
ME 5	32 49 25	2019	Below Normal	October	Used in Summary Table Analysis	214.9	170.8	44.1	20.5%	161.9	53.1	24.7%	135.0	79.9	37.2%
ME 5	32 49 25	2019	Below Normal	November	Used in Summary Table Analysis	6,716.0	6,680.0	36.0	0.5%	6,672.7	43.3	0.6%	6,650.7	65.3	1.0%
ME 5	32 49 25	2019	Below Normal	December	--	14,820.6	14,790.5	30.1	0.2%	14,783.6	37.0	0.2%	14,765.0	55.6	0.4%
ME 5	32 49 25	2019	Below Normal	January	--	35,532.4	35,505.8	26.6	0.1%	35,498.8	33.6	0.1%	35,482.6	49.8	0.1%
ME 5	32 49 25	2019	Below Normal	February	--	142,256.9	142,233.8	23.1	0.0%	142,222.2	34.7	0.0%	142,210.6	46.3	0.0%
ME 5	32 49 25	2019	Below Normal	March	--	42,491.9	42,469.9	22.0	0.1%	42,465.3	26.6	0.1%	42,451.4	40.5	0.1%
ME 5	32 49 25	2019	Below Normal	April	--	15,321.8	15,299.8	22.0	0.1%	15,296.3	25.5	0.2%	15,282.4	39.4	0.3%
ME 5	32 49 25	2019	Below Normal	May	--	17,179.4	17,133.1	46.3	0.3%	17,123.8	55.6	0.3%	17,097.2	82.2	0.5%
ME 5	32 49 25	2019	Below Normal	June	--	4,245.1	4,186.7	58.4	1.4%	4,175.5	69.7	1.6%	4,142.5	102.7	2.4%
ME 5	32 49 25	2019	Below Normal	July	--	1,372.3	1,311.0	61.3	4.5%	1,298.8	73.5	5.4%	1,263.0	109.4	8.0%
ME 5	32 49 25	2019	Below Normal	August	--	606.9	548.1	58.8	9.7%	536.4	70.5	11.6%	501.7	105.2	17.3%
ME 5	32 49 25	2019	Below Normal	September	Used in Summary Table Analysis	471.7	416.5	55.3	11.7%	405.4	66.3	14.1%	372.2	99.5	21.1%
ME 5	32 49 25	2020	Dry	October	Used in Summary Table Analysis	363.1	320.5	42.5	11.7%	311.9	51.2	14.1%	286.0	77.0	21.2%
ME 5	32 49 25	2020	Dry	November	Used in Summary Table Analysis	332.4	298.5	33.9	10.2%	291.6	40.8	12.3%	270.9	61.5	18.5%
ME 5	32 49 25	2020	Dry	December	--	13,511.6	13,480.3	31.3	0.2%	13,474.5	37.0	0.3%	13,454.9	56.7	0.4%
ME 5	32 49 25	2020	Dry	January	--	22,508.1	22,480.3	27.8	0.1%	22,474.5	33.6	0.1%	22,457.2	50.9	0.2%
ME 5	32 49 25	2020	Dry	February	--	7,423.8	7,399.0	24.9	0.3%	7,393.9	30.0	0.4%	7,378.5	45.4	0.6%
ME 5	32 49 25	2020	Dry	March	--	7,278.0	7,254.7	23.3	0.3%	7,249.9	28.1	0.4%	7,235.5	42.5	0.6%
ME 5	32 49 25	2020	Dry	April	--	5,520.0	5,474.2	45.8	0.8%	5,464.9	55.1	1.0%	5,437.6	82.4	1.5%
ME 5	32 49 25	2020	Dry	May	--	7,424.1	7,369.1	55.0	0.7%	7,358.1	66.0	0.9%	7,325.2	98.8	1.3%
ME 5	32 49 25	2020	Dry	June	--	2,107.8	2,038.1	69.7	3.3%	2,024.5	83.2	3.9%	1,984.7	123.0	5.8%
ME 5	32 49 25	2020	Dry	July	--	803.6	732.1	71.5	8.9%	718.0	85.6	10.7%	681.2	122.4	15.2%
ME 5	32 49 25	2020	Dry	August	--	406.7	335.8	70.8	17.4%	321.7	85.0	20.9%	282.5	124.2	30.5%
ME 5	32 49 25	2020	Dry	September	Used in Summary Table Analysis	255.9	188.9	67.0	26.2%	175.2	80.7	31.5%	135.4	120.5	47.1%
ME 6	32 49 25	2000	Above Normal	October	Used in Summary Table Analysis	827.4	783.6	43.8	5.3%	774.7	52.7	6.4%	748.2	79.2	9.6%
ME 6	32 49 25	2000	Above Normal	November	Used in Summary Table Analysis	12,281.3	12,245.4	35.9	0.3%	12,238.4	42.8	0.3%	12,217.6	63.7	0.5%
ME 6	32 49 25	2000	Above Normal	December	--	10,898.1	10,867.8	30.3	0.3%	10,861.7	36.5	0.3%	10,843.1	55.1	0.5%
ME 6	32 49 25	2000	Above Normal	January	--	28,847.2	28,820.6	26.6	0.1%	28,814.8	32.4	0.1%	28,797.5	49.8	0.2%
ME 6	32 49 25	2000	Above Normal	February	--	37,218.8	37,194.4	24.3	0.1%	37,189.8	28.9	0.1%	37,173.6	45.1	0.1%
ME 6	32 49 25	2000	Above Normal	March	--	18,372.7	18,349.5	23.1	0.1%	18,344.9	27.8	0.2%	18,331.0	41.7	0.2%
ME 6	32 49 25	2000	Above Normal	April	--	12,357.6	12,335.6	22.0	0.2%	12,332.2	25.5	0.2%	12,318.3	39.4	0.3%
ME 6	32 49 25	2000	Above Normal	May	--	7,131.1	7,086.6	44.6	0.6%	7,077.7	53.5	0.7%	7,051.0	80.1	1.1%
ME 6	32 49 25	2000	Above Normal	June	--	2,626.7	2,561.1	65.6	2.5%	2,548.0	78.7	3.0%	2,509.6	117.1	4.5%
ME 6	32 49 25	2000	Above Normal	July	--	1,000.1	939.7	60.4	6.0%	927.8	72.3	7.2%	892.3	107.8	10.8%
ME 6	32 49 25	2000	Above Normal	August	--	530.6	473.3	57.2	10.8%	461.9	68.6	12.9%	427.8	102.7	19.4%
ME 6	32 49 25	2000	Above Normal	September	Used in Summary Table Analysis	303.0	251.7	51.3	16.9%	241.4	61.6	20.3%	210.7	92.3	30.5%
ME 6	32 49 25	2001	Dry	October	Used in Summary Table Analysis	3,854.5	3,811.5	43.1	1.1%	3,802.7	51.9	1.3%	3,776.5	78.0	2.0%
ME 6	32 49 25	2001	Dry	November	Used in Summary Table Analysis	6,186.6	6,151.7	34.8	0.6%	6,144.7	41.9	0.7%	6,123.4	63.2	1.0%
ME 6	32 49 25	2001	Dry	December	--	8,901.2	8,871.1	30.1	0.3%	8,864.9	36.2	0.4%	8,846.4	54.7	0.6%
ME 6	32 49 25	2001	Dry	January	--	12,908.6	12,881.9	26.6	0.2%	12,876.2	32.4	0.3%	12,860.0	48.6	0.4%
ME 6	32 49 25	2001	Dry	February	--	17,547.5	17,522.0	25.5	0.1%	17,517.4	30.1	0.2%	17,502.3	45.1	0.3%
ME 6	32 49 25	2001	Dry	March	--	12,335.6	12,313.7	22.0	0.2%	12,309.0	26.6	0.2%	12,295.1	40.5	0.3%
ME 6	32 49 25	2001	Dry	April	--	11,013.1	10,967.4	45.7	0.4%	10,958.2	54.9	0.5%	10,930.9	82.2	0.7%
ME 6	32 49 25	2001	Dry	May	--	2,639.6	2,585.5	54.1	2.0%	2,574.8	64.8	2.5%	2,542.5	97.1	3.7%
ME 6	32 49 25	2001	Dry	June	--	2,675.2	2,602.1	73.1	2.7%	2,587.7	87.5	3.3%	2,545.6	129.6	4.8%
ME 6	32 49 25	2001	Dry	July	--	723.1	653.2	69.9	9.7%	639.3	83.8	11.6%	603.1	120.0	16.6%
ME 6	32 49 25	2001	Dry	August	--	179.2	110.7	68.5	38.2%	97.0	82.2	45.9%	58.7	120.5	67.3%
ME 6	32 49 25	2001	Dry	September	Used in Summary Table Analysis	102.5	40.6	61.9	60.4%	28.3	74.2	72.4%	1.1	101.4	98.9%
ME 6	32 49 25	2002	Below Normal	October	Used in Summary Table Analysis	272.8	220.3	52.6	19.3%	209.6	63.2	23.2%	177.9	94.9	34.8%
ME 6	32 49 25	2002	Below Normal	November	Used in Summary Table Analysis	12,108.8	12,067.1	41.7	0.3%	12,057.9	50.9	0.4%	12,030.1	78.7	0.6%
ME 6	32 49 25	2002	Below Normal	December	--	35,927.1	35,890.0	37.0	0.1%	35,881.9	45.1	0.1%	35,858.8	68.3	0.2%
ME 6	32 49 25	2002	Below Normal	January	--	31,032.4	31,000.0	32.4	0.1%	30,993.1	39.4	0.1%	30,973.4	59.0	0.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 49 25	2002	Below Normal	February	--	24,770.8	24,740.7	30.1	0.1%	24,735.0	35.9	0.1%	24,717.6	53.2	0.2%
ME 6	32 49 25	2002	Below Normal	March	--	17,851.9	17,825.2	26.6	0.1%	17,819.4	32.4	0.2%	17,802.1	49.8	0.3%
ME 6	32 49 25	2002	Below Normal	April	--	9,953.7	9,907.5	46.2	0.5%	9,898.4	55.3	0.6%	9,870.7	83.0	0.8%
ME 6	32 49 25	2002	Below Normal	May	--	3,330.9	3,276.5	54.4	1.6%	3,265.6	65.3	2.0%	3,233.2	97.7	2.9%
ME 6	32 49 25	2002	Below Normal	June	--	860.4	799.1	61.3	7.1%	786.9	73.5	8.5%	751.0	109.4	12.7%
ME 6	32 49 25	2002	Below Normal	July	--	369.2	306.3	63.0	17.1%	293.8	75.5	20.4%	257.3	111.9	30.3%
ME 6	32 49 25	2002	Below Normal	August	--	234.9	175.2	59.7	25.4%	163.3	71.6	30.5%	127.1	107.8	45.9%
ME 6	32 49 25	2002	Below Normal	September	Used in Summary Table Analysis	171.4	114.5	56.8	33.2%	103.2	68.2	39.8%	68.4	103.0	60.1%
ME 6	32 49 25	2003	Wet	October	Used in Summary Table Analysis	136.2	88.8	47.3	34.8%	79.3	56.9	41.8%	50.7	85.5	62.8%
ME 6	32 49 25	2003	Wet	November	Used in Summary Table Analysis	905.5	867.0	38.5	4.3%	859.1	46.4	5.1%	835.5	70.0	7.7%
ME 6	32 49 25	2003	Wet	December	--	57,392.4	57,357.6	34.7	0.1%	57,350.7	41.7	0.1%	57,329.9	62.5	0.1%
ME 6	32 49 25	2003	Wet	January	--	31,648.1	31,618.1	30.1	0.1%	31,612.3	35.9	0.1%	31,593.8	54.4	0.2%
ME 6	32 49 25	2003	Wet	February	--	20,416.7	20,388.9	27.8	0.1%	20,384.3	32.4	0.2%	20,366.9	49.8	0.2%
ME 6	32 49 25	2003	Wet	March	--	24,130.8	24,105.3	25.5	0.1%	24,100.7	30.1	0.1%	24,084.5	46.3	0.2%
ME 6	32 49 25	2003	Wet	April	--	43,151.6	43,127.3	24.3	0.1%	43,121.5	30.1	0.1%	43,107.6	44.0	0.1%
ME 6	32 49 25	2003	Wet	May	--	12,256.9	12,209.5	47.5	0.4%	12,200.2	56.7	0.5%	12,172.5	84.5	0.7%
ME 6	32 49 25	2003	Wet	June	--	3,175.3	3,117.1	58.2	1.8%	3,105.8	69.6	2.2%	3,072.1	103.2	3.3%
ME 6	32 49 25	2003	Wet	July	--	1,484.0	1,421.8	62.3	4.2%	1,409.4	74.7	5.0%	1,372.8	111.2	7.5%
ME 6	32 49 25	2003	Wet	August	--	769.5	708.2	61.3	8.0%	695.6	73.9	9.6%	656.5	113.0	14.7%
ME 6	32 49 25	2003	Wet	September	Used in Summary Table Analysis	466.6	414.0	52.5	11.3%	403.5	63.1	13.5%	370.9	95.7	20.5%
ME 6	32 49 25	2004	Wet	October	Used in Summary Table Analysis	333.3	289.2	44.1	13.2%	280.3	53.0	15.9%	253.4	79.8	23.9%
ME 6	32 49 25	2004	Wet	November	Used in Summary Table Analysis	5,871.2	5,835.0	36.2	0.6%	5,827.5	43.6	0.7%	5,805.2	66.0	1.1%
ME 6	32 49 25	2004	Wet	December	--	36,610.0	36,577.5	32.4	0.1%	36,571.8	38.2	0.1%	36,550.9	59.0	0.2%
ME 6	32 49 25	2004	Wet	January	--	31,677.1	31,649.3	27.8	0.1%	31,643.5	33.6	0.1%	31,626.2	50.9	0.2%
ME 6	32 49 25	2004	Wet	February	--	38,431.7	38,406.3	25.5	0.1%	38,400.5	31.3	0.1%	38,384.3	47.5	0.1%
ME 6	32 49 25	2004	Wet	March	--	16,559.0	16,535.9	23.1	0.1%	16,531.3	27.8	0.2%	16,516.2	42.8	0.3%
ME 6	32 49 25	2004	Wet	April	--	9,477.0	9,454.7	22.2	0.2%	9,450.2	26.7	0.3%	9,436.5	40.5	0.4%
ME 6	32 49 25	2004	Wet	May	--	3,441.8	3,397.0	44.8	1.3%	3,388.1	53.7	1.6%	3,361.3	80.4	2.3%
ME 6	32 49 25	2004	Wet	June	--	698.1	642.1	56.0	8.0%	631.1	67.1	9.6%	598.4	99.7	14.3%
ME 6	32 49 25	2004	Wet	July	--	364.2	303.1	61.1	16.8%	291.0	73.2	20.1%	255.0	109.2	30.0%
ME 6	32 49 25	2004	Wet	August	--	232.8	174.8	58.0	24.9%	163.2	69.6	29.9%	128.6	104.2	44.8%
ME 6	32 49 25	2004	Wet	September	Used in Summary Table Analysis	169.3	113.7	55.6	32.8%	102.6	66.7	39.4%	69.3	100.1	59.1%
ME 6	32 49 25	2005	Above Normal	October	Used in Summary Table Analysis	7,770.6	7,725.6	45.0	0.6%	7,716.6	54.1	0.7%	7,689.1	81.5	1.0%
ME 6	32 49 25	2005	Above Normal	November	Used in Summary Table Analysis	2,270.5	2,235.1	35.4	1.6%	2,227.9	42.6	1.9%	2,206.1	64.4	2.8%
ME 6	32 49 25	2005	Above Normal	December	--	21,277.8	21,246.5	31.3	0.1%	21,240.7	37.0	0.2%	21,222.2	55.6	0.3%
ME 6	32 49 25	2005	Above Normal	January	--	22,582.2	22,554.4	27.8	0.1%	22,548.6	33.6	0.1%	22,531.3	50.9	0.2%
ME 6	32 49 25	2005	Above Normal	February	--	14,047.5	14,023.1	24.3	0.2%	14,017.4	30.1	0.2%	14,002.3	45.1	0.3%
ME 6	32 49 25	2005	Above Normal	March	--	28,717.6	28,694.4	23.1	0.1%	28,689.8	27.8	0.1%	28,675.9	41.7	0.1%
ME 6	32 49 25	2005	Above Normal	April	--	21,544.0	21,522.0	22.0	0.1%	21,517.4	26.6	0.1%	21,503.5	40.5	0.2%
ME 6	32 49 25	2005	Above Normal	May	--	19,688.7	19,642.4	46.3	0.2%	19,633.1	55.6	0.3%	19,606.5	82.2	0.4%
ME 6	32 49 25	2005	Above Normal	June	--	16,011.6	15,944.4	67.1	0.4%	15,930.6	81.0	0.5%	15,891.2	120.4	0.8%
ME 6	32 49 25	2005	Above Normal	July	--	2,867.2	2,804.5	62.7	2.2%	2,792.6	74.7	2.6%	2,757.1	110.2	3.8%
ME 6	32 49 25	2005	Above Normal	August	--	992.4	935.0	57.4	5.8%	923.6	68.8	6.9%	889.7	102.7	10.3%
ME 6	32 49 25	2005	Above Normal	September	Used in Summary Table Analysis	533.8	482.4	51.4	9.6%	472.2	61.6	11.5%	441.5	92.3	17.3%
ME 6	32 49 25	2006	Wet	October	Used in Summary Table Analysis	644.7	602.4	42.3	6.6%	593.9	50.8	7.9%	568.2	76.5	11.9%
ME 6	32 49 25	2006	Wet	November	Used in Summary Table Analysis	9,422.0	9,388.2	33.8	0.4%	9,381.3	40.7	0.4%	9,360.4	61.6	0.7%
ME 6	32 49 25	2006	Wet	December	--	43,876.2	43,846.1	30.1	0.1%	43,839.1	37.0	0.1%	43,820.6	55.6	0.1%
ME 6	32 49 25	2006	Wet	January	--	46,640.0	46,612.3	27.8	0.1%	46,606.5	33.6	0.1%	46,589.1	50.9	0.1%
ME 6	32 49 25	2006	Wet	February	--	26,766.2	26,741.9	24.3	0.1%	26,737.3	28.9	0.1%	26,722.2	44.0	0.2%
ME 6	32 49 25	2006	Wet	March	--	47,429.4	47,406.3	23.1	0.0%	47,401.6	27.8	0.1%	47,386.6	42.8	0.1%
ME 6	32 49 25	2006	Wet	April	--	30,535.9	30,513.9	22.0	0.1%	30,510.4	25.5	0.1%	30,497.7	38.2	0.1%
ME 6	32 49 25	2006	Wet	May	--	14,269.7	14,241.9	27.8	0.2%	14,236.1	33.6	0.2%	14,219.9	49.8	0.3%
ME 6	32 49 25	2006	Wet	June	--	3,555.8	3,500.3	55.4	1.6%	3,489.5	66.3	1.9%	3,457.4	98.4	2.8%
ME 6	32 49 25	2006	Wet	July	--	1,289.9	1,230.2	59.7	4.6%	1,218.5	71.4	5.5%	1,183.8	106.1	8.2%
ME 6	32 49 25	2006	Wet	August	--	676.0	617.2	58.8	8.7%	605.6	70.4	10.4%	570.8	105.2	15.6%
ME 6	32 49 25	2006	Wet	September	Used in Summary Table Analysis	436.1	383.9	52.2	12.0%	373.5	62.6	14.3%	342.3	93.8	21.5%
ME 6	32 49 25	2007	Above Normal	October	Used in Summary Table Analysis	283.0	239.8	43.2	15.3%	231.1	51.9	18.3%	204.8	78.2	27.6%
ME 6	32 49 25	2007	Above Normal	November	Used in Summary Table Analysis	8,769.0	8,733.4	35.5	0.4%	8,726.3	42.7	0.5%	8,704.4	64.6	0.7%
ME 6	32 49 25	2007	Above Normal	December	--	20,616.9	20,585.6	31.3	0.2%	20,578.7	38.2	0.2%	20,560.2	56.7	0.3%
ME 6	32 49 25	2007	Above Normal	January	--	10,306.9	10,279.6	27.3	0.3%	10,274.1	32.9	0.3%	10,256.9	50.0	0.5%
ME 6	32 49 25	2007	Above Normal	February	--	30,803.2	30,777.8	25.5	0.1%	30,772.0	31.3	0.1%	30,755.8	47.5	0.2%
ME 6	32 49 25	2007	Above Normal	March	--	13,142.4	13,118.1	24.3	0.2%	13,113.4	28.9	0.2%	13,098.4	44.0	0.3%
ME 6	32 49 25	2007	Above Normal	April	--	11,573.3	11,529.1	44.2	0.4%	11,520.3	53.0	0.5%	11,493.9	79.4	0.7%
ME 6	32 49 25	2007	Above Normal	May	--	4,158.0	4,105.6	52.4	1.3%	4,095.0	63.0	1.5%	4,063.7	94.3	2.3%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 49 25	2007	Above Normal	June	--	1,511.9	1,449.3	62.6	4.1%	1,436.9	75.0	5.0%	1,400.2	111.7	7.4%
ME 6	32 49 25	2007	Above Normal	July	--	502.8	439.1	63.7	12.7%	426.5	76.3	15.2%	389.4	113.4	22.6%
ME 6	32 49 25	2007	Above Normal	August	--	231.0	173.1	58.0	25.1%	161.5	69.5	30.1%	126.3	104.7	45.3%
ME 6	32 49 25	2007	Above Normal	September	Used in Summary Table Analysis	158.6	103.3	55.3	34.9%	92.3	66.3	41.8%	59.2	99.5	62.7%
ME 6	32 49 25	2008	Dry	October	Used in Summary Table Analysis	3,472.0	3,426.2	45.8	1.3%	3,416.9	55.1	1.6%	3,388.8	83.2	2.4%
ME 6	32 49 25	2008	Dry	November	Used in Summary Table Analysis	3,311.5	3,275.7	35.8	1.1%	3,268.4	43.1	1.3%	3,246.3	65.2	2.0%
ME 6	32 49 25	2008	Dry	December	--	23,395.8	23,363.4	32.4	0.1%	23,357.6	38.2	0.2%	23,338.0	57.9	0.2%
ME 6	32 49 25	2008	Dry	January	--	37,788.2	37,759.3	28.9	0.1%	37,753.5	34.7	0.1%	37,735.0	53.2	0.1%
ME 6	32 49 25	2008	Dry	February	--	26,334.5	26,309.0	25.5	0.1%	26,304.4	30.1	0.1%	26,288.2	46.3	0.2%
ME 6	32 49 25	2008	Dry	March	--	11,824.1	11,802.1	22.0	0.2%	11,797.5	26.6	0.2%	11,783.6	40.5	0.3%
ME 6	32 49 25	2008	Dry	April	--	9,041.3	8,996.5	44.8	0.5%	8,987.6	53.7	0.6%	8,960.8	80.6	0.9%
ME 6	32 49 25	2008	Dry	May	--	1,359.6	1,312.4	47.2	3.5%	1,303.2	56.4	4.1%	1,275.7	83.9	6.2%
ME 6	32 49 25	2008	Dry	June	--	445.0	376.9	68.1	15.3%	363.5	81.5	18.3%	323.9	121.1	27.2%
ME 6	32 49 25	2008	Dry	July	--	262.7	194.3	68.5	26.1%	180.7	82.0	31.2%	145.4	117.3	44.7%
ME 6	32 49 25	2008	Dry	August	--	186.4	119.3	67.1	36.0%	106.0	80.4	43.1%	65.8	120.6	64.7%
ME 6	32 49 25	2008	Dry	September	Used in Summary Table Analysis	148.0	82.9	65.0	43.9%	70.0	77.9	52.7%	32.5	115.5	78.0%
ME 6	32 49 25	2009	Critical	October	Used in Summary Table Analysis	933.6	881.4	52.2	5.6%	871.0	62.7	6.7%	839.2	94.5	10.1%
ME 6	32 49 25	2009	Critical	November	Used in Summary Table Analysis	5,578.9	5,537.6	41.3	0.7%	5,529.3	49.7	0.9%	5,501.3	77.7	1.4%
ME 6	32 49 25	2009	Critical	December	--	12,305.6	12,269.7	35.9	0.3%	12,262.7	42.8	0.3%	12,240.7	64.8	0.5%
ME 6	32 49 25	2009	Critical	January	--	8,837.6	8,805.7	31.9	0.4%	8,799.1	38.5	0.4%	8,779.3	58.3	0.7%
ME 6	32 49 25	2009	Critical	February	--	22,732.6	22,703.7	28.9	0.1%	22,697.9	34.7	0.2%	22,680.6	52.1	0.2%
ME 6	32 49 25	2009	Critical	March	--	21,209.5	21,184.0	25.5	0.1%	21,179.4	30.1	0.1%	21,163.2	46.3	0.2%
ME 6	32 49 25	2009	Critical	April	--	10,108.7	10,061.8	46.9	0.5%	10,052.5	56.1	0.6%	10,024.3	84.4	0.8%
ME 6	32 49 25	2009	Critical	May	--	15,629.6	15,572.9	56.7	0.4%	15,561.3	68.3	0.4%	15,527.8	101.9	0.7%
ME 6	32 49 25	2009	Critical	June	--	3,168.4	3,095.6	72.8	2.3%	3,081.6	86.8	2.7%	3,039.5	128.9	4.1%
ME 6	32 49 25	2009	Critical	July	--	1,270.6	1,201.4	69.2	5.4%	1,187.7	82.9	6.5%	1,152.1	118.5	9.3%
ME 6	32 49 25	2009	Critical	August	--	676.9	609.3	67.6	10.0%	595.8	81.0	12.0%	558.1	118.8	17.6%
ME 6	32 49 25	2009	Critical	September	Used in Summary Table Analysis	397.5	336.2	61.2	15.4%	324.1	73.4	18.5%	288.7	108.8	27.4%
ME 6	32 49 25	2010	Below Normal	October	Used in Summary Table Analysis	6,100.1	6,047.2	52.9	0.9%	6,036.6	63.5	1.0%	6,003.6	96.5	1.6%
ME 6	32 49 25	2010	Below Normal	November	Used in Summary Table Analysis	8,337.2	8,294.4	42.7	0.5%	8,285.9	51.3	0.6%	8,257.2	80.0	1.0%
ME 6	32 49 25	2010	Below Normal	December	--	12,449.1	12,412.0	37.0	0.3%	12,405.1	44.0	0.4%	12,381.9	67.1	0.5%
ME 6	32 49 25	2010	Below Normal	January	--	36,547.5	36,513.9	33.6	0.1%	36,508.1	39.4	0.1%	36,487.3	60.2	0.2%
ME 6	32 49 25	2010	Below Normal	February	--	27,334.5	27,305.6	28.9	0.1%	27,299.8	34.7	0.1%	27,281.3	53.2	0.2%
ME 6	32 49 25	2010	Below Normal	March	--	28,915.5	28,887.7	27.8	0.1%	28,883.1	32.4	0.1%	28,865.7	49.8	0.2%
ME 6	32 49 25	2010	Below Normal	April	--	40,157.4	40,131.9	25.5	0.1%	40,127.3	30.1	0.1%	40,111.1	46.3	0.1%
ME 6	32 49 25	2010	Below Normal	May	--	20,380.8	20,332.2	48.6	0.2%	20,322.9	57.9	0.3%	20,294.0	86.8	0.4%
ME 6	32 49 25	2010	Below Normal	June	--	9,439.6	9,370.4	69.2	0.7%	9,356.7	82.9	0.9%	9,316.2	123.4	1.3%
ME 6	32 49 25	2010	Below Normal	July	--	1,462.0	1,398.4	63.7	4.4%	1,386.0	76.0	5.2%	1,349.3	112.7	7.7%
ME 6	32 49 25	2010	Below Normal	August	--	578.6	519.6	59.1	10.2%	507.9	70.7	12.2%	473.1	105.6	18.2%
ME 6	32 49 25	2010	Below Normal	September	Used in Summary Table Analysis	661.1	604.3	56.8	8.6%	592.9	68.2	10.3%	558.9	102.2	15.5%
ME 6	32 49 25	2011	Wet	October	Used in Summary Table Analysis	9,705.3	9,661.6	43.8	0.5%	9,652.7	52.7	0.5%	9,625.9	79.4	0.8%
ME 6	32 49 25	2011	Wet	November	Used in Summary Table Analysis	14,300.9	14,266.2	34.7	0.2%	14,259.3	41.7	0.3%	14,237.3	63.7	0.4%
ME 6	32 49 25	2011	Wet	December	--	34,028.9	33,998.8	30.1	0.1%	33,991.9	37.0	0.1%	33,972.2	56.7	0.2%
ME 6	32 49 25	2011	Wet	January	--	14,218.8	14,192.1	26.6	0.2%	14,186.3	32.4	0.2%	14,170.1	48.6	0.3%
ME 6	32 49 25	2011	Wet	February	--	20,829.9	20,805.6	24.3	0.1%	20,799.8	30.1	0.1%	20,784.7	45.1	0.2%
ME 6	32 49 25	2011	Wet	March	--	52,222.2	52,197.9	24.3	0.0%	52,193.3	28.9	0.1%	52,178.2	44.0	0.1%
ME 6	32 49 25	2011	Wet	April	--	24,875.0	24,851.9	23.1	0.1%	24,847.2	27.8	0.1%	24,833.3	41.7	0.2%
