## CALIFORNIA COASTAL COMMISSION

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# **Th17b**

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## STAFF REPORT: CDP APPLICATION

**Application Number: 2-12-004** 

**Applicant:** Sonoma County Water Agency

**Project Location:** At Goat Rock, Sonoma Coast State Beach and the Russian River

mouth in the unincorporated Jenner area of Sonoma County (APNs

099-040-002, 099-030-006, and 099-030-007).

**Project Description:** Implement a 3-year estuary management program and conduct a

scientific investigation of a relic jetty at the mouth of the Russian River. The estuary management program includes the construction and maintenance of a low velocity lagoon outlet channel that would sustain raised water elevations in the estuary from May 15th to October 15th to benefit fish habitat. In addition, the proposed

program includes sand bar breaching activities during the

remainder of the year, and during the lagoon management period, if necessary to prevent flooding. The project also includes a geotechnical evaluation of the Goat Rock Jetty to determine the

effect of the jetty on water elevations in the estuary.

**Staff Recommendation:** Approval with Conditions

#### SUMMARY OF STAFF RECOMMENDATION

The Sonoma County Water Agency (SCWA) proposes to implement an estuary management program at the Russian River mouth to enhance fish habitat and provide flood protection. The proposed project is located at the Russian River Estuary, within Goat Rock, Sonoma Coast State Beach, near the town of Jenner, Sonoma County. The project site is located partially on State Parks

property, partially on property administered by the California State Lands Commission (SLC), and within the Russian River Jenner Marine Protected Area as designated by the California Department of Fish and Wildlife (DFW). Previous development at the site has been authorized by the Coastal Commission in CDPs 1-96-09 and 2-01-033-A1, and emergency CDPs 2-12-002-G, and 2-13-005-G for periodic breaching of the sand bar at the Russian River Mouth.

The proposed project has three main components: 1) a new program that would implement a plan for a lagoon outlet channel to be maintained from May 15 to October 15; 2) sand bar breaching when necessary to minimize flooding; and 3) a geotechnical evaluation of an existing jetty at the river mouth (the jetty study).

First, the project proposes creation of a lagoon outlet channel to maintain the water elevation in the estuary during what the Applicant calls the 'lagoon management period', which lasts from May 15th to October 15th, at a slightly higher elevation than has typically been the case in the past. Second, the project proposes sand bar breaching to minimize flooding if necessary between October 16th and May 14<sup>th</sup>, and when flooding or water quality conditions warrant it, between May 15th and October 15th. Last, the jetty study will provide information, for future use, regarding how the jetty influences the seasonal closure of the estuary and whether or not removing portions of the jetty would benefit fish habitat in the estuary.

The project area is in and adjacent to several types of significant biological resources, including habitat for anadromous fish, dune habitats, and pinniped haulouts. As concerns anadromous fish, the Russian River has been designated critical habitat for Coho salmon, Chinook salmon, and Steelhead, all of which have been listed as threatened species under the federal Endangered Species Act (ESA). In 2008, the National Marine Fisheries Service (NMFS) issued a Biological Opinion (BO) for the Russian River Watershed directing SCWA to change their management practices to provide higher water elevations in the estuary during the summer months to benefit habitat for juvenile salmonids while avoiding impacts from flooding. Thus, the goals of the proposed project are to improve fish habitat as directed by the NMFS BO while at the same time protecting low-lying development from flooding. The proposed project, also known as the Estuary Management Project, is proposed to implement one of the requirements of the BO.

The proposed project can be authorized under the Coastal Act because: (1) it is necessary to provide for the biological productivity of coastal waters appropriate to maintain optimum populations of marine resources as required by Section 30230-31 of the Coastal Act; (2) it is a permissible use in streams and includes the best mitigation measures feasible, including adaptive management, consistent with the requirements of Section 30236 of the Coastal Act; (3) risks to life and property are minimized consistent with the requirements of Section 30253 of the Coastal Act; and (4) public access is implemented in a manner that takes into account public safety and the protection of fragile natural resources as required by Section 30214 of the Coastal Act.

In the subject case, the project has two principal objectives, both of which are purposes that are enumerated in Section 30236: (1) flood alleviation; and (2) necessary improvement of fish and wildlife habitat. Further, all proposed breaching activities will be conducted in accordance with restrictions in the Incidental Harassment Authorization (IHA) (NMFS 2013) and additional biological resource protections required by State Parks. In addition, the project includes measures to minimize disruption to public access and also includes construction best

management practices (BMPs) to protect coastal waters (including spill prevention, a spill contingency plan, and onsite spill containment and spill cleanup kits). All construction equipment proposed for use in the project will access the beach by an existing access point and route, which are regularly used by State Parks staff. All construction equipment will be maintained in good working order, and construction equipment will not remain on the beach overnight. Special Conditions are included to better define and refine elements of the project, most specifically with respect to the way in which monitoring and project adaptation will proceed over the course of the project, and the way in which lessons learned will be applied to better protect coastal resources consistent with project objectives. Conditions limit the duration of the approval to three years, with the possibility for Executive Director extension for another three years, after which time a new CDP or a CDP amendment would be required to continue the project.

As proposed and conditioned, the estuary management project and jetty project will protect coastal resources consistent with the requirements of the Coastal Act. Staff recommends that the Commission approve a CDP with conditions, and the motion to implement this staff recommendation is found on page 4 below.

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Appendix A – Incidental Harassment Authorization

Appendix B – Proposed Mitigation Monitoring Plan

#### **EXHIBITS**

Exhibit 1 – Vicinity Map and Parcels

Exhibit 2 – Project Location Photos

Exhibit 3 – Jetty Study Location, Detail, and Photos

Exhibit 4 – Pinniped Haul Outs

Exhibit 5 – ExParte Communication

Exhibit 6 – Drill Rig Dimensions

Exhibit 7 – Channel Types, Design, and Photos

#### I. MOTION AND RESOLUTION

Staff recommends that the Commission, after public hearing, **approve** a coastal development permit for the proposed development. To implement this recommendation, staff recommends a **YES** vote on the following motion. Passage of this motion will result in approval of the CDP as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

*Motion:* I move that the Commission approve Coastal Development Permit Number 2-12-004 pursuant to the staff recommendation, and I recommend a yes vote.

Resolution to Approve CDP: The Commission hereby approves Coastal Development Permit Number 2-12-004 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

#### II. STANDARD CONDITIONS

- 1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the Permittees or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- **3. Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
- **4. Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
- **5. Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the Permittees to bind all future owners and possessors of the subject property to the terms and conditions.

## III. SPECIAL CONDITIONS

1. **Approved Project.** Subject to these standard and special conditions (including modifications to the project, mitigation measures, and/or the project plans required by them), this CDP authorizes implementation of the Russian River Estuary Management Project and related

jetty study, including: 1) a new program that would implement a lagoon outlet channel during the lagoon management season, from May 15th to October 15th, 2) sand bar breaching from October 16th to May 14th and as necessary from May 15th to October 15th to minimize flooding, and 3) a geotechnical evaluation of a relic jetty at the river mouth, all as more specifically described in the proposed project materials (see Appendices A and B and Exhibits 2, 3, and 7).

