Appendix N

1993 CDFG
1603 Notification Process

STATE OF CALIFORNIA—THE RESOURCES AGENCY PETE WILSON, *Governor*

DEPARTMENT OF FISH AND GAME
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April 7, 1993

Humboldt County Gravel Operators:

1993 Streambed Alteration Agreement Notification Process
Gravel Extraction and Monitoring, Humboldt County

The Department of Fish and Game (DFG) has previously contacted you by letter (November 1990, February 1991) summarizing the information needed by DFG to evaluate your gravel extraction project. These needs were described relative to your 1991 and 1992 streambed alteration agreements which were consummated pursuant to Fish and Game Code, Section 1600 et seq. We requested this information to help us begin the difficult task of assessing direct as well as cumulative impacts of gravel operations. These impacts relate to the number and proximity of operations on adjacent parcels on the same bar, as well as operations on consecutive bars, both upstream and downstream.

We have occasionally asked members of the scientific community qualified in hydrology, geology and engineering to review certain gravel extraction projects for potential impacts to fish and wildlife resources. In addition, through the memorandum of understanding (MOU) process completed last year for the Mad River, a scientific committee reviewed several proposed gravel operations. During their review, the scientists discovered that it was difficult to interpret some of the cross-sectional or project map information provided us by operators. They also observed that the presentation of information was not always consistent between different operators.

Based on these experiences and a desire to avoid future problems, we began developing a consensus building process through which we can standardize and clarify the informational and monitoring requirements for streambed alteration agreements for gravel extraction projects. A key component of this process is the development of consistent guidelines for applicants to use in describing clearly the specific physical aspects of proposed extractions, which in turn will form the basis upon which the DFG can evaluate potential adverse project impacts or benefits and develop mitigation measures.

In addition, the requested information is essential for the DFG, Humboldt County and the applicant to be able to monitor the success of extraction prescriptions in achieving desired mitigation goals and thus prevent impacts to fish and wildlife resources. These same techniques may also be required by Humboldt

County, the local lead agency, when they establish monitoring requirements and develop gravel management plans for gravel extraction projects on the Mad, Trinity, Eel, and Van Duzen River systems.

To accomplish our goals in this regard, a series of meetings was held in an attempt to determine what information is specifically needed to conduct a thorough review of gravel extraction project impacts to stream resources. These meetings clearly established the need for a more coordinated approach for providing project information, monitoring and data collection. The first meeting was attended by the DFG, Mr. Tom Conlon (Humboldt County Planning Department Director), Mr. William Davis (representing most north coast gravel operators), some environmental groups and numerous gravel operators and their consultants/engineers.

During this initial meeting, the attendees agreed by consensus that it would be to everyone's benefit to develop standardized and consistent informational requirements and monitoring standards for incorporation into the DFG's streambed alteration agreement process for gravel extraction projects. The group also agreed that this information would be developed in subsequent meetings with representatives from DFG, Pacific Affiliates, Trinity River Restoration Associates, Incorporated, Rising Sun Enterprises, Baird Engineering, Dr. Douglas Jager, Dr. William Trush, Mr. Randy Klein and others. After this initial meeting, two additional meetings were held.

We are very encouraged by the progress made at these meetings in the development of informational requirements and monitoring standards. We also appreciate the willingness of the operators to work together cooperatively and operate on the river in a manner that benefits gravel procurement while protecting riverine resources. We believe this approach worked well last year on the Mad River. Humboldt County's environmental impact report for gravel extraction on the lower Eel River strongly focuses on this type of approach.

We encourage operators who work adjacent parcels and bars, as well as their respective consultants/engineers, to coordinate their information gathering and monitoring activities. Such coordination should significantly reduce duplication of effort and costs associated with these informational and monitoring requirements and could go a long way toward achieving our mutual goal of sustainable gravel extraction and fish and wildlife resource protection on our coastal rivers and streams.

The criteria presented here will form much of the basis for the DFG to develop streambed alteration agreements for gravel extraction projects. We also believe Humboldt County, as lead agency, could use this information in formulating a program for managing gravel extraction on a river system basis.

Based on the consensus reached by the scientific community and the local operators and their consultants/engineers, the DFG will require that the following information be included in all 1993 streambed alteration agreement notifications. There are some exceptions to these requirements described below that may apply to smaller operations that extract less that 5,000 cubic yards of material. Incomplete notifications will not be accepted and will be returned to the applicant.

Except as provided below, all notifications of streambed alteration for gravel extraction projects shall include, at a minimum, the following documentation and information:

A. Documentation of approved conditional use/vested right entitlements and reclamation plans. It is not necessary to resubmit this information if your entitlement was approved prior to 1992 and DFG has already received a complete copy. The DFG cannot issue a streambed alteration agreement for gravel extraction unless the applicant already has a legal entitlement from the local lead agency to extract gravel. In addition, we cannot issue an agreement for amounts that exceed the maximum identified quantity or using an extraction method that is inconsistent with legal entitlements and reclamation plans.