ME 6	32 49 25	2011	Wet	May	--	11,419.6	11,374.1	45.5	0.4%	11,364.9	54.6	0.5%	11,337.7	81.8	0.7%
ME 6	32 49 25	2011	Wet	June	--	7,093.4	7,026.2	67.2	0.9%	7,012.8	80.6	1.1%	6,973.6	119.8	1.7%
ME 6	32 49 25	2011	Wet	July	--	1,834.0	1,766.4	67.6	3.7%	1,753.0	81.0	4.4%	1,714.7	119.3	6.5%
ME 6	32 49 25	2011	Wet	August	--	785.2	727.0	58.2	7.4%	715.5	69.7	8.9%	680.9	104.3	13.3%
ME 6	32 49 25	2011	Wet	September	Used in Summary Table Analysis	441.8	388.4	53.4	12.1%	377.7	64.1	14.5%	345.9	95.9	21.7%
ME 6	32 49 25	2012	Below Normal	October	Used in Summary Table Analysis	4,579.5	4,535.1	44.4	1.0%	4,526.0	53.5	1.2%	4,498.7	80.8	1.8%
ME 6	32 49 25	2012	Below Normal	November	Used in Summary Table Analysis	8,313.4	8,277.8	35.6	0.4%	8,270.5	42.9	0.5%	8,248.4	65.0	0.8%
ME 6	32 49 25	2012	Below Normal	December	--	5,217.5	5,186.9	30.6	0.6%	5,180.7	36.8	0.7%	5,161.7	55.8	1.1%
ME 6	32 49 25	2012	Below Normal	January	--	20,329.9	20,302.1	27.8	0.1%	20,296.3	33.6	0.2%	20,278.9	50.9	0.3%
ME 6	32 49 25	2012	Below Normal	February	--	18,275.5	18,250.0	25.5	0.1%	18,245.4	30.1	0.2%	18,229.2	46.3	0.3%
ME 6	32 49 25	2012	Below Normal	March	--	45,677.1	45,651.6	25.5	0.1%	45,647.0	30.1	0.1%	45,631.9	45.1	0.1%
ME 6	32 49 25	2012	Below Normal	April	--	26,951.4	26,928.2	23.1	0.1%	26,923.6	27.8	0.1%	26,909.7	41.7	0.2%
ME 6	32 49 25	2012	Below Normal	May	--	7,506.0	7,460.9	45.1	0.6%	7,451.9	54.2	0.7%	7,425.0	81.0	1.1%
ME 6	32 49 25	2012	Below Normal	June	--	5,552.2	5,483.9	68.3	1.2%	5,470.5	81.7	1.5%	5,430.8	121.4	2.2%
ME 6	32 49 25	2012	Below Normal	July	--	2,247.1	2,181.6	65.5	2.9%	2,168.6	78.5	3.5%	2,130.0	117.1	5.2%
ME 6	32 49 25	2012	Below Normal	August	--	395.0	341.6	53.4	13.5%	331.0	64.0	16.2%	299.2	95.8	24.3%
ME 6	32 49 25	2012	Below Normal	September	Used in Summary Table Analysis	257.1	209.1	48.0	18.7%	199.5	57.5	22.4%	170.9	86.2	33.5%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 49 25	2013	Below Normal	October	Used in Summary Table Analysis	1,937.5	1,895.1	42.4	2.2%	1,886.6	50.9	2.6%	1,861.0	76.5	3.9%
ME 6	32 49 25	2013	Below Normal	November	Used in Summary Table Analysis	14,822.9	14,788.2	34.7	0.2%	14,781.3	41.7	0.3%	14,760.4	62.5	0.4%
ME 6	32 49 25	2013	Below Normal	December	--	60,296.3	60,265.0	31.3	0.1%	60,258.1	38.2	0.1%	60,239.6	56.7	0.1%
ME 6	32 49 25	2013	Below Normal	January	--	22,290.5	22,265.0	25.5	0.1%	22,259.3	31.3	0.1%	22,243.1	47.5	0.2%
ME 6	32 49 25	2013	Below Normal	February	--	8,888.4	8,863.8	24.7	0.3%	8,858.7	29.7	0.3%	8,843.6	44.8	0.5%
ME 6	32 49 25	2013	Below Normal	March	--	10,395.0	10,371.3	23.7	0.2%	10,366.4	28.6	0.3%	10,352.0	43.1	0.4%
ME 6	32 49 25	2013	Below Normal	April	--	8,311.8	8,268.8	43.1	0.5%	8,260.2	51.6	0.6%	8,234.5	77.3	0.9%
ME 6	32 49 25	2013	Below Normal	May	--	4,457.3	4,405.3	52.0	1.2%	4,394.9	62.4	1.4%	4,363.9	93.4	2.1%
ME 6	32 49 25	2013	Below Normal	June	--	2,120.5	2,058.2	62.3	2.9%	2,045.9	74.5	3.5%	2,009.4	111.1	5.2%
ME 6	32 49 25	2013	Below Normal	July	--	723.8	662.8	60.9	8.4%	650.8	73.0	10.1%	615.6	108.2	14.9%
ME 6	32 49 25	2013	Below Normal	August	--	347.4	289.6	57.8	16.6%	278.1	69.3	20.0%	243.0	104.4	30.1%
ME 6	32 49 25	2013	Below Normal	September	Used in Summary Table Analysis	4,825.1	4,764.9	60.2	1.2%	4,752.9	72.2	1.5%	4,716.9	108.2	2.2%
ME 6	32 49 25	2014	Critical	October	Used in Summary Table Analysis	283.9	239.2	44.7	15.7%	230.2	53.6	18.9%	203.9	80.0	28.2%
ME 6	32 49 25	2014	Critical	November	Used in Summary Table Analysis	1,559.6	1,523.5	36.1	2.3%	1,516.2	43.4	2.8%	1,494.0	65.6	4.2%
ME 6	32 49 25	2014	Critical	December	--	1,603.2	1,571.6	31.6	2.0%	1,565.3	38.0	2.4%	1,545.6	57.6	3.6%
ME 6	32 49 25	2014	Critical	January	--	2,843.8	2,815.5	28.2	1.0%	2,809.8	33.9	1.2%	2,792.1	51.6	1.8%
ME 6	32 49 25	2014	Critical	February	--	15,814.8	15,789.4	25.5	0.2%	15,784.7	30.1	0.2%	15,767.4	47.5	0.3%
ME 6	32 49 25	2014	Critical	March	--	31,566.0	31,541.7	24.3	0.1%	31,537.0	28.9	0.1%	31,520.8	45.1	0.1%
ME 6	32 49 25	2014	Critical	April	--	13,018.5	12,972.2	46.3	0.4%	12,963.0	55.6	0.4%	12,935.2	83.3	0.6%
ME 6	32 49 25	2014	Critical	May	--	5,206.3	5,151.3	55.0	1.1%	5,140.3	66.0	1.3%	5,107.3	99.0	1.9%
ME 6	32 49 25	2014	Critical	June	--	1,206.5	1,132.1	74.4	6.2%	1,117.5	89.0	7.4%	1,075.3	131.1	10.9%
ME 6	32 49 25	2014	Critical	July	--	552.0	482.1	70.0	12.7%	468.2	83.9	15.2%	431.5	120.5	21.8%
ME 6	32 49 25	2014	Critical	August	--	355.3	288.0	67.3	18.9%	274.5	80.8	22.8%	236.3	119.1	33.5%
ME 6	32 49 25	2014	Critical	September	Used in Summary Table Analysis	2,593.2	2,526.7	66.4	2.6%	2,513.5	79.6	3.1%	2,474.2	119.0	4.6%
ME 6	32 49 25	2015	Dry	October	Used in Summary Table Analysis	11,431.7	11,379.2	52.5	0.5%	11,368.8	63.0	0.6%	11,337.2	94.6	0.8%
ME 6	32 49 25	2015	Dry	November	Used in Summary Table Analysis	9,111.8	9,071.8	40.0	0.4%	9,063.7	48.1	0.5%	9,035.9	75.9	0.8%
ME 6	32 49 25	2015	Dry	December	--	32,887.7	32,854.2	33.6	0.1%	32,846.1	41.7	0.1%	32,824.1	63.7	0.2%
ME 6	32 49 25	2015	Dry	January	--	14,619.2	14,589.1	30.1	0.2%	14,582.2	37.0	0.3%	14,562.5	56.7	0.4%
ME 6	32 49 25	2015	Dry	February	--	27,341.4	27,313.7	27.8	0.1%	27,309.0	32.4	0.1%	27,291.7	49.8	0.2%
ME 6	32 49 25	2015	Dry	March	--	11,597.2	11,572.7	24.5	0.2%	11,567.7	29.5	0.3%	11,552.4	44.8	0.4%
ME 6	32 49 25	2015	Dry	April	--	8,457.3	8,411.2	46.1	0.5%	8,402.0	55.3	0.7%	8,374.3	83.0	1.0%
ME 6	32 49 25	2015	Dry	May	--	1,512.3	1,458.1	54.2	3.6%	1,447.3	64.9	4.3%	1,415.9	96.4	6.4%
ME 6	32 49 25	2015	Dry	June	--	657.9	588.7	69.2	10.5%	575.0	82.9	12.6%	534.7	123.2	18.7%
ME 6	32 49 25	2015	Dry	July	--	274.3	205.2	69.2	25.2%	191.4	82.9	30.2%	155.7	118.6	43.2%
ME 6	32 49 25	2015	Dry	August	--	173.3	105.8	67.5	38.9%	92.3	81.0	46.7%	54.8	118.6	68.4%
ME 6	32 49 25	2015	Dry	September	Used in Summary Table Analysis	126.8	62.9	63.8	50.4%	49.8	77.0	60.7%	11.8	115.0	90.7%
ME 6	32 49 25	2016	Above Normal	October	Used in Summary Table Analysis	91.8	37.8	54.0	58.8%	27.4	64.4	70.2%	0.8	91.0	99.1%
ME 6	32 49 25	2016	Above Normal	November	Used in Summary Table Analysis	3,930.0	3,887.6	42.4	1.1%	3,878.9	51.0	1.3%	3,848.1	81.8	2.1%
ME 6	32 49 25	2016	Above Normal	December	--	36,937.5	36,899.3	38.2	0.1%	36,892.4	45.1	0.1%	36,868.1	69.4	0.2%
ME 6	32 49 25	2016	Above Normal	January	--	57,648.1	57,613.4	34.7	0.1%	57,606.5	41.7	0.1%	57,585.6	62.5	0.1%
ME 6	32 49 25	2016	Above Normal	February	--	24,322.9	24,295.1	27.8	0.1%	24,289.4	33.6	0.1%	24,272.0	50.9	0.2%
ME 6	32 49 25	2016	Above Normal	March	--	41,931.7	41,905.1	26.6	0.1%	41,899.3	32.4	0.1%	41,883.1	48.6	0.1%
ME 6	32 49 25	2016	Above Normal	April	--	18,581.0	18,556.7	24.3	0.1%	18,552.1	28.9	0.2%	18,537.0	44.0	0.2%
ME 6	32 49 25	2016	Above Normal	May	--	5,231.6	5,202.5	29.1	0.6%	5,196.6	35.0	0.7%	5,178.7	52.9	1.0%
ME 6	32 49 25	2016	Above Normal	June	--	1,517.1	1,463.8	53.4	3.5%	1,454.3	62.8	4.1%	1,426.3	90.9	6.0%
ME 6	32 49 25	2016	Above Normal	July	--	831.3	770.9	60.5	7.3%	758.9	72.5	8.7%	723.3	108.0	13.0%
ME 6	32 49 25	2016	Above Normal	August	--	500.3	440.4	59.9	12.0%	428.5	71.8	14.4%	392.9	107.3	21.5%
ME 6	32 49 25	2016	Above Normal	September	Used in Summary Table Analysis	336.2	279.8	56.4	16.8%	268.3	67.9	20.2%	234.1	102.1	30.4%
ME 6	32 49 25	2017	Wet	October	Used in Summary Table Analysis	18,409.7	18,363.4	46.3	0.3%	18,354.2	55.6	0.3%	18,327.5	82.2	0.4%
ME 6	32 49 25	2017	Wet	November	Used in Summary Table Analysis	18,960.6	18,925.9	34.7	0.2%	18,917.8	42.8	0.2%	18,895.8	64.8	0.3%
ME 6	32 49 25	2017	Wet	December	--	24,324.1	24,294.0	30.1	0.1%	24,287.0	37.0	0.2%	24,268.5	55.6	0.2%
ME 6	32 49 25	2017	Wet	January	--	107,520.8	107,491.9	28.9	0.0%	107,486.1	34.7	0.0%	107,468.8	52.1	0.0%
ME 6	32 49 25	2017	Wet	February	--	82,200.2	82,174.8	25.5	0.0%	82,169.0	31.3	0.0%	82,152.8	47.5	0.1%
ME 6	32 49 25	2017	Wet	March	--	27,388.9	27,364.6	24.3	0.1%	27,360.0	28.9	0.1%	27,344.9	44.0	0.2%
ME 6	32 49 25	2017	Wet	April	--	23,059.0	23,037.0	22.0	0.1%	23,032.4	26.6	0.1%	23,019.7	39.4	0.2%
ME 6	32 49 25	2017	Wet	May	--	6,278.5	6,249.7	28.8	0.5%	6,243.9	34.6	0.6%	6,226.4	52.1	0.8%
ME 6	32 49 25	2017	Wet	June	--	2,133.4	2,078.6	54.9	2.6%	2,067.8	65.6	3.1%	2,035.8	97.7	4.6%
ME 6	32 49 25	2017	Wet	July	--	945.2	884.8	60.4	6.4%	872.9	72.3	7.7%	837.7	107.5	11.4%
ME 6	32 49 25	2017	Wet	August	--	517.3	458.0	59.3	11.5%	446.2	71.1	13.7%	411.1	106.2	20.5%
ME 6	32 49 25	2017	Wet	September	Used in Summary Table Analysis	332.0	276.6	55.4	16.7%	265.5	66.5	20.0%	232.3	99.7	30.0%
ME 6	32 49 25	2018	Above Normal	October	Used in Summary Table Analysis	284.7	240.0	44.6	15.7%	231.0	53.6	18.8%	204.0	80.6	28.3%
ME 6	32 49 25	2018	Above Normal	November	Used in Summary Table Analysis	10,931.1	10,895.5	35.6	0.3%	10,888.3	42.8	0.4%	10,866.4	64.7	0.6%
ME 6	32 49 25	2018	Above Normal	December	--	5,460.9	5,430.7	30.2	0.6%	5,424.4	36.5	0.7%	5,405.8	55.1	1.0%
ME 6	32 49 25	2018	Above Normal	January	--	18,019.7	17,991.9	27.8	0.2%	17,986.1	33.6	0.2%	17,969.9	49.8	0.3%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 49 25	2018	Above Normal	February	--	7,610.5	7,586.3	24.2	0.3%	7,581.4	29.2	0.4%	7,566.3	44.2	0.6%
ME 6	32 49 25	2018	Above Normal	March	--	20,854.2	20,831.0	23.1	0.1%	20,826.4	27.8	0.1%	20,812.5	41.7	0.2%
ME 6	32 49 25	2018	Above Normal	April	--	32,381.9	32,360.0	22.0	0.1%	32,356.5	25.5	0.1%	32,343.8	38.2	0.1%
ME 6	32 49 25	2018	Above Normal	May	--	6,996.2	6,953.2	42.9	0.6%	6,944.7	51.5	0.7%	6,918.8	77.4	1.1%
ME 6	32 49 25	2018	Above Normal	June	--	1,922.3	1,866.8	55.6	2.9%	1,855.8	66.6	3.5%	1,823.5	98.8	5.1%
ME 6	32 49 25	2018	Above Normal	July	--	790.6	729.5	61.1	7.7%	717.3	73.2	9.3%	681.3	109.3	13.8%
ME 6	32 49 25	2018	Above Normal	August	--	451.8	394.3	57.4	12.7%	382.8	68.9	15.3%	348.5	103.3	22.9%
ME 6	32 49 25	2018	Above Normal	September	Used in Summary Table Analysis	308.6	253.0	55.5	18.0%	241.9	66.7	21.6%	208.6	100.0	32.4%
ME 6	32 49 25	2019	Below Normal	October	Used in Summary Table Analysis	214.9	170.8	44.1	20.5%	161.9	53.1	24.7%	135.0	79.9	37.2%
ME 6	32 49 25	2019	Below Normal	November	Used in Summary Table Analysis	6,716.0	6,680.0	36.0	0.5%	6,672.7	43.3	0.6%	6,650.7	65.3	1.0%
ME 6	32 49 25	2019	Below Normal	December	--	14,820.6	14,790.5	30.1	0.2%	14,783.6	37.0	0.2%	14,765.0	55.6	0.4%
ME 6	32 49 25	2019	Below Normal	January	--	35,532.4	35,505.8	26.6	0.1%	35,498.8	33.6	0.1%	35,482.6	49.8	0.1%
ME 6	32 49 25	2019	Below Normal	February	--	142,256.9	142,233.8	23.1	0.0%	142,222.2	34.7	0.0%	142,210.6	46.3	0.0%
ME 6	32 49 25	2019	Below Normal	March	--	42,491.9	42,469.9	22.0	0.1%	42,465.3	26.6	0.1%	42,451.4	40.5	0.1%
ME 6	32 49 25	2019	Below Normal	April	--	15,321.8	15,299.8	22.0	0.1%	15,296.3	25.5	0.2%	15,282.4	39.4	0.3%
ME 6	32 49 25	2019	Below Normal	May	--	17,179.4	17,133.1	46.3	0.3%	17,123.8	55.6	0.3%	17,097.2	82.2	0.5%
ME 6	32 49 25	2019	Below Normal	June	--	4,245.1	4,186.7	58.4	1.4%	4,175.5	69.7	1.6%	4,142.5	102.7	2.4%
ME 6	32 49 25	2019	Below Normal	July	--	1,372.3	1,311.0	61.3	4.5%	1,298.8	73.5	5.4%	1,263.0	109.4	8.0%
ME 6	32 49 25	2019	Below Normal	August	--	606.9	548.1	58.8	9.7%	536.4	70.5	11.6%	501.7	105.2	17.3%
ME 6	32 49 25	2019	Below Normal	September	Used in Summary Table Analysis	471.7	416.5	55.3	11.7%	405.4	66.3	14.1%	372.2	99.5	21.1%
ME 6	32 49 25	2020	Dry	October	Used in Summary Table Analysis	363.1	320.5	42.5	11.7%	311.9	51.2	14.1%	286.0	77.0	21.2%
ME 6	32 49 25	2020	Dry	November	Used in Summary Table Analysis	332.4	298.5	33.9	10.2%	291.6	40.8	12.3%	270.9	61.5	18.5%
ME 6	32 49 25	2020	Dry	December	--	13,511.6	13,480.3	31.3	0.2%	13,474.5	37.0	0.3%	13,454.9	56.7	0.4%
ME 6	32 49 25	2020	Dry	January	--	22,508.1	22,480.3	27.8	0.1%	22,474.5	33.6	0.1%	22,457.2	50.9	0.2%
ME 6	32 49 25	2020	Dry	February	--	7,423.8	7,399.0	24.9	0.3%	7,393.9	30.0	0.4%	7,378.5	45.4	0.6%
ME 6	32 49 25	2020	Dry	March	--	7,278.0	7,254.7	23.3	0.3%	7,249.9	28.1	0.4%	7,235.5	42.5	0.6%
ME 6	32 49 25	2020	Dry	April	--	5,520.0	5,474.2	45.8	0.8%	5,464.9	55.1	1.0%	5,437.6	82.4	1.5%
ME 6	32 49 25	2020	Dry	May	--	7,424.1	7,369.1	55.0	0.7%	7,358.1	66.0	0.9%	7,325.2	98.8	1.3%
ME 6	32 49 25	2020	Dry	June	--	2,107.8	2,038.1	69.7	3.3%	2,024.5	83.2	3.9%	1,984.7	123.0	5.8%
ME 6	32 49 25	2020	Dry	July	--	803.6	732.1	71.5	8.9%	718.0	85.6	10.7%	681.2	122.4	15.2%
ME 6	32 49 25	2020	Dry	August	--	406.7	335.8	70.8	17.4%	321.7	85.0	20.9%	282.5	124.2	30.5%
ME 6	32 49 25	2020	Dry	September	Used in Summary Table Analysis	255.9	188.9	67.0	26.2%	175.2	80.7	31.5%	135.4	120.5	47.1%
ME 6	32 48 26	2000	Above Normal	October	Used in Summary Table Analysis	829.1	784.7	44.4	5.4%	775.7	53.4	6.4%	748.8	80.3	9.7%
ME 6	32 48 26	2000	Above Normal	November	Used in Summary Table Analysis	12,306.7	12,270.8	35.9	0.3%	12,263.9	42.8	0.3%	12,241.9	64.8	0.5%
ME 6	32 48 26	2000	Above Normal	December	--	10,911.5	10,880.8	30.7	0.3%	10,874.5	36.9	0.3%	10,855.7	55.8	0.5%
ME 6	32 48 26	2000	Above Normal	January	--	28,890.0	28,862.3	27.8	0.1%	28,856.5	33.6	0.1%	28,839.1	50.9	0.2%
ME 6	32 48 26	2000	Above Normal	February	--	37,246.5	37,221.1	25.5	0.1%	37,216.4	30.1	0.1%	37,200.2	46.3	0.1%
ME 6	32 48 26	2000	Above Normal	March	--	18,380.8	18,357.6	23.1	0.1%	18,353.0	27.8	0.2%	18,338.0	42.8	0.2%
ME 6	32 48 26	2000	Above Normal	April	--	12,364.6	12,342.6	22.0	0.2%	12,338.0	26.6	0.2%	12,324.1	40.5	0.3%
ME 6	32 48 26	2000	Above Normal	May	--	7,136.3	7,091.7	44.7	0.6%	7,082.6	53.7	0.8%	7,056.0	80.3	1.1%
ME 6	32 48 26	2000	Above Normal	June	--	2,628.8	2,562.8	66.0	2.5%	2,549.7	79.2	3.0%	2,511.0	117.8	4.5%
ME 6	32 48 26	2000	Above Normal	July	--	1,001.2	940.3	60.9	6.1%	928.3	72.9	7.3%	892.5	108.7	10.9%
ME 6	32 48 26	2000	Above Normal	August	--	531.7	474.0	57.7	10.9%	462.5	69.2	13.0%	428.1	103.6	19.5%
ME 6	32 48 26	2000	Above Normal	September	Used in Summary Table Analysis	304.1	252.2	51.8	17.0%	241.9	62.2	20.5%	210.8	93.3	30.7%
ME 6	32 48 26	2001	Dry	October	Used in Summary Table Analysis	3,860.6	3,817.0	43.6	1.1%	3,808.1	52.5	1.4%	3,781.6	79.1	2.0%
ME 6	32 48 26	2001	Dry	November	Used in Summary Table Analysis	6,196.2	6,160.9	35.3	0.6%	6,153.8	42.4	0.7%	6,132.2	64.0	1.0%
ME 6	32 48 26	2001	Dry	December	--	8,910.8	8,880.3	30.4	0.3%	8,874.1	36.7	0.4%	8,855.4	55.3	0.6%
ME 6	32 48 26	2001	Dry	January	--	12,927.1	12,899.3	27.8	0.2%	12,894.7	32.4	0.3%	12,877.3	49.8	0.4%
ME 6	32 48 26	2001	Dry	February	--	17,557.9	17,533.6	24.3	0.1%	17,528.9	28.9	0.2%	17,512.7	45.1	0.3%
ME 6	32 48 26	2001	Dry	March	--	12,341.4	12,319.4	22.0	0.2%	12,313.7	27.8	0.2%	12,299.8	41.7	0.3%
ME 6	32 48 26	2001	Dry	April	--	11,019.2	10,973.3	45.9	0.4%	10,964.1	55.1	0.5%	10,936.7	82.5	0.7%
ME 6	32 48 26	2001	Dry	May	--	2,639.6	2,585.3	54.3	2.1%	2,574.5	65.0	2.5%	2,542.1	97.5	3.7%
ME 6	32 48 26	2001	Dry	June	--	2,679.3	2,605.7	73.6	2.7%	2,591.2	88.1	3.3%	2,548.8	130.4	4.9%
ME 6	32 48 26	2001	Dry	July	--	723.5	653.0	70.5	9.7%	639.0	84.5	11.7%	602.4	121.1	16.7%
ME 6	32 48 26	2001	Dry	August	--	180.0	110.9	69.1	38.4%	97.1	82.9	46.1%	58.4	121.7	67.6%
ME 6	32 48 26	2001	Dry	September	Used in Summary Table Analysis	103.4	40.9	62.5	60.5%	28.4	75.0	72.5%	0.8	102.6	99.2%
ME 6	32 48 26	2002	Below Normal	October	Used in Summary Table Analysis	274.0	220.7	53.3	19.4%	209.9	64.1	23.4%	177.8	96.2	35.1%
ME 6	32 48 26	2002	Below Normal	November	Used in Summary Table Analysis	12,121.5	12,078.7	42.8	0.4%	12,070.6	50.9	0.4%	12,041.7	79.9	0.7%
ME 6	32 48 26	2002	Below Normal	December	--	35,965.3	35,927.1	38.2	0.1%	35,920.1	45.1	0.1%	35,895.8	69.4	0.2%
ME 6	32 48 26	2002	Below Normal	January	--	31,055.6	31,023.1	32.4	0.1%	31,016.2	39.4	0.1%	30,996.5	59.0	0.2%
ME 6	32 48 26	2002	Below Normal	February	--	24,784.7	24,754.6	30.1	0.1%	24,748.8	35.9	0.1%	24,730.3	54.4	0.2%
ME 6	32 48 26	2002	Below Normal	March	--	17,863.4	17,835.6	27.8	0.2%	17,829.9	33.6	0.2%	17,812.5	50.9	0.3%
ME 6	32 48 26	2002	Below Normal	April	--	9,957.8	9,911.3	46.4	0.5%	9,902.1	55.7	0.6%	9,874.3	83.4	0.8%
ME 6	32 48 26	2002	Below Normal	May	--	3,332.3	3,277.7	54.6	1.6%	3,266.8	65.5	2.0%	3,234.1	98.1	2.9%

Table A.1

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 48 26	2002	Below Normal	June	--	861.1	799.4	61.7	7.2%	787.2	73.9	8.6%	751.0	110.1	12.8%
ME 6	32 48 26	2002	Below Normal	July	--	370.1	306.6	63.5	17.2%	294.0	76.1	20.6%	257.2	112.9	30.5%
ME 6	32 48 26	2002	Below Normal	August	--	236.0	175.7	60.3	25.6%	163.7	72.3	30.7%	127.2	108.8	46.1%
ME 6	32 48 26	2002	Below Normal	September	Used in Summary Table Analysis	172.4	114.9	57.5	33.3%	103.5	68.9	40.0%	68.3	104.1	60.4%
ME 6	32 48 26	2003	Wet	October	Used in Summary Table Analysis	137.2	89.2	48.0	35.0%	79.6	57.6	42.0%	50.5	86.7	63.2%
ME 6	32 48 26	2003	Wet	November	Used in Summary Table Analysis	906.9	867.8	39.1	4.3%	859.8	47.1	5.2%	835.9	71.0	7.8%
ME 6	32 48 26	2003	Wet	December	--	57,482.6	57,447.9	34.7	0.1%	57,441.0	41.7	0.1%	57,419.0	63.7	0.1%
ME 6	32 48 26	2003	Wet	January	--	31,666.7	31,635.4	31.3	0.1%	31,629.6	37.0	0.1%	31,610.0	56.7	0.2%
ME 6	32 48 26	2003	Wet	February	--	20,425.9	20,398.1	27.8	0.1%	20,392.4	33.6	0.2%	20,376.2	49.8	0.2%
ME 6	32 48 26	2003	Wet	March	--	24,145.8	24,120.4	25.5	0.1%	24,114.6	31.3	0.1%	24,099.5	46.3	0.2%
ME 6	32 48 26	2003	Wet	April	--	43,188.7	43,164.4	24.3	0.1%	43,158.6	30.1	0.1%	43,143.5	45.1	0.1%
ME 6	32 48 26	2003	Wet	May	--	12,260.4	12,214.1	46.3	0.4%	12,204.9	55.6	0.5%	12,177.1	83.3	0.7%
ME 6	32 48 26	2003	Wet	June	--	3,176.3	3,117.7	58.6	1.8%	3,106.3	70.0	2.2%	3,072.3	103.9	3.3%
ME 6	32 48 26	2003	Wet	July	--	1,485.3	1,422.5	62.8	4.2%	1,410.1	75.2	5.1%	1,373.1	112.2	7.6%
ME 6	32 48 26	2003	Wet	August	--	770.7	708.9	61.9	8.0%	696.1	74.6	9.7%	656.7	114.0	14.8%
ME 6	32 48 26	2003	Wet	September	Used in Summary Table Analysis	467.8	414.6	53.1	11.4%	404.0	63.8	13.6%	371.0	96.8	20.7%