- **2. Construction Plan.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittee shall submit two copies of a Construction Plan (the Plan) to the Executive Director for review and written approval. The Plan shall, at a minimum, include the following:
  - a. Construction Areas. The Construction Plan shall identify the specific location of all construction areas, all staging areas, and all construction access corridors in site plan view. All such areas within which construction activities and/or staging are to take place shall be minimized to the maximum extent feasible in order to have the least impact on public access and adjacent biological resources as well as to maintain best management practices (BMPs) to protect coastal dune and marine resources on-site and in the surrounding area, including by using offsite areas for staging and storing construction equipment and materials, as feasible. In addition, all construction areas shall avoid sensitive dune plant species, including Tidestrom's lupine, as required in subsection (c), below. The placement of the piezometers shall occur no closer than fifty feet from the sensitive dune plant habitat (as outlined in Exhibit 3 Jetty Study Location, Detail, and Photos). Construction (including but not limited to construction activities, and materials and/or equipment storage) is prohibited outside of the defined construction, staging, and storage areas.
  - **b.** Construction Methods and Timing. The plan shall specify the construction methods to be used, including all methods to be used to keep the construction areas separated from sensitive coastal dune and marine resources and public recreational use areas (including using unobtrusive fencing (or equivalent measures) to delineate construction areas). All work shall take place during daylight hours and all lighting of the beach, river, and dune habitat is prohibited.
  - c. Dune Plants Avoidance. The plan shall include methods to avoid impacts to sensitive dune plant species, including Tidestrom's lupine. All sensitive species shall be avoided during construction, including through locating the defined construction areas required in subsection (a) away from such species (as generally depicted on Exhibit 3 Jetty Study Location, Detail, and Photos). Furthermore, the sensitive dune plant habitat shall be fenced off during the two weeks wherein the instruments are being placed and the seismic work is occurring. For the duration of the project, markers identifying the boundaries of the sensitive dune plant habitat shall remain in place. A monitor shall be on site during instrument placement, testing, and removal to ensure that project activities occur within the defined construction, staging, and storage areas and outside of the sensitive dune plant habitat.

- **d. Best Management Practices.** The plan shall clearly identify all BMPs to be implemented during construction and their location. Contractors shall ensure that work crews are carefully briefed on the importance of observing the appropriate precautions and reporting and cleanup of accidental spills. Construction contracts shall contain appropriate penalty provisions, sufficient to offset the cost of retrieving or cleaning up improperly contained foreign materials.
- e. Construction and Instrument Noise Level Restrictions. Noise generated by any instrument driving or hammer strike activities shall be minimized to the maximum extent practicable. Underwater noise shall not exceed an accumulated 187 dB SEL as measured 10 meters from the source. At no time shall peak dB SEL rise above 206 at 10 meters from the source. Furthermore, the Applicants shall limit activities at the site that involve the use of heavy equipment to between local sunrise to local sunset.
- f. Construction Site Documents. The plan shall provide that copies of the signed CDP and the approved Construction Plan be maintained in a conspicuous location at the construction job site at all times, and that such copies are available for public review on request. All persons involved with the construction shall be briefed on the content and meaning of the coastal development permit and the approved Construction Plan, and the public review requirements applicable to them, prior to commencement of construction.
- g. Construction Coordinator. The plan shall provide that a construction coordinator be designated to be contacted during construction should questions arise regarding the construction (in case of both regular inquiries and emergencies), and that their contact information (i.e., address, phone numbers, etc.) including, at a minimum, a telephone number that will be made available 24 hours a day for the duration of construction, is conspicuously posted at the job site where such contact information is readily visible from public viewing areas, along with indication that the construction coordinator should be contacted in the case of questions regarding the construction (in case of both regular inquiries and emergencies). The construction coordinator shall record the name, phone number, and nature of all complaints received regarding the construction, and shall investigate complaints and take remedial action, if necessary, within 24 hours of receipt of the complaint or inquiry. In addition, all construction personnel shall be trained in proper material handling, cleanup, and disposal procedures.
- **h. Notification.** The Permittee shall notify planning staff of the Coastal Commission's North Central Coast District Office at least three working days in advance of commencement of construction, and immediately upon completion of construction.
- i. **Property Owner Consent.** The plan shall be submitted with evidence indicating that the owners of any properties on which construction activities are to take place, including properties to be crossed in accessing the site, consent to such use of their properties.

Minor adjustments to the above construction requirements may be allowed by the Executive Director in the approved Construction Plan if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources. All requirements above and all requirements of the approved Construction Plan shall be enforceable components of this

- CDP. The Permittee shall undertake construction in accordance with the approved Construction Plan.
- **3. Mitigation Monitoring Plan.** The project shall be conducted in compliance with the requirements of the Mitigation Monitoring Plan, dated August 17, 2011, (see Appendix B) except where the terms and conditions of this CDP require actions more protective of coastal resources.
- **4. Marine Mammal Avoidance and Monitoring.** All work shall avoid the river mouth area where seal haul out is typically located (see Exhibit 4 Pinniped Haul Outs). In addition, all work shall be conducted consistent with the NMFS and NOAA-approved seal haul out plan described in the Incidental Harassment Authorization (April 2013) (IHA) and any updates to this IHA. Project activities shall comply with all mitigation, monitoring and reporting requirements contained in the IHA, including the following requirements as outlined in the IHA:
  - **a. Avoid Sudden Flushes.** Permittee crews shall cautiously approach the haul-out ahead of heavy equipment to minimize the potential for sudden flushes, which may result in a stampede. Crews on foot shall make an effort to be seen by seals from a distance, if possible, rather than appearing suddenly at the top of the sand bar, again preventing sudden flushes. Boats operating near river haul-outs during monitoring shall be kept within posted speed limits and driven as far from the haul-outs as safely possible to minimize flushing seals.
  - **b. Avoid Haul-Out.** Permittee crews shall avoid walking or driving equipment through the seal haul-out. Physical and biological monitoring at the haul-out location shall not be occur if a pup less than one-week old is present at the monitoring site or on a path to the site.
  - **c. Monitoring From Bluff.** During breaching events, all monitoring shall be conducted from the overlook on the bluff along Highway 1 adjacent to the haul-out in order to minimize potential for harassment.
  - **d. Disturbance Recovery.** The Permittee shall maintain a one-week no-work period between water level management events (unless flooding is an immediate threat) to allow for an adequate disturbance recovery period. During the no-work period, equipment must be removed from the beach.
  - **e. Equipment BMPs.** All equipment shall be driven slowly on the beach and care shall be taken to minimize the number of shutdowns and start-ups when equipment is on the beach. All work shall be completed as efficiently as possible, with the smallest amount of heavy equipment possible, to minimize disturbance of seals at the haul-out.
  - **f. Haul-out Maintained.** The Permittee shall conduct seal counts at the Jenner seal haul-out and at nearby coastal and river haul-outs in accordance with methods described in the Russian River Management Activities Pinniped Monitoring Plan (Pinniped Monitoring

Plan), dated September 9, 2009, or as updated by requirements of NMFS under the Marine Mammal Protection Act (MMPA). If monitoring during the lagoon management period indicates decreases in overall use at the Jenner haul-out are correlated with increases in use at the three closest haul-outs, then the Permittee shall consult with the Executive Director, NMFS and CDFW to modify the Estuary Management Plan activities such that the haul-out site is maintained. Proposed alterations to the approved Estuary Management Plan shall be reported to the Executive Director. No alterations to the approved Estuary Management Plan shall occur without an approved amendment to this CDP, unless the Executive Director determines that no amendment is legally required.

- 5. Public Access Management Plan. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittee shall submit two copies of a public access management plan (Public Access Plan) to the Executive Director for review and approval. The Public Access Plan shall clearly describe the manner in which public access at the project site is to be protected, with the objective of avoiding any adverse impacts to public access at Goat Rock, Sonoma Coast State Beach. The Public Access Plan shall be consistent with all other terms and conditions of this CDP, and shall at a minimum include the following:
  - a. No Disruption of Public Access. Development under this CDP that blocks access to the beach at the project site shall be prohibited. Temporary signs shall warn the public of construction while construction activities are underway. Signs shall direct the public to safe access routes during construction activities. Signs shall not discourage public access. Signs shall notify beach users of channel conditions, potential for safety hazards from beach erosion or hydrologic action, and emergency contact information. Signs shall be posted and maintained at key locations, such as the parking lot at Goat Rock State Beach Parking lot, the unofficial beach access trail located on the north side of the beach off Highway 1, and 100 feet on either side of the outlet channel.
  - **b.** Peak Public Access Times Avoided. Project activities shall occur Monday through Thursday only, to avoid impacts to park visitors during peak visitation times (Friday through Sunday).

