

**King Salmon/Fields Landing Sea Level Rise Workshop**  
**Humboldt County Ag Center**  
**August 7, 2018**

**Speaker Presentations**

*Rex Bohn, Humboldt County First District Supervisor* – Introductory remarks.

*John Ford, Humboldt County Planning and Building Director* – The purpose of the workshop is to communicate potential risks and develop adaptation strategies going forward. Time scale: far into the future; the objective is to develop collaborative strategies.

*Aldaron Laird, Environmental Planner, Trinity Associates* – What’s expected as sea level rises? In short, tidal inundation as well as rising groundwater in low-lying areas are expected to drive people and development out eventually. Maps and discussion were presented with a PowerPoint presentation addressing the why, when, how, where and what things will happen in regard to sea level rise in the King Salmon (KS)/Fields Landing (FL) areas.

He emphasizes that the projections shown are for the “do nothing” scenario, which we can avoid. The first step is this workshop to educate those who live and work in these communities about which assets and critical infrastructure are vulnerable. Because KS and FL are developed, the goal should be to sustain the use and value as long as possible, but also move development that can be relocated. When building new structures, they should be in locations that don’t need to be protected from sea level rise if possible or engineered to accommodate projected sea level rise.

Potential solutions: In King Salmon, we could fill the canals and build a dike to protect the community from tidal water coming in the back, or elevate infrastructure to function as a barrier dike for PG&E facilities. We could also build a barrier dike right along the canal and King Salmon Avenue, though that would change the nature of the community. In Fields Landing, we could fill low-lying areas to the north and south at the railroad, or build a dike along the railroad to isolate and protect the residential portion from the waterfront, and the waterfront will need a dike or we could elevate the community. There are many engineering solutions that are physically feasible, but we need to identify funding to implement.

*Michael Richardson, Humboldt County Supervising Planner* – Brief explanation of Coastal Plans and amendments to them. Upcoming HBAP update will incorporate strategies to address sea level rise. He explained the relationship of local coastal plans to planning and development processes, and the County versus Coastal Commission permit jurisdiction.

Michael presented an overview of Coastal Act basics and policies. LCPs need to be updated to account for new situations, including sea level rise. Introduced sea level rise adaption policy framework. The framework includes goal and policy options, but now, before policies are set, is the time to get public input to shape policies. Goals and policies for coastal development will be modified as per public input as the process goes forward.

Workshop comments and ideas will be compiled and draft sea level rise policies brought before the Planning Commission by the end of 2018. He anticipates a lot of Planning Commission workshops and public hearings, similar to cannabis ordinance. Next steps include a draft being brought before the Board of Supervisors for approval, and then it will proceed through the Coastal Commission process,

which also includes public hearings. Once approved, plans will be modified as may be required into the future through an iterative process.

*John Miller, Humboldt County Senior Planner* – King Salmon and Fields Landing are not only at risk for sea level rise, but tsunamis as well. HBAP will include tsunami hazard planning. The National Weather Service has evaluated the areas at risk and the central evacuation areas, and compiled tsunami-ready community plans for King Salmon, Fields Landing and other communities. The County will be using these as part of the HBAP update and building off of them to develop some of the land use policies. Also, the California Geologic Society has been doing probabilistic tsunami hazard area mapping to update the models of potential inundation areas that will help inform planning efforts. The goal is to support existing communities and development and support community resilience to tsunami hazards. Stay tuned to County website for details.

*Bob Merrill, District Manager, California Coastal Commission North Coast District Office* – Provided an overview of the role of Coastal Act, and the local planning aspect. Bob describes the partnership model of state/local collaboration on coastal development matters.

The Coastal Commission’s main and preferred sea level rise strategy: move away from the hazard, referred to as “managed retreat.” He mentions several classes of responses to sea level rise, including buyout programs and transferred development rights, where the receiver site is allowed a greater development density than normally allotted. Beach nourishment, living shorelines, and other ideas are also mentioned briefly. Hard barriers are considered a last resort. Avoiding development completely in hazardous areas would be safest, but is not always realistic. An example of accommodation is a building in which the habitable part of the structure is elevated, with reinforced and/or breakaway first floor walls. In other words, adapt structures to the reality of periodic flood.