ME 6	32 48 26	2004	Wet	October	Used in Summary Table Analysis	334.4	289.8	44.7	13.4%	280.8	53.7	16.1%	253.6	80.9	24.2%
ME 6	32 48 26	2004	Wet	November	Used in Summary Table Analysis	5,881.6	5,844.8	36.8	0.6%	5,837.4	44.2	0.8%	5,814.7	66.9	1.1%
ME 6	32 48 26	2004	Wet	December	--	36,656.3	36,622.7	33.6	0.1%	36,616.9	39.4	0.1%	36,596.1	60.2	0.2%
ME 6	32 48 26	2004	Wet	January	--	31,707.2	31,679.4	27.8	0.1%	31,673.6	33.6	0.1%	31,656.3	50.9	0.2%
ME 6	32 48 26	2004	Wet	February	--	38,460.6	38,435.2	25.5	0.1%	38,429.4	31.3	0.1%	38,413.2	47.5	0.1%
ME 6	32 48 26	2004	Wet	March	--	16,563.7	16,539.4	24.3	0.1%	16,534.7	28.9	0.2%	16,520.8	42.8	0.3%
ME 6	32 48 26	2004	Wet	April	--	9,480.7	9,458.2	22.5	0.2%	9,453.6	27.1	0.3%	9,439.8	40.9	0.4%
ME 6	32 48 26	2004	Wet	May	--	3,444.8	3,399.8	45.0	1.3%	3,390.7	54.1	1.6%	3,364.0	80.8	2.3%
ME 6	32 48 26	2004	Wet	June	--	698.8	642.4	56.4	8.1%	631.4	67.4	9.7%	598.5	100.3	14.4%
ME 6	32 48 26	2004	Wet	July	--	365.3	303.7	61.6	16.9%	291.5	73.8	20.2%	255.2	110.1	30.1%
ME 6	32 48 26	2004	Wet	August	--	233.9	175.3	58.6	25.0%	163.6	70.2	30.0%	128.6	105.2	45.0%
ME 6	32 48 26	2004	Wet	September	Used in Summary Table Analysis	170.3	114.1	56.2	33.0%	102.9	67.4	39.6%	69.2	101.1	59.4%
ME 6	32 48 26	2005	Above Normal	October	Used in Summary Table Analysis	7,784.1	7,738.4	45.7	0.6%	7,729.3	54.9	0.7%	7,701.5	82.6	1.1%
ME 6	32 48 26	2005	Above Normal	November	Used in Summary Table Analysis	2,272.5	2,236.5	36.0	1.6%	2,229.2	43.3	1.9%	2,207.2	65.3	2.9%
ME 6	32 48 26	2005	Above Normal	December	--	21,317.1	21,284.7	32.4	0.2%	21,278.9	38.2	0.2%	21,259.3	57.9	0.3%
ME 6	32 48 26	2005	Above Normal	January	--	22,612.3	22,583.3	28.9	0.1%	22,578.7	33.6	0.1%	22,561.3	50.9	0.2%
ME 6	32 48 26	2005	Above Normal	February	--	14,052.1	14,027.8	24.3	0.2%	14,023.1	28.9	0.2%	14,006.9	45.1	0.3%
ME 6	32 48 26	2005	Above Normal	March	--	28,740.7	28,717.6	23.1	0.1%	28,711.8	28.9	0.1%	28,697.9	42.8	0.1%
ME 6	32 48 26	2005	Above Normal	April	--	21,559.0	21,535.9	23.1	0.1%	21,532.4	26.6	0.1%	21,518.5	40.5	0.2%
ME 6	32 48 26	2005	Above Normal	May	--	19,706.0	19,659.7	46.3	0.2%	19,650.5	55.6	0.3%	19,623.8	82.2	0.4%
ME 6	32 48 26	2005	Above Normal	June	--	16,032.4	15,964.1	68.3	0.4%	15,951.4	81.0	0.5%	15,912.0	120.4	0.8%
ME 6	32 48 26	2005	Above Normal	July	--	2,867.2	2,804.1	63.2	2.2%	2,792.1	75.1	2.6%	2,756.3	111.0	3.9%
ME 6	32 48 26	2005	Above Normal	August	--	993.6	935.7	57.9	5.8%	924.2	69.3	7.0%	890.0	103.5	10.4%
ME 6	32 48 26	2005	Above Normal	September	Used in Summary Table Analysis	535.0	483.1	51.9	9.7%	472.8	62.2	11.6%	441.8	93.2	17.4%
ME 6	32 48 26	2006	Wet	October	Used in Summary Table Analysis	646.2	603.4	42.8	6.6%	594.8	51.4	8.0%	568.7	77.5	12.0%
ME 6	32 48 26	2006	Wet	November	Used in Summary Table Analysis	9,439.7	9,405.4	34.3	0.4%	9,398.5	41.2	0.4%	9,377.3	62.4	0.7%
ME 6	32 48 26	2006	Wet	December	--	43,934.0	43,903.9	30.1	0.1%	43,897.0	37.0	0.1%	43,877.3	56.7	0.1%
ME 6	32 48 26	2006	Wet	January	--	46,691.0	46,663.2	27.8	0.1%	46,657.4	33.6	0.1%	46,640.0	50.9	0.1%
ME 6	32 48 26	2006	Wet	February	--	26,787.0	26,762.7	24.3	0.1%	26,758.1	28.9	0.1%	26,743.1	44.0	0.2%
ME 6	32 48 26	2006	Wet	March	--	47,469.9	47,446.8	23.1	0.0%	47,442.1	27.8	0.1%	47,427.1	42.8	0.1%
ME 6	32 48 26	2006	Wet	April	--	30,550.9	30,528.9	22.0	0.1%	30,525.5	25.5	0.1%	30,512.7	38.2	0.1%
ME 6	32 48 26	2006	Wet	May	--	14,278.9	14,251.2	27.8	0.2%	14,245.4	33.6	0.2%	14,228.0	50.9	0.4%
ME 6	32 48 26	2006	Wet	June	--	3,556.5	3,500.8	55.7	1.6%	3,489.9	66.6	1.9%	3,457.8	98.7	2.8%
ME 6	32 48 26	2006	Wet	July	--	1,291.3	1,231.1	60.2	4.7%	1,219.3	72.0	5.6%	1,184.4	106.9	8.3%
ME 6	32 48 26	2006	Wet	August	--	677.5	618.1	59.3	8.8%	606.4	71.1	10.5%	571.3	106.2	15.7%
ME 6	32 48 26	2006	Wet	September	Used in Summary Table Analysis	437.5	384.7	52.8	12.1%	374.2	63.3	14.5%	342.6	94.8	21.7%
ME 6	32 48 26	2007	Above Normal	October	Used in Summary Table Analysis	284.2	240.4	43.8	15.4%	231.6	52.6	18.5%	205.0	79.2	27.9%
ME 6	32 48 26	2007	Above Normal	November	Used in Summary Table Analysis	8,784.6	8,748.5	36.1	0.4%	8,741.2	43.4	0.5%	8,719.1	65.5	0.7%
ME 6	32 48 26	2007	Above Normal	December	--	20,648.1	20,616.9	31.3	0.2%	20,610.0	38.2	0.2%	20,590.3	57.9	0.3%
ME 6	32 48 26	2007	Above Normal	January	--	10,314.8	10,287.2	27.7	0.3%	10,281.6	33.2	0.3%	10,264.4	50.5	0.5%
ME 6	32 48 26	2007	Above Normal	February	--	30,839.1	30,812.5	26.6	0.1%	30,806.7	32.4	0.1%	30,790.5	48.6	0.2%
ME 6	32 48 26	2007	Above Normal	March	--	13,148.1	13,123.8	24.3	0.2%	13,118.1	30.1	0.2%	13,103.0	45.1	0.3%
ME 6	32 48 26	2007	Above Normal	April	--	11,578.7	11,534.5	44.2	0.4%	11,525.6	53.1	0.5%	11,499.1	79.6	0.7%
ME 6	32 48 26	2007	Above Normal	May	--	4,160.4	4,107.6	52.8	1.3%	4,097.1	63.3	1.5%	4,065.6	94.8	2.3%
ME 6	32 48 26	2007	Above Normal	June	--	1,513.8	1,450.6	63.2	4.2%	1,438.2	75.6	5.0%	1,401.3	112.5	7.4%
ME 6	32 48 26	2007	Above Normal	July	--	503.6	439.5	64.2	12.7%	426.8	76.9	15.3%	389.3	114.3	22.7%
ME 6	32 48 26	2007	Above Normal	August	--	232.1	173.6	58.5	25.2%	162.0	70.1	30.2%	126.4	105.7	45.5%
ME 6	32 48 26	2007	Above Normal	September	Used in Summary Table Analysis	159.7	103.8	55.9	35.0%	92.7	67.0	41.9%	59.2	100.5	62.9%

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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 48 26	2008	Dry	October	Used in Summary Table Analysis	3,477.8	3,431.4	46.4	1.3%	3,422.0	55.8	1.6%	3,393.5	84.3	2.4%
ME 6	32 48 26	2008	Dry	November	Used in Summary Table Analysis	3,316.9	3,280.7	36.2	1.1%	3,273.3	43.6	1.3%	3,250.8	66.1	2.0%
ME 6	32 48 26	2008	Dry	December	--	23,436.3	23,403.9	32.4	0.1%	23,398.1	38.2	0.2%	23,378.5	57.9	0.2%
ME 6	32 48 26	2008	Dry	January	--	37,827.5	37,797.5	30.1	0.1%	37,791.7	35.9	0.1%	37,773.1	54.4	0.1%
ME 6	32 48 26	2008	Dry	February	--	26,342.6	26,317.1	25.5	0.1%	26,312.5	30.1	0.1%	26,296.3	46.3	0.2%
ME 6	32 48 26	2008	Dry	March	--	11,828.7	11,805.6	23.1	0.2%	11,800.9	27.8	0.2%	11,787.0	41.7	0.4%
ME 6	32 48 26	2008	Dry	April	--	9,044.7	8,999.8	44.9	0.5%	8,990.9	53.8	0.6%	8,963.9	80.8	0.9%
ME 6	32 48 26	2008	Dry	May	--	1,359.3	1,311.8	47.5	3.5%	1,302.5	56.7	4.2%	1,274.8	84.5	6.2%
ME 6	32 48 26	2008	Dry	June	--	445.9	377.3	68.6	15.4%	363.8	82.0	18.4%	323.9	121.9	27.3%
ME 6	32 48 26	2008	Dry	July	--	263.6	194.5	69.1	26.2%	180.8	82.8	31.4%	145.1	118.5	44.9%
ME 6	32 48 26	2008	Dry	August	--	187.4	119.6	67.8	36.2%	106.1	81.3	43.4%	65.5	121.8	65.0%
ME 6	32 48 26	2008	Dry	September	Used in Summary Table Analysis	148.9	83.1	65.8	44.2%	70.1	78.9	53.0%	32.1	116.8	78.5%
ME 6	32 48 26	2009	Critical	October	Used in Summary Table Analysis	935.0	882.0	53.0	5.7%	871.4	63.6	6.8%	839.2	95.9	10.3%
ME 6	32 48 26	2009	Critical	November	Used in Summary Table Analysis	5,589.1	5,547.2	41.9	0.7%	5,538.8	50.3	0.9%	5,510.3	78.8	1.4%
ME 6	32 48 26	2009	Critical	December	--	12,326.4	12,290.5	35.9	0.3%	12,283.6	42.8	0.3%	12,260.4	66.0	0.5%
ME 6	32 48 26	2009	Critical	January	--	8,843.5	8,811.2	32.3	0.4%	8,804.6	38.9	0.4%	8,784.5	59.0	0.7%
ME 6	32 48 26	2009	Critical	February	--	22,750.0	22,721.1	28.9	0.1%	22,715.3	34.7	0.2%	22,697.9	52.1	0.2%
ME 6	32 48 26	2009	Critical	March	--	21,222.2	21,196.8	25.5	0.1%	21,192.1	30.1	0.1%	21,175.9	46.3	0.2%
ME 6	32 48 26	2009	Critical	April	--	10,109.8	10,062.8	47.0	0.5%	10,053.5	56.4	0.6%	10,025.1	84.7	0.8%
ME 6	32 48 26	2009	Critical	May	--	15,636.6	15,579.9	56.7	0.4%	15,568.3	68.3	0.4%	15,533.6	103.0	0.7%
ME 6	32 48 26	2009	Critical	June	--	3,169.2	3,095.9	73.3	2.3%	3,081.7	87.5	2.8%	3,039.4	129.9	4.1%
ME 6	32 48 26	2009	Critical	July	--	1,271.5	1,201.6	69.9	5.5%	1,187.8	83.7	6.6%	1,151.8	119.7	9.4%
ME 6	32 48 26	2009	Critical	August	--	677.9	609.6	68.3	10.1%	596.1	81.9	12.1%	557.9	120.0	17.7%
ME 6	32 48 26	2009	Critical	September	Used in Summary Table Analysis	398.5	336.5	62.0	15.6%	324.2	74.3	18.6%	288.3	110.2	27.6%
ME 6	32 48 26	2010	Below Normal	October	Used in Summary Table Analysis	6,102.0	6,048.3	53.7	0.9%	6,037.4	64.6	1.1%	6,003.9	98.0	1.6%
ME 6	32 48 26	2010	Below Normal	November	Used in Summary Table Analysis	8,344.1	8,300.7	43.4	0.5%	8,292.0	52.1	0.6%	8,262.8	81.3	1.0%
ME 6	32 48 26	2010	Below Normal	December	--	12,463.0	12,425.9	37.0	0.3%	12,417.8	45.1	0.4%	12,394.7	68.3	0.5%
ME 6	32 48 26	2010	Below Normal	January	--	36,593.8	36,560.2	33.6	0.1%	36,553.2	40.5	0.1%	36,532.4	61.3	0.2%
ME 6	32 48 26	2010	Below Normal	February	--	27,347.2	27,318.3	28.9	0.1%	27,312.5	34.7	0.1%	27,294.0	53.2	0.2%
ME 6	32 48 26	2010	Below Normal	March	--	28,925.9	28,899.3	26.6	0.1%	28,893.5	32.4	0.1%	28,876.2	49.8	0.2%
ME 6	32 48 26	2010	Below Normal	April	--	40,178.2	40,152.8	25.5	0.1%	40,147.0	31.3	0.1%	40,131.9	46.3	0.1%
ME 6	32 48 26	2010	Below Normal	May	--	20,397.0	20,348.4	48.6	0.2%	20,338.0	59.0	0.3%	20,309.0	88.0	0.4%
ME 6	32 48 26	2010	Below Normal	June	--	9,452.0	9,382.4	69.6	0.7%	9,368.8	83.2	0.9%	9,328.0	124.0	1.3%
ME 6	32 48 26	2010	Below Normal	July	--	1,462.7	1,398.5	64.2	4.4%	1,386.1	76.6	5.2%	1,349.1	113.7	7.8%
ME 6	32 48 26	2010	Below Normal	August	--	579.9	520.3	59.6	10.3%	508.5	71.4	12.3%	473.4	106.5	18.4%
ME 6	32 48 26	2010	Below Normal	September	Used in Summary Table Analysis	662.5	605.1	57.4	8.7%	593.6	68.9	10.4%	559.3	103.2	15.6%
ME 6	32 48 26	2011	Wet	October	Used in Summary Table Analysis	9,715.9	9,671.5	44.3	0.5%	9,662.5	53.4	0.5%	9,635.4	80.4	0.8%
ME 6	32 48 26	2011	Wet	November	Used in Summary Table Analysis	14,312.5	14,277.8	34.7	0.2%	14,269.7	42.8	0.3%	14,247.7	64.8	0.5%
ME 6	32 48 26	2011	Wet	December	--	34,076.4	34,045.1	31.3	0.1%	34,038.2	38.2	0.1%	34,018.5	57.9	0.2%
ME 6	32 48 26	2011	Wet	January	--	14,226.9	14,200.2	26.6	0.2%	14,194.4	32.4	0.2%	14,177.1	49.8	0.3%
ME 6	32 48 26	2011	Wet	February	--	20,838.0	20,813.7	24.3	0.1%	20,807.9	30.1	0.1%	20,792.8	45.1	0.2%
ME 6	32 48 26	2011	Wet	March	--	52,253.5	52,229.2	24.3	0.0%	52,224.5	28.9	0.1%	52,209.5	44.0	0.1%
ME 6	32 48 26	2011	Wet	April	--	24,885.4	24,862.3	23.1	0.1%	24,857.6	27.8	0.1%	24,842.6	42.8	0.2%
ME 6	32 48 26	2011	Wet	May	--	11,424.3	11,378.6	45.7	0.4%	11,369.4	54.9	0.5%	11,342.1	82.2	0.7%
ME 6	32 48 26	2011	Wet	June	--	7,098.3	7,030.8	67.5	1.0%	7,017.4	80.9	1.1%	6,977.9	120.4	1.7%
ME 6	32 48 26	2011	Wet	July	--	1,834.5	1,766.3	68.2	3.7%	1,752.9	81.6	4.4%	1,714.2	120.3	6.6%
ME 6	32 48 26	2011	Wet	August	--	786.3	727.5	58.7	7.5%	715.9	70.3	8.9%	681.1	105.2	13.4%
ME 6	32 48 26	2011	Wet	September	Used in Summary Table Analysis	442.9	388.9	53.9	12.2%	378.2	64.7	14.6%	346.0	96.9	21.9%
ME 6	32 48 26	2012	Below Normal	October	Used in Summary Table Analysis	4,585.0	4,539.9	45.0	1.0%	4,530.9	54.1	1.2%	4,503.1	81.8	1.8%
ME 6	32 48 26	2012	Below Normal	November	Used in Summary Table Analysis	8,324.2	8,288.1	36.1	0.4%	8,280.7	43.5	0.5%	8,258.3	65.9	0.8%
ME 6	32 48 26	2012	Below Normal	December	--	5,222.2	5,191.2	31.0	0.6%	5,185.0	37.3	0.7%	5,165.7	56.5	1.1%
ME 6	32 48 26	2012	Below Normal	January	--	20,361.1	20,332.2	28.9	0.1%	20,326.4	34.7	0.2%	20,309.0	52.1	0.3%
ME 6	32 48 26	2012	Below Normal	February	--	18,283.6	18,258.1	25.5	0.1%	18,253.5	30.1	0.2%	18,237.3	46.3	0.3%
ME 6	32 48 26	2012	Below Normal	March	--	45,713.0	45,687.5	25.5	0.1%	45,682.9	30.1	0.1%	45,667.8	45.1	0.1%
ME 6	32 48 26	2012	Below Normal	April	--	26,964.1	26,941.0	23.1	0.1%	26,936.3	27.8	0.1%	26,921.3	42.8	0.2%
ME 6	32 48 26	2012	Below Normal	May	--	7,508.7	7,463.2	45.5	0.6%	7,454.2	54.5	0.7%	7,427.3	81.4	1.1%
ME 6	32 48 26	2012	Below Normal	June	--	5,557.1	5,488.4	68.6	1.2%	5,475.0	82.1	1.5%	5,435.2	121.9	2.2%
ME 6	32 48 26	2012	Below Normal	July	--	2,250.2	2,184.1	66.1	2.9%	2,171.1	79.2	3.5%	2,132.2	118.1	5.2%
ME 6	32 48 26	2012	Below Normal	August	--	395.8	342.0	53.8	13.6%	331.2	64.5	16.3%	299.1	96.7	24.4%
ME 6	32 48 26	2012	Below Normal	September	Used in Summary Table Analysis	258.2	209.7	48.5	18.8%	200.0	58.1	22.5%	171.1	87.1	33.7%
ME 6	32 48 26	2013	Below Normal	October	Used in Summary Table Analysis	1,941.1	1,898.3	42.8	2.2%	1,889.7	51.4	2.6%	1,863.8	77.3	4.0%
ME 6	32 48 26	2013	Below Normal	November	Used in Summary Table Analysis	14,842.6	14,807.9	34.7	0.2%	14,800.9	41.7	0.3%	14,780.1	62.5	0.4%
ME 6	32 48 26	2013	Below Normal	December	--	60,340.3	60,309.0	31.3	0.1%	60,302.1	38.2	0.1%	60,282.4	57.9	0.1%
ME 6	32 48 26	2013	Below Normal	January	--	22,302.1	22,275.5	26.6	0.1%	22,270.8	31.3	0.1%	22,254.6	47.5	0.2%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 48 26	2013	Below Normal	February	--	8,894.0	8,869.1	24.9	0.3%	8,864.0	30.0	0.3%	8,848.8	45.1	0.5%
ME 6	32 48 26	2013	Below Normal	March	--	10,404.1	10,380.1	24.0	0.2%	10,375.3	28.7	0.3%	10,360.6	43.4	0.4%
ME 6	32 48 26	2013	Below Normal	April	--	8,314.5	8,271.3	43.2	0.5%	8,262.7	51.7	0.6%	8,236.8	77.7	0.9%
ME 6	32 48 26	2013	Below Normal	May	--	4,460.9	4,408.6	52.3	1.2%	4,398.1	62.7	1.4%	4,367.0	93.9	2.1%
ME 6	32 48 26	2013	Below Normal	June	--	2,121.8	2,059.1	62.6	3.0%	2,046.8	75.0	3.5%	2,010.0	111.8	5.3%
ME 6	32 48 26	2013	Below Normal	July	--	724.4	662.9	61.4	8.5%	650.8	73.6	10.2%	615.3	109.1	15.1%
ME 6	32 48 26	2013	Below Normal	August	--	348.3	290.0	58.3	16.7%	278.4	70.0	20.1%	243.0	105.3	30.2%
ME 6	32 48 26	2013	Below Normal	September	Used in Summary Table Analysis	4,830.7	4,770.0	60.6	1.3%	4,757.9	72.8	1.5%	4,721.5	109.1	2.3%
ME 6	32 48 26	2014	Critical	October	Used in Summary Table Analysis	284.1	238.9	45.2	15.9%	229.8	54.3	19.1%	203.1	80.9	28.5%
ME 6	32 48 26	2014	Critical	November	Used in Summary Table Analysis	1,562.6	1,526.0	36.6	2.3%	1,518.6	44.0	2.8%	1,496.2	66.4	4.3%
ME 6	32 48 26	2014	Critical	December	--	1,605.1	1,573.1	31.9	2.0%	1,566.7	38.4	2.4%	1,546.8	58.3	3.6%
ME 6	32 48 26	2014	Critical	January	--	2,846.9	2,818.4	28.5	1.0%	2,812.6	34.3	1.2%	2,794.7	52.2	1.8%
ME 6	32 48 26	2014	Critical	February	--	15,824.1	15,798.6	25.5	0.2%	15,792.8	31.3	0.2%	15,776.6	47.5	0.3%
ME 6	32 48 26	2014	Critical	March	--	31,577.5	31,553.2	24.3	0.1%	31,547.5	30.1	0.1%	31,532.4	45.1	0.1%
ME 6	32 48 26	2014	Critical	April	--	13,020.8	12,974.5	46.3	0.4%	12,965.3	55.6	0.4%	12,937.5	83.3	0.6%
ME 6	32 48 26	2014	Critical	May	--	5,208.4	5,153.2	55.2	1.1%	5,142.2	66.2	1.3%	5,109.0	99.4	1.9%
ME 6	32 48 26	2014	Critical	June	--	1,207.4	1,132.6	74.8	6.2%	1,117.9	89.5	7.4%	1,075.5	131.9	10.9%
ME 6	32 48 26	2014	Critical	July	--	552.8	482.2	70.6	12.8%	468.2	84.6	15.3%	431.1	121.6	22.0%
ME 6	32 48 26	2014	Critical	August	--	356.3	288.3	68.0	19.1%	274.7	81.6	22.9%	236.0	120.3	33.8%
ME 6	32 48 26	2014	Critical	September	Used in Summary Table Analysis	2,596.1	2,528.8	67.2	2.6%	2,515.5	80.6	3.1%	2,475.7	120.4	4.6%
ME 6	32 48 26	2015	Dry	October	Used in Summary Table Analysis	11,441.7	11,388.4	53.2	0.5%	11,377.9	63.8	0.6%	11,345.8	95.8	0.8%
ME 6	32 48 26	2015	Dry	November	Used in Summary Table Analysis	9,122.0	9,081.4	40.6	0.4%	9,073.1	48.8	0.5%	9,045.0	77.0	0.8%
ME 6	32 48 26	2015	Dry	December	--	32,925.9	32,891.2	34.7	0.1%	32,884.3	41.7	0.1%	32,862.3	63.7	0.2%
ME 6	32 48 26	2015	Dry	January	--	14,625.0	14,593.8	31.3	0.2%	14,586.8	38.2	0.3%	14,567.1	57.9	0.4%
ME 6	32 48 26	2015	Dry	February	--	27,356.5	27,328.7	27.8	0.1%	27,322.9	33.6	0.1%	27,305.6	50.9	0.2%
ME 6	32 48 26	2015	Dry	March	--	11,599.5	11,575.2	24.3	0.2%	11,570.5	29.1	0.3%	11,555.1	44.4	0.4%
ME 6	32 48 26	2015	Dry	April	--	8,466.9	8,420.7	46.2	0.5%	8,411.5	55.4	0.7%	8,383.6	83.3	1.0%
ME 6	32 48 26	2015	Dry	May	--	1,512.5	1,458.0	54.5	3.6%	1,447.1	65.4	4.3%	1,415.5	97.0	6.4%
ME 6	32 48 26	2015	Dry	June	--	658.4	588.8	69.7	10.6%	575.0	83.4	12.7%	534.4	124.1	18.8%
ME 6	32 48 26	2015	Dry	July	--	275.0	205.2	69.8	25.4%	191.3	83.7	30.4%	155.2	119.8	43.6%
ME 6	32 48 26	2015	Dry	August	--	174.2	106.0	68.2	39.1%	92.4	81.8	47.0%	54.4	119.8	68.8%
ME 6	32 48 26	2015	Dry	September	Used in Summary Table Analysis	127.6	63.0	64.6	50.6%	49.7	77.9	61.0%	11.2	116.3	91.2%
ME 6	32 48 26	2016	Above Normal	October	Used in Summary Table Analysis	92.5	37.9	54.7	59.1%	27.3	65.2	70.5%	0.3	92.3	99.7%
ME 6	32 48 26	2016	Above Normal	November	Used in Summary Table Analysis	3,939.1	3,896.1	43.1	1.1%	3,887.3	51.9	1.3%	3,856.0	83.1	2.1%
ME 6	32 48 26	2016	Above Normal	December	--	36,982.6	36,944.4	38.2	0.1%	36,936.3	46.3	0.1%	36,912.0	70.6	0.2%
ME 6	32 48 26	2016	Above Normal	January	--	57,694.4	57,659.7	34.7	0.1%	57,652.8	41.7	0.1%	57,630.8	63.7	0.1%
ME 6	32 48 26	2016	Above Normal	February	--	24,329.9	24,302.1	27.8	0.1%	24,296.3	33.6	0.1%	24,277.8	52.1	0.2%
ME 6	32 48 26	2016	Above Normal	March	--	41,953.7	41,925.9	27.8	0.1%	41,921.3	32.4	0.1%	41,903.9	49.8	0.1%
ME 6	32 48 26	2016	Above Normal	April	--	18,586.8	18,562.5	24.3	0.1%	18,557.9	28.9	0.2%	18,542.8	44.0	0.2%
ME 6	32 48 26	2016	Above Normal	May	--	5,233.4	5,204.2	29.3	0.6%	5,198.1	35.3	0.7%	5,180.2	53.2	1.0%
ME 6	32 48 26	2016	Above Normal	June	--	1,517.9	1,464.4	53.6	3.5%	1,454.7	63.2	4.2%	1,426.6	91.3	6.0%
ME 6	32 48 26	2016	Above Normal	July	--	832.4	771.4	61.0	7.3%	759.3	73.1	8.8%	723.5	108.9	13.1%
ME 6	32 48 26	2016	Above Normal	August	--	501.4	441.0	60.4	12.1%	428.9	72.5	14.5%	393.0	108.4	21.6%
ME 6	32 48 26	2016	Above Normal	September	Used in Summary Table Analysis	337.3	280.3	57.0	16.9%	268.7	68.6	20.3%	234.1	103.2	30.6%
ME 6	32 48 26	2017	Wet	October	Used in Summary Table Analysis	18,427.1	18,380.8	46.3	0.3%	18,371.5	55.6	0.3%	18,343.8	83.3	0.5%
ME 6	32 48 26	2017	Wet	November	Used in Summary Table Analysis	18,980.3	18,944.4	35.9	0.2%	18,936.3	44.0	0.2%	18,914.4	66.0	0.3%
ME 6	32 48 26	2017	Wet	December	--	24,354.2	24,322.9	31.3	0.1%	24,317.1	37.0	0.2%	24,297.5	56.7	0.2%
ME 6	32 48 26	2017	Wet	January	--	107,608.8	107,581.0	27.8	0.0%	107,574.1	34.7	0.0%	107,556.7	52.1	0.0%
ME 6	32 48 26	2017	Wet	February	--	82,251.2	82,224.5	26.6	0.0%	82,218.8	32.4	0.0%	82,203.7	47.5	0.1%