All requirements above and all requirements of the approved Public Access Plan shall be enforceable components of this CDP. The Permittee shall undertake development in accordance with the approved Public Access Plan, which shall govern all general public access to the site pursuant to this CDP.

6. Monitoring Plan. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittee shall submit two copies of a Flood Analysis, Habitat and Water Quality Monitoring Plan (Monitoring Plan) to the Executive Director for review and approval. The Flood Analysis portion of the Monitoring Plan shall identify avoidance and mitigation measures as detailed in Special Condition 6(a). The Habitat Monitoring portion of the Monitoring Plan shall cover all approved project activities, and shall evaluate project effectiveness and alternatives as detailed in Special Condition 6(b). The Water Quality Monitoring portion of the Monitoring Plan shall direct management actions in response to water quality conditions and as detailed in Special Condition 6(c). The primary objective of

the Monitoring Plan shall be to ensure that approved project activities protect and enhance project area habitats while also protecting development from flooding and enhancing water quality, and shall be measured against a clearly defined project baseline, which shall be provided in the Monitoring Plan. The Monitoring Plan shall be based upon an adaptation framework where lessons learned from approved project activities and monitoring are applied through adaptive changes designed to better achieve the primary objective over the course of this authorization. The Monitoring Plan shall include all monitoring components of the BO and the FEIR for the project, and shall include, at minimum, the following:

- a. Flood Analysis. The Permittee shall continue to coordinate with NMFS and work with property owners affected by flooding to identify measures that would, if necessary, substantially minimize or avoid any damages to existing structures that would occur as a result of increasing water elevations in the lagoon pursuant to the approved project. As appropriate and indicated in the BO, the Permittee shall continue to survey properties within the estuary's maximum water elevation in greater detail to more accurately and precisely determine the elevation of the structures potentially at risk; this information shall be kept on record by the Permittee and a copy shall be provided to each of the property owners. A detailed account of individual properties and development of these properties for each foot of estuary water surface elevations shall be provided. The range of options available to protect affected developments, other than breaching or controlling water levels in the estuary, including relocating, elevating, or reinforcing structures, shall be provided. At a minimum, and evaluation of the effects of flood levels at 4.5, 7, and 9 feet shall be so evaluated.
- b. Habitat Monitoring. Monitoring shall be conducted consistent with the BO to provide information on (1) the ways in which the project results in benefits to juvenile steelhead and/or adverse impacts to other salmonids, (2) whether a controlled outlet program can achieve optimal lagoon elevations, and (3) whether habitat improvements would result if no breaching occurred, water levels were allowed to be higher than current management, a larger estuary was formed, and low-lying development within the historic estuary footprint were flooded. A geotechnical study shall be conducted prior to December 31, 2014 to contribute to a determination as to what modifications to/removal of the jetty infrastructure would optimize seepage through the sand barrier and allow estuary levels to rise to a maximum elevation without the sand bar manipulation. An evaluation of the need for additional monitoring wells and frequency of water level data needed to adequately characterize seepage through the sand bar and jetty shall be conducted at the commencement of the geotechnical work so that reliable information is assured to be included in the study.
- c. Water Quality Monitoring. The water quality monitoring data collected for the 2008 BO, the Temporary Urgency Change Petition's surface water sampling program, and the Stipulated Judgment's sediment sampling requirement shall be integrated under the direction of an independent water quality professional. These data collection programs shall be linked and coordinated so that they provide a cohesive and useful data set that can be used to evaluate the low velocity lagoon outlet channel and whether or not it is

successful in sustaining raised water elevations and improved water quality conditions in the estuary.

**d.** Monitoring Reports. The Monitoring Plan shall provide for submission of annual reports of monitoring results to the Executive Director for review and approval for as long as activities are authorized by this CDP, with the first annual monitoring report due on August 15, 2014, and subsequent reports due on August 15th of each year thereafter. Each monitoring report shall be cumulative and shall summarize all previous results. Each report shall clearly document conditions in the project area related to project implementation, including in narrative (with supporting monitoring data) and through photographs taken from the same fixed points in the same directions each year, all commencing from the project baseline. Each report shall include a performance evaluation section where information and results from the monitoring program are used to evaluate the effect of project implementation with respect to flooding, habitat, and water quality impacts, both beneficial and detrimental. To allow for an adaptive approach, each report shall also include a recommendations section to address changes that may be necessary in light of monitoring results and/or other information, including with respect to more current data and/or species information related to the habitat areas in question, if any. Actions necessary to implement the recommendations shall be implemented within 30 days of Executive Director approval of each Monitoring Report, unless the Executive Director identifies a different time frame for implementation.

Minor adjustments to the above monitoring requirements may be allowed by the Executive Director in the approved Monitoring Plan if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources. All requirements above and all requirements of the approved Monitoring Plan shall be enforceable components of this CDP. The Permittee shall undertake development in accordance with the approved Monitoring Plan.

- **7. Assumption of Risk.** By acceptance of this CDP, the Permittee acknowledges and agrees, on behalf of itself and all successors and assigns:
  - **a.** Coastal Hazards. That the site is subject to coastal hazards including but not limited to episodic and long-term shoreline retreat and coastal erosion, high seas, ocean waves, storms, tsunami, tidal scour, coastal flooding, and the interaction of same;
  - **b. Assume Risks.** To assume the risks to the Permittee and the property that is the subject of this permit of injury and damage from the above-identified coastal hazards in connection with this permitted development;
  - **c. Waive Liability.** To unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from the above-identified hazards;
  - **d. Indemnification.** To indemnify and hold harmless the Coastal Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred

in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to the above-identified coastal hazards.

- **8. Sand bar Breaching Limitation**. Except under conditions requiring immediate action to prevent or mitigate loss or damage to life, health, property, or essential public services, the sand bar breaching activities authorized by the CDP shall not be initiated on or within 36 hours prior to any weekend or State holiday.
- 9. CDP Term. Development authorized by this CDP is valid for three (3) years from the date of Commission approval (until August 15, 2016). One request for an additional three-year period of development authorization may be accepted, reviewed and approved by the Executive Director for a maximum total of six (6) years of development authorization, provided the request would not alter the project description and/or require modifications of conditions due to new information or other changed circumstances. The request for an additional three-year period of development authorization shall be made at least 120 days prior to August 15, 2016. If the request for an additional three-year authorization period would alter the project description and/or require modifications of conditions due to new information or other changed circumstances, an amendment to this CDP shall be necessary to authorize development beyond August 15, 2016.

If the Permittee submits a request/application to continue estuary management (including breaching and other activities intended to control water elevations) beyond August 15, 2016, such request/application shall be accompanied by a project alternatives analysis that, at minimum, provides a survey of potential flooding risks to properties within the estuary up to a water elevation of 14 feet, or the maximum water elevation known to occur, whichever is higher, to precisely determine the elevation of the structures potentially at risk. In addition, the analysis shall include an evaluation of the range of options available to protect against identified flooding risks, other than breaching or controlling water levels in the estuary, including relocating, elevating, or reinforcing structures. Such analysis shall also include an evaluation of the range of options available to modify or remove the jetty to reduce or eliminate the need for breaching.