B. A blue line print (print) of a recent (within one year and since the most recent high water) aerial photograph at a scale of 1" = 400' that shows the river at a low enough flow such that the entire proposed extraction area is above water and clearly visible. In addition, all parcel lines, horizontal and vertical control points, cross sections, permanent monuments, and bench marks shall be clearly delineated on the print. The print shall also contain a legend which has the project name, property owner, Assessor's parcel number and the date and scale of the underlying aerial photograph used to make the print.

C. A preextraction narrative shall specify all methods and areas that may be potentially worked and these areas shall be delineated and detailed on the print. A project map drawn to a scale of 1" = 400' on the print, or on a sheet of clear acetate (mylar) overlaying the print, shall indicate

the exact location and limits of the proposed gravel operation, as well as access roads, equipment storage areas, stockpile areas and established riparian vegetation.

Although not mandatory, we recommend applicants consider using a more detailed print and project map scale (e.g. 1" = 100' or 1" = 50') where appropriate to show a more detailed extraction scenario in cases where a 1" = 400' scale results in a map that is too cluttered to read or understand adequately.

A clearly documented estimate of gravel recruitment from the previous winter, based on preextraction transects of successive seasons, should be provided.

D. The pre- and postextraction transects shall be established according to the following criteria:

1. Two bench marks (e.g., permanent monuments) shall be established for each bar above the stream's active banks. Bench mark elevations shall be reported or indicated relative to the 1929 National Geodetic Datum elevation for sea level and serve as common elevational controls for all transects.

2. Surveyed transects should be accurate to 0.1 feet and must document all breaks in slope, water's edge and, where readily discernible, the high-water mark for the previous winter's flow. The maximum distance between any two elevational points along a transect shall be 50 feet, inclusive of the wetted portion. If the distance between elevational points is found to be level for the first 500 feet, then the distance between elevational points can be increased to 100 feet. Thalweg location and thalweg elevation measured at the time of the transect shall be included independent of the 50-foot requirement.

3. End points for each transect shall extend beyond the actively scoured channel width (bank full width) and (a) onto a terrace flooded by a 10-year flood or greater, or (b) into established riparian vegetation clearly older than 10 years (e.g., 4" dbh or larger).

4. Preextraction (spring) transects shall be surveyed each year at the appropriate time relative to the applicant's desire to begin extracting gravel. Only those portions of each transect inundated by the previous winter's highest water need to be resurveyed.

If the highest flood of the season occurs after the transect survey is completed, another transect survey must be completed. Thus, applicant's wishing to survey transects early in the spring should be aware that they will risk the need to resurvey if storm events occur.

Preextraction transect information submitted with the streambed alteration notification shall overlay the previous season's postextraction transects to document recruitment.

5. Postextraction (fall) transects need only be resurveyed through those portions of the transect altered by extraction, temporary stockpiles or construction of roads and equipment storage areas. Postextraction transects shall overlay the preextraction transects to demonstrate compliance with the streambed alteration agreement.

6. The number of required cross-sectional transects for individual projects shall be based on the following guidelines (a diagram prepared by Mr. Lane Davis, Pacific Affiliates, Inc., illustrating cross-section location and the following guidelines is attached):

   a. A hypothetical center line for the river channel, measured equidistant from both banks and delineating the actively scoured channel (bank full width), must be established to determine length of the project line.

   b. If the radius of curvature is less than ten times greater than the average actively scoured channel width of the project reach, the reach will be considered a bend. If the radius of curvature is ten times greater than the average actively scoured channel width of the project reach, the reach will be considered straight.

   c. Transects shall be oriented perpendicular to the radius of the curvature.

   d. Transects shall be no greater than 400 feet apart except on straight reaches which can be 500 feet. If the length of the project reach is not evenly divided by 400 or 500 feet, the number of transects should be rounded up, e.g., a straight

reach of 2300 feet along on the Eel River will require (2300/500 feet = 4.6) 5 transects as a minimum.

e. We encourage operators to do the following additional monitoring whenever any permanent bridge, instream water diversion facility or other significant permanent structure is located within 2000 feet upstream or downstream of the project boundaries. In those cases, an annual pre-extraction transect near the structure should be surveyed as described above. The applicant's consultant/engineer should contact the agency or entity responsible for the structure to coordinate surveying activity and discuss extraction plans with them.

f. All survey notes, maps, drawings, etc., prepared in meeting the requirements outlined in Item 6a-d above, shall be made available to DFG upon request if we find additional information is necessary for us to adequately evaluate project impacts or monitoring results.