ME 6	32 48 26	2017	Wet	March	--	27,403.9	27,379.6	24.3	0.1%	27,375.0	28.9	0.1%	27,360.0	44.0	0.2%
ME 6	32 48 26	2017	Wet	April	--	23,076.4	23,054.4	22.0	0.1%	23,049.8	26.6	0.1%	23,035.9	40.5	0.2%
ME 6	32 48 26	2017	Wet	May	--	6,278.6	6,249.5	29.1	0.5%	6,243.6	35.0	0.6%	6,226.2	52.4	0.8%
ME 6	32 48 26	2017	Wet	June	--	2,135.5	2,080.4	55.1	2.6%	2,069.6	66.0	3.1%	2,037.4	98.1	4.6%
ME 6	32 48 26	2017	Wet	July	--	946.6	885.7	60.9	6.4%	873.7	72.8	7.7%	838.3	108.3	11.4%
ME 6	32 48 26	2017	Wet	August	--	518.8	458.9	59.8	11.5%	447.0	71.7	13.8%	411.6	107.2	20.7%
ME 6	32 48 26	2017	Wet	September	Used in Summary Table Analysis	333.3	277.3	55.9	16.8%	266.1	67.2	20.2%	232.6	100.7	30.2%
ME 6	32 48 26	2018	Above Normal	October	Used in Summary Table Analysis	285.9	240.7	45.2	15.8%	231.6	54.3	19.0%	204.3	81.7	28.6%
ME 6	32 48 26	2018	Above Normal	November	Used in Summary Table Analysis	10,951.6	10,915.5	36.1	0.3%	10,908.1	43.5	0.4%	10,886.0	65.6	0.6%
ME 6	32 48 26	2018	Above Normal	December	--	5,462.7	5,432.1	30.7	0.6%	5,425.8	36.9	0.7%	5,406.8	55.9	1.0%
ME 6	32 48 26	2018	Above Normal	January	--	18,054.4	18,026.6	27.8	0.2%	18,020.8	33.6	0.2%	18,003.5	50.9	0.3%
ME 6	32 48 26	2018	Above Normal	February	--	7,611.8	7,587.4	24.4	0.3%	7,582.4	29.4	0.4%	7,567.1	44.7	0.6%
ME 6	32 48 26	2018	Above Normal	March	--	20,876.2	20,853.0	23.1	0.1%	20,848.4	27.8	0.1%	20,834.5	41.7	0.2%
ME 6	32 48 26	2018	Above Normal	April	--	32,407.4	32,386.6	20.8	0.1%	32,381.9	25.5	0.1%	32,369.2	38.2	0.1%
ME 6	32 48 26	2018	Above Normal	May	--	6,996.5	6,953.4	43.2	0.6%	6,944.8	51.7	0.7%	6,918.6	77.9	1.1%

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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 48 26	2018	Above Normal	June	--	1,923.3	1,867.2	56.0	2.9%	1,856.3	67.0	3.5%	1,823.7	99.5	5.2%
ME 6	32 48 26	2018	Above Normal	July	--	791.7	730.2	61.6	7.8%	717.9	73.9	9.3%	681.5	110.2	13.9%
ME 6	32 48 26	2018	Above Normal	August	--	453.0	395.0	58.0	12.8%	383.4	69.6	15.4%	348.7	104.3	23.0%
ME 6	32 48 26	2018	Above Normal	September	Used in Summary Table Analysis	309.7	253.6	56.1	18.1%	242.3	67.4	21.8%	208.7	101.1	32.6%
ME 6	32 48 26	2019	Below Normal	October	Used in Summary Table Analysis	215.9	171.2	44.7	20.7%	162.1	53.8	24.9%	134.9	81.0	37.5%
ME 6	32 48 26	2019	Below Normal	November	Used in Summary Table Analysis	6,729.5	6,693.1	36.5	0.5%	6,685.6	43.9	0.7%	6,663.3	66.2	1.0%
ME 6	32 48 26	2019	Below Normal	December	--	14,843.8	14,812.5	31.3	0.2%	14,805.6	38.2	0.3%	14,787.0	56.7	0.4%
ME 6	32 48 26	2019	Below Normal	January	--	35,578.7	35,550.9	27.8	0.1%	35,544.0	34.7	0.1%	35,527.8	50.9	0.1%
ME 6	32 48 26	2019	Below Normal	February	--	142,303.2	142,280.1	23.1	0.0%	142,268.5	34.7	0.0%	142,256.9	46.3	0.0%
ME 6	32 48 26	2019	Below Normal	March	--	42,515.0	42,493.1	22.0	0.1%	42,488.4	26.6	0.1%	42,473.4	41.7	0.1%
ME 6	32 48 26	2019	Below Normal	April	--	15,327.5	15,306.7	20.8	0.1%	15,302.1	25.5	0.2%	15,289.4	38.2	0.2%
ME 6	32 48 26	2019	Below Normal	May	--	17,214.1	17,167.8	46.3	0.3%	17,158.6	55.6	0.3%	17,130.8	83.3	0.5%
ME 6	32 48 26	2019	Below Normal	June	--	4,244.9	4,186.1	58.8	1.4%	4,174.8	70.1	1.7%	4,141.7	103.2	2.4%
ME 6	32 48 26	2019	Below Normal	July	--	1,373.6	1,311.9	61.7	4.5%	1,299.7	74.0	5.4%	1,263.4	110.2	8.0%
ME 6	32 48 26	2019	Below Normal	August	--	608.3	549.0	59.3	9.7%	537.2	71.1	11.7%	502.1	106.1	17.4%
ME 6	32 48 26	2019	Below Normal	September	Used in Summary Table Analysis	473.0	417.1	55.8	11.8%	405.9	67.0	14.2%	372.4	100.5	21.3%
ME 6	32 48 26	2020	Dry	October	Used in Summary Table Analysis	364.0	320.9	43.1	11.8%	312.2	51.8	14.2%	286.0	78.0	21.4%
ME 6	32 48 26	2020	Dry	November	Used in Summary Table Analysis	334.3	299.8	34.4	10.3%	292.8	41.4	12.4%	271.8	62.5	18.7%
ME 6	32 48 26	2020	Dry	December	--	13,544.0	13,512.7	31.3	0.2%	13,506.9	37.0	0.3%	13,487.3	56.7	0.4%
ME 6	32 48 26	2020	Dry	January	--	22,533.6	22,505.8	27.8	0.1%	22,500.0	33.6	0.1%	22,482.6	50.9	0.2%
ME 6	32 48 26	2020	Dry	February	--	7,424.5	7,399.4	25.1	0.3%	7,394.2	30.3	0.4%	7,378.7	45.8	0.6%
ME 6	32 48 26	2020	Dry	March	--	7,282.6	7,259.1	23.5	0.3%	7,254.3	28.4	0.4%	7,239.8	42.8	0.6%
ME 6	32 48 26	2020	Dry	April	--	5,525.2	5,479.2	46.1	0.8%	5,469.9	55.3	1.0%	5,442.4	82.9	1.5%
ME 6	32 48 26	2020	Dry	May	--	7,430.9	7,375.6	55.3	0.7%	7,364.6	66.3	0.9%	7,331.6	99.3	1.3%
ME 6	32 48 26	2020	Dry	June	--	2,108.0	2,037.7	70.3	3.3%	2,024.2	83.8	4.0%	1,984.0	124.0	5.9%
ME 6	32 48 26	2020	Dry	July	--	804.5	732.4	72.1	9.0%	718.1	86.4	10.7%	680.9	123.6	15.4%
ME 6	32 48 26	2020	Dry	August	--	407.7	336.1	71.5	17.5%	321.9	85.8	21.0%	282.3	125.4	30.8%
ME 6	32 48 26	2020	Dry	September	Used in Summary Table Analysis	256.9	189.1	67.8	26.4%	175.3	81.5	31.7%	135.1	121.8	47.4%
ME 6	32 47 27	2000	Above Normal	October	Used in Summary Table Analysis	831.0	786.1	45.0	5.4%	777.0	54.0	6.5%	749.7	81.3	9.8%
ME 6	32 47 27	2000	Above Normal	November	Used in Summary Table Analysis	12,332.2	12,296.3	35.9	0.3%	12,289.4	42.8	0.3%	12,266.2	66.0	0.5%
ME 6	32 47 27	2000	Above Normal	December	--	10,925.3	10,894.3	31.0	0.3%	10,888.0	37.4	0.3%	10,868.8	56.6	0.5%
ME 6	32 47 27	2000	Above Normal	January	--	28,932.9	28,905.1	27.8	0.1%	28,899.3	33.6	0.1%	28,881.9	50.9	0.2%
ME 6	32 47 27	2000	Above Normal	February	--	37,274.3	37,248.8	25.5	0.1%	37,244.2	30.1	0.1%	37,228.0	46.3	0.1%
ME 6	32 47 27	2000	Above Normal	March	--	18,388.9	18,365.7	23.1	0.1%	18,361.1	27.8	0.2%	18,346.1	42.8	0.2%
ME 6	32 47 27	2000	Above Normal	April	--	12,370.4	12,348.4	22.0	0.2%	12,343.8	26.6	0.2%	12,331.0	39.4	0.3%
ME 6	32 47 27	2000	Above Normal	May	--	7,142.0	7,097.2	44.8	0.6%	7,088.2	53.8	0.8%	7,061.3	80.7	1.1%
ME 6	32 47 27	2000	Above Normal	June	--	2,631.1	2,564.8	66.3	2.5%	2,551.6	79.5	3.0%	2,512.7	118.4	4.5%
ME 6	32 47 27	2000	Above Normal	July	--	1,002.5	941.1	61.4	6.1%	929.0	73.5	7.3%	892.9	109.6	10.9%
ME 6	32 47 27	2000	Above Normal	August	--	533.2	475.0	58.2	10.9%	463.4	69.8	13.1%	428.7	104.5	19.6%
ME 6	32 47 27	2000	Above Normal	September	Used in Summary Table Analysis	305.4	253.1	52.4	17.1%	242.6	62.8	20.6%	211.2	94.3	30.9%
ME 6	32 47 27	2001	Dry	October	Used in Summary Table Analysis	3,867.1	3,822.9	44.2	1.1%	3,814.0	53.1	1.4%	3,787.2	80.0	2.1%
ME 6	32 47 27	2001	Dry	November	Used in Summary Table Analysis	6,206.1	6,170.5	35.6	0.6%	6,163.3	42.8	0.7%	6,141.4	64.7	1.0%
ME 6	32 47 27	2001	Dry	December	--	8,920.8	8,890.0	30.8	0.3%	8,883.8	37.0	0.4%	8,864.9	55.9	0.6%
ME 6	32 47 27	2001	Dry	January	--	12,945.6	12,917.8	27.8	0.2%	12,912.0	33.6	0.3%	12,895.8	49.8	0.4%
ME 6	32 47 27	2001	Dry	February	--	17,570.6	17,545.1	25.5	0.1%	17,540.5	30.1	0.2%	17,524.3	46.3	0.3%
ME 6	32 47 27	2001	Dry	March	--	12,348.4	12,325.2	23.1	0.2%	12,320.6	27.8	0.2%	12,305.6	42.8	0.3%
ME 6	32 47 27	2001	Dry	April	--	11,025.7	10,979.6	46.1	0.4%	10,970.4	55.3	0.5%	10,942.9	82.8	0.8%
ME 6	32 47 27	2001	Dry	May	--	2,639.9	2,585.4	54.5	2.1%	2,574.5	65.4	2.5%	2,542.0	97.9	3.7%
ME 6	32 47 27	2001	Dry	June	--	2,683.6	2,609.5	74.1	2.8%	2,595.0	88.5	3.3%	2,552.3	131.3	4.9%
ME 6	32 47 27	2001	Dry	July	--	724.3	653.2	71.2	9.8%	639.0	85.3	11.8%	602.0	122.3	16.9%
ME 6	32 47 27	2001	Dry	August	--	181.2	111.4	69.8	38.5%	97.5	83.7	46.2%	58.4	122.8	67.8%
ME 6	32 47 27	2001	Dry	September	Used in Summary Table Analysis	104.7	41.5	63.2	60.4%	28.9	75.8	72.4%	0.8	103.9	99.2%
ME 6	32 47 27	2002	Below Normal	October	Used in Summary Table Analysis	275.4	221.4	54.0	19.6%	210.5	64.9	23.6%	178.0	97.4	35.4%
ME 6	32 47 27	2002	Below Normal	November	Used in Summary Table Analysis	12,135.4	12,092.6	42.8	0.4%	12,083.3	52.1	0.4%	12,054.4	81.0	0.7%
ME 6	32 47 27	2002	Below Normal	December	--	36,003.5	35,965.3	38.2	0.1%	35,958.3	45.1	0.1%	35,934.0	69.4	0.2%
ME 6	32 47 27	2002	Below Normal	January	--	31,079.9	31,047.5	32.4	0.1%	31,040.5	39.4	0.1%	31,019.7	60.2	0.2%
ME 6	32 47 27	2002	Below Normal	February	--	24,798.6	24,769.7	28.9	0.1%	24,762.7	35.9	0.1%	24,744.2	54.4	0.2%
ME 6	32 47 27	2002	Below Normal	March	--	17,873.8	17,846.1	27.8	0.2%	17,841.4	32.4	0.2%	17,824.1	49.8	0.3%
ME 6	32 47 27	2002	Below Normal	April	--	9,962.3	9,915.6	46.6	0.5%	9,906.4	55.9	0.6%	9,878.4	83.9	0.8%
ME 6	32 47 27	2002	Below Normal	May	--	3,334.0	3,279.2	54.9	1.6%	3,268.2	65.9	2.0%	3,235.4	98.6	3.0%
ME 6	32 47 27	2002	Below Normal	June	--	862.2	800.0	62.2	7.2%	787.7	74.5	8.6%	751.2	110.9	12.9%
ME 6	32 47 27	2002	Below Normal	July	--	371.3	307.2	64.1	17.3%	294.5	76.8	20.7%	257.4	113.9	30.7%
ME 6	32 47 27	2002	Below Normal	August	--	237.4	176.5	60.9	25.6%	164.3	73.0	30.8%	127.5	109.9	46.3%
ME 6	32 47 27	2002	Below Normal	September	Used in Summary Table Analysis	173.7	115.6	58.1	33.4%	104.1	69.7	40.1%	68.5	105.2	60.6%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 47 27	2003	Wet	October	Used in Summary Table Analysis	138.5	89.9	48.6	35.1%	80.2	58.4	42.1%	50.8	87.8	63.4%
ME 6	32 47 27	2003	Wet	November	Used in Summary Table Analysis	908.6	869.0	39.7	4.4%	860.9	47.8	5.3%	836.6	72.0	7.9%
ME 6	32 47 27	2003	Wet	December	--	57,574.1	57,539.4	34.7	0.1%	57,531.3	42.8	0.1%	57,509.3	64.8	0.1%
ME 6	32 47 27	2003	Wet	January	--	31,685.2	31,653.9	31.3	0.1%	31,647.0	38.2	0.1%	31,628.5	56.7	0.2%
ME 6	32 47 27	2003	Wet	February	--	20,435.2	20,407.4	27.8	0.1%	20,401.6	33.6	0.2%	20,385.4	49.8	0.2%
ME 6	32 47 27	2003	Wet	March	--	24,160.9	24,135.4	25.5	0.1%	24,129.6	31.3	0.1%	24,114.6	46.3	0.2%
ME 6	32 47 27	2003	Wet	April	--	43,226.9	43,201.4	25.5	0.1%	43,196.8	30.1	0.1%	43,181.7	45.1	0.1%
ME 6	32 47 27	2003	Wet	May	--	12,265.0	12,218.8	46.3	0.4%	12,209.5	55.6	0.5%	12,180.6	84.5	0.7%
ME 6	32 47 27	2003	Wet	June	--	3,177.5	3,118.5	59.0	1.9%	3,107.1	70.5	2.2%	3,072.9	104.6	3.3%
ME 6	32 47 27	2003	Wet	July	--	1,486.8	1,423.5	63.3	4.3%	1,410.9	75.9	5.1%	1,373.7	113.1	7.6%
ME 6	32 47 27	2003	Wet	August	--	772.3	709.9	62.4	8.1%	697.0	75.2	9.7%	657.3	115.0	14.9%
ME 6	32 47 27	2003	Wet	September	Used in Summary Table Analysis	469.3	415.5	53.7	11.5%	404.8	64.5	13.7%	371.4	97.8	20.8%
ME 6	32 47 27	2004	Wet	October	Used in Summary Table Analysis	335.9	290.7	45.2	13.5%	281.5	54.4	16.2%	254.0	81.9	24.4%
ME 6	32 47 27	2004	Wet	November	Used in Summary Table Analysis	5,892.5	5,855.2	37.3	0.6%	5,847.6	44.9	0.8%	5,824.7	67.8	1.2%
ME 6	32 47 27	2004	Wet	December	--	36,702.5	36,669.0	33.6	0.1%	36,662.0	40.5	0.1%	36,642.4	60.2	0.2%
ME 6	32 47 27	2004	Wet	January	--	31,738.4	31,710.6	27.8	0.1%	31,703.7	34.7	0.1%	31,686.3	52.1	0.2%
ME 6	32 47 27	2004	Wet	February	--	38,490.7	38,465.3	25.5	0.1%	38,459.5	31.3	0.1%	38,443.3	47.5	0.1%
ME 6	32 47 27	2004	Wet	March	--	16,568.3	16,545.1	23.1	0.1%	16,539.4	28.9	0.2%	16,525.5	42.8	0.3%
ME 6	32 47 27	2004	Wet	April	--	9,484.7	9,462.0	22.7	0.2%	9,457.4	27.3	0.3%	9,443.5	41.2	0.4%
ME 6	32 47 27	2004	Wet	May	--	3,448.0	3,402.9	45.1	1.3%	3,393.9	54.2	1.6%	3,366.9	81.1	2.4%
ME 6	32 47 27	2004	Wet	June	--	699.8	643.1	56.7	8.1%	631.9	67.9	9.7%	598.8	100.9	14.4%
ME 6	32 47 27	2004	Wet	July	--	366.6	304.5	62.1	16.9%	292.2	74.4	20.3%	255.6	111.0	30.3%
ME 6	32 47 27	2004	Wet	August	--	235.2	176.1	59.1	25.1%	164.3	70.9	30.1%	129.0	106.2	45.2%
ME 6	32 47 27	2004	Wet	September	Used in Summary Table Analysis	171.6	114.8	56.8	33.1%	103.5	68.1	39.7%	69.4	102.2	59.5%
ME 6	32 47 27	2005	Above Normal	October	Used in Summary Table Analysis	7,798.0	7,751.9	46.2	0.6%	7,742.6	55.4	0.7%	7,714.5	83.6	1.1%
ME 6	32 47 27	2005	Above Normal	November	Used in Summary Table Analysis	2,274.7	2,238.3	36.3	1.6%	2,230.9	43.8	1.9%	2,208.6	66.1	2.9%
ME 6	32 47 27	2005	Above Normal	December	--	21,355.3	21,324.1	31.3	0.1%	21,317.1	38.2	0.2%	21,297.5	57.9	0.3%
ME 6	32 47 27	2005	Above Normal	January	--	22,642.4	22,613.4	28.9	0.1%	22,607.6	34.7	0.2%	22,590.3	52.1	0.2%
ME 6	32 47 27	2005	Above Normal	February	--	14,057.9	14,032.4	25.5	0.2%	14,027.8	30.1	0.2%	14,012.7	45.1	0.3%
ME 6	32 47 27	2005	Above Normal	March	--	28,763.9	28,740.7	23.1	0.1%	28,735.0	28.9	0.1%	28,721.1	42.8	0.1%
ME 6	32 47 27	2005	Above Normal	April	--	21,574.1	21,550.9	23.1	0.1%	21,546.3	27.8	0.1%	21,532.4	41.7	0.2%
ME 6	32 47 27	2005	Above Normal	May	--	19,724.5	19,678.2	46.3	0.2%	19,669.0	55.6	0.3%	19,641.2	83.3	0.4%
ME 6	32 47 27	2005	Above Normal	June	--	16,053.2	15,986.1	67.1	0.4%	15,972.2	81.0	0.5%	15,932.9	120.4	0.7%
ME 6	32 47 27	2005	Above Normal	July	--	2,867.6	2,803.9	63.7	2.2%	2,791.8	75.8	2.6%	2,755.7	111.9	3.9%
ME 6	32 47 27	2005	Above Normal	August	--	995.1	936.7	58.4	5.9%	925.1	69.9	7.0%	890.6	104.4	10.5%
ME 6	32 47 27	2005	Above Normal	September	Used in Summary Table Analysis	536.6	484.2	52.4	9.8%	473.7	62.9	11.7%	442.4	94.2	17.6%
ME 6	32 47 27	2006	Wet	October	Used in Summary Table Analysis	648.0	604.7	43.3	6.7%	596.0	52.0	8.0%	569.6	78.4	12.1%
ME 6	32 47 27	2006	Wet	November	Used in Summary Table Analysis	9,457.9	9,423.1	34.7	0.4%	9,416.1	41.8	0.4%	9,394.7	63.2	0.7%
ME 6	32 47 27	2006	Wet	December	--	43,993.1	43,961.8	31.3	0.1%	43,956.0	37.0	0.1%	43,936.3	56.7	0.1%
ME 6	32 47 27	2006	Wet	January	--	46,743.1	46,715.3	27.8	0.1%	46,709.5	33.6	0.1%	46,691.0	52.1	0.1%
ME 6	32 47 27	2006	Wet	February	--	26,809.0	26,784.7	24.3	0.1%	26,780.1	28.9	0.1%	26,765.0	44.0	0.2%
ME 6	32 47 27	2006	Wet	March	--	47,511.6	47,488.4	23.1	0.0%	47,483.8	27.8	0.1%	47,468.8	42.8	0.1%
ME 6	32 47 27	2006	Wet	April	--	30,567.1	30,545.1	22.0	0.1%	30,541.7	25.5	0.1%	30,527.8	39.4	0.1%
ME 6	32 47 27	2006	Wet	May	--	14,288.2	14,260.4	27.8	0.2%	14,254.6	33.6	0.2%	14,237.3	50.9	0.4%
ME 6	32 47 27	2006	Wet	June	--	3,557.6	3,501.6	56.0	1.6%	3,490.6	67.0	1.9%	3,458.3	99.3	2.8%
ME 6	32 47 27	2006	Wet	July	--	1,293.1	1,232.4	60.6	4.7%	1,220.5	72.6	5.6%	1,185.2	107.9	8.3%
ME 6	32 47 27	2006	Wet	August	--	679.2	619.3	59.9	8.8%	607.5	71.7	10.6%	572.0	107.2	15.8%
ME 6	32 47 27	2006	Wet	September	Used in Summary Table Analysis	439.1	385.8	53.3	12.1%	375.2	64.0	14.6%	343.3	95.9	21.8%
ME 6	32 47 27	2007	Above Normal	October	Used in Summary Table Analysis	285.6	241.3	44.3	15.5%	232.4	53.2	18.6%	205.4	80.2	28.1%
ME 6	32 47 27	2007	Above Normal	November	Used in Summary Table Analysis	8,800.6	8,764.1	36.5	0.4%	8,756.7	43.9	0.5%	8,734.3	66.3	0.8%
ME 6	32 47 27	2007	Above Normal	December	--	20,680.6	20,648.1	32.4	0.2%	20,641.2	39.4	0.2%	20,621.5	59.0	0.3%
ME 6	32 47 27	2007	Above Normal	January	--	10,323.1	10,295.3	27.9	0.3%	10,289.6	33.6	0.3%	10,272.2	50.9	0.5%
ME 6	32 47 27	2007	Above Normal	February	--	30,875.0	30,848.4	26.6	0.1%	30,842.6	32.4	0.1%	30,826.4	48.6	0.2%
ME 6	32 47 27	2007	Above Normal	March	--	13,153.9	13,128.5	25.5	0.2%	13,123.8	30.1	0.2%	13,108.8	45.1	0.3%
ME 6	32 47 27	2007	Above Normal	April	--	11,584.5	11,540.3	44.2	0.4%	11,531.4	53.1	0.5%	11,504.7	79.7	0.7%
ME 6	32 47 27	2007	Above Normal	May	--	4,163.1	4,110.2	52.9	1.3%	4,099.5	63.5	1.5%	4,067.9	95.1	2.3%
ME 6	32 47 27	2007	Above Normal	June	--	1,515.7	1,452.3	63.4	4.2%	1,439.7	76.0	5.0%	1,402.5	113.2	7.5%
ME 6	32 47 27	2007	Above Normal	July	--	504.8	440.1	64.7	12.8%	427.2	77.5	15.4%	389.5	115.3	22.8%
ME 6	32 47 27	2007	Above Normal	August	--	233.4	174.4	59.0	25.3%	162.7	70.8	30.3%	126.8	106.7	45.7%
ME 6	32 47 27	2007	Above Normal	September	Used in Summary Table Analysis	161.1	104.7	56.4	35.0%	93.4	67.7	42.0%	59.5	101.6	63.0%
ME 6	32 47 27	2008	Dry	October	Used in Summary Table Analysis	3,484.0	3,436.9	47.1	1.4%	3,427.4	56.6	1.6%	3,398.6	85.4	2.5%
ME 6	32 47 27	2008	Dry	November	Used in Summary Table Analysis	3,322.8	3,286.0	36.8	1.1%	3,278.6	44.2	1.3%	3,255.8	67.0	2.0%
ME 6	32 47 27	2008	Dry	December	--	23,478.0	23,445.6	32.4	0.1%	23,438.7	39.4	0.2%	23,419.0	59.0	0.3%
ME 6	32 47 27	2008	Dry	January	--	37,866.9	37,836.8	30.1	0.1%	37,831.0	35.9	0.1%	37,812.5	54.4	0.1%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 47 27	2008	Dry	February	--	26,351.9	26,326.4	25.5	0.1%	26,321.8	30.1	0.1%	26,305.6	46.3	0.2%
ME 6	32 47 27	2008	Dry	March	--	11,833.3	11,810.2	23.1	0.2%	11,805.6	27.8	0.2%	11,790.5	42.8	0.4%
ME 6	32 47 27	2008	Dry	April	--	9,048.5	9,003.5	45.0	0.5%	8,994.4	54.1	0.6%	8,967.4	81.1	0.9%
ME 6	32 47 27	2008	Dry	May	--	1,359.1	1,311.5	47.7	3.5%	1,302.1	57.1	4.2%	1,274.2	85.0	6.3%
ME 6	32 47 27	2008	Dry	June	--	447.0	378.0	69.1	15.5%	364.4	82.6	18.5%	324.2	122.8	27.5%
ME 6	32 47 27	2008	Dry	July	--	264.8	195.0	69.8	26.4%	181.2	83.6	31.6%	145.1	119.7	45.2%
ME 6	32 47 27	2008	Dry	August	--	188.6	120.2	68.5	36.3%	106.5	82.1	43.5%	65.5	123.1	65.2%
ME 6	32 47 27	2008	Dry	September	Used in Summary Table Analysis	150.1	83.6	66.5	44.3%	70.4	79.7	53.1%	32.0	118.2	78.7%
ME 6	32 47 27	2009	Critical	October	Used in Summary Table Analysis	936.7	883.0	53.7	5.7%	872.3	64.5	6.9%	839.6	97.2	10.4%
ME 6	32 47 27	2009	Critical	November	Used in Summary Table Analysis	5,599.7	5,557.2	42.5	0.8%	5,548.6	51.0	0.9%	5,519.8	79.9	1.4%
ME 6	32 47 27	2009	Critical	December	--	12,348.4	12,311.3	37.0	0.3%	12,304.4	44.0	0.4%	12,281.3	67.1	0.5%
ME 6	32 47 27	2009	Critical	January	--	8,849.9	8,817.2	32.6	0.4%	8,810.5	39.4	0.4%	8,790.2	59.7	0.7%
ME 6	32 47 27	2009	Critical	February	--	22,768.5	22,739.6	28.9	0.1%	22,733.8	34.7	0.2%	22,715.3	53.2	0.2%
ME 6	32 47 27	2009	Critical	March	--	21,236.1	21,210.6	25.5	0.1%	21,204.9	31.3	0.1%	21,188.7	47.5	0.2%
ME 6	32 47 27	2009	Critical	April	--	10,111.5	10,064.2	47.2	0.5%	10,054.9	56.6	0.6%	10,026.4	85.1	0.8%
ME 6	32 47 27	2009	Critical	May	--	15,644.7	15,586.8	57.9	0.4%	15,575.2	69.4	0.4%	15,540.5	104.2	0.7%
ME 6	32 47 27	2009	Critical	June	--	3,170.4	3,096.5	73.8	2.3%	3,082.3	88.1	2.8%	3,039.6	130.8	4.1%
ME 6	32 47 27	2009	Critical	July	--	1,272.7	1,202.2	70.5	5.5%	1,188.3	84.4	6.6%	1,151.8	120.8	9.5%
ME 6	32 47 27	2009	Critical	August	--	679.3	610.3	69.0	10.2%	596.6	82.7	12.2%	558.0	121.3	17.9%
ME 6	32 47 27	2009	Critical	September	Used in Summary Table Analysis	399.7	337.0	62.7	15.7%	324.6	75.2	18.8%	288.3	111.5	27.9%