10. Other Agency Approval. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittee shall submit to the Executive Director written evidence that all necessary permits, permissions, approvals, and/or authorizations for the approved project have been granted by Sonoma County, the North Coast Regional Water Quality Control Board, California State Lands Commission, California Department of Parks and Recreation, California Department of Fish and Wildlife, National Marine Fisheries Service, U.S. Army Corps of Engineers, and the U.S. Fish and Wildlife Service or that no such permits or approvals are necessary. Any changes to the approved project required by these agencies shall be reported to the Executive Director. No changes to the approved project shall occur without a Commission amendment to this CDP unless the Executive Director determines that no amendment is necessary.

11. Liability for Costs and Attorneys' Fees. By acceptance of this CDP, the Applicant/Permittee agrees to reimburse the Coastal Commission in full for all Coastal Commission costs and attorneys' fees (including (1) those charged by the Office of the Attorney General, and (2) any court costs and attorneys' fees that the Coastal Commission may be required by a court to pay) that the Coastal Commission incurs in connection with the defense of any action brought by a party other than the Applicant/Permittee against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this CDP. The Coastal Commission retains complete authority to conduct and direct the defense of any such action against the Coastal Commission.

#### IV. COASTAL DEVELOPMENT PERMIT DETERMINATION

The Coastal Commission retains permitting jurisdiction over historic tidelands, including the property that is the subject of this permit application. As a result, the standard of review for the proposed project is the Coastal Act, although the certified Sonoma County LCP can provide non-binding guidance.

#### A. PROJECT LOCATION AND BACKGROUND

The proposed project is located at the Russian River Estuary, within Goat Rock, Sonoma Coast State Beach, near the town of Jenner, Sonoma County (APNs 099-040-002, 099-030-006, and 099-030-007) (see Vicinity Map and Parcels in Exhibit 1). The site is bounded by the Russian River to the north and the east and the waters of the Pacific Ocean to the west (see Exhibit 2 – Project Location Photos). The project site is located at the Russian River estuary at the confluence of the river and the Pacific Ocean. The Russian River Estuary is a sand bar built estuary, meaning that a sand bar forms at the river mouth and dams off the connection with the ocean. The sand bar periodically breaches without assistance. However, there has been a long standing practice of breaching the sand bar when estuary water elevations encroach on development located on low lying properties surrounding the lagoon. This activity is currently performed by the Applicant, the Sonoma County Water Agency. Although the Commission has authorized certain breaching episodes in the past, the Applicant does not currently have authorization to proceed with breaching or any related manipulations moving forward, thus this current CDP application.

The site includes a dilapidated rock jetty along the sand bar barrier (see Exhibit 3 – Jetty Study Location, Detail, and Photos). Prior to the Coastal Act, the jetty and associated seawall, roadway, and railroad were constructed in phases by the Russian River Improvement Company (RRIC) with funds from the RRIC, private sources, the Fish and Game Preservation Fund, and the State of California, and later by the California Division of Water Resources with funding from the Fish and Game Commission and Sonoma and Mendocino Counties (Schulz, 1942). The jetty was essentially abandoned in 1948. Currently, the area is zoned "Public Facilities" within the coastal zone and the LCP designation is "Public/Quasi Public". The project site is located partially on State Parks property and partially on State Lands property. The mouth of the river occasionally closes, which causes water levels to rise within the lagoon until it is breached, either naturally or artificially (see Exhibit 2 – Project Location Photos and Exhibit 7 – Channel Types, Design, and Photos).

The Russian River drains a large area of Sonoma and Mendocino Counties before discharging to the ocean at Jenner. The estuarine portion of the river extends approximately six to seven miles upstream to a point between Duncan Mills and Austin Creek. Tidal action has on occasion occurred as far as ten miles upstream. The rural lands surrounding the estuary are sparsely developed with the exceptions of the small communities of Jenner, Bridgehaven, and Duncan Mills. The floodplain within the river canyon contains some agricultural lands. The partially forested river canyon cuts through the Coast Range, creating a dramatic and highly scenic landscape. The headlands at the river mouth rise 50 to 200 feet above the sea and rocky pinnacles rise from the seafloor offshore. The river turns northward near the mouth where it is flanked by a long barrier beach that extends north from Goat Rock, about 4,000 feet to the south.

The Russian River Estuary and the freshwater marsh on Willow Creek, a tributary that enters the river about a mile upstream from the mouth, provide important habitat for a diverse mix of flora and fauna. Estuaries provide particularly rich habitats, as the mixing of fresh and saltwater concentrates nutrients. A variety of habitat types line the banks of the river, including freshwater marsh, coastal terrace prairie, redwood forest, Douglas fir forest, north coast riparian scrub, freshwater seep, and red alder riparian scrub. The estuary and river are designated critical habitat for the Chinook salmon, Coho salmon, and Steelhead, all of which are listed as threatened under the federal Endangered Species Act. In addition, the project is located in the Russian River Jenner Marine Protected Area as designated by the California Department of Fish and Wildlife (CDFW). The marine protected area is divided in two designations: 1) the ocean side of the Russian River mouth is located within the Russian River State Marine Conservation Area (SMCA) and 2) the estuary side is located within the Russian River State Marine Recreational Management Area (MRMA).

Goat Rock, Sonoma Coast State Beach, at the mouth of the Russian River, is known for its scenic shoreline and easily accessible sandy beach, with picnic tables, parking, and restroom facilities available onsite. As one of the Sonoma Coast State Beaches, the site offers low-cost visitor-serving and recreational opportunities to the public as no fee is currently charged for use. In addition the site has several significant biological resources including habitat for the sensitive dune species Tidestrom's lupine, as well as a colony of harbor seals protected under the Marine Mammal Protection Act (MMPA), which is frequently found north of the jetty at the opening of the river mouth (see Exhibit 8 – Pinniped Haul Outs).

#### **Background**

Like many coastal estuaries and lagoons along the California coast, the Russian River estuary is subject to frequent closure by the formation of a sand bar across the mouth of the estuary. The sand bar is created by the movement of sand by long, low-energy ocean waves that reach the shore during low precipitation, minimum runoff periods. The closure of the estuary temporarily eliminates tidal exchange and creates a fresh and brackish water lagoon, which gradually increases in depth, raising the water level in the estuary. Without assisted breaching, the estuary eventually overtops the sand bar. However, for many years, the sand bar has been artificially breached to alleviate the threat of flooding. Over the years, artificial breaching was done by local residents, Sonoma County Public Works, and more recently, the SCWA.

Artificial breaching has historically been accomplished using a bulldozer to excavate a channel

through the sand bar. Once breached, the water rushing through the channel acts to quickly widen and deepen the opening. Beginning in the 1980s, the Executive Director issued a series of emergency permits to the County to allow breaching to prevent flooding. These emergency permits were conditioned to require the County to conduct an environmental review of the effects of breaching to the estuarine ecology and to subsequently apply for a regular coastal development permit for a long-term breaching program. In 1996, the Commission granted regular CDP 1-96-09 to SCWA, authorizing periodic breaching for a five-year period ending December 31, 2001 (CCC 1996). This CDP included conditions requiring SCWA to monitor the effects of breaching to water quality and biological productivity of the estuary. Accordingly, the SCWA has submitted five annual monitoring reports for the years 1996 through 2000, documenting the effects of the breaching program to the water quality of the estuary as well as direct and indirect effects to fish and other macro-invertebrates, pinnipeds and plankton (MSC 1997, MSC 1998, MSC 1999, MSC 2000, and SCWA 2001).

In addition to the CDP issued in 1996, a CDP for Russian River estuary management was also previously issued May 15, 2002 (CDP 2-01-033) and amended on June 14, 2010 (CDP 2-01-033-A1), to periodically breach the sand bar at the mouth of the Russian River for flood control purposes. Subsequently, emergency CDPs 2-12-002-G, and 2-13-005-G were issued for artificial breaching of the sand bar at the Russian River Mouth. This application serves as the follow up regular CDP application for these emergency permits.