E. Postextraction volumetric estimates.

The preextraction narrative shall also include a quantifiable procedure for determining the upcoming season's postextraction volume estimates. We believe that, in many cases, the required permanent transects for monitoring purposes may be too wide to provide an adequate estimate of extraction volumes. It will be the responsibility of the applicant to ensure additional transects are made using a scientifically acceptable method for making this estimate with reasonable accuracy and precision. In addition, the applicant or his engineer shall certify that such estimate is accurate to the best of their ability.

F. Cross-sections shall be delineated and provided to DFG according to the following criteria and in the following manner:

1. Cross section plots shall be drafted to a vertical scale of 1 inch = 5 feet, and horizontal scale of 1 inch = 50 feet.

2. A clear delineation of the high-water mark of the previous winter's peak flow, water's edge and specific survey dates shall be provided.

3. Right bank (RB) and left bank (LB) facing downstream shall be indicated on the project map. Zero distance in cross-sections shall always originate on the left bank (LB).

G. Although not mandatory, DFG would prefer having the cross-sectional information and aerial photograph presented on a 24-inch x 36-inch print keyed to the original 1" = 400' aerial photograph, with cross-sections plotted on 100-square/inch grid paper. It is also preferred that cross-sectional information and aerial photographs be presented on the same 24 x 36-inch mylar sheet, with the aerial photograph presented on the top 12 x 36-inch area and the cross-section overlays on the lower 12 x 36-inch area.

DFG recognizes there may be occasion for smaller projects under 5,000 yards to be exempted from some or all of these requirements. Exemptions will be valid for one year only and will not automatically allow the applicant to be exempt from the subsequent year's monitoring requirements. The DFG will grant exemptions on a case by case basis each year. The applicant must submit pertinent information and the rationale for an exemption early enough in the season for evaluation by DFG in a timely manner. The applicant's compliance with the previous year's streambed alteration agreement conditions will be a major factor in DFG's decision regarding exemptions for subsequent years.

We realize that Fish and Game Code Section 1600 et seq. guarantees the applicant's right to arbitrate any conditions presented by the DFG in response to a notification. Because the informational and monitoring requirements described above were developed by consensus between DFG and representatives of the gravel operators, we believe future negotiations and possible arbitration will be limited to specific prescriptions for gravel extraction.

DFG will evaluate each project on a site by site basis and will be as flexible as possible in attempting to work with all operators. However, DFG is required to ensure our legislative and Fish and Game Commission mandates to protect fish and wildlife resources are met. This is especially important in terms of protecting anadromous fish spawning and rearing habitat.

DFG also realizes that it may be necessary for the operators and their consultants/engineers to alter or change some existing transects to conform to these standard requirements. In order to provide a reasonable transition period, we will not require complete compliance for transect relocation (items 6 a., b., c.) in 1993 but will make it mandatory for all 1994 notifications.

In addition, we recognize there may be more effective or efficient ways of developing, displaying or presenting the requested project and monitoring information. Therefore, we would appreciate receiving any suggestions you may have for improving this process once you have had an opportunity to try things out this year. We look forward to hearing from you at the end of this year's extraction season.

We again wish to express our appreciation for the cooperation of the gravel extraction industry in Humboldt County as we attempt to achieve the important goals of sustainable gravel extraction and natural resource protection within our river systems. If you have any questions regarding this matter, please contact Mr. Larry Preston at (707) 441-5736 or Ms. Karen Kovacs at (707) 441-5789.

Sincerely,

Richard L. Elliott

Richard L. Elliott
Regional Manager

Enclosure

cc: See attached list.

1993 MONITORING TRANSECTS GUIDELINES

Please refer to the sample drawing (Attachment "A") as you go through the following steps.

1. Delineate "Bankful Limit" (usually Vegetation Limit).

2. Scribe "Best Fit" centerline between the bankful limits ("Meander Centerline").

3. Identify: Beginning of Curve (BC)
   End of Curve (EC)
   Tangents

   EC's and BC's will be the points of inflection.

4. Scribe a line perpendicular to the tangent, at the inflection point (EC, BC); connect the lines to create a "Radial Axis".

5. Measure the angle, divide by five (5), and mark each segment.

6. Divide each segment in half and place a mark on the meander centerline.

7. Draw a line from the radial axis through each point (Step 6). The line should extend from the radial axis to the far bankful limit. The field transect shall be located on this line and shall extend from the left bankful limit to the right bankful limit.

8. The maximum distance between the transects shall be 500* feet as measured from points on the meander centerline.

9. The previously established transects (1991, 1992) shall be reviewed to see if they approximate this monitoring plan; otherwise, new transects will be required.

10. The 8-1/2"x17" photocopy (Attachment "B") shows the layout which shall be used for transect submittals. Aerial Photo Scale is 1"=400'. Cross-sections plotted at a scale of 1"=50' horizontally and 1"=5' vertically.

11. If you have any questions contact Mr. Larry Preston at the Department of Fish and Game, (707) 441-5736.

* 400 feet on curves.

(1/15/93)DPG

ATTACHMENT "A"