ME 6	32 47 27	2010	Below Normal	October	Used in Summary Table Analysis	6,104.2	6,049.7	54.5	0.9%	6,038.8	65.4	1.1%	6,004.9	99.3	1.6%
ME 6	32 47 27	2010	Below Normal	November	Used in Summary Table Analysis	8,351.5	8,307.4	44.1	0.5%	8,298.6	52.9	0.6%	8,269.1	82.4	1.0%
ME 6	32 47 27	2010	Below Normal	December	--	12,476.9	12,438.7	38.2	0.3%	12,431.7	45.1	0.4%	12,407.4	69.4	0.6%
ME 6	32 47 27	2010	Below Normal	January	--	36,640.0	36,606.5	33.6	0.1%	36,599.5	40.5	0.1%	36,578.7	61.3	0.2%
ME 6	32 47 27	2010	Below Normal	February	--	27,360.0	27,331.0	28.9	0.1%	27,325.2	34.7	0.1%	27,306.7	53.2	0.2%
ME 6	32 47 27	2010	Below Normal	March	--	28,937.5	28,910.9	26.6	0.1%	28,905.1	32.4	0.1%	28,887.7	49.8	0.2%
ME 6	32 47 27	2010	Below Normal	April	--	40,200.2	40,173.6	26.6	0.1%	40,169.0	31.3	0.1%	40,152.8	47.5	0.1%
ME 6	32 47 27	2010	Below Normal	May	--	20,413.2	20,363.4	49.8	0.2%	20,354.2	59.0	0.3%	20,325.2	88.0	0.4%
ME 6	32 47 27	2010	Below Normal	June	--	9,464.9	9,394.9	70.0	0.7%	9,381.1	83.8	0.9%	9,340.2	124.8	1.3%
ME 6	32 47 27	2010	Below Normal	July	--	1,463.7	1,399.0	64.7	4.4%	1,386.5	77.2	5.3%	1,349.2	114.5	7.8%
ME 6	32 47 27	2010	Below Normal	August	--	581.5	521.3	60.1	10.3%	509.4	72.0	12.4%	474.0	107.5	18.5%
ME 6	32 47 27	2010	Below Normal	September	Used in Summary Table Analysis	664.2	606.3	57.9	8.7%	594.7	69.5	10.5%	560.0	104.2	15.7%
ME 6	32 47 27	2011	Wet	October	Used in Summary Table Analysis	9,726.7	9,681.9	44.8	0.5%	9,672.8	53.9	0.6%	9,645.4	81.4	0.8%
ME 6	32 47 27	2011	Wet	November	Used in Summary Table Analysis	14,325.2	14,289.4	35.9	0.3%	14,281.3	44.0	0.3%	14,259.3	66.0	0.5%
ME 6	32 47 27	2011	Wet	December	--	34,123.8	34,092.6	31.3	0.1%	34,085.6	38.2	0.1%	34,066.0	57.9	0.2%
ME 6	32 47 27	2011	Wet	January	--	14,236.1	14,208.3	27.8	0.2%	14,202.5	33.6	0.2%	14,186.3	49.8	0.3%
ME 6	32 47 27	2011	Wet	February	--	20,847.2	20,822.9	24.3	0.1%	20,817.1	30.1	0.1%	20,800.9	46.3	0.2%
ME 6	32 47 27	2011	Wet	March	--	52,284.7	52,260.4	24.3	0.0%	52,255.8	28.9	0.1%	52,240.7	44.0	0.1%
ME 6	32 47 27	2011	Wet	April	--	24,895.8	24,872.7	23.1	0.1%	24,866.9	28.9	0.1%	24,853.0	42.8	0.2%
ME 6	32 47 27	2011	Wet	May	--	11,429.4	11,383.6	45.8	0.4%	11,374.3	55.1	0.5%	11,346.9	82.5	0.7%
ME 6	32 47 27	2011	Wet	June	--	7,103.5	7,035.6	67.8	1.0%	7,022.2	81.3	1.1%	6,982.5	120.9	1.7%
ME 6	32 47 27	2011	Wet	July	--	1,835.3	1,766.7	68.6	3.7%	1,753.1	82.2	4.5%	1,714.1	121.2	6.6%
ME 6	32 47 27	2011	Wet	August	--	787.6	728.4	59.2	7.5%	716.7	70.9	9.0%	681.5	106.1	13.5%
ME 6	32 47 27	2011	Wet	September	Used in Summary Table Analysis	444.3	389.8	54.5	12.3%	378.9	65.3	14.7%	346.5	97.8	22.0%
ME 6	32 47 27	2012	Below Normal	October	Used in Summary Table Analysis	4,590.7	4,545.3	45.5	1.0%	4,536.1	54.6	1.2%	4,508.1	82.6	1.8%
ME 6	32 47 27	2012	Below Normal	November	Used in Summary Table Analysis	8,335.4	8,298.8	36.6	0.4%	8,291.4	44.0	0.5%	8,268.8	66.7	0.8%
ME 6	32 47 27	2012	Below Normal	December	--	5,227.2	5,195.9	31.3	0.6%	5,189.6	37.6	0.7%	5,170.3	56.9	1.1%
ME 6	32 47 27	2012	Below Normal	January	--	20,392.4	20,363.4	28.9	0.1%	20,357.6	34.7	0.2%	20,340.3	52.1	0.3%
ME 6	32 47 27	2012	Below Normal	February	--	18,292.8	18,267.4	25.5	0.1%	18,261.6	31.3	0.2%	18,245.4	47.5	0.3%
ME 6	32 47 27	2012	Below Normal	March	--	45,750.0	45,724.5	25.5	0.1%	45,719.9	30.1	0.1%	45,703.7	46.3	0.1%
ME 6	32 47 27	2012	Below Normal	April	--	26,976.9	26,953.7	23.1	0.1%	26,949.1	27.8	0.1%	26,934.0	42.8	0.2%
ME 6	32 47 27	2012	Below Normal	May	--	7,511.6	7,466.1	45.5	0.6%	7,456.9	54.6	0.7%	7,430.0	81.6	1.1%
ME 6	32 47 27	2012	Below Normal	June	--	5,562.4	5,493.4	69.0	1.2%	5,479.9	82.5	1.5%	5,439.7	122.7	2.2%
ME 6	32 47 27	2012	Below Normal	July	--	2,253.6	2,187.0	66.6	3.0%	2,173.8	79.7	3.5%	2,134.7	118.9	5.3%
ME 6	32 47 27	2012	Below Normal	August	--	396.9	342.5	54.3	13.7%	331.7	65.1	16.4%	299.3	97.5	24.6%
ME 6	32 47 27	2012	Below Normal	September	Used in Summary Table Analysis	259.5	210.6	49.0	18.9%	200.8	58.7	22.6%	171.6	88.0	33.9%
ME 6	32 47 27	2013	Below Normal	October	Used in Summary Table Analysis	1,945.1	1,901.7	43.4	2.2%	1,893.1	52.1	2.7%	1,866.9	78.2	4.0%
ME 6	32 47 27	2013	Below Normal	November	Used in Summary Table Analysis	14,863.4	14,827.5	35.9	0.2%	14,820.6	42.8	0.3%	14,799.8	63.7	0.4%
ME 6	32 47 27	2013	Below Normal	December	--	60,384.3	60,353.0	31.3	0.1%	60,346.1	38.2	0.1%	60,326.4	57.9	0.1%
ME 6	32 47 27	2013	Below Normal	January	--	22,314.8	22,288.2	26.6	0.1%	22,282.4	32.4	0.1%	22,266.2	48.6	0.2%
ME 6	32 47 27	2013	Below Normal	February	--	8,900.0	8,874.9	25.1	0.3%	8,869.8	30.2	0.3%	8,854.4	45.6	0.5%
ME 6	32 47 27	2013	Below Normal	March	--	10,413.4	10,389.5	24.0	0.2%	10,384.6	28.8	0.3%	10,369.9	43.5	0.4%
ME 6	32 47 27	2013	Below Normal	April	--	8,317.6	8,274.3	43.3	0.5%	8,265.6	52.0	0.6%	8,239.7	77.9	0.9%
ME 6	32 47 27	2013	Below Normal	May	--	4,464.7	4,412.3	52.4	1.2%	4,401.7	63.0	1.4%	4,370.5	94.2	2.1%

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Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 47 27	2013	Below Normal	June	--	2,123.3	2,060.3	63.0	3.0%	2,047.8	75.5	3.6%	2,010.9	112.4	5.3%
ME 6	32 47 27	2013	Below Normal	July	--	725.3	663.3	61.9	8.5%	651.1	74.2	10.2%	615.3	110.0	15.2%
ME 6	32 47 27	2013	Below Normal	August	--	349.5	290.7	58.8	16.8%	279.0	70.6	20.2%	243.3	106.3	30.4%
ME 6	32 47 27	2013	Below Normal	September	Used in Summary Table Analysis	4,836.7	4,775.3	61.3	1.3%	4,763.1	73.6	1.5%	4,726.4	110.3	2.3%
ME 6	32 47 27	2014	Critical	October	Used in Summary Table Analysis	284.6	238.9	45.7	16.1%	229.7	54.9	19.3%	202.7	81.9	28.8%
ME 6	32 47 27	2014	Critical	November	Used in Summary Table Analysis	1,566.0	1,529.1	36.9	2.4%	1,521.5	44.4	2.8%	1,498.7	67.2	4.3%
ME 6	32 47 27	2014	Critical	December	--	1,607.3	1,575.0	32.3	2.0%	1,568.4	38.9	2.4%	1,548.4	58.9	3.7%
ME 6	32 47 27	2014	Critical	January	--	2,850.3	2,821.6	28.7	1.0%	2,815.7	34.6	1.2%	2,797.7	52.7	1.8%
ME 6	32 47 27	2014	Critical	February	--	15,834.5	15,807.9	26.6	0.2%	15,802.1	32.4	0.2%	15,785.9	48.6	0.3%
ME 6	32 47 27	2014	Critical	March	--	31,589.1	31,564.8	24.3	0.1%	31,560.2	28.9	0.1%	31,544.0	45.1	0.1%
ME 6	32 47 27	2014	Critical	April	--	13,025.5	12,979.2	46.3	0.4%	12,969.9	55.6	0.4%	12,941.0	84.5	0.6%
ME 6	32 47 27	2014	Critical	May	--	5,211.1	5,155.6	55.6	1.1%	5,144.6	66.6	1.3%	5,111.1	100.0	1.9%
ME 6	32 47 27	2014	Critical	June	--	1,208.7	1,133.4	75.3	6.2%	1,118.6	90.1	7.5%	1,075.9	132.8	11.0%
ME 6	32 47 27	2014	Critical	July	--	553.8	482.6	71.2	12.9%	468.4	85.3	15.4%	431.0	122.7	22.2%
ME 6	32 47 27	2014	Critical	August	--	357.6	289.0	68.6	19.2%	275.2	82.4	23.0%	236.1	121.4	34.0%
ME 6	32 47 27	2014	Critical	September	Used in Summary Table Analysis	2,599.2	2,531.3	67.9	2.6%	2,517.8	81.4	3.1%	2,477.5	121.6	4.7%
ME 6	32 47 27	2015	Dry	October	Used in Summary Table Analysis	11,452.2	11,398.4	53.8	0.5%	11,387.7	64.5	0.6%	11,355.2	97.0	0.8%
ME 6	32 47 27	2015	Dry	November	Used in Summary Table Analysis	9,132.6	9,091.6	41.1	0.4%	9,083.1	49.5	0.5%	9,054.6	78.0	0.9%
ME 6	32 47 27	2015	Dry	December	--	32,965.3	32,930.6	34.7	0.1%	32,922.5	42.8	0.1%	32,900.5	64.8	0.2%
ME 6	32 47 27	2015	Dry	January	--	14,630.8	14,599.5	31.3	0.2%	14,592.6	38.2	0.3%	14,572.9	57.9	0.4%
ME 6	32 47 27	2015	Dry	February	--	27,372.7	27,344.9	27.8	0.1%	27,339.1	33.6	0.1%	27,320.6	52.1	0.2%
ME 6	32 47 27	2015	Dry	March	--	11,603.0	11,578.7	24.3	0.2%	11,573.8	29.2	0.3%	11,558.3	44.7	0.4%
ME 6	32 47 27	2015	Dry	April	--	8,477.1	8,430.7	46.4	0.5%	8,421.3	55.8	0.7%	8,393.3	83.8	1.0%
ME 6	32 47 27	2015	Dry	May	--	1,512.8	1,458.1	54.7	3.6%	1,447.2	65.6	4.3%	1,415.5	97.3	6.4%
ME 6	32 47 27	2015	Dry	June	--	659.3	589.1	70.2	10.6%	575.3	84.0	12.7%	534.3	125.0	19.0%
ME 6	32 47 27	2015	Dry	July	--	276.0	205.5	70.5	25.5%	191.5	84.5	30.6%	155.0	121.0	43.8%
ME 6	32 47 27	2015	Dry	August	--	175.4	106.5	68.9	39.3%	92.8	82.6	47.1%	54.4	121.0	69.0%
ME 6	32 47 27	2015	Dry	September	Used in Summary Table Analysis	128.6	63.3	65.3	50.8%	49.9	78.7	61.2%	11.0	117.7	91.5%
ME 6	32 47 27	2016	Above Normal	October	Used in Summary Table Analysis	93.6	38.2	55.3	59.1%	27.5	66.1	70.6%	0.1	93.5	99.9%
ME 6	32 47 27	2016	Above Normal	November	Used in Summary Table Analysis	3,948.6	3,905.0	43.6	1.1%	3,896.1	52.5	1.3%	3,864.4	84.3	2.1%
ME 6	32 47 27	2016	Above Normal	December	--	37,028.9	36,989.6	39.4	0.1%	36,981.5	47.5	0.1%	36,957.2	71.8	0.2%
ME 6	32 47 27	2016	Above Normal	January	--	57,741.9	57,707.2	34.7	0.1%	57,699.1	42.8	0.1%	57,677.1	64.8	0.1%
ME 6	32 47 27	2016	Above Normal	February	--	24,336.8	24,309.0	27.8	0.1%	24,302.1	34.7	0.1%	24,284.7	52.1	0.2%
ME 6	32 47 27	2016	Above Normal	March	--	41,975.7	41,947.9	27.8	0.1%	41,943.3	32.4	0.1%	41,925.9	49.8	0.1%
ME 6	32 47 27	2016	Above Normal	April	--	18,592.6	18,568.3	24.3	0.1%	18,563.7	28.9	0.2%	18,547.5	45.1	0.2%
ME 6	32 47 27	2016	Above Normal	May	--	5,235.5	5,206.1	29.4	0.6%	5,200.1	35.4	0.7%	5,181.9	53.6	1.0%
ME 6	32 47 27	2016	Above Normal	June	--	1,519.0	1,465.2	53.8	3.5%	1,455.4	63.5	4.2%	1,427.1	91.9	6.0%
ME 6	32 47 27	2016	Above Normal	July	--	833.7	772.2	61.5	7.4%	760.0	73.7	8.8%	723.9	109.8	13.2%
ME 6	32 47 27	2016	Above Normal	August	--	502.8	441.8	61.0	12.1%	429.6	73.2	14.6%	393.4	109.5	21.8%
ME 6	32 47 27	2016	Above Normal	September	Used in Summary Table Analysis	338.7	281.1	57.6	17.0%	269.4	69.4	20.5%	234.4	104.3	30.8%
ME 6	32 47 27	2017	Wet	October	Used in Summary Table Analysis	18,445.6	18,399.3	46.3	0.3%	18,390.0	55.6	0.3%	18,361.1	84.5	0.5%
ME 6	32 47 27	2017	Wet	November	Used in Summary Table Analysis	19,000.0	18,963.0	37.0	0.2%	18,956.0	44.0	0.2%	18,934.0	66.0	0.3%
ME 6	32 47 27	2017	Wet	December	--	24,385.4	24,354.2	31.3	0.1%	24,347.2	38.2	0.2%	24,327.5	57.9	0.2%
ME 6	32 47 27	2017	Wet	January	--	107,699.1	107,670.1	28.9	0.0%	107,664.4	34.7	0.0%	107,645.8	53.2	0.0%
ME 6	32 47 27	2017	Wet	February	--	82,302.1	82,275.5	26.6	0.0%	82,270.8	31.3	0.0%	82,254.6	47.5	0.1%
ME 6	32 47 27	2017	Wet	March	--	27,419.0	27,394.7	24.3	0.1%	27,390.0	28.9	0.1%	27,375.0	44.0	0.2%
ME 6	32 47 27	2017	Wet	April	--	23,093.8	23,070.6	23.1	0.1%	23,067.1	26.6	0.1%	23,053.2	40.5	0.2%
ME 6	32 47 27	2017	Wet	May	--	6,278.9	6,249.8	29.2	0.5%	6,243.9	35.1	0.6%	6,226.3	52.7	0.8%
ME 6	32 47 27	2017	Wet	June	--	2,138.0	2,082.6	55.3	2.6%	2,071.6	66.3	3.1%	2,039.2	98.7	4.6%
ME 6	32 47 27	2017	Wet	July	--	948.2	886.9	61.3	6.5%	874.8	73.4	7.7%	839.1	109.1	11.5%
ME 6	32 47 27	2017	Wet	August	--	520.5	460.1	60.4	11.6%	448.1	72.4	13.9%	412.3	108.2	20.8%
ME 6	32 47 27	2017	Wet	September	Used in Summary Table Analysis	334.8	278.3	56.5	16.9%	267.0	67.8	20.3%	233.1	101.7	30.4%
ME 6	32 47 27	2018	Above Normal	October	Used in Summary Table Analysis	287.5	241.8	45.7	15.9%	232.5	55.0	19.1%	204.8	82.7	28.7%
ME 6	32 47 27	2018	Above Normal	November	Used in Summary Table Analysis	10,972.7	10,936.0	36.7	0.3%	10,928.6	44.1	0.4%	10,906.1	66.6	0.6%
ME 6	32 47 27	2018	Above Normal	December	--	5,464.9	5,433.9	31.0	0.6%	5,427.5	37.4	0.7%	5,408.3	56.6	1.0%
ME 6	32 47 27	2018	Above Normal	January	--	18,089.1	18,061.3	27.8	0.2%	18,055.6	33.6	0.2%	18,038.2	50.9	0.3%
ME 6	32 47 27	2018	Above Normal	February	--	7,613.5	7,589.0	24.5	0.3%	7,583.9	29.6	0.4%	7,568.5	45.0	0.6%
ME 6	32 47 27	2018	Above Normal	March	--	20,899.3	20,876.2	23.1	0.1%	20,871.5	27.8	0.1%	20,856.5	42.8	0.2%
ME 6	32 47 27	2018	Above Normal	April	--	32,434.0	32,413.2	20.8	0.1%	32,408.6	25.5	0.1%	32,395.8	38.2	0.1%
ME 6	32 47 27	2018	Above Normal	May	--	6,997.2	6,953.9	43.3	0.6%	6,945.4	51.9	0.7%	6,919.1	78.1	1.1%
ME 6	32 47 27	2018	Above Normal	June	--	1,924.4	1,868.1	56.4	2.9%	1,856.9	67.5	3.5%	1,824.2	100.2	5.2%
ME 6	32 47 27	2018	Above Normal	July	--	793.2	731.1	62.1	7.8%	718.7	74.5	9.4%	682.0	111.2	14.0%
ME 6	32 47 27	2018	Above Normal	August	--	454.5	396.0	58.5	12.9%	384.2	70.3	15.5%	349.2	105.3	23.2%
ME 6	32 47 27	2018	Above Normal	September	Used in Summary Table Analysis	311.2	254.5	56.7	18.2%	243.1	68.1	21.9%	209.1	102.1	32.8%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 6	32 47 27	2019	Below Normal	October	Used in Summary Table Analysis	217.1	171.9	45.2	20.8%	162.7	54.4	25.1%	135.2	82.0	37.8%
ME 6	32 47 27	2019	Below Normal	November	Used in Summary Table Analysis	6,743.5	6,706.6	36.9	0.5%	6,699.1	44.4	0.7%	6,676.4	67.1	1.0%
ME 6	32 47 27	2019	Below Normal	December	--	14,866.9	14,835.6	31.3	0.2%	14,828.7	38.2	0.3%	14,809.0	57.9	0.4%
ME 6	32 47 27	2019	Below Normal	January	--	35,625.0	35,596.1	28.9	0.1%	35,590.3	34.7	0.1%	35,572.9	52.1	0.1%
ME 6	32 47 27	2019	Below Normal	February	--	142,349.5	142,326.4	23.1	0.0%	142,326.4	23.1	0.0%	142,303.2	46.3	0.0%
ME 6	32 47 27	2019	Below Normal	March	--	42,539.4	42,516.2	23.1	0.1%	42,511.6	27.8	0.1%	42,497.7	41.7	0.1%
ME 6	32 47 27	2019	Below Normal	April	--	15,334.5	15,312.5	22.0	0.1%	15,307.9	26.6	0.2%	15,295.1	39.4	0.3%
ME 6	32 47 27	2019	Below Normal	May	--	17,248.8	17,202.5	46.3	0.3%	17,193.3	55.6	0.3%	17,165.5	83.3	0.5%
ME 6	32 47 27	2019	Below Normal	June	--	4,244.9	4,185.8	59.1	1.4%	4,174.4	70.5	1.7%	4,141.1	103.8	2.4%
ME 6	32 47 27	2019	Below Normal	July	--	1,375.2	1,313.0	62.3	4.5%	1,300.7	74.5	5.4%	1,264.1	111.1	8.1%
ME 6	32 47 27	2019	Below Normal	August	--	609.9	550.1	59.8	9.8%	538.2	71.7	11.8%	502.8	107.1	17.6%
ME 6	32 47 27	2019	Below Normal	September	Used in Summary Table Analysis	474.5	418.1	56.4	11.9%	406.8	67.7	14.3%	372.9	101.6	21.4%
ME 6	32 47 27	2020	Dry	October	Used in Summary Table Analysis	365.3	321.6	43.6	11.9%	312.8	52.5	14.4%	286.2	79.0	21.6%
ME 6	32 47 27	2020	Dry	November	Used in Summary Table Analysis	336.4	301.5	34.9	10.4%	294.4	42.0	12.5%	273.1	63.3	18.8%
ME 6	32 47 27	2020	Dry	December	--	13,578.7	13,546.3	32.4	0.2%	13,540.5	38.2	0.3%	13,520.8	57.9	0.4%
ME 6	32 47 27	2020	Dry	January	--	22,560.2	22,532.4	27.8	0.1%	22,525.5	34.7	0.2%	22,508.1	52.1	0.2%
ME 6	32 47 27	2020	Dry	February	--	7,425.6	7,400.2	25.3	0.3%	7,395.0	30.6	0.4%	7,379.3	46.3	0.6%
ME 6	32 47 27	2020	Dry	March	--	7,287.7	7,264.0	23.7	0.3%	7,259.1	28.6	0.4%	7,244.4	43.3	0.6%
ME 6	32 47 27	2020	Dry	April	--	5,530.8	5,484.6	46.2	0.8%	5,475.2	55.6	1.0%	5,447.6	83.2	1.5%
ME 6	32 47 27	2020	Dry	May	--	7,438.1	7,382.5	55.6	0.7%	7,371.4	66.7	0.9%	7,338.3	99.8	1.3%
ME 6	32 47 27	2020	Dry	June	--	2,108.4	2,037.7	70.7	3.4%	2,024.1	84.4	4.0%	1,983.7	124.8	5.9%
ME 6	32 47 27	2020	Dry	July	--	805.6	732.9	72.7	9.0%	718.5	87.2	10.8%	680.9	124.7	15.5%
ME 6	32 47 27	2020	Dry	August	--	408.9	336.7	72.2	17.7%	322.4	86.6	21.2%	282.4	126.6	30.9%
ME 6	32 47 27	2020	Dry	September	Used in Summary Table Analysis	258.2	189.7	68.5	26.5%	175.8	82.4	31.9%	135.1	123.0	47.7%
ME 7	32 44 30	2000	Above Normal	October	Used in Summary Table Analysis	838.1	790.3	47.8	5.7%	780.6	57.5	6.9%	751.6	86.5	10.3%
ME 7	32 44 30	2000	Above Normal	November	Used in Summary Table Analysis	12,409.7	12,371.5	38.2	0.3%	12,363.4	46.3	0.4%	12,339.1	70.6	0.6%
ME 7	32 44 30	2000	Above Normal	December	--	10,967.0	10,934.1	32.9	0.3%	10,927.4	39.6	0.4%	10,907.1	60.0	0.5%
ME 7	32 44 30	2000	Above Normal	January	--	29,061.3	29,031.3	30.1	0.1%	29,025.5	35.9	0.1%	29,006.9	54.4	0.2%
ME 7	32 44 30	2000	Above Normal	February	--	37,357.6	37,332.2	25.5	0.1%	37,326.4	31.3	0.1%	37,310.2	47.5	0.1%
ME 7	32 44 30	2000	Above Normal	March	--	18,415.5	18,391.2	24.3	0.1%	18,386.6	28.9	0.2%	18,371.5	44.0	0.2%
ME 7	32 44 30	2000	Above Normal	April	--	12,392.4	12,369.2	23.1	0.2%	12,364.6	27.8	0.2%	12,350.7	41.7	0.3%
ME 7	32 44 30	2000	Above Normal	May	--	7,160.4	7,114.6	45.8	0.6%	7,105.3	55.1	0.8%	7,077.9	82.5	1.2%
ME 7	32 44 30	2000	Above Normal	June	--	2,639.9	2,571.2	68.8	2.6%	2,557.5	82.4	3.1%	2,517.1	122.8	4.7%
ME 7	32 44 30	2000	Above Normal	July	--	1,008.2	943.8	64.3	6.4%	931.1	77.0	7.6%	893.2	114.9	11.4%
ME 7	32 44 30	2000	Above Normal	August	--	539.1	478.0	61.1	11.3%	465.8	73.3	13.6%	429.4	109.7	20.4%
ME 7	32 44 30	2000	Above Normal	September	Used in Summary Table Analysis	310.9	255.5	55.4	17.8%	244.4	66.4	21.4%	211.2	99.7	32.1%
ME 7	32 44 30	2001	Dry	October	Used in Summary Table Analysis	3,887.2	3,840.3	46.9	1.2%	3,830.8	56.4	1.5%	3,802.2	85.0	2.2%
ME 7	32 44 30	2001	Dry	November	Used in Summary Table Analysis	6,236.7	6,199.0	37.7	0.6%	6,191.3	45.4	0.7%	6,168.1	68.6	1.1%
ME 7	32 44 30	2001	Dry	December	--	8,951.4	8,919.0	32.4	0.4%	8,912.4	39.0	0.4%	8,892.4	59.0	0.7%
ME 7	32 44 30	2001	Dry	January	--	13,002.3	12,973.4	28.9	0.2%	12,967.6	34.7	0.3%	12,949.1	53.2	0.4%
ME 7	32 44 30	2001	Dry	February	--	17,606.5	17,581.0	25.5	0.1%	17,575.2	31.3	0.2%	17,559.0	47.5	0.3%
ME 7	32 44 30	2001	Dry	March	--	12,366.9	12,343.8	23.1	0.2%	12,338.0	28.9	0.2%	12,324.1	42.8	0.3%
ME 7	32 44 30	2001	Dry	April	--	11,046.2	10,999.2	47.0	0.4%	10,989.8	56.4	0.5%	10,961.7	84.5	0.8%
ME 7	32 44 30	2001	Dry	May	--	2,642.5	2,586.5	56.0	2.1%	2,575.2	67.2	2.5%	2,541.8	100.7	3.8%
ME 7	32 44 30	2001	Dry	June	--	2,697.9	2,620.5	77.4	2.9%	2,605.3	92.6	3.4%	2,560.6	137.3	5.1%
ME 7	32 44 30	2001	Dry	July	--	728.1	653.2	74.9	10.3%	638.3	89.8	12.3%	599.0	129.1	17.7%
ME 7	32 44 30	2001	Dry	August	--	186.1	112.7	73.4	39.4%	98.0	88.1	47.3%	56.6	129.5	69.6%
ME 7	32 44 30	2001	Dry	September	Used in Summary Table Analysis	109.8	42.8	67.0	61.0%	29.4	80.4	73.2%	0.0	109.8	100.0%
ME 7	32 44 30	2002	Below Normal	October	Used in Summary Table Analysis	280.8	223.3	57.6	20.5%	211.6	69.3	24.7%	176.9	104.0	37.0%
ME 7	32 44 30	2002	Below Normal	November	Used in Summary Table Analysis	12,175.9	12,129.6	46.3	0.4%	12,120.4	55.6	0.5%	12,089.1	86.8	0.7%
ME 7	32 44 30	2002	Below Normal	December	--	36,119.2	36,077.5	41.7	0.1%	36,069.4	49.8	0.1%	36,044.0	75.2	0.2%
ME 7	32 44 30	2002	Below Normal	January	--	31,152.8	31,118.1	34.7	0.1%	31,111.1	41.7	0.1%	31,089.1	63.7	0.2%