There have been an average of six artificial breaching events annually over the last 14 years. During years when artificial breaching was implemented, the maximum number of artificial breaching events was fifteen (in 2009) and the minimum was one (in 2004). During the lagoon management period, which runs from May to October, the maximum number of artificial breach events was eight (in 1997 and 2008), while the minimum number was one (in 2006). The greatest number of monthly breaches (up to 4) has consistently occurred in October and November, including natural and artificial breaches. Under the proposed project, up to 18 events to construct the proposed lagoon outlet channel could occur between May 15th and October 15th.

## **Current Estuary Management**

In recent years, the Applicant has artificially breached the barrier beach when the water surface level in the estuary is between 4.5 and 7.0 feet (NGVD 29), as determined by the gauge at the Jenner Visitor's Center, in accordance with the Russian River Estuary Study 1992–1993 (Heckel, 1994). Artificial breaching occurred every year between 1996 and 2009. Monthly breaching activities varied from year to year, but the majority of the breaching events occurred in April through June and September through November.

#### **Federal Framework**

Section 7 of the Endangered Species Act, 16 USC Section 1536(a)(2), requires agencies to consult with NMFS regarding potential impacts to marine and anadromous species under NMFS jurisdiction if they are proposing an "action" that may affect listed species or their designated habitat. Each federal agency is to insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or

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<sup>&</sup>lt;sup>1</sup> United States Fish and Wildlife Services is the federal agency for fresh-water and wildlife species.

adverse modification of designated critical habitat. If a listed species may be present, the local agency conducts a biological assessment to analyze potential effects of the project on listed species and critical habitat in order to establish and justify a determination of the level of potential effect. The Russian River Biological Opinion (BO) concluded that the continued operations of Coyote Valley Dam and Warm Springs Dam by the U.S. Army Corps of Engineers (USACE) and SCWA in a manner similar to recent historic practices, together with SCWA's stream channel maintenance activities and Estuary management, are likely to jeopardize and adversely modify critical habitat for endangered coho salmon and threatened steelhead. As discussed further below, the BO recommends "reasonable and prudent alternatives" (RPAs) to artificial breaching activities to avoid jeopardizing or adversely modifying habitat. The Russian River BO directs the Applicant to change its management of the Russian River Estuary's water surface elevations with the intent of improving juvenile salmonid habitat while minimizing flood risk (NMFS Russian River Biological Opinion 2008).

The BO includes a series of actions to be taken by the Applicant, in coordination with NMFS and CDFW, to provide benefit to listed salmonids. Many of the actions mandated by the BO require additional review consistent with other state and federal regulations. The proposed Estuary Management Project is one of a series of actions to be undertaken by the Applicant to meet the requirements of the Russian River BO. The Estuary Management Project provides independent utility (i.e., must be implemented to achieve a purpose irrespective of other Russian River Instream Flow and Restoration (RRIFR) elements) in achieving these goals and necessitates implementation separately from other actions identified in the BO in order to meet the objectives and schedule in the Russian River BO.

By complying with the BO, the Applicant may continue to carry out its water supply, stream channel maintenance, and Estuary management activities without risking potential criminal and civil liability under the federal Endangered Species Act for the incidental "take" of listed fish species. Moreover, compliance with the BO requirements is necessary for the Applicant to obtain the permits and approvals from other agencies necessary for the Applicant to carry out its activities.

#### **Russian River Biological Opinion**

As stated above, in 2008, the National Marine Fisheries Service (NMFS) issued the Biological Opinion (BO) for the Russian River Watershed. The BO is a federal mandate to implement measures to reduce or avoid impacts to listed salmonids. The BO addressed Water Supply, Flood Control Operations, and Channel Maintenance conducted by USACE, the Applicant, and the Mendocino County Russian River Flood Control and Water Conservation District (MCRRFCD) in the watershed. The Applicant's breaching program is one of the many flood control, water diversion and storage, hydroelectric power generation, and fish production and passage activities that occur in the Russian River watershed that are addressed in the BO. The BO is a culmination of more than a decade of consultation between the Applicant, USACE, and NMFS regarding the impact of the Applicant's and USACE's water supply and flood control activities on three fish species listed under the federal Endangered Species Act: Central California Coast steelhead, Central California Coast coho salmon, and California Coastal Chinook salmon. CDFW issued a consistency determination on November 9, 2009, finding that the BO was consistent with the requirements of the California Endangered Species Act (CESA) and adopted the measures

identified in the BO. Based on consultation with CDFW<sup>2</sup> the proposed activity is not inconsistent with the MPA designations at issue (the Russian River State Marine Conservation Area and the Russian River State Marine Recreational Management Area).

The BO concluded that artificially elevated inflows to the Estuary during the low flow season (May through October) and historic artificial breaching practices have significant, adverse effects on the Russian River's estuarine rearing habitat for juvenile salmonids, particularly steelhead. The historic method of artificial breaching, which is done in response to rising water levels in the estuary, results in a tidal marine environment in the estuary, with shallow depths and high salinity. The BO concludes that breaching practices impact rearing habitat by limiting the formation of a freshwater lagoon. According to NMFS, fresh or brackish water lagoons at the mouths of many streams in central and southern California often provide depths and water quality that are highly favorable to habitat for rearing salmon and steelhead.<sup>3</sup>

Additionally, NMFS determined that this proposed project is likely to jeopardize the continued existence of some of the salmonid species affected by the project, and adversely modify their critical habitats. Thus, NMFS provided a *Reasonable and Prudent Alternative* (RPA) to the proposed action that 1) avoids jeopardy to the species and adverse modification of critical habitat, 2) can be implemented in a manner consistent with the intended purpose of the action, 3) is economically and technically feasible, and 4) is within the legal authorities of USACE, SCWA, and MCRRFCD. The RPA does not eliminate all impacts to listed salmonids, and therefore, an Incidental Take Statement is also provided.

#### **B. PROJECT DESCRIPTION**

The proposed project has three main components: 1) a new 3-year program that would implement a lagoon outlet channel during the lagoon management season, from May 15th to October 15th, 2) a 3-year artificial breaching program from October 16th to May 14th and as necessary from May 15th to October 15th to minimize flooding impacts, and 3) a geotechnical evaluation of a relic jetty at the river mouth. The proposed project, also known as the Estuary Management Project, would thus enhance freshwater lagoon conditions from May 15 to October 15 to improve rearing habitat for juvenile salmonids, particularly steelhead, while minimizing the potential for flooding of low-lying properties.

#### **Lagoon Outlet Channel**

To comply with conditions stipulated in the BO to improve habitat conditions for threatened and endangered salmon and steelhead, the Applicant is proposing a new program to modify breaching activities at the Russian River. The Applicant proposes creating a lagoon outlet channel to maintain a minimum water elevation of 7 feet in the estuary during the 'lagoon management period' (May 15th to October 15th). The project also prevents flooding of structures

<sup>&</sup>lt;sup>2</sup> Personal communication between Dr. Craig Shuman (Regional Manager, Marine Region, CDFW) and Dan Carl (District Director, North Central Coast District, CCC).

<sup>&</sup>lt;sup>3</sup> National Marine Fisheries Service. Biological Opinion for Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of Engineers, the Sonoma County Water Agency, and the Mendocino County Russian River Flood Control and Water Conservation District in the Russian River Watershed. p. 243. September 2008.

bordering the estuary by limiting maximum water levels to 9 feet. Thus the proposed project would have a target water elevation of 7 feet with a maximum of 9 feet from May 15th to October 15th.