## **Public Comments**

*FL = Fields Landing; KS = King Salmon; PC = public commenter; JF = John Ford; BM = Bob Merrill; MR = Michael Richardson; LS – Lisa Shikany*

*PC 1:* Is it possible plans to respond to sea level rise may affect property taxes?

*JF:* It’s possible, but not planned at this point.

*PC2:* Person wonders why the services district is not present at this meeting, since they seem to be first responders in emergencies. Also he has a warning for other attendees: after he made a flood insurance claim in 2005 in King Salmon, he was then blacklisted for homeowner’s insurance for 2 years.

*PC3:* MR’s comments seemed general. She wonders what can possibly be done by the end of the year as far as a concrete plan. She was concerned about that the County’s request for solution ideas was sudden.

*JF:* Attempts to explain the objective of the workshop process. Public input is data, used to identify strategies and approaches to develop policies and plans. Specifics of solutions come later and we want to take small, stable steps. The County doesn’t want to force ideas onto the communities without input first.

*PC3:* Person admits she hasn't thought about it much and didn't realize that she should come prepared with ideas. Because of the age of many attendees present, the scenarios may be moot.

*PC4:* Mickey Hulstrom of the Humboldt Community Services District announced his interest and presence.

*PC5:* The entire world is experiencing the same issues as us. We should look at Holland as an example of how to adapt, and also New York City and Venice. We live on the coast because we love the coast, so if we have a choice to adapt and stay, we want to stay.

*JF:* Great point. We are looking into other communities that have been adapting to flooding and sea level rise and this is incorporated into our HBAP update.

*PC6:* Resident of KS relates that the King Salmon elementary school access road floods regularly. She has done some research on Rotterdam adaptations. She brought forth the idea of gated holding areas for flood water, as a temporary buffer against flooding. Can the old dike structures along the SE edge of King Salmon be revived? Some of these structures may be feasible.

*PC7:* Older resident recently bought a house in FL knowing it could not be passed on to their kids. She considered implementing adaptations like rising up the house or breakaway barriers for her own home. She asks: what is there to save here in terms of private vs. public assets? She could see the County spending money on public assets, but why would the County be interested in saving her house? PG&E yes, her house no. Can't the school and homes and structures be moved? What's the point of building a barrier if groundwater will flood the area anyway?

*JF:* Points out that houses have a value as community assets, beyond market value. Promotes protecting homes and communities as long as possible, but then do a graceful retreat.

*PC8:* Older King Salmon resident has been watching water level changes for fifteen years. He states that the water level fluctuates in KS, but there is not a steady rise. He doubts that we are in an area of sea level rise. Could it be that we are in one of those rare areas where sea level rise is not happening? Secondly, he notes that the 1964 earthquake in Alaska wiped out Crescent City, but didn't affect other areas of the coast, other than a momentary water rise. He wonders why.

No one offers an explanation.

*PC9:* Wonders if pumps can be used behind dikes to reduce flooding in some places?

*JF:* Possibly, this is worth looking at.

*PC10:* Resident feels water-based tourism is of value to the community (character of place, and use, even if only temporary or occasional). Gill's By The Bay in KS and the boat docks in FL are examples that are worth saving.

*PC11:* Troy Nicolini of National Weather Service talks about tsunami, referring to past meetings on the subject. Points out that subduction causes about half the sea level rise in this area; he claims there could be a rebound up to 3 feet after the next large earthquake. He predicts that earthquake will happen in the next 50-100 years.

*PC 12:* FL resident has a question about inundation maps. She would like to see the contours on more granular scale.

Aldaron: That work has been done and it will be available online.

*PC 13:* Person wondered, if the levees can be raised, how long will they protect us?