ME 7	32 44 30	2002	Below Normal	February	--	24,843.8	24,812.5	31.3	0.1%	24,805.6	38.2	0.2%	24,785.9	57.9	0.2%
ME 7	32 44 30	2002	Below Normal	March	--	17,909.7	17,880.8	28.9	0.2%	17,875.0	34.7	0.2%	17,856.5	53.2	0.3%
ME 7	32 44 30	2002	Below Normal	April	--	9,977.1	9,929.3	47.8	0.5%	9,919.8	57.3	0.6%	9,891.1	86.0	0.9%
ME 7	32 44 30	2002	Below Normal	May	--	3,341.1	3,284.6	56.5	1.7%	3,273.3	67.8	2.0%	3,239.5	101.6	3.0%
ME 7	32 44 30	2002	Below Normal	June	--	867.0	801.9	65.1	7.5%	789.0	78.0	9.0%	750.8	116.2	13.4%
ME 7	32 44 30	2002	Below Normal	July	--	376.3	308.9	67.4	17.9%	295.5	80.8	21.5%	256.4	119.9	31.9%
ME 7	32 44 30	2002	Below Normal	August	--	242.8	178.6	64.2	26.4%	165.8	77.0	31.7%	127.0	115.9	47.7%
ME 7	32 44 30	2002	Below Normal	September	Used in Summary Table Analysis	179.0	117.5	61.6	34.4%	105.2	73.8	41.2%	67.6	111.4	62.2%
ME 7	32 44 30	2003	Wet	October	Used in Summary Table Analysis	143.7	91.9	51.7	36.0%	81.5	62.2	43.3%	50.2	93.5	65.1%
ME 7	32 44 30	2003	Wet	November	Used in Summary Table Analysis	914.7	872.2	42.5	4.7%	863.5	51.2	5.6%	837.4	77.3	8.5%
ME 7	32 44 30	2003	Wet	December	--	57,843.8	57,805.6	38.2	0.1%	57,797.5	46.3	0.1%	57,773.1	70.6	0.1%
ME 7	32 44 30	2003	Wet	January	--	31,739.6	31,707.2	32.4	0.1%	31,700.2	39.4	0.1%	31,679.4	60.2	0.2%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
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Humboldt County Groundwater Sustainability Agency

Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 44 30	2003	Wet	February	--	20,465.3	20,436.3	28.9	0.1%	20,430.6	34.7	0.2%	20,412.0	53.2	0.3%
ME 7	32 44 30	2003	Wet	March	--	24,208.3	24,180.6	27.8	0.1%	24,175.9	32.4	0.1%	24,158.6	49.8	0.2%
ME 7	32 44 30	2003	Wet	April	--	43,338.0	43,312.5	25.5	0.1%	43,307.9	30.1	0.1%	43,291.7	46.3	0.1%
ME 7	32 44 30	2003	Wet	May	--	12,281.3	12,232.6	48.6	0.4%	12,223.4	57.9	0.5%	12,194.4	86.8	0.7%
ME 7	32 44 30	2003	Wet	June	--	3,183.3	3,121.8	61.6	1.9%	3,109.7	73.6	2.3%	3,074.1	109.3	3.4%
ME 7	32 44 30	2003	Wet	July	--	1,493.3	1,426.7	66.6	4.5%	1,413.5	79.7	5.3%	1,374.4	118.9	8.0%
ME 7	32 44 30	2003	Wet	August	--	778.6	713.0	65.5	8.4%	699.5	79.0	10.1%	657.9	120.7	15.5%
ME 7	32 44 30	2003	Wet	September	Used in Summary Table Analysis	475.2	418.1	57.0	12.0%	406.7	68.4	14.4%	371.4	103.8	21.8%
ME 7	32 44 30	2004	Wet	October	Used in Summary Table Analysis	341.6	293.5	48.1	14.1%	283.8	57.9	16.9%	254.5	87.2	25.5%
ME 7	32 44 30	2004	Wet	November	Used in Summary Table Analysis	5,925.5	5,885.5	39.9	0.7%	5,877.4	48.0	0.8%	5,852.8	72.7	1.2%
ME 7	32 44 30	2004	Wet	December	--	36,840.3	36,804.4	35.9	0.1%	36,797.5	42.8	0.1%	36,775.5	64.8	0.2%
ME 7	32 44 30	2004	Wet	January	--	31,831.0	31,800.9	30.1	0.1%	31,795.1	35.9	0.1%	31,776.6	54.4	0.2%
ME 7	32 44 30	2004	Wet	February	--	38,581.0	38,553.2	27.8	0.1%	38,548.6	32.4	0.1%	38,531.3	49.8	0.1%
ME 7	32 44 30	2004	Wet	March	--	16,585.6	16,560.2	25.5	0.2%	16,555.6	30.1	0.2%	16,539.4	46.3	0.3%
ME 7	32 44 30	2004	Wet	April	--	9,498.4	9,475.0	23.4	0.2%	9,470.1	28.2	0.3%	9,455.7	42.7	0.4%
ME 7	32 44 30	2004	Wet	May	--	3,459.7	3,413.4	46.3	1.3%	3,404.3	55.4	1.6%	3,376.6	83.1	2.4%
ME 7	32 44 30	2004	Wet	June	--	704.5	645.2	59.2	8.4%	633.6	70.9	10.1%	599.0	105.5	15.0%
ME 7	32 44 30	2004	Wet	July	--	372.2	307.0	65.2	17.5%	294.1	78.1	21.0%	255.6	116.6	31.3%
ME 7	32 44 30	2004	Wet	August	--	240.6	178.4	62.2	25.9%	166.0	74.6	31.0%	128.8	111.7	46.5%
ME 7	32 44 30	2004	Wet	September	Used in Summary Table Analysis	176.7	116.7	60.0	34.0%	104.7	72.0	40.8%	68.7	108.0	61.1%
ME 7	32 44 30	2005	Above Normal	October	Used in Summary Table Analysis	7,840.0	7,790.9	49.2	0.6%	7,781.0	59.0	0.8%	7,751.0	89.0	1.1%
ME 7	32 44 30	2005	Above Normal	November	Used in Summary Table Analysis	2,282.3	2,243.6	38.7	1.7%	2,235.8	46.5	2.0%	2,211.9	70.4	3.1%
ME 7	32 44 30	2005	Above Normal	December	--	21,471.1	21,437.5	33.6	0.2%	21,430.6	40.5	0.2%	21,409.7	61.3	0.3%
ME 7	32 44 30	2005	Above Normal	January	--	22,732.6	22,702.5	30.1	0.1%	22,696.8	35.9	0.2%	22,678.2	54.4	0.2%
ME 7	32 44 30	2005	Above Normal	February	--	14,075.2	14,049.8	25.5	0.2%	14,044.0	31.3	0.2%	14,027.8	47.5	0.3%
ME 7	32 44 30	2005	Above Normal	March	--	28,833.3	28,809.0	24.3	0.1%	28,804.4	28.9	0.1%	28,789.4	44.0	0.2%
ME 7	32 44 30	2005	Above Normal	April	--	21,619.2	21,596.1	23.1	0.1%	21,591.4	27.8	0.1%	21,577.5	41.7	0.2%
ME 7	32 44 30	2005	Above Normal	May	--	19,778.9	19,731.5	47.5	0.2%	19,722.2	56.7	0.3%	19,694.4	84.5	0.4%
ME 7	32 44 30	2005	Above Normal	June	--	16,118.1	16,047.5	70.6	0.4%	16,033.6	84.5	0.5%	15,993.1	125.0	0.8%
ME 7	32 44 30	2005	Above Normal	July	--	2,870.5	2,803.9	66.6	2.3%	2,791.2	79.3	2.8%	2,753.2	117.2	4.1%
ME 7	32 44 30	2005	Above Normal	August	--	1,001.3	940.0	61.3	6.1%	928.0	73.4	7.3%	891.7	109.6	10.9%
ME 7	32 44 30	2005	Above Normal	September	Used in Summary Table Analysis	542.8	487.4	55.4	10.2%	476.4	66.4	12.2%	443.3	99.5	18.3%
ME 7	32 44 30	2006	Wet	October	Used in Summary Table Analysis	654.7	608.7	46.0	7.0%	599.5	55.3	8.4%	571.4	83.3	12.7%
ME 7	32 44 30	2006	Wet	November	Used in Summary Table Analysis	9,512.5	9,475.6	36.9	0.4%	9,468.1	44.4	0.5%	9,445.3	67.2	0.7%
ME 7	32 44 30	2006	Wet	December	--	44,165.5	44,133.1	32.4	0.1%	44,126.2	39.4	0.1%	44,105.3	60.2	0.1%
ME 7	32 44 30	2006	Wet	January	--	46,898.1	46,868.1	30.1	0.1%	46,862.3	35.9	0.1%	46,843.8	54.4	0.1%
ME 7	32 44 30	2006	Wet	February	--	26,876.2	26,850.7	25.5	0.1%	26,846.1	30.1	0.1%	26,829.9	46.3	0.2%
ME 7	32 44 30	2006	Wet	March	--	47,635.4	47,611.1	24.3	0.1%	47,606.5	28.9	0.1%	47,591.4	44.0	0.1%
ME 7	32 44 30	2006	Wet	April	--	30,615.7	30,593.8	22.0	0.1%	30,589.1	26.6	0.1%	30,576.4	39.4	0.1%
ME 7	32 44 30	2006	Wet	May	--	14,317.1	14,288.2	28.9	0.2%	14,282.4	34.7	0.2%	14,265.0	52.1	0.4%
ME 7	32 44 30	2006	Wet	June	--	3,563.0	3,505.0	58.0	1.6%	3,493.6	69.3	1.9%	3,460.0	103.0	2.9%
ME 7	32 44 30	2006	Wet	July	--	1,299.9	1,236.3	63.5	4.9%	1,223.8	76.0	5.8%	1,186.8	113.1	8.7%
ME 7	32 44 30	2006	Wet	August	--	686.1	623.1	63.0	9.2%	610.6	75.5	11.0%	573.3	112.9	16.5%
ME 7	32 44 30	2006	Wet	September	Used in Summary Table Analysis	445.6	389.1	56.5	12.7%	377.8	67.8	15.2%	344.0	101.6	22.8%
ME 7	32 44 30	2007	Above Normal	October	Used in Summary Table Analysis	291.4	244.2	47.2	16.2%	234.7	56.7	19.5%	205.9	85.5	29.3%
ME 7	32 44 30	2007	Above Normal	November	Used in Summary Table Analysis	8,848.8	8,809.8	39.0	0.4%	8,801.9	47.0	0.5%	8,777.8	71.1	0.8%
ME 7	32 44 30	2007	Above Normal	December	--	20,775.5	20,740.7	34.7	0.2%	20,733.8	41.7	0.2%	20,713.0	62.5	0.3%
ME 7	32 44 30	2007	Above Normal	January	--	10,349.2	10,319.8	29.4	0.3%	10,313.8	35.4	0.3%	10,295.4	53.8	0.5%
ME 7	32 44 30	2007	Above Normal	February	--	30,981.5	30,953.7	27.8	0.1%	30,947.9	33.6	0.1%	30,930.6	50.9	0.2%
ME 7	32 44 30	2007	Above Normal	March	--	13,172.5	13,147.0	25.5	0.2%	13,142.4	30.1	0.2%	13,126.2	46.3	0.4%
ME 7	32 44 30	2007	Above Normal	April	--	11,604.2	11,558.3	45.8	0.4%	11,549.2	55.0	0.5%	11,521.9	82.3	0.7%
ME 7	32 44 30	2007	Above Normal	May	--	4,172.8	4,118.4	54.4	1.3%	4,107.6	65.2	1.6%	4,075.0	97.8	2.3%
ME 7	32 44 30	2007	Above Normal	June	--	1,523.6	1,457.3	66.3	4.4%	1,444.2	79.4	5.2%	1,405.3	118.3	7.8%
ME 7	32 44 30	2007	Above Normal	July	--	509.6	441.8	67.8	13.3%	428.4	81.3	15.9%	388.6	121.0	23.7%
ME 7	32 44 30	2007	Above Normal	August	--	238.9	176.8	62.1	26.0%	164.5	74.4	31.2%	126.7	112.2	47.0%
ME 7	32 44 30	2007	Above Normal	September	Used in Summary Table Analysis	166.6	106.9	59.6	35.8%	95.1	71.5	42.9%	59.2	107.3	64.4%
ME 7	32 44 30	2008	Dry	October	Used in Summary Table Analysis	3,503.2	3,453.1	50.1	1.4%	3,443.1	60.2	1.7%	3,412.4	90.9	2.6%
ME 7	32 44 30	2008	Dry	November	Used in Summary Table Analysis	3,341.0	3,301.9	39.1	1.2%	3,294.0	47.0	1.4%	3,269.6	71.4	2.1%
ME 7	32 44 30	2008	Dry	December	--	23,601.9	23,567.1	34.7	0.1%	23,560.2	41.7	0.2%	23,539.4	62.5	0.3%
ME 7	32 44 30	2008	Dry	January	--	37,985.0	37,953.7	31.3	0.1%	37,946.8	38.2	0.1%	37,928.2	56.7	0.1%
ME 7	32 44 30	2008	Dry	February	--	26,380.8	26,354.2	26.6	0.1%	26,349.5	31.3	0.1%	26,332.2	48.6	0.2%
ME 7	32 44 30	2008	Dry	March	--	11,847.2	11,822.9	24.3	0.2%	11,818.3	28.9	0.2%	11,803.2	44.0	0.4%
ME 7	32 44 30	2008	Dry	April	--	9,061.3	9,015.2	46.2	0.5%	9,006.0	55.3	0.6%	8,978.2	83.1	0.9%
ME 7	32 44 30	2008	Dry	May	--	1,360.6	1,311.3	49.3	3.6%	1,301.7	58.9	4.3%	1,272.8	87.8	6.5%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 44 30	2008	Dry	June	--	452.1	379.7	72.4	16.0%	365.5	86.6	19.2%	323.5	128.7	28.5%
ME 7	32 44 30	2008	Dry	July	--	269.7	196.0	73.7	27.3%	181.5	88.2	32.7%	143.1	126.6	47.0%
ME 7	32 44 30	2008	Dry	August	--	193.7	121.3	72.4	37.4%	106.9	86.8	44.8%	63.6	130.1	67.2%
ME 7	32 44 30	2008	Dry	September	Used in Summary Table Analysis	155.1	84.4	70.6	45.6%	70.4	84.7	54.6%	29.6	125.5	80.9%
ME 7	32 44 30	2009	Critical	October	Used in Summary Table Analysis	942.9	885.3	57.6	6.1%	873.8	69.1	7.3%	838.7	104.2	11.0%
ME 7	32 44 30	2009	Critical	November	Used in Summary Table Analysis	5,631.8	5,586.2	45.6	0.8%	5,577.0	54.9	1.0%	5,546.2	85.6	1.5%
ME 7	32 44 30	2009	Critical	December	--	12,412.0	12,373.8	38.2	0.3%	12,365.7	46.3	0.4%	12,341.4	70.6	0.6%
ME 7	32 44 30	2009	Critical	January	--	8,869.7	8,835.2	34.5	0.4%	8,828.0	41.7	0.5%	8,806.4	63.3	0.7%
ME 7	32 44 30	2009	Critical	February	--	22,822.9	22,792.8	30.1	0.1%	22,785.9	37.0	0.2%	22,767.4	55.6	0.2%
ME 7	32 44 30	2009	Critical	March	--	21,276.6	21,250.0	26.6	0.1%	21,244.2	32.4	0.2%	21,226.9	49.8	0.2%
ME 7	32 44 30	2009	Critical	April	--	10,117.9	10,069.4	48.5	0.5%	10,059.7	58.2	0.6%	10,030.4	87.5	0.9%
ME 7	32 44 30	2009	Critical	May	--	15,666.7	15,607.6	59.0	0.4%	15,596.1	70.6	0.5%	15,560.2	106.5	0.7%
ME 7	32 44 30	2009	Critical	June	--	3,175.3	3,098.1	77.2	2.4%	3,083.2	92.1	2.9%	3,038.5	136.8	4.3%
ME 7	32 44 30	2009	Critical	July	--	1,278.0	1,203.6	74.4	5.8%	1,188.9	89.1	7.0%	1,150.1	127.9	10.0%
ME 7	32 44 30	2009	Critical	August	--	684.8	611.9	72.9	10.6%	597.4	87.4	12.8%	556.5	128.3	18.7%
ME 7	32 44 30	2009	Critical	September	Used in Summary Table Analysis	405.0	338.2	66.8	16.5%	324.9	80.1	19.8%	286.2	118.8	29.3%
ME 7	32 44 30	2010	Below Normal	October	Used in Summary Table Analysis	6,111.3	6,053.1	58.2	1.0%	6,041.4	69.9	1.1%	6,005.2	106.1	1.7%
ME 7	32 44 30	2010	Below Normal	November	Used in Summary Table Analysis	8,374.1	8,326.7	47.3	0.6%	8,317.2	56.8	0.7%	8,285.6	88.4	1.1%
ME 7	32 44 30	2010	Below Normal	December	--	12,519.7	12,480.3	39.4	0.3%	12,471.1	48.6	0.4%	12,445.6	74.1	0.6%
ME 7	32 44 30	2010	Below Normal	January	--	36,780.1	36,743.1	37.0	0.1%	36,736.1	44.0	0.1%	36,713.0	67.1	0.2%
ME 7	32 44 30	2010	Below Normal	February	--	27,400.5	27,369.2	31.3	0.1%	27,363.4	37.0	0.1%	27,343.8	56.7	0.2%
ME 7	32 44 30	2010	Below Normal	March	--	28,973.4	28,944.4	28.9	0.1%	28,938.7	34.7	0.1%	28,921.3	52.1	0.2%
ME 7	32 44 30	2010	Below Normal	April	--	40,265.0	40,237.3	27.8	0.1%	40,231.5	33.6	0.1%	40,215.3	49.8	0.1%
ME 7	32 44 30	2010	Below Normal	May	--	20,461.8	20,412.0	49.8	0.2%	20,401.6	60.2	0.3%	20,372.7	89.1	0.4%
ME 7	32 44 30	2010	Below Normal	June	--	9,505.1	9,432.4	72.7	0.8%	9,418.2	86.9	0.9%	9,375.5	129.6	1.4%
ME 7	32 44 30	2010	Below Normal	July	--	1,468.8	1,400.9	67.8	4.6%	1,387.7	81.0	5.5%	1,348.6	120.1	8.2%
ME 7	32 44 30	2010	Below Normal	August	--	587.9	524.8	63.1	10.7%	512.3	75.6	12.9%	475.0	112.9	19.2%
ME 7	32 44 30	2010	Below Normal	September	Used in Summary Table Analysis	670.8	609.8	61.0	9.1%	597.5	73.3	10.9%	561.0	109.8	16.4%
ME 7	32 44 30	2011	Wet	October	Used in Summary Table Analysis	9,759.8	9,712.5	47.3	0.5%	9,702.8	57.1	0.6%	9,673.7	86.1	0.9%
ME 7	32 44 30	2011	Wet	November	Used in Summary Table Analysis	14,361.1	14,322.9	38.2	0.3%	14,316.0	45.1	0.3%	14,291.7	69.4	0.5%
ME 7	32 44 30	2011	Wet	December	--	34,265.0	34,232.6	32.4	0.1%	34,224.5	40.5	0.1%	34,203.7	61.3	0.2%
ME 7	32 44 30	2011	Wet	January	--	14,262.7	14,235.0	27.8	0.2%	14,229.2	33.6	0.2%	14,211.8	50.9	0.4%
ME 7	32 44 30	2011	Wet	February	--	20,876.2	20,849.5	26.6	0.1%	20,843.8	32.4	0.2%	20,827.5	48.6	0.2%
ME 7	32 44 30	2011	Wet	March	--	52,378.5	52,353.0	25.5	0.0%	52,348.4	30.1	0.1%	52,332.2	46.3	0.1%
ME 7	32 44 30	2011	Wet	April	--	24,928.2	24,903.9	24.3	0.1%	24,899.3	28.9	0.1%	24,884.3	44.0	0.2%
ME 7	32 44 30	2011	Wet	May	--	11,446.3	11,399.7	46.6	0.4%	11,390.3	56.0	0.5%	11,362.3	84.0	0.7%
ME 7	32 44 30	2011	Wet	June	--	7,120.8	7,050.7	70.1	1.0%	7,036.8	84.0	1.2%	6,995.6	125.2	1.8%
ME 7	32 44 30	2011	Wet	July	--	1,839.4	1,767.9	71.4	3.9%	1,753.8	85.5	4.7%	1,713.2	126.2	6.9%
ME 7	32 44 30	2011	Wet	August	--	793.3	731.4	61.9	7.8%	719.1	74.1	9.3%	682.4	110.9	14.0%
ME 7	32 44 30	2011	Wet	September	Used in Summary Table Analysis	450.0	392.5	57.5	12.8%	381.0	69.0	15.3%	346.7	103.3	22.9%
ME 7	32 44 30	2012	Below Normal	October	Used in Summary Table Analysis	4,609.0	4,561.0	48.0	1.0%	4,551.3	57.8	1.3%	4,521.6	87.4	1.9%
ME 7	32 44 30	2012	Below Normal	November	Used in Summary Table Analysis	8,369.4	8,330.8	38.7	0.5%	8,322.8	46.6	0.6%	8,298.8	70.6	0.8%
ME 7	32 44 30	2012	Below Normal	December	--	5,243.3	5,210.5	32.8	0.6%	5,203.8	39.5	0.8%	5,183.6	59.7	1.1%
ME 7	32 44 30	2012	Below Normal	January	--	20,485.0	20,454.9	30.1	0.1%	20,449.1	35.9	0.2%	20,430.6	54.4	0.3%
ME 7	32 44 30	2012	Below Normal	February	--	18,320.6	18,294.0	26.6	0.1%	18,288.2	32.4	0.2%	18,272.0	48.6	0.3%
ME 7	32 44 30	2012	Below Normal	March	--	45,858.8	45,832.2	26.6	0.1%	45,827.5	31.3	0.1%	45,811.3	47.5	0.1%
ME 7	32 44 30	2012	Below Normal	April	--	27,016.2	26,993.1	23.1	0.1%	26,987.3	28.9	0.1%	26,972.2	44.0	0.2%
ME 7	32 44 30	2012	Below Normal	May	--	7,522.5	7,475.9	46.5	0.6%	7,466.7	55.8	0.7%	7,439.0	83.4	1.1%
ME 7	32 44 30	2012	Below Normal	June	--	5,579.7	5,508.2	71.5	1.3%	5,494.2	85.5	1.5%	5,452.7	127.1	2.3%
ME 7	32 44 30	2012	Below Normal	July	--	2,265.3	2,195.8	69.4	3.1%	2,182.1	83.2	3.7%	2,141.2	124.1	5.5%
ME 7	32 44 30	2012	Below Normal	August	--	401.7	344.7	57.0	14.2%	333.3	68.3	17.0%	299.3	102.4	25.5%
ME 7	32 44 30	2012	Below Normal	September	Used in Summary Table Analysis	265.1	213.4	51.7	19.5%	203.0	62.0	23.4%	172.1	93.0	35.1%
ME 7	32 44 30	2013	Below Normal	October	Used in Summary Table Analysis	1,958.0	1,912.2	45.8	2.3%	1,902.9	55.1	2.8%	1,875.2	82.8	4.2%
ME 7	32 44 30	2013	Below Normal	November	Used in Summary Table Analysis	14,923.6	14,886.6	37.0	0.2%	14,878.5	45.1	0.3%	14,856.5	67.1	0.4%
ME 7	32 44 30	2013	Below Normal	December	--	60,516.2	60,482.6	33.6	0.1%	60,475.7	40.5	0.1%	60,454.9	61.3	0.1%
ME 7	32 44 30	2013	Below Normal	January	--	22,351.9	22,325.2	26.6	0.1%	22,319.4	32.4	0.1%	22,302.1	49.8	0.2%
ME 7	32 44 30	2013	Below Normal	February	--	8,919.6	8,893.6	25.9	0.3%	8,888.3	31.3	0.4%	8,872.5	47.1	0.5%
ME 7	32 44 30	2013	Below Normal	March	--	10,442.9	10,418.2	24.8	0.2%	10,413.1	29.9	0.3%	10,397.8	45.1	0.4%
ME 7	32 44 30	2013	Below Normal	April	--	8,328.1	8,284.0	44.1	0.5%	8,275.2	52.9	0.6%	8,248.7	79.4	1.0%
ME 7	32 44 30	2013	Below Normal	May	--	4,477.8	4,424.0	53.8	1.2%	4,413.2	64.6	1.4%	4,381.0	96.8	2.2%
ME 7	32 44 30	2013	Below Normal	June	--	2,129.5	2,063.7	65.9	3.1%	2,050.7	78.8	3.7%	2,012.2	117.4	5.5%
ME 7	32 44 30	2013	Below Normal	July	--	729.5	664.5	65.0	8.9%	651.6	77.9	10.7%	614.0	115.5	15.8%
ME 7	32 44 30	2013	Below Normal	August	--	354.6	292.8	61.8	17.4%	280.4	74.2	20.9%	243.0	111.6	31.5%
ME 7	32 44 30	2013	Below Normal	September	Used in Summary Table Analysis	4,855.3	4,790.9	64.5	1.3%	4,778.0	77.3	1.6%	4,739.4	116.0	2.4%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 44 30	2014	Critical	October	Used in Summary Table Analysis	287.4	239.0	48.4	16.8%	229.2	58.2	20.2%	200.5	86.8	30.2%
ME 7	32 44 30	2014	Critical	November	Used in Summary Table Analysis	1,577.1	1,538.0	39.1	2.5%	1,530.1	47.0	3.0%	1,505.9	71.2	4.5%
ME 7	32 44 30	2014	Critical	December	--	1,614.8	1,580.9	33.9	2.1%	1,574.0	40.9	2.5%	1,552.7	62.2	3.8%
ME 7	32 44 30	2014	Critical	January	--	2,861.7	2,831.6	30.1	1.1%	2,825.5	36.2	1.3%	2,806.3	55.4	1.9%
ME 7	32 44 30	2014	Critical	February	--	15,862.3	15,835.6	26.6	0.2%	15,829.9	32.4	0.2%	15,812.5	49.8	0.3%
ME 7	32 44 30	2014	Critical	March	--	31,625.0	31,599.5	25.5	0.1%	31,593.8	31.3	0.1%	31,577.5	47.5	0.2%
ME 7	32 44 30	2014	Critical	April	--	13,038.2	12,990.7	47.5	0.4%	12,981.5	56.7	0.4%	12,952.5	85.6	0.7%
ME 7	32 44 30	2014	Critical	May	--	5,220.3	5,163.2	57.1	1.1%	5,151.9	68.4	1.3%	5,117.5	102.8	2.0%
ME 7	32 44 30	2014	Critical	June	--	1,214.0	1,135.4	78.6	6.5%	1,120.0	94.0	7.7%	1,075.4	138.6	11.4%
ME 7	32 44 30	2014	Critical	July	--	558.2	483.4	74.8	13.4%	468.5	89.7	16.1%	428.8	129.4	23.2%
ME 7	32 44 30	2014	Critical	August	--	362.6	290.5	72.2	19.9%	275.9	86.7	23.9%	234.6	128.1	35.3%
ME 7	32 44 30	2014	Critical	September	Used in Summary Table Analysis	2,609.6	2,537.8	71.8	2.7%	2,523.6	86.0	3.3%	2,480.9	128.7	4.9%
ME 7	32 44 30	2015	Dry	October	Used in Summary Table Analysis	11,483.8	11,426.5	57.3	0.5%	11,415.2	68.6	0.6%	11,380.3	103.5	0.9%
ME 7	32 44 30	2015	Dry	November	Used in Summary Table Analysis	9,164.8	9,121.2	43.6	0.5%	9,112.3	52.5	0.6%	9,081.9	82.9	0.9%
ME 7	32 44 30	2015	Dry	December	--	33,081.0	33,044.0	37.0	0.1%	33,035.9	45.1	0.1%	33,011.6	69.4	0.2%
ME 7	32 44 30	2015	Dry	January	--	14,648.1	14,615.7	32.4	0.2%	14,608.8	39.4	0.3%	14,588.0	60.2	0.4%
ME 7	32 44 30	2015	Dry	February	--	27,419.0	27,390.0	28.9	0.1%	27,384.3	34.7	0.1%	27,365.7	53.2	0.2%
ME 7	32 44 30	2015	Dry	March	--	11,615.7	11,590.3	25.5	0.2%	11,584.5	31.3	0.3%	11,568.5	47.2	0.4%
ME 7	32 44 30	2015	Dry	April	--	8,508.4	8,461.0	47.5	0.6%	8,451.5	56.9	0.7%	8,422.8	85.6	1.0%
ME 7	32 44 30	2015	Dry	May	--	1,516.0	1,459.6	56.4	3.7%	1,448.4	67.6	4.5%	1,415.6	100.3	6.6%