Project implementation would increase the duration of freshwater lagoon conditions during the lagoon management period to increase freshwater habitat available for rearing salmon and steelhead. The duration of freshwater lagoon conditions would increase from the typical 5-14 days currently experienced, to an estimated 1-5 months. This longer duration of 1-5 months would be consistent with freshwater lagoons observed in some other coastal river systems.

Physical establishment of the outlet channel during the lagoon management period would be similar in terms of equipment and duration as artificial breaching. However, in contrast to the steep, narrow pilot channel historically used for artificial breaching, the lagoon outlet channel under the proposed project would use a shallow, wide, low velocity outlet. The exact location, width, and length of the channel would depend upon physical parameters such as the width of the barrier beach, river flow, and ocean conditions. In general, the channel would be excavated diagonally across the barrier beach in the same general location where it has been observed to naturally occur, between the jetty and approximately 1,500 feet to the northwest. When configuring the outlet channel for the first time that year at the start of the management period (approximately May 15th), machinery may operate for two consecutive working days. One or two pieces of heavy equipment (e.g., an excavator or bulldozer) would be used to move sand on the beach to create and maintain the outlet channel. Channel construction and modification would typically be initiated during low tide so that after several hours of work, the removal of the final portion of the beach berm would occur near high tide. This would minimize the head difference between the estuary and ocean, reducing the potential for the reconnected channel to scour into a fully tidal inlet. The quantity of sand moved would depend on beach topography, ranging from less than 100 cubic yards to approximately 2,000 cubic yards. Any sand excavated from the channel would be immediately smoothed into the adjacent beach north and south of the channel to promote natural removal and to minimize changes to beach topography outside of the outlet channel (PWA, 2010).

Over the course of the lagoon management period, the outlet channel may close. The Applicant proposes resuming adaptive management of the outlet channel's width, slope, and alignment in consultation with the NMFS and CDFW when the outlet is closed. The Applicant proposes this activity when the barrier beach has re-closed and water levels have reached a target of 7 feet during the lagoon management period. The Applicant proposes manipulation of the outlet channel up to once per week in order to maintain the opening and control water elevations in the estuary. The number of maintenance events depends upon natural conditions and outlet channel performance. Artificial breaching or maintenance events could be as high as 31 per year, including 18 events from May 15th to October 15th during the Lagoon Management period and 13 events from October 16th to May 14th during the Artificial Breaching Period. All breaching activity and maintenance events would be scheduled and conducted to comply with restrictions in the IHA and by State Parks, which limit maintenance events during harbor seal pupping season (before June 15) and during peak visitation times.

The Applicant proposes adaptive management to include the following: 1) monitoring of

biological productivity, water quality, and physical processes in the Estuary in response to changes in water surface elevations in the estuary-lagoon system; and 2) refinement of management actions to achieve desired water levels to support biological productivity, while simultaneously providing flood control for properties adjacent to the estuary.<sup>4</sup>

## **Artificial Breaching**

The Applicant proposes to continue artificial breaching to control flooding between October 16th and May 14th (the Artificial Breaching Period). The project also proposes artificial breaching between May 15th and October 15th under certain conditions such as declines in water quality or if water surface elevations are above 7 feet at the Jenner gage to minimize flooding potential. Artificial breaching would occur in order to minimize flood risk to existing structures. Artificial breaching entails excavation of a steep, narrow pilot channel and results in rapid draining of the estuary. Breaching is done in the same general location as natural breaches. The proposed project includes up to 13 artificial breaching events each year during the Artificial Breaching Period.

The proposed project also includes after-the-fact authorization for emergency artificial breaching activities for flood control that were conducted pursuant to Emergency CDPs 2-12-002-G and CDP 2-13-005-G.

#### **Jetty Study**

The proposed project includes a geotechnical study to determine the location and nature of a relic jetty which was constructed in several stages between 1929 and 1948 and was subsequently abandoned. The jetty extends from Goat Rock to the south of the estuary approximately 1,000 feet across the barrier sand bar which forms at the mouth of the Russian River. At the northern extent of the sand bar, the jetty extends out to sea for approximately 500 feet. It is projected that the jetty influences the seasonal closure of the mouth of the Russian River by reducing the flow of water through the sand bar. However, because of uncertainty around its construction and its current dilapidated condition, it is unclear the exact role the structure plays in natural and artificial breaching of the estuary.

The study would determine, using geophysical techniques, the nature and extent of subsurface

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<sup>&</sup>lt;sup>4</sup> Recognizing the variable and dynamic nature of the Russian River system, influence from external human inputs, and the future uncertainty of natural conditions, the Estuary Management Project is intended to be implemented as an adaptive management project. Adaptive management is a decision process that promotes flexible decision-making within a given set of accepted criteria that can be adjusted in the face of uncertainties as outcomes from management actions and other events become better understood. Adaptive management requires: 1) monitoring of biological productivity, water quality, and physical processes in the Estuary in response to the changes in management actions that control water surface elevations in the estuary-lagoon system; and 2) refinement of management actions to achieve desired water levels to support improved biological productivity, while simultaneously providing flood management for properties adjacent to the Estuary. Adaptive management also recognizes the importance of natural variability in contributing to ecological resilience and productivity. Adaptive management is not an experimental 'trial and error' process; rather, it provides a structured approach to resource management. It is an iterative process in which the actions and tasks implemented to meet the management objectives are continually revisited and revised based on monitoring results and analysis relative to performance. Although predicting the actual outcome of the actions may be uncertain, actions are implemented purposefully, in coordination with regulatory agencies, with a specific intended outcome.

features of the sand bar, including the jetty and its components. Wells would be installed and monitored to collect data on water levels. The data would be used to help determine the interaction of estuary water and ocean water that seeps through the sand bar and show how seepage is influenced by the jetty. The information would be used to augment an on-going investigation of how the jetty influences the seasonal closure of the estuary and whether or not removing portions of the jetty would benefit fish habitat in the estuary (see Exhibit 3 - Jetty Study Location, Detail, and Photos).

The study consists of the installation of six two-inch diameter PVC piezometers installed to a depth of 27 to 42 feet that would collect water levels weekly. Drilling would use a small drill rig the size of a small car (see Exhibit 6 – Drill Rig Dimensions). A temporary construction buffer of approximately 20 feet would surround the drill rig and the service vehicle while the piezometers are being installed. Piezometers would be monitored approximately weekly. Monitoring would involve removing a small amount of sand from around the piezometers, collecting data from the piezometers, and re-burial of the piezometers. The bore hole sand (approximately two cubic yards per well) would be sampled for temperature, salinity, moisture, and other components to better understand permeability and seepage through the sand bar. Bore hole sand would be side cast around the drill hole after sampling. When not being monitored, piezometers would be capped and covered with sand.

The proposed geophysical studies also include seismic refraction, electrical resistivity profiling, ground-penetrating radar, and electromagnetic profiling. None of these methods involve grading or construction. The seismic refraction survey would be conducted by a three-person crew. A small all-terrain vehicle will provide seismic energy by dropping a 100-pound weight on a steel plate placed on the sand surface. The electrical resistivity survey would also involve a three-person crew. Measurements would be taken of small amounts of current induced into the ground. A ground-penetrating radar survey would be performed over the suspected breakwater. A ground-penetrating radar antenna mounted on a small wheeled cart sends and receives subsurface signals. Survey staking would be positioned temporarily along each transect. Seismic refraction and electrical resistivity profiling would be conducted simultaneously and should take two days to complete. Ground penetrating radar profiles should be completed in one day. Several visits would be made to the beach during this time and each mapping survey would take about four hours to complete. The work would occur Monday through Thursday to avoid impacts to park visitors during peak visitation times (Friday through Sunday).