*JF:* Data suggests that sea level is rising faster than we previously thought. Ultimately, we will all work together to develop a policy framework to adapt to changing circumstances.

*PC14:* Person wonders whether anyone is currently working on implementing projects or getting funding for projects and if not, wonders why we are waiting.

*JF:* The workshop process and policy development help get environmental and policy pieces in place to get funding. Policy, then funding, then projects.

*PC15:* Person says his home can't be replaced if he sells it at present value; if sold he won't be able to get a new place on the coast. Also, he has a question about property taxes - will they go down as property value drops? If improvements are made to mitigate sea level rise, will taxes go up?

*JF:* Some counties nationwide, particularly after 2008's economic crisis did reassess property values and decrease property taxes. Adaptive measures taken by individual property owners might increase property tax, if property value goes up. As far as public adaptive projects like dikes, he doesn't see it. He admits he doesn't really know.

*PC 16:* Joel Gerwein of the State Coastal Conservancy spoke about pilot implementation projects he is working on in the San Francisco Bay area and here to test adaptation methods. Smaller scale tests can then be scaled up and applied locally by others. He is working on a living shoreline project locally in Arcata to protect the wastewater treatment plant. They are working to get funding for implementation of these projects around Humboldt. Prop 68 is one potential funding source.

*PC17:* Supervisor Rex Bohn wants to know if the Coastal Commission can pre-approve smaller methodologies or designs to help property owners avoid the expense of designing and permitting projects.

*BM:* Even though we're starting from scratch right now, every project is a data point for later people to use to build on the experience of previous project to help expedite projects through the Coastal Commission permitting process. It gets easier as more projects are approved.

*Supervisor Bohn:* Lenders may be less willing to finance projects in these communities after hearing the sea level rise projections discussed this evening, so homeowners are likely to need to self-finance. We need to collaborate to make the process more cost-effective.

*MR:* Gives an example of general or “blanket” permit with performance standards for permit applicants to use to avoid reinventing the wheel. County is trying to develop more of these plans.

*PC18:* A person complains that the Coastal Commission’s approval process is too long and expensive, not user friendly, and generally not a good experience according to everyone he’s talked to.

*MR:* Is that a question or a comment?

*BM:* We appreciate that. Some applicants haven’t had the same negative experience. It is a process and it is a state requirement. We do strive to reduce that burden.

*PC19:* FL resident has problem with some of the slides shown in Aldaron’s presentation. One intersection in FL showing flooding, he says, is due to built-up mud in a storm drain and ditches never cleaned out since the 80s. Some other water problems are due to bad maintenance of flood gates, culverts and ditches. He thinks flood gates that worked would help a lot.

*PC20:* Person wants to know if dikes were built in FL, whose land would the dikes be built on.  
*JF:* not determined yet.

*PC21:* KS resident also complains the ditches and flood gates are never repaired or maintained.

*PC22:* Levees between FL and KS were never fixed, why?

*PC23:* Because they are on private property, owned by multiple property owners, not the County.

*PC24:* Several residents talking at once say they have been asking for fixes for years that appear to be relatively inexpensive, but nothing is done.  
*JF:* We are documenting your complaints tonight.

*PC25:* Question for PG&E: What about the nuke rods (radioactive waste)?

*PG&E:* Alison Talbott of PG&E said the Independent Spent Fuel Storage Installation is at elevation 45 ft. and would not be influenced by sea level rise directly. PG&E recently submitted their License Renewal Application to the Nuclear Regulatory Commission for continued storage on site. She indicated there did not appear to be political will to move the fuel rods anytime soon, though it is the federal government’s responsibility to do so.

*PC26:* Person wondered if it was worth continuing to own and maintain a home in these areas.  
*JF:* I would want to maintain my home as long as I could. A lot of factors need to be weighed, including financial costs and social costs.

*PC26:* Where can we go with further comments or ideas?

*LS:* Invites phone and email comments.

**End of meeting.**