ME 7	32 44 30	2015	Dry	June	--	663.5	590.0	73.5	11.1%	575.5	88.0	13.3%	532.6	130.9	19.7%
ME 7	32 44 30	2015	Dry	July	--	280.4	206.0	74.4	26.5%	191.2	89.1	31.8%	152.3	128.0	45.7%
ME 7	32 44 30	2015	Dry	August	--	180.3	107.6	72.7	40.3%	93.1	87.3	48.4%	52.3	128.0	71.0%
ME 7	32 44 30	2015	Dry	September	Used in Summary Table Analysis	133.2	63.9	69.3	52.0%	49.7	83.6	62.7%	8.3	124.9	93.8%
ME 7	32 44 30	2016	Above Normal	October	Used in Summary Table Analysis	98.0	39.0	58.9	60.2%	27.5	70.4	71.9%	0.0	98.0	100.0%
ME 7	32 44 30	2016	Above Normal	November	Used in Summary Table Analysis	3,977.7	3,931.0	46.6	1.2%	3,921.3	56.4	1.4%	3,887.4	90.3	2.3%
ME 7	32 44 30	2016	Above Normal	December	--	37,164.4	37,123.8	40.5	0.1%	37,114.6	49.8	0.1%	37,088.0	76.4	0.2%
ME 7	32 44 30	2016	Above Normal	January	--	57,880.8	57,844.9	35.9	0.1%	57,836.8	44.0	0.1%	57,813.7	67.1	0.1%
ME 7	32 44 30	2016	Above Normal	February	--	24,360.0	24,329.9	30.1	0.1%	24,324.1	35.9	0.1%	24,305.6	54.4	0.2%
ME 7	32 44 30	2016	Above Normal	March	--	42,042.8	42,013.9	28.9	0.1%	42,008.1	34.7	0.1%	41,990.7	52.1	0.1%
ME 7	32 44 30	2016	Above Normal	April	--	18,611.1	18,585.6	25.5	0.1%	18,581.0	30.1	0.2%	18,564.8	46.3	0.2%
ME 7	32 44 30	2016	Above Normal	May	--	5,243.9	5,213.5	30.3	0.6%	5,207.3	36.6	0.7%	5,188.5	55.3	1.1%
ME 7	32 44 30	2016	Above Normal	June	--	1,524.3	1,468.1	56.3	3.7%	1,458.0	66.3	4.4%	1,428.1	96.2	6.3%
ME 7	32 44 30	2016	Above Normal	July	--	839.4	774.8	64.5	7.7%	762.0	77.4	9.2%	724.0	115.4	13.7%
ME 7	32 44 30	2016	Above Normal	August	--	508.6	444.3	64.4	12.7%	431.4	77.2	15.2%	393.1	115.5	22.7%
ME 7	32 44 30	2016	Above Normal	September	Used in Summary Table Analysis	344.3	283.3	61.0	17.7%	270.9	73.4	21.3%	233.9	110.4	32.1%
ME 7	32 44 30	2017	Wet	October	Used in Summary Table Analysis	18,501.2	18,451.4	49.8	0.3%	18,441.0	60.2	0.3%	18,410.9	90.3	0.5%
ME 7	32 44 30	2017	Wet	November	Used in Summary Table Analysis	19,059.0	19,020.8	38.2	0.2%	19,012.7	46.3	0.2%	18,988.4	70.6	0.4%
ME 7	32 44 30	2017	Wet	December	--	24,476.9	24,443.3	33.6	0.1%	24,436.3	40.5	0.2%	24,415.5	61.3	0.3%
ME 7	32 44 30	2017	Wet	January	--	107,964.1	107,932.9	31.3	0.0%	107,927.1	37.0	0.0%	107,907.4	56.7	0.1%
ME 7	32 44 30	2017	Wet	February	--	82,456.0	82,429.4	26.6	0.0%	82,423.6	32.4	0.0%	82,406.3	49.8	0.1%
ME 7	32 44 30	2017	Wet	March	--	27,468.8	27,443.3	25.5	0.1%	27,437.5	31.3	0.1%	27,422.5	46.3	0.2%
ME 7	32 44 30	2017	Wet	April	--	23,147.0	23,123.8	23.1	0.1%	23,119.2	27.8	0.1%	23,105.3	41.7	0.2%
ME 7	32 44 30	2017	Wet	May	--	6,282.5	6,252.5	30.0	0.5%	6,246.5	36.0	0.6%	6,228.2	54.3	0.9%
ME 7	32 44 30	2017	Wet	June	--	2,147.3	2,089.8	57.5	2.7%	2,078.5	68.9	3.2%	2,044.8	102.5	4.8%
ME 7	32 44 30	2017	Wet	July	--	955.1	890.8	64.3	6.7%	878.2	76.9	8.1%	840.7	114.4	12.0%
ME 7	32 44 30	2017	Wet	August	--	527.3	463.9	63.4	12.0%	451.2	76.1	14.4%	413.6	113.7	21.6%
ME 7	32 44 30	2017	Wet	September	Used in Summary Table Analysis	340.9	281.3	59.6	17.5%	269.3	71.6	21.0%	233.5	107.4	31.5%
ME 7	32 44 30	2018	Above Normal	October	Used in Summary Table Analysis	293.5	244.9	48.6	16.6%	235.1	58.4	19.9%	205.6	87.9	29.9%
ME 7	32 44 30	2018	Above Normal	November	Used in Summary Table Analysis	11,035.4	10,996.3	39.1	0.4%	10,988.3	47.1	0.4%	10,964.2	71.2	0.6%
ME 7	32 44 30	2018	Above Normal	December	--	5,472.5	5,439.5	33.0	0.6%	5,432.6	39.8	0.7%	5,412.2	60.3	1.1%
ME 7	32 44 30	2018	Above Normal	January	--	18,195.6	18,165.5	30.1	0.2%	18,159.7	35.9	0.2%	18,141.2	54.4	0.3%
ME 7	32 44 30	2018	Above Normal	February	--	7,620.3	7,594.3	25.9	0.3%	7,589.0	31.3	0.4%	7,572.9	47.3	0.6%
ME 7	32 44 30	2018	Above Normal	March	--	20,968.8	20,944.4	24.3	0.1%	20,938.7	30.1	0.1%	20,923.6	45.1	0.2%
ME 7	32 44 30	2018	Above Normal	April	--	32,513.9	32,491.9	22.0	0.1%	32,487.3	26.6	0.1%	32,473.4	40.5	0.1%
ME 7	32 44 30	2018	Above Normal	May	--	7,001.3	6,956.9	44.3	0.6%	6,948.1	53.1	0.8%	6,921.2	80.1	1.1%
ME 7	32 44 30	2018	Above Normal	June	--	1,929.7	1,870.9	58.8	3.0%	1,859.4	70.4	3.6%	1,825.1	104.6	5.4%
ME 7	32 44 30	2018	Above Normal	July	--	799.2	733.9	65.2	8.2%	720.9	78.3	9.8%	682.3	116.9	14.6%
ME 7	32 44 30	2018	Above Normal	August	--	460.5	398.9	61.6	13.4%	386.5	74.0	16.1%	349.5	111.0	24.1%
ME 7	32 44 30	2018	Above Normal	September	Used in Summary Table Analysis	316.9	257.0	59.9	18.9%	244.9	72.0	22.7%	208.9	108.0	34.1%
ME 7	32 44 30	2019	Below Normal	October	Used in Summary Table Analysis	222.1	173.9	48.2	21.7%	164.1	58.0	26.1%	134.8	87.4	39.3%
ME 7	32 44 30	2019	Below Normal	November	Used in Summary Table Analysis	6,785.6	6,746.2	39.5	0.6%	6,738.1	47.6	0.7%	6,713.8	71.9	1.1%
ME 7	32 44 30	2019	Below Normal	December	--	14,936.3	14,902.8	33.6	0.2%	14,895.8	40.5	0.3%	14,875.0	61.3	0.4%
ME 7	32 44 30	2019	Below Normal	January	--	35,761.6	35,731.5	30.1	0.1%	35,725.7	35.9	0.1%	35,707.2	54.4	0.2%

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Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
							Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 44 30	2019	Below Normal	February	--	142,500.0	142,465.3	34.7	0.0%	142,465.3	34.7	0.0%	142,442.1	57.9	0.0%
ME 7	32 44 30	2019	Below Normal	March	--	42,613.4	42,589.1	24.3	0.1%	42,584.5	28.9	0.1%	42,569.4	44.0	0.1%
ME 7	32 44 30	2019	Below Normal	April	--	15,356.5	15,333.3	23.1	0.2%	15,328.7	27.8	0.2%	15,316.0	40.5	0.3%
ME 7	32 44 30	2019	Below Normal	May	--	17,354.2	17,306.7	47.5	0.3%	17,297.5	56.7	0.3%	17,268.5	85.6	0.5%
ME 7	32 44 30	2019	Below Normal	June	--	4,247.2	4,185.5	61.7	1.5%	4,173.6	73.6	1.7%	4,138.8	108.4	2.6%
ME 7	32 44 30	2019	Below Normal	July	--	1,382.3	1,316.9	65.4	4.7%	1,303.8	78.5	5.7%	1,265.5	116.8	8.4%
ME 7	32 44 30	2019	Below Normal	August	--	616.6	553.8	62.9	10.2%	541.2	75.4	12.2%	504.0	112.6	18.3%
ME 7	32 44 30	2019	Below Normal	September	Used in Summary Table Analysis	480.5	421.0	59.5	12.4%	409.1	71.4	14.9%	373.3	107.2	22.3%
ME 7	32 44 30	2020	Dry	October	Used in Summary Table Analysis	370.4	323.9	46.5	12.5%	314.5	55.9	15.1%	286.2	84.2	22.7%
ME 7	32 44 30	2020	Dry	November	Used in Summary Table Analysis	344.2	306.8	37.4	10.9%	299.1	45.0	13.1%	276.2	67.9	19.7%
ME 7	32 44 30	2020	Dry	December	--	13,678.2	13,644.7	33.6	0.2%	13,637.7	40.5	0.3%	13,616.9	61.3	0.4%
ME 7	32 44 30	2020	Dry	January	--	22,638.9	22,608.8	30.1	0.1%	22,603.0	35.9	0.2%	22,583.3	55.6	0.2%
ME 7	32 44 30	2020	Dry	February	--	7,430.6	7,403.9	26.6	0.4%	7,398.4	32.2	0.4%	7,381.7	48.8	0.7%
ME 7	32 44 30	2020	Dry	March	--	7,304.3	7,279.4	24.9	0.3%	7,274.2	30.1	0.4%	7,258.8	45.5	0.6%
ME 7	32 44 30	2020	Dry	April	--	5,548.7	5,501.4	47.3	0.9%	5,491.8	56.9	1.0%	5,463.3	85.4	1.5%
ME 7	32 44 30	2020	Dry	May	--	7,460.5	7,403.4	57.2	0.8%	7,391.9	68.6	0.9%	7,357.5	103.0	1.4%
ME 7	32 44 30	2020	Dry	June	--	2,111.3	2,037.3	74.1	3.5%	2,022.9	88.4	4.2%	1,980.6	130.8	6.2%
ME 7	32 44 30	2020	Dry	July	--	810.6	734.0	76.6	9.4%	718.8	91.8	11.3%	679.0	131.7	16.2%
ME 7	32 44 30	2020	Dry	August	--	414.1	338.1	76.0	18.4%	323.0	91.2	22.0%	280.7	133.4	32.2%
ME 7	32 44 30	2020	Dry	September	Used in Summary Table Analysis	263.3	190.8	72.5	27.5%	176.1	87.2	33.1%	133.1	130.2	49.5%
ME 7	32 43 31	2000	Above Normal	October	Used in Summary Table Analysis	840.9	791.8	49.1	5.8%	781.8	59.0	7.0%	752.0	88.8	10.6%
ME 7	32 43 31	2000	Above Normal	November	Used in Summary Table Analysis	12,436.3	12,397.0	39.4	0.3%	12,388.9	47.5	0.4%	12,364.6	71.8	0.6%
ME 7	32 43 31	2000	Above Normal	December	--	10,981.7	10,948.1	33.6	0.3%	10,941.2	40.5	0.4%	10,920.4	61.3	0.6%
ME 7	32 43 31	2000	Above Normal	January	--	29,104.2	29,074.1	30.1	0.1%	29,068.3	35.9	0.1%	29,049.8	54.4	0.2%
ME 7	32 43 31	2000	Above Normal	February	--	37,387.7	37,361.1	26.6	0.1%	37,355.3	32.4	0.1%	37,338.0	49.8	0.1%
ME 7	32 43 31	2000	Above Normal	March	--	18,424.8	18,400.5	24.3	0.1%	18,395.8	28.9	0.2%	18,380.8	44.0	0.2%
ME 7	32 43 31	2000	Above Normal	April	--	12,400.5	12,377.3	23.1	0.2%	12,372.7	27.8	0.2%	12,358.8	41.7	0.3%
ME 7	32 43 31	2000	Above Normal	May	--	7,167.4	7,121.2	46.2	0.6%	7,111.8	55.6	0.8%	7,084.1	83.2	1.2%
ME 7	32 43 31	2000	Above Normal	June	--	2,643.5	2,573.6	69.9	2.6%	2,559.7	83.8	3.2%	2,518.6	124.9	4.7%
ME 7	32 43 31	2000	Above Normal	July	--	1,010.6	944.9	65.6	6.5%	932.0	78.6	7.8%	893.3	117.3	11.6%
ME 7	32 43 31	2000	Above Normal	August	--	541.5	479.2	62.4	11.5%	466.7	74.8	13.8%	429.5	112.0	20.7%
ME 7	32 43 31	2000	Above Normal	September	Used in Summary Table Analysis	313.1	256.4	56.7	18.1%	245.1	68.0	21.7%	211.1	102.0	32.6%
ME 7	32 43 31	2001	Dry	October	Used in Summary Table Analysis	3,894.4	3,846.3	48.1	1.2%	3,836.6	57.9	1.5%	3,807.2	87.3	2.2%
ME 7	32 43 31	2001	Dry	November	Used in Summary Table Analysis	6,247.5	6,208.9	38.5	0.6%	6,201.0	46.4	0.7%	6,177.2	70.3	1.1%
ME 7	32 43 31	2001	Dry	December	--	8,962.4	8,929.3	33.1	0.4%	8,922.5	39.9	0.4%	8,902.1	60.3	0.7%
ME 7	32 43 31	2001	Dry	January	--	13,020.8	12,991.9	28.9	0.2%	12,986.1	34.7	0.3%	12,967.6	53.2	0.4%
ME 7	32 43 31	2001	Dry	February	--	17,619.2	17,593.8	25.5	0.1%	17,588.0	31.3	0.2%	17,571.8	47.5	0.3%
ME 7	32 43 31	2001	Dry	March	--	12,375.0	12,350.7	24.3	0.2%	12,346.1	28.9	0.2%	12,329.9	45.1	0.4%
ME 7	32 43 31	2001	Dry	April	--	11,053.9	11,006.5	47.5	0.4%	10,997.1	56.8	0.5%	10,968.8	85.2	0.8%
ME 7	32 43 31	2001	Dry	May	--	2,644.1	2,587.4	56.7	2.1%	2,576.0	68.1	2.6%	2,542.0	102.1	3.9%
ME 7	32 43 31	2001	Dry	June	--	2,703.2	2,624.2	79.1	2.9%	2,608.7	94.6	3.5%	2,563.2	140.0	5.2%
ME 7	32 43 31	2001	Dry	July	--	729.9	653.3	76.6	10.5%	638.0	91.8	12.6%	597.7	132.2	18.1%
ME 7	32 43 31	2001	Dry	August	--	188.1	113.1	75.0	39.9%	98.1	90.0	47.8%	55.7	132.4	70.4%
ME 7	32 43 31	2001	Dry	September	Used in Summary Table Analysis	111.9	43.2	68.7	61.4%	29.5	82.4	73.7%	0.0	111.9	100.0%
ME 7	32 43 31	2002	Below Normal	October	Used in Summary Table Analysis	283.1	223.9	59.2	20.9%	211.9	71.2	25.2%	176.2	106.8	37.7%
ME 7	32 43 31	2002	Below Normal	November	Used in Summary Table Analysis	12,189.8	12,142.4	47.5	0.4%	12,131.9	57.9	0.5%	12,100.7	89.1	0.7%
ME 7	32 43 31	2002	Below Normal	December	--	36,158.6	36,116.9	41.7	0.1%	36,107.6	50.9	0.1%	36,081.0	77.5	0.2%
ME 7	32 43 31	2002	Below Normal	January	--	31,178.2	31,142.4	35.9	0.1%	31,135.4	42.8	0.1%	31,113.4	64.8	0.2%
ME 7	32 43 31	2002	Below Normal	February	--	24,858.8	24,827.5	31.3	0.1%	24,820.6	38.2	0.2%	24,800.9	57.9	0.2%
ME 7	32 43 31	2002	Below Normal	March	--	17,922.5	17,893.5	28.9	0.2%	17,886.6	35.9	0.2%	17,869.2	53.2	0.3%
ME 7	32 43 31	2002	Below Normal	April	--	9,983.0	9,934.7	48.3	0.5%	9,925.1	57.9	0.6%	9,896.1	86.9	0.9%
ME 7	32 43 31	2002	Below Normal	May	--	3,344.1	3,287.0	57.1	1.7%	3,275.6	68.5	2.0%	3,241.3	102.8	3.1%
ME 7	32 43 31	2002	Below Normal	June	--	869.2	802.6	66.5	7.7%	789.5	79.7	9.2%	750.5	118.7	13.7%
ME 7	32 43 31	2002	Below Normal	July	--	378.5	309.6	68.9	18.2%	295.9	82.6	21.8%	255.9	122.6	32.4%
ME 7	32 43 31	2002	Below Normal	August	--	245.1	179.4	65.7	26.8%	166.3	78.8	32.1%	126.6	118.5	48.4%
ME 7	32 43 31	2002	Below Normal	September	Used in Summary Table Analysis	181.2	118.1	63.1	34.8%	105.5	75.7	41.8%	67.0	114.2	63.0%
ME 7	32 43 31	2003	Wet	October	Used in Summary Table Analysis	145.8	92.6	53.2	36.5%	81.9	63.9	43.8%	49.7	96.0	65.9%
ME 7	32 43 31	2003	Wet	November	Used in Summary Table Analysis	917.2	873.4	43.8	4.8%	864.5	52.7	5.7%	837.7	79.5	8.7%
ME 7	32 43 31	2003	Wet	December	--	57,934.0	57,894.7	39.4	0.1%	57,886.6	47.5	0.1%	57,862.3	71.8	0.1%
ME 7	32 43 31	2003	Wet	January	--	31,759.3	31,725.7	33.6	0.1%	31,718.8	40.5	0.1%	31,697.9	61.3	0.2%
ME 7	32 43 31	2003	Wet	February	--	20,476.9	20,446.8	30.1	0.1%	20,441.0	35.9	0.2%	20,422.5	54.4	0.3%
ME 7	32 43 31	2003	Wet	March	--	24,224.5	24,196.8	27.8	0.1%	24,192.1	32.4	0.1%	24,174.8	49.8	0.2%
ME 7	32 43 31	2003	Wet	April	--	43,377.3	43,350.7	26.6	0.1%	43,346.1	31.3	0.1%	43,329.9	47.5	0.1%
ME 7	32 43 31	2003	Wet	May	--	12,287.0	12,238.4	48.6	0.4%	12,229.2	57.9	0.5%	12,200.2	86.8	0.7%

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Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 43 31	2003	Wet	June	--	3,186.0	3,123.3	62.7	2.0%	3,110.9	75.1	2.4%	3,074.4	111.6	3.5%
ME 7	32 43 31	2003	Wet	July	--	1,496.1	1,428.1	67.9	4.5%	1,414.7	81.4	5.4%	1,374.7	121.4	8.1%
ME 7	32 43 31	2003	Wet	August	--	781.1	714.2	66.9	8.6%	700.5	80.7	10.3%	658.0	123.1	15.8%
ME 7	32 43 31	2003	Wet	September	Used in Summary Table Analysis	477.6	419.2	58.4	12.2%	407.5	70.1	14.7%	371.3	106.3	22.3%
ME 7	32 43 31	2004	Wet	October	Used in Summary Table Analysis	344.0	294.6	49.4	14.4%	284.6	59.4	17.3%	254.4	89.5	26.0%
ME 7	32 43 31	2004	Wet	November	Used in Summary Table Analysis	5,936.9	5,896.1	40.9	0.7%	5,887.6	49.3	0.8%	5,862.3	74.7	1.3%
ME 7	32 43 31	2004	Wet	December	--	36,886.6	36,850.7	35.9	0.1%	36,843.8	42.8	0.1%	36,820.6	66.0	0.2%
ME 7	32 43 31	2004	Wet	January	--	31,863.4	31,833.3	30.1	0.1%	31,826.4	37.0	0.1%	31,806.7	56.7	0.2%
ME 7	32 43 31	2004	Wet	February	--	38,612.3	38,584.5	27.8	0.1%	38,578.7	33.6	0.1%	38,561.3	50.9	0.1%
ME 7	32 43 31	2004	Wet	March	--	16,591.4	16,567.1	24.3	0.1%	16,561.3	30.1	0.2%	16,546.3	45.1	0.3%
ME 7	32 43 31	2004	Wet	April	--	9,503.9	9,480.2	23.7	0.2%	9,475.3	28.6	0.3%	9,460.6	43.3	0.5%
ME 7	32 43 31	2004	Wet	May	--	3,464.4	3,417.6	46.8	1.3%	3,408.3	56.0	1.6%	3,380.4	83.9	2.4%
ME 7	32 43 31	2004	Wet	June	--	706.6	646.1	60.5	8.6%	634.2	72.4	10.2%	599.0	107.6	15.2%
ME 7	32 43 31	2004	Wet	July	--	374.5	308.0	66.6	17.8%	294.7	79.8	21.3%	255.4	119.2	31.8%
ME 7	32 43 31	2004	Wet	August	--	242.8	179.2	63.6	26.2%	166.5	76.3	31.4%	128.6	114.2	47.0%
ME 7	32 43 31	2004	Wet	September	Used in Summary Table Analysis	178.8	117.3	61.4	34.4%	105.1	73.7	41.2%	68.2	110.6	61.8%
ME 7	32 43 31	2005	Above Normal	October	Used in Summary Table Analysis	7,854.6	7,804.2	50.5	0.6%	7,794.0	60.6	0.8%	7,763.2	91.4	1.2%
ME 7	32 43 31	2005	Above Normal	November	Used in Summary Table Analysis	2,285.5	2,245.8	39.7	1.7%	2,237.7	47.8	2.1%	2,213.3	72.2	3.2%
ME 7	32 43 31	2005	Above Normal	December	--	21,510.4	21,475.7	34.7	0.2%	21,468.8	41.7	0.2%	21,447.9	62.5	0.3%
ME 7	32 43 31	2005	Above Normal	January	--	22,762.7	22,733.8	28.9	0.1%	22,726.9	35.9	0.2%	22,708.3	54.4	0.2%
ME 7	32 43 31	2005	Above Normal	February	--	14,082.2	14,055.6	26.6	0.2%	14,050.9	31.3	0.2%	14,033.6	48.6	0.3%
ME 7	32 43 31	2005	Above Normal	March	--	28,858.8	28,833.3	25.5	0.1%	28,828.7	30.1	0.1%	28,812.5	46.3	0.2%
ME 7	32 43 31	2005	Above Normal	April	--	21,636.6	21,612.3	24.3	0.1%	21,607.6	28.9	0.1%	21,592.6	44.0	0.2%
ME 7	32 43 31	2005	Above Normal	May	--	19,798.6	19,751.2	47.5	0.2%	19,741.9	56.7	0.3%	19,713.0	85.6	0.4%
ME 7	32 43 31	2005	Above Normal	June	--	16,141.2	16,069.4	71.8	0.4%	16,054.4	86.8	0.5%	16,012.7	128.5	0.8%
ME 7	32 43 31	2005	Above Normal	July	--	2,872.2	2,804.3	67.9	2.4%	2,791.3	80.9	2.8%	2,752.7	119.6	4.2%
ME 7	32 43 31	2005	Above Normal	August	--	1,004.0	941.5	62.5	6.2%	929.1	74.9	7.5%	892.2	111.8	11.1%
ME 7	32 43 31	2005	Above Normal	September	Used in Summary Table Analysis	545.4	488.7	56.7	10.4%	477.4	68.0	12.5%	443.5	101.8	18.7%
ME 7	32 43 31	2006	Wet	October	Used in Summary Table Analysis	657.4	610.3	47.1	7.2%	600.8	56.6	8.6%	572.0	85.4	13.0%
ME 7	32 43 31	2006	Wet	November	Used in Summary Table Analysis	9,531.4	9,493.6	37.7	0.4%	9,485.9	45.5	0.5%	9,462.4	69.0	0.7%
ME 7	32 43 31	2006	Wet	December	--	44,224.5	44,191.0	33.6	0.1%	44,184.0	40.5	0.1%	44,162.0	62.5	0.1%
ME 7	32 43 31	2006	Wet	January	--	46,951.4	46,921.3	30.1	0.1%	46,915.5	35.9	0.1%	46,895.8	55.6	0.1%
ME 7	32 43 31	2006	Wet	February	--	26,900.5	26,873.8	26.6	0.1%	26,869.2	31.3	0.1%	26,853.0	47.5	0.2%
ME 7	32 43 31	2006	Wet	March	--	47,678.2	47,653.9	24.3	0.1%	47,648.1	30.1	0.1%	47,633.1	45.1	0.1%
ME 7	32 43 31	2006	Wet	April	--	30,634.3	30,611.1	23.1	0.1%	30,606.5	27.8	0.1%	30,593.8	40.5	0.1%
ME 7	32 43 31	2006	Wet	May	--	14,328.7	14,299.8	28.9	0.2%	14,292.8	35.9	0.3%	14,275.5	53.2	0.4%
ME 7	32 43 31	2006	Wet	June	--	3,565.6	3,506.6	59.0	1.7%	3,494.9	70.7	2.0%	3,460.6	105.0	2.9%
ME 7	32 43 31	2006	Wet	July	--	1,302.9	1,238.0	64.9	5.0%	1,225.2	77.7	6.0%	1,187.3	115.6	8.9%
ME 7	32 43 31	2006	Wet	August	--	688.9	624.5	64.4	9.4%	611.8	77.2	11.2%	573.6	115.4	16.7%
ME 7	32 43 31	2006	Wet	September	Used in Summary Table Analysis	448.2	390.3	57.9	12.9%	378.8	69.4	15.5%	344.1	104.2	23.2%
ME 7	32 43 31	2007	Above Normal	October	Used in Summary Table Analysis	293.8	245.3	48.4	16.5%	235.6	58.2	19.8%	205.9	87.8	29.9%
ME 7	32 43 31	2007	Above Normal	November	Used in Summary Table Analysis	8,865.6	8,825.5	40.2	0.5%	8,817.4	48.3	0.5%	8,792.5	73.1	0.8%
ME 7	32 43 31	2007	Above Normal	December	--	20,807.9	20,772.0	35.9	0.2%	20,765.0	42.8	0.2%	20,743.1	64.8	0.3%
ME 7	32 43 31	2007	Above Normal	January	--	10,358.8	10,328.8	30.0	0.3%	10,322.7	36.1	0.3%	10,303.8	55.0	0.5%
ME 7	32 43 31	2007	Above Normal	February	--	31,017.4	30,989.6	27.8	0.1%	30,983.8	33.6	0.1%	30,966.4	50.9	0.2%
ME 7	32 43 31	2007	Above Normal	March	--	13,180.6	13,153.9	26.6	0.2%	13,149.3	31.3	0.2%	13,133.1	47.5	0.4%
ME 7	32 43 31	2007	Above Normal	April	--	11,611.1	11,565.3	45.8	0.4%	11,556.1	55.0	0.5%	11,528.6	82.5	0.7%
ME 7	32 43 31	2007	Above Normal	May	--	4,176.9	4,121.9	55.0	1.3%	4,110.9	66.0	1.6%	4,077.9	99.0	2.4%
ME 7	32 43 31	2007	Above Normal	June	--	1,526.9	1,459.1	67.7	4.4%	1,445.7	81.1	5.3%	1,406.1	120.7	7.9%
ME 7	32 43 31	2007	Above Normal	July	--	511.8	442.6	69.2	13.5%	428.9	82.9	16.2%	388.3	123.5	24.1%
ME 7	32 43 31	2007	Above Normal	August	--	241.2	177.8	63.4	26.3%	165.1	76.1	31.5%	126.5	114.7	47.6%
ME 7	32 43 31	2007	Above Normal	September	Used in Summary Table Analysis	168.8	107.8	61.0	36.2%	95.6	73.2	43.3%	58.9	109.9	65.1%
ME 7	32 43 31	2008	Dry	October	Used in Summary Table Analysis	3,510.1	3,458.7	51.4	1.5%	3,448.4	61.7	1.8%	3,416.8	93.3	2.7%