The following construction, safety, monitoring and mitigation components are proposed as part of the jetty study. Equipment would be off-loaded in the parking lot of Goat Rock Beach and driven onto the beach via an existing access point. Personnel on the beach would include up to two equipment operators, three safety team members (one on each side of the channel observing the equipment operators, and one at the barrier to warn beach visitors away from the activities), and one safety team member at the overlook on Highway 1 above the beach. SCWA staff would be followed by the equipment, which would then be followed by an SCWA vehicle. The SCWA vehicle would typically be a small pickup truck which would be parked at previously posted signs and barriers on the south side of the excavation location. Biological and water quality monitoring would be conducted consistent with the IHA and the Mitigation Monitoring Plan.

#### C. ALTERATION OF RIVERS

Coastal Act Section 30236 restricts substantial alterations of rivers and streams except for water supply, flood control, or habitat improvement projects, and requires such projects to incorporate the best mitigation measures feasible. Section 30236 states:

Section 30236. Water supply and flood control

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

## **Consistency Analysis**

The proposed project includes artificial breaching of the Russian River estuary, as well as construction of a lagoon outlet channel at the mouth of the Russian River during the lagoon management period (May 15th through October15th). Therefore, the project includes substantial alterations of the Russian River and can only be allowed pursuant to Section 30236 for necessary water supply projects, certain flood control projects, or habitat improvement projects. The proposed project has two objectives. The first is to improve fish habitat. The second is to continue to provide flood control to protect existing development on the low lying properties surrounding the estuary. The flood control objective would be achieved by maintaining the water elevation at no more than 9 feet during the lagoon management period and artificially breaching the estuary throughout the year when necessary to protect existing development. Flood control projects are only allowed pursuant to Section 30236 where no other method for protecting existing structures is feasible (see "Hazards" section below for detail on development which is potentially subject to flooding). As discussed further below, the Commission finds that the proposed project is the best method to protect existing structures and minimize flood hazards while maintaining and enhancing habitat for listed salmonids, including steelhead. as required by Sections 30230-30231 of the Coastal Act. The alternatives are further described below.

#### Alternatives

The EIR and the Russian River Estuary Management Plan Alternatives Evaluation<sup>5</sup> evaluated a number of alternatives to the project including No Project, Reduced Alternative 8 Foot Maximum, Alternative Flood Management, Structural Conveyance, and Flood Containment Barriers. The Alternatives evaluated in the EIR and Alternatives Evaluation are analyzed below.

No Project. As analyzed in the EIR, this alternative would continue current artificial breaching activities during summer months, resulting in saline conditions within estuary and precluding formation of perched freshwater lagoon conditions. Under this alternative, the modified breaching program would not be implemented. Therefore, this alternative would not meet the fundamental project goal of providing a minimum of 7 feet water elevations during the lagoon

<sup>&</sup>lt;sup>5</sup> Russian River Estuary Management Plan – Alternatives Evaluation. Prepared by ESA/PWA. June 5, 2012.

management period to improve rearing habitat for juvenile salmonids as required by Sections 30230-30231 of the Coastal Act. Further, since flooding is a natural component of the River system, this alternative would not avoid the need for artificial breaching activities to occur on the beach as breaching could occur consistent with the past practice of artificially breaching the lagoon when necessary to protect existing development. As such, the No Project Alternative would not protect biological resources as directed by the Coastal Act, and is not a more feasible, method to protect structures in the floodplain consistent with all requirements of the Coastal Act.

Reduced Alternative 8 Foot Maximum. This alternative proposes a maximum water target level of 8 feet (compared to the proposed project alternative of a target of 7 feet and a maximum of 9 feet). Under the reduced Project Alternative, structures would still be affected. This alternative would have similar impacts to those of the proposed project but it would provide a lesser amount of habitat for juvenile salmonids (966 acre-feet less than the proposed project alternative). Further, it is possible that more maintenance events for the lagoon outlet channel would be necessary if this alternative were to be implemented, leading to additional impacts on public access and harbor seals. As such, the Reduced Alternative would not maintain and enhance marine resources and protect public access as directed by the Coastal Act, and is not a more feasible, method to protect structures in the floodplain consistent with all applicable requirements of the Coastal Act.

Alternative Flood Management. This alternative would allow the estuary to naturally breach. Under this alternative, the Applicant would cease artificial breaching and would manage the estuary to accommodate water levels associated with natural breaching events. This alternative would have impacts similar to the proposed project except that greater amounts of structures and infrastructure would be exposed to flooding risks. In addition, natural breaches would be uncontrolled and unsupervised which could create hazardous conditions for beach visitors and lagoon users. Furthermore, natural breaching could impact property owner safety by exposing portions of their property to periodic inundation. As such, this alternative would not meet the project objectives related to maintaining and protecting public health and safety as it pertains to property owners, visitors, and lagoon users. This alternative could necessitate modification or elevation of structures, purchase of easements, or purchase of properties affected, including negotiation with private landowners. These options are potentially cost prohibitive. Furthermore, this alternative would not meet fundamental project goals of managing estuary water levels to minimize flood hazard. As such, it would not meet the project objectives relating to implementing, operating and maintaining management techniques in a technically and economically feasible manner. In sum, the Alternative Flood Management Alternative would not support achievement of project objectives to avoid flooding, would not avoid coastal hazards and protect and enhance coastal resources, including water quality and public access as directed by the Coastal Act, and is not a more feasible method for protecting structures in the floodplain consistent with all applicable requirements of the Coastal Act.

<u>Structural Conveyance</u>. This alternative would involve the installation and maintenance of temporary or permanent beach structures. Such structures could include culverts with gravity flow or pumping, a standpipe on the beach, or a flume weir (seasonal cobble or permanent concrete) on the barrier beach. Because installation of the mechanisms and their presence on the

beach could incur public safety issues, this alternative does not meet project goals to maintain and protect public health and safety as it pertains to property owners, visitors, lagoon users, and public resource agency employees. Furthermore, there are significant challenges associated with technical and engineering feasibility and costs and funding mechanisms have not been identified. As such, the Structural Conveyance Alternative would not support achievement of project objectives, would not protect and enhance coastal resources including marine resources and public access as directed by the Coastal Act, and is not a more feasible method for protecting structures in the floodplain consistent with all applicable requirements of the Coastal Act.

#### Flood Containment Barriers

This alternative involves the construction of earthen berms or seawalls along the estuary. Barriers would be built along the frontage of the at-risk properties to avoid or mitigate damages caused by flooding and prolonged inundation. A berm or seawall would require space for permanent installation and be designed to allow detention and drainage of landside runoff. Implementation of this alternative requires substantial construction to install seawalls and/or levees, which would incur traffic, dust, and noise-related impacts to residents and visitors. Implementation of a permanent containment structure between properties and the riverfront may limit public access to the river and beaches. Additionally, the height of the containment structures may be up to 10 feet in some locations, potentially completely restricting existing views and permanently altering the aesthetic character of the riverfront. As such, the Flood Containment Barriers Alternative would not support achievement of project objectives, would not protect and enhance coastal resources including marine resources and public access as directed by the Coastal Act, and is not a more feasible method for protecting structures in the floodplain consistent with all applicable requirements of the Coastal Act.

<u>Proposed Project</u>. The proposed project would use outlet channel creation to maintain perched freshwater lagoon conditions from May 15th to October 15th and would provide a maximum of 4,565 acre feet of storage volume at 9 feet. In addition, the proposed project includes artificial breaching at any time of the year in order to minimize the potential for flooding of development surrounding the estuary's edge. Thus, the project would meet the fundamental project goals of enhancing rearing habitat for juvenile salmonids (particularly steelhead) and manage estuary levels to minimize flood hazard by targeting an average water level of 7 feet. In sum, the proposed project, as conditioned, represents the most feasible method for protecting structures in the floodplain consistent with all applicable requirements of the Coastal Act.

## **Jetty Study**

The project also proposes a jetty study to provide information to better understand potential alternatives for estuary management to enhance fish habitat and provide flood protection. The currently proposed project does not include jetty removal, in part because the SCWA does not own, operate, and is not authorized to remove the jetty. However, future analyses may show that other estuary management alternatives are feasible and most protective of coastal resources, such as modification of the jetty structure, or maintenance of water elevations above 9 feet. These future evaluations may point the way to new alternatives or assist in updating the evaluations of the alternatives examined in the EIR and the Alternatives Evaluation, summarized above. Such alternatives evaluation is required of any subsequent CDP or CDP amendment proceeding.

## **Feasible Mitigation Measures**

The proposed project, as conditioned, incorporates the best mitigation measures feasible as required by Section 30236 and consistent with all other applicable provisions of the Coastal Act. Special Conditions require submittal of final monitoring plans to ensure that the permissible development does not result in long-term degradation of the surrounding habitats and achieves the objectives for which it is intended. Special Conditions also minimize the project's potential impacts on flooding hazards, maintain water quality and protect biological resources. In particular:

- Special Condition 2 imposes various construction responsibilities that must be adhered to during construction to protect water quality and sensitive habitats in and adjacent to the project area. Special Condition 2 requires maintenance activities to be conducted in accordance with the construction methods typically required by the Commission to protect water quality and marine resources during construction, including maintaining good construction site housekeeping controls and procedures, the use of appropriate erosion and sediment controls, a prohibition on equipment washing, refueling, or servicing on the beach, etc.
- Special Condition 9 limits the authorized maintenance and adaptive management development to three years, allowing for one three-year extension of this term absent a new CDP authorization. Any such future permitting must be in relation to monitoring data and lessons learned regarding the approved project, and must include evaluation of a full range of alternatives, including allowing the system to breach naturally, as well as allowing water level to go above 9 feet.
- Finally, Special Condition 6 requires submittal of a monitoring plan for the Executive Director's review and approval that provide annual reports of monitoring/adaptive management activities that are conducted pursuant to this CDP authorization to ensure that the various standards and restrictions required by the special conditions continue to be implemented during the course of long-term maintenance and adaptive management operations, and that the project remains the most protective of coastal resources during the course of this authorization.

#### **Conclusion**

The dual objectives of the project are the necessary improvement of fish and habitat and flood alleviation to protect existing structures and development in the floodplain, which are both permissible uses under Section 30236. Further, no other feasible measures currently exist for protecting structures within the area, and such protection is necessary to protect public safety and existing development. Therefore, the proposed project is a permissible alteration of a river under Coastal Act Section 30236. Further, the proposed project, as conditioned, incorporates the best mitigation measures feasible. Therefore, the Commission finds that as conditioned herein, the proposed project is consistent with the requirements of Section 30236 of the Coastal Act.

#### D. MARINE AND BIOLOGICAL RESOURCES

Coastal Act Sections 30230, 30231, and 30240 afford protection of marine resources and their associated biological productivity and state:

Section 30230: Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231: The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

**Section 30240(b)** requires development in areas adjacent to environmentally sensitive habitat areas to prevent impacts that would degrade those areas. It states:

Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

#### **Consistency Analysis**

In accordance with Coastal Act Section 30240(b), the Commission must consider whether the proposed breaching would be sited and designed to prevent impacts that would degrade the environmentally sensitive habitat areas near the project site. In addition, pursuant to Coastal Act Section 30230, the Commission must evaluate whether the proposed project would be carried out in a manner that will sustain the biological productivity of the river and estuary and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes. Finally, consistent with Coastal Act Section 30231, the Commission must determine if the project will protect the biological productivity and the quality of the Russian River Estuary to maintain optimum populations of marine organisms.

For over ten years, significant amounts of data have been collected and numerous reports have been prepared to evaluate fisheries, wildlife, and aquatic habitat impacts at the Russian River Estuary. The primary sources include NMFS, CDFW, USFWS, and monitoring reports on water quality and fisheries survey data compiled by the Applicant. The biological resources and water conditions of the Estuary have been extensively studied. In the early 1990s an Estuary ecosystem management plan was developed followed by five years of monitoring. Then, in 2003, the Applicant began fish population ecology studies and water quality monitoring, which are ongoing. The Applicant also commissioned the study of the physical processes of the barrier beach. In 2008, NMFS issued the BO for three Russian River salmonids: coho salmon, Chinook salmon, and steelhead. Further, in 2013, NMFS issued an Incidental Harassment Authorization for marine mammals that utilize the Russian River mouth. These studies and directives are part

of long-term monitoring efforts within the project area.

The project area is in and adjacent to several types of significant biological resources, including habitat for anadromous fish, sensitive dune habitats, and pinniped haulouts. First, with regard to anadromous fish, Chinook salmon, coho salmon and steelhead all spawn in the Russian River. Each of these species is listed as threatened under the federal Endangered Species Act. All three species are anadromous – migrating upstream from the ocean as adults to spawn in the river – although steelhead may also spend their entire life in freshwater. The fish lay their eggs in gravel beds, which generally hatch in winter and spring. Juveniles spend varying amounts of time rearing in the river and/or tributaries and then migrate out to the ocean. Coho salmon and steelhead are native to the Russian River, although these fish have also been planted in the river from other river systems. Although it is uncertain whether native populations of chinook salmon used the Russian River historically, stocked chinook presently spawn in the river. The Russian River is within an Evolutionary Significant Unit for each of the three listed species. NMFS has designated the estuarine and freshwater portions of the Russian River, including all waterways, substrate, and adjacent riparian zones (except the areas above the Warm Springs and Coyote Valley dams and within tribal lands) as critical habitat for each of the three species.

#### Fish Habitat

In addition to stating that marine resources shall be maintained, enhanced, and where feasible, restored, Sections 30230 and 30231 specifically state that the biological productivity of coastal waters appropriate to maintain optimum populations of all species of marine organisms shall be maintained and, where feasible, restored. As discussed in more detail herein, the project's stated purpose is to maintain the functional capacity and biological productivity of coastal waters in order to maintain healthy populations of listed species and conditions of the permit will ensure that the site is monitored for achievement of these goals. The proposed project will provide necessary benefits to marine resources such as the steelhead and other listed salmonids and it will increase needed "critical habitat" for these listed species. In particular, the proposed project will improve and enhance rearing habitat for threatened and endangered salmonid species, particularly steelhead, by reducing tidal influence and increasing the amount of habitat area and fresh water available to rearing salmon and steelhead during the Lagoon Management Period, thus increasing the likelihood of the survival and recovery of these species. By so doing, the Project will allow the Applicant to comply with the terms of NMFS's BO. Without the proposed project, the biological productivity of the coastal waters necessary to maintain optimum populations of listed marine resources would not be maintained or improved. Therefore, the Commission finds that the project, as conditioned, will maintain and enhance the functional capacity of the habitat and maintain and restore optimum populations of marine organisms as required by Section 30230 and 30231 of the Coastal Act.

As proposed and conditioned, the project will improve rearing habitat for juvenile salmonids because it will increase the amount and duration of freshwater in the estuary during the summer months. The project is designed to create a larger freshwater lens as compared to previous management strategies. This larger lens will provide increased habitat for juvenile salmonids and

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<sup>&</sup>lt;sup>6</sup> Federal Register 64(86):24049-24062; 65(32):7764-7787.

give them greater protection from predation. Also, in creating a lagoon outlet channel that allows for water to flow out of the lagoon without permitting ocean water to enter, the project will decrease tidal influence in the estuary during the summer months. The lagoon outlet channel, in comparison to the