ME 7	32 43 31	2008	Dry	November	Used in Summary Table Analysis	3,347.6	3,307.5	40.0	1.2%	3,299.4	48.1	1.4%	3,274.4	73.1	2.2%
ME 7	32 43 31	2008	Dry	December	--	23,643.5	23,608.8	34.7	0.1%	23,600.7	42.8	0.2%	23,579.9	63.7	0.3%
ME 7	32 43 31	2008	Dry	January	--	38,025.5	37,993.1	32.4	0.1%	37,987.3	38.2	0.1%	37,967.6	57.9	0.2%
ME 7	32 43 31	2008	Dry	February	--	26,392.4	26,365.7	26.6	0.1%	26,360.0	32.4	0.1%	26,342.6	49.8	0.2%
ME 7	32 43 31	2008	Dry	March	--	11,853.0	11,828.7	24.3	0.2%	11,824.1	28.9	0.2%	11,809.0	44.0	0.4%
ME 7	32 43 31	2008	Dry	April	--	9,066.4	9,019.9	46.5	0.5%	9,010.6	55.8	0.6%	8,982.6	83.8	0.9%
ME 7	32 43 31	2008	Dry	May	--	1,361.8	1,311.8	50.0	3.7%	1,302.1	59.7	4.4%	1,272.7	89.1	6.5%
ME 7	32 43 31	2008	Dry	June	--	454.3	380.3	74.1	16.3%	365.8	88.6	19.5%	322.8	131.6	29.0%
ME 7	32 43 31	2008	Dry	July	--	271.8	196.4	75.5	27.8%	181.4	90.4	33.2%	142.0	129.8	47.8%
ME 7	32 43 31	2008	Dry	August	--	195.8	121.6	74.2	37.9%	106.8	88.9	45.4%	62.5	133.2	68.1%
ME 7	32 43 31	2008	Dry	September	Used in Summary Table Analysis	157.1	84.6	72.5	46.1%	70.2	86.9	55.3%	28.3	128.9	82.0%

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							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 43 31	2009	Critical	October	Used in Summary Table Analysis	945.4	886.0	59.3	6.3%	874.2	71.2	7.5%	838.1	107.3	11.3%
ME 7	32 43 31	2009	Critical	November	Used in Summary Table Analysis	5,643.1	5,596.2	46.9	0.8%	5,586.6	56.5	1.0%	5,554.9	88.2	1.6%
ME 7	32 43 31	2009	Critical	December	--	12,434.0	12,394.7	39.4	0.3%	12,386.6	47.5	0.4%	12,361.1	72.9	0.6%
ME 7	32 43 31	2009	Critical	January	--	8,877.0	8,841.8	35.2	0.4%	8,834.6	42.4	0.5%	8,812.4	64.6	0.7%
ME 7	32 43 31	2009	Critical	February	--	22,842.6	22,811.3	31.3	0.1%	22,804.4	38.2	0.2%	22,784.7	57.9	0.3%
ME 7	32 43 31	2009	Critical	March	--	21,291.7	21,263.9	27.8	0.1%	21,258.1	33.6	0.2%	21,240.7	50.9	0.2%
ME 7	32 43 31	2009	Critical	April	--	10,120.9	10,072.0	49.0	0.5%	10,062.3	58.7	0.6%	10,032.8	88.2	0.9%
ME 7	32 43 31	2009	Critical	May	--	15,674.8	15,614.6	60.2	0.4%	15,603.0	71.8	0.5%	15,567.1	107.6	0.7%
ME 7	32 43 31	2009	Critical	June	--	3,177.8	3,099.0	78.8	2.5%	3,083.7	94.1	3.0%	3,038.0	139.8	4.4%
ME 7	32 43 31	2009	Critical	July	--	1,280.3	1,204.2	76.2	5.9%	1,189.1	91.2	7.1%	1,149.3	131.1	10.2%
ME 7	32 43 31	2009	Critical	August	--	687.1	612.5	74.6	10.9%	597.7	89.4	13.0%	555.7	131.4	19.1%
ME 7	32 43 31	2009	Critical	September	Used in Summary Table Analysis	407.2	338.6	68.6	16.8%	324.9	82.2	20.2%	285.1	122.1	30.0%
ME 7	32 43 31	2010	Below Normal	October	Used in Summary Table Analysis	6,114.4	6,054.5	59.8	1.0%	6,042.4	72.0	1.2%	6,005.1	109.3	1.8%
ME 7	32 43 31	2010	Below Normal	November	Used in Summary Table Analysis	8,382.3	8,333.6	48.7	0.6%	8,323.7	58.6	0.7%	8,291.3	91.0	1.1%
ME 7	32 43 31	2010	Below Normal	December	--	12,534.7	12,494.2	40.5	0.3%	12,485.0	49.8	0.4%	12,459.5	75.2	0.6%
ME 7	32 43 31	2010	Below Normal	January	--	36,827.5	36,790.5	37.0	0.1%	36,782.4	45.1	0.1%	36,759.3	68.3	0.2%
ME 7	32 43 31	2010	Below Normal	February	--	27,415.5	27,383.1	32.4	0.1%	27,377.3	38.2	0.1%	27,356.5	59.0	0.2%
ME 7	32 43 31	2010	Below Normal	March	--	28,986.1	28,957.2	28.9	0.1%	28,951.4	34.7	0.1%	28,932.9	53.2	0.2%
ME 7	32 43 31	2010	Below Normal	April	--	40,287.0	40,259.3	27.8	0.1%	40,254.6	32.4	0.1%	40,237.3	49.8	0.1%
ME 7	32 43 31	2010	Below Normal	May	--	20,480.3	20,429.4	50.9	0.2%	20,419.0	61.3	0.3%	20,388.9	91.4	0.4%
ME 7	32 43 31	2010	Below Normal	June	--	9,519.3	9,445.4	74.0	0.8%	9,430.9	88.4	0.9%	9,387.5	131.8	1.4%
ME 7	32 43 31	2010	Below Normal	July	--	1,471.2	1,402.0	69.2	4.7%	1,388.4	82.8	5.6%	1,348.5	122.7	8.3%
ME 7	32 43 31	2010	Below Normal	August	--	590.6	526.1	64.4	10.9%	513.4	77.2	13.1%	475.3	115.2	19.5%
ME 7	32 43 31	2010	Below Normal	September	Used in Summary Table Analysis	673.5	611.1	62.3	9.3%	598.6	74.9	11.1%	561.2	112.2	16.7%
ME 7	32 43 31	2011	Wet	October	Used in Summary Table Analysis	9,771.5	9,723.0	48.5	0.5%	9,713.2	58.3	0.6%	9,683.2	88.3	0.9%
ME 7	32 43 31	2011	Wet	November	Used in Summary Table Analysis	14,373.8	14,335.6	38.2	0.3%	14,327.5	46.3	0.3%	14,303.2	70.6	0.5%
ME 7	32 43 31	2011	Wet	December	--	34,312.5	34,280.1	32.4	0.1%	34,272.0	40.5	0.1%	34,251.2	61.3	0.2%
ME 7	32 43 31	2011	Wet	January	--	14,273.1	14,245.4	27.8	0.2%	14,239.6	33.6	0.2%	14,221.1	52.1	0.4%
ME 7	32 43 31	2011	Wet	February	--	20,886.6	20,860.0	26.6	0.1%	20,854.2	32.4	0.2%	20,838.0	48.6	0.2%
ME 7	32 43 31	2011	Wet	March	--	52,410.9	52,386.6	24.3	0.0%	52,380.8	30.1	0.1%	52,364.6	46.3	0.1%
ME 7	32 43 31	2011	Wet	April	--	24,939.8	24,915.5	24.3	0.1%	24,910.9	28.9	0.1%	24,895.8	44.0	0.2%
ME 7	32 43 31	2011	Wet	May	--	11,453.0	11,405.9	47.1	0.4%	11,396.5	56.5	0.5%	11,368.3	84.7	0.7%
ME 7	32 43 31	2011	Wet	June	--	7,127.4	7,056.0	71.4	1.0%	7,041.9	85.5	1.2%	7,000.0	127.4	1.8%
ME 7	32 43 31	2011	Wet	July	--	1,841.4	1,768.6	72.8	4.0%	1,754.3	87.2	4.7%	1,712.8	128.6	7.0%
ME 7	32 43 31	2011	Wet	August	--	795.7	732.5	63.1	7.9%	720.0	75.7	9.5%	682.6	113.1	14.2%
ME 7	32 43 31	2011	Wet	September	Used in Summary Table Analysis	452.3	393.6	58.8	13.0%	381.8	70.5	15.6%	346.7	105.6	23.3%
ME 7	32 43 31	2012	Below Normal	October	Used in Summary Table Analysis	4,615.6	4,566.4	49.2	1.1%	4,556.5	59.1	1.3%	4,526.0	89.6	1.9%
ME 7	32 43 31	2012	Below Normal	November	Used in Summary Table Analysis	8,381.4	8,341.9	39.5	0.5%	8,333.8	47.6	0.6%	8,309.3	72.1	0.9%
ME 7	32 43 31	2012	Below Normal	December	--	5,249.3	5,216.0	33.3	0.6%	5,209.1	40.2	0.8%	5,188.4	60.9	1.2%
ME 7	32 43 31	2012	Below Normal	January	--	20,517.4	20,486.1	31.3	0.2%	20,480.3	37.0	0.2%	20,461.8	55.6	0.3%
ME 7	32 43 31	2012	Below Normal	February	--	18,329.9	18,303.2	26.6	0.1%	18,297.5	32.4	0.2%	18,281.3	48.6	0.3%
ME 7	32 43 31	2012	Below Normal	March	--	45,895.8	45,869.2	26.6	0.1%	45,864.6	31.3	0.1%	45,848.4	47.5	0.1%
ME 7	32 43 31	2012	Below Normal	April	--	27,031.3	27,006.9	24.3	0.1%	27,002.3	28.9	0.1%	26,986.1	45.1	0.2%
ME 7	32 43 31	2012	Below Normal	May	--	7,527.1	7,480.2	46.9	0.6%	7,470.8	56.3	0.7%	7,442.9	84.1	1.1%
ME 7	32 43 31	2012	Below Normal	June	--	5,586.2	5,513.5	72.7	1.3%	5,499.3	86.9	1.6%	5,457.1	129.2	2.3%
ME 7	32 43 31	2012	Below Normal	July	--	2,269.9	2,199.1	70.8	3.1%	2,185.1	84.8	3.7%	2,143.3	126.6	5.6%
ME 7	32 43 31	2012	Below Normal	August	--	403.8	345.6	58.2	14.4%	334.0	69.8	17.3%	299.3	104.5	25.9%
ME 7	32 43 31	2012	Below Normal	September	Used in Summary Table Analysis	267.4	214.5	52.9	19.8%	203.9	63.5	23.7%	172.3	95.1	35.6%
ME 7	32 43 31	2013	Below Normal	October	Used in Summary Table Analysis	1,962.8	1,915.9	47.0	2.4%	1,906.5	56.4	2.9%	1,878.0	84.8	4.3%
ME 7	32 43 31	2013	Below Normal	November	Used in Summary Table Analysis	14,944.4	14,906.3	38.2	0.3%	14,899.3	45.1	0.3%	14,876.2	68.3	0.5%
ME 7	32 43 31	2013	Below Normal	December	--	60,561.3	60,527.8	33.6	0.1%	60,520.8	40.5	0.1%	60,498.8	62.5	0.1%
ME 7	32 43 31	2013	Below Normal	January	--	22,365.7	22,338.0	27.8	0.1%	22,332.2	33.6	0.2%	22,314.8	50.9	0.2%
ME 7	32 43 31	2013	Below Normal	February	--	8,927.1	8,900.8	26.3	0.3%	8,895.5	31.6	0.4%	8,879.3	47.8	0.5%
ME 7	32 43 31	2013	Below Normal	March	--	10,453.6	10,428.6	25.0	0.2%	10,423.5	30.1	0.3%	10,408.1	45.5	0.4%
ME 7	32 43 31	2013	Below Normal	April	--	8,332.5	8,288.1	44.4	0.5%	8,279.2	53.4	0.6%	8,252.5	80.0	1.0%
ME 7	32 43 31	2013	Below Normal	May	--	4,482.9	4,428.4	54.5	1.2%	4,417.5	65.4	1.5%	4,385.1	97.8	2.2%
ME 7	32 43 31	2013	Below Normal	June	--	2,132.2	2,065.0	67.1	3.1%	2,051.7	80.4	3.8%	2,012.4	119.8	5.6%
ME 7	32 43 31	2013	Below Normal	July	--	731.5	665.1	66.4	9.1%	651.9	79.5	10.9%	613.5	118.0	16.1%
ME 7	32 43 31	2013	Below Normal	August	--	356.7	293.6	63.2	17.7%	281.0	75.8	21.2%	242.7	114.0	32.0%
ME 7	32 43 31	2013	Below Normal	September	Used in Summary Table Analysis	4,862.2	4,796.2	66.0	1.4%	4,783.0	79.2	1.6%	4,743.5	118.6	2.4%
ME 7	32 43 31	2014	Critical	October	Used in Summary Table Analysis	288.8	239.3	49.5	17.2%	229.3	59.6	20.6%	199.8	89.0	30.8%
ME 7	32 43 31	2014	Critical	November	Used in Summary Table Analysis	1,581.3	1,541.3	39.9	2.5%	1,533.2	48.0	3.0%	1,508.4	72.8	4.6%
ME 7	32 43 31	2014	Critical	December	--	1,617.8	1,583.2	34.6	2.1%	1,576.2	41.7	2.6%	1,554.4	63.4	3.9%
ME 7	32 43 31	2014	Critical	January	--	2,866.0	2,835.4	30.6	1.1%	2,829.2	36.8	1.3%	2,809.6	56.4	2.0%

Change in Monthly Average Stream Flow Due to Groundwater Extraction
At Surface Water Depletion Locations of Interest
Eel River Valley Groundwater Sustainability Plan
Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 43 31	2014	Critical	February	--	15,872.7	15,846.1	26.6	0.2%	15,840.3	32.4	0.2%	15,821.8	50.9	0.3%
ME 7	32 43 31	2014	Critical	March	--	31,637.7	31,612.3	25.5	0.1%	31,606.5	31.3	0.1%	31,590.3	47.5	0.1%
ME 7	32 43 31	2014	Critical	April	--	13,042.8	12,995.4	47.5	0.4%	12,986.1	56.7	0.4%	12,957.2	85.6	0.7%
ME 7	32 43 31	2014	Critical	May	--	5,224.1	5,166.4	57.6	1.1%	5,154.9	69.2	1.3%	5,120.0	104.1	2.0%
ME 7	32 43 31	2014	Critical	June	--	1,216.3	1,136.2	80.1	6.6%	1,120.5	95.8	7.9%	1,075.0	141.4	11.6%
ME 7	32 43 31	2014	Critical	July	--	560.2	483.8	76.5	13.6%	468.5	91.7	16.4%	427.7	132.5	23.6%
ME 7	32 43 31	2014	Critical	August	--	364.8	291.0	73.8	20.2%	276.1	88.7	24.3%	233.7	131.1	35.9%
ME 7	32 43 31	2014	Critical	September	Used in Summary Table Analysis	2,613.5	2,540.0	73.5	2.8%	2,525.5	88.1	3.4%	2,481.6	131.9	5.0%
ME 7	32 43 31	2015	Dry	October	Used in Summary Table Analysis	11,495.0	11,436.3	58.7	0.5%	11,424.5	70.5	0.6%	11,388.7	106.4	0.9%
ME 7	32 43 31	2015	Dry	November	Used in Summary Table Analysis	9,176.4	9,131.7	44.7	0.5%	9,122.5	53.9	0.6%	9,091.4	85.0	0.9%
ME 7	32 43 31	2015	Dry	December	--	33,120.4	33,082.2	38.2	0.1%	33,075.2	45.1	0.1%	33,049.8	70.6	0.2%
ME 7	32 43 31	2015	Dry	January	--	14,656.3	14,622.7	33.6	0.2%	14,615.7	40.5	0.3%	14,593.8	62.5	0.4%
ME 7	32 43 31	2015	Dry	February	--	27,436.3	27,406.3	30.1	0.1%	27,400.5	35.9	0.1%	27,381.9	54.4	0.2%
ME 7	32 43 31	2015	Dry	March	--	11,620.4	11,594.9	25.5	0.2%	11,589.1	31.3	0.3%	11,572.9	47.5	0.4%
ME 7	32 43 31	2015	Dry	April	--	8,519.7	8,472.0	47.7	0.6%	8,462.3	57.4	0.7%	8,433.3	86.3	1.0%
ME 7	32 43 31	2015	Dry	May	--	1,517.6	1,460.5	57.1	3.8%	1,449.2	68.4	4.5%	1,416.0	101.6	6.7%
ME 7	32 43 31	2015	Dry	June	--	665.4	590.2	75.2	11.3%	575.4	90.0	13.5%	531.6	133.8	20.1%
ME 7	32 43 31	2015	Dry	July	--	282.3	206.1	76.1	27.0%	191.0	91.3	32.3%	151.0	131.3	46.5%
ME 7	32 43 31	2015	Dry	August	--	182.4	108.0	74.5	40.8%	93.1	89.4	49.0%	51.3	131.2	71.9%
ME 7	32 43 31	2015	Dry	September	Used in Summary Table Analysis	135.2	64.1	71.1	52.6%	49.4	85.7	63.4%	6.9	128.2	94.9%
ME 7	32 43 31	2016	Above Normal	October	Used in Summary Table Analysis	99.8	39.3	60.5	60.6%	27.5	72.4	72.5%	0.0	99.8	100.0%
ME 7	32 43 31	2016	Above Normal	November	Used in Summary Table Analysis	3,987.8	3,939.9	47.9	1.2%	3,929.9	58.0	1.5%	3,895.0	92.8	2.3%
ME 7	32 43 31	2016	Above Normal	December	--	37,210.6	37,169.0	41.7	0.1%	37,159.7	50.9	0.1%	37,131.9	78.7	0.2%
ME 7	32 43 31	2016	Above Normal	January	--	57,929.4	57,892.4	37.0	0.1%	57,884.3	45.1	0.1%	57,860.0	69.4	0.1%
ME 7	32 43 31	2016	Above Normal	February	--	24,369.2	24,339.1	30.1	0.1%	24,332.2	37.0	0.2%	24,312.5	56.7	0.2%
ME 7	32 43 31	2016	Above Normal	March	--	42,066.0	42,037.0	28.9	0.1%	42,031.3	34.7	0.1%	42,013.9	52.1	0.1%
ME 7	32 43 31	2016	Above Normal	April	--	18,619.2	18,593.8	25.5	0.1%	18,588.0	31.3	0.2%	18,571.8	47.5	0.3%
ME 7	32 43 31	2016	Above Normal	May	--	5,247.6	5,216.8	30.8	0.6%	5,210.5	37.0	0.7%	5,191.4	56.1	1.1%
ME 7	32 43 31	2016	Above Normal	June	--	1,526.6	1,469.4	57.2	3.7%	1,459.1	67.5	4.4%	1,428.6	98.0	6.4%
ME 7	32 43 31	2016	Above Normal	July	--	841.8	775.9	65.9	7.8%	762.8	79.0	9.4%	723.9	117.9	14.0%
ME 7	32 43 31	2016	Above Normal	August	--	511.0	445.2	65.8	12.9%	432.0	79.0	15.5%	392.8	118.2	23.1%
ME 7	32 43 31	2016	Above Normal	September	Used in Summary Table Analysis	346.6	284.1	62.5	18.0%	271.4	75.2	21.7%	233.5	113.1	32.6%
ME 7	32 43 31	2017	Wet	October	Used in Summary Table Analysis	18,520.8	18,468.8	52.1	0.3%	18,458.3	62.5	0.3%	18,428.2	92.6	0.5%
ME 7	32 43 31	2017	Wet	November	Used in Summary Table Analysis	19,079.9	19,040.5	39.4	0.2%	19,031.3	48.6	0.3%	19,006.9	72.9	0.4%
ME 7	32 43 31	2017	Wet	December	--	24,508.1	24,474.5	33.6	0.1%	24,467.6	40.5	0.2%	24,445.6	62.5	0.3%
ME 7	32 43 31	2017	Wet	January	--	108,054.4	108,023.1	31.3	0.0%	108,016.2	38.2	0.0%	107,996.5	57.9	0.1%
ME 7	32 43 31	2017	Wet	February	--	82,509.3	82,481.5	27.8	0.0%	82,475.7	33.6	0.0%	82,458.3	50.9	0.1%
ME 7	32 43 31	2017	Wet	March	--	27,486.1	27,460.6	25.5	0.1%	27,454.9	31.3	0.1%	27,439.8	46.3	0.2%
ME 7	32 43 31	2017	Wet	April	--	23,165.5	23,142.4	23.1	0.1%	23,137.7	27.8	0.1%	23,123.8	41.7	0.2%
ME 7	32 43 31	2017	Wet	May	--	6,284.7	6,254.4	30.3	0.5%	6,248.3	36.5	0.6%	6,229.9	54.9	0.9%
ME 7	32 43 31	2017	Wet	June	--	2,151.2	2,092.6	58.6	2.7%	2,081.0	70.1	3.3%	2,046.8	104.4	4.9%
ME 7	32 43 31	2017	Wet	July	--	958.0	892.4	65.6	6.8%	879.4	78.5	8.2%	841.2	116.8	12.2%
ME 7	32 43 31	2017	Wet	August	--	530.1	465.2	64.8	12.2%	452.3	77.7	14.7%	413.9	116.2	21.9%
ME 7	32 43 31	2017	Wet	September	Used in Summary Table Analysis	343.4	282.4	61.0	17.8%	270.1	73.3	21.3%	233.5	109.9	32.0%
ME 7	32 43 31	2018	Above Normal	October	Used in Summary Table Analysis	295.9	246.1	49.8	16.8%	236.0	59.9	20.3%	205.8	90.2	30.5%
ME 7	32 43 31	2018	Above Normal	November	Used in Summary Table Analysis	11,056.9	11,016.9	40.0	0.4%	11,008.7	48.3	0.4%	10,983.8	73.1	0.7%
ME 7	32 43 31	2018	Above Normal	December	--	5,475.7	5,441.9	33.8	0.6%	5,435.0	40.7	0.7%	5,414.0	61.7	1.1%
ME 7	32 43 31	2018	Above Normal	January	--	18,231.5	18,200.2	31.3	0.2%	18,194.4	37.0	0.2%	18,175.9	55.6	0.3%
ME 7	32 43 31	2018	Above Normal	February	--	7,623.3	7,597.0	26.3	0.3%	7,591.6	31.7	0.4%	7,575.1	48.1	0.6%
ME 7	32 43 31	2018	Above Normal	March	--	20,991.9	20,967.6	24.3	0.1%	20,963.0	28.9	0.1%	20,946.8	45.1	0.2%
ME 7	32 43 31	2018	Above Normal	April	--	32,541.7	32,519.7	22.0	0.1%	32,515.0	26.6	0.1%	32,500.0	41.7	0.1%
ME 7	32 43 31	2018	Above Normal	May	--	7,003.6	6,958.8	44.8	0.6%	6,949.9	53.7	0.8%	6,922.8	80.8	1.2%
ME 7	32 43 31	2018	Above Normal	June	--	1,932.3	1,872.2	60.1	3.1%	1,860.3	72.0	3.7%	1,825.3	106.9	5.5%
ME 7	32 43 31	2018	Above Normal	July	--	801.7	735.1	66.6	8.3%	721.8	80.0	10.0%	682.3	119.5	14.9%
ME 7	32 43 31	2018	Above Normal	August	--	463.0	400.0	63.0	13.6%	387.3	75.7	16.3%	349.5	113.4	24.5%
ME 7	32 43 31	2018	Above Normal	September	Used in Summary Table Analysis	319.2	257.9	61.3	19.2%	245.5	73.7	23.1%	208.7	110.5	34.6%
ME 7	32 43 31	2019	Below Normal	October	Used in Summary Table Analysis	224.2	174.7	49.5	22.1%	164.7	59.5	26.6%	134.5	89.7	40.0%
ME 7	32 43 31	2019	Below Normal	November	Used in Summary Table Analysis	6,800.2	6,759.7	40.5	0.6%	6,751.4	48.8	0.7%	6,726.4	73.8	1.1%
ME 7	32 43 31	2019	Below Normal	December	--	14,959.5	14,925.9	33.6	0.2%	14,917.8	41.7	0.3%	14,897.0	62.5	0.4%
ME 7	32 43 31	2019	Below Normal	January	--	35,809.0	35,777.8	31.3	0.1%	35,772.0	37.0	0.1%	35,752.3	56.7	0.2%
ME 7	32 43 31	2019	Below Normal	February	--	142,546.3	142,523.1	23.1	0.0%	142,511.6	34.7	0.0%	142,500.0	46.3	0.0%
ME 7	32 43 31	2019	Below Normal	March	--	42,638.9	42,614.6	24.3	0.1%	42,610.0	28.9	0.1%	42,594.9	44.0	0.1%
ME 7	32 43 31	2019	Below Normal	April	--	15,364.6	15,341.4	23.1	0.2%	15,336.8	27.8	0.2%	15,322.9	41.7	0.3%
ME 7	32 43 31	2019	Below Normal	May	--	17,390.0	17,342.6	47.5	0.3%	17,332.2	57.9	0.3%	17,304.4	85.6	0.5%

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Humboldt County Groundwater Sustainability Agency

							400% Pumping Increase			500% Pumping Increase			800% Pumping Increase		
Surface Water Depletion Area Area of Interest	Model Cell (Row, Column, Surface Water Reach)	Water Year	Water Year Type	Month	Note	Flow Without Pumping (cfs)	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference	Flow (cfs)	Flow Difference (cfs)	Percent Difference
ME 7	32 43 31	2019	Below Normal	June	--	4,248.8	4,185.9	63.0	1.5%	4,173.8	75.0	1.8%	4,138.2	110.6	2.6%
ME 7	32 43 31	2019	Below Normal	July	--	1,385.2	1,318.4	66.8	4.8%	1,305.2	80.0	5.8%	1,266.0	119.2	8.6%
ME 7	32 43 31	2019	Below Normal	August	--	619.4	555.2	64.2	10.4%	542.4	77.0	12.4%	504.4	115.0	18.6%
ME 7	32 43 31	2019	Below Normal	September	Used in Summary Table Analysis	483.0	422.2	60.9	12.6%	409.9	73.1	15.1%	373.3	109.7	22.7%
ME 7	32 43 31	2020	Dry	October	Used in Summary Table Analysis	372.6	324.9	47.7	12.8%	315.2	57.4	15.4%	286.1	86.5	23.2%
ME 7	32 43 31	2020	Dry	November	Used in Summary Table Analysis	347.2	308.8	38.4	11.1%	300.9	46.3	13.3%	277.3	69.8	20.1%
ME 7	32 43 31	2020	Dry	December	--	13,713.0	13,678.2	34.7	0.3%	13,671.3	41.7	0.3%	13,649.3	63.7	0.5%
ME 7	32 43 31	2020	Dry	January	--	22,666.7	22,635.4	31.3	0.1%	22,628.5	38.2	0.2%	22,610.0	56.7	0.3%
ME 7	32 43 31	2020	Dry	February	--	7,433.1	7,406.0	27.1	0.4%	7,400.3	32.8	0.4%	7,383.3	49.8	0.7%
ME 7	32 43 31	2020	Dry	March	--	7,310.5	7,285.3	25.2	0.3%	7,280.1	30.4	0.4%	7,264.2	46.3	0.6%
ME 7	32 43 31	2020	Dry	April	--	5,555.4	5,507.6	47.8	0.9%	5,497.9	57.5	1.0%	5,469.2	86.2	1.6%
ME 7	32 43 31	2020	Dry	May	--	7,468.8	7,410.8	58.0	0.8%	7,399.2	69.6	0.9%	7,364.5	104.3	1.4%
ME 7	32 43 31	2020	Dry	June	--	2,112.8	2,037.2	75.7	3.6%	2,022.6	90.3	4.3%	1,979.3	133.6	6.3%
ME 7	32 43 31	2020	Dry	July	--	812.8	734.5	78.3	9.6%	718.9	93.9	11.5%	678.1	134.8	16.6%
ME 7	32 43 31	2020	Dry	August	--	416.3	338.6	77.7	18.7%	323.1	93.2	22.4%	279.8	136.5	32.8%
ME 7	32 43 31	2020	Dry	September	Used in Summary Table Analysis	265.4	191.1	74.3	28.0%	176.0	89.4	33.7%	132.0	133.4	50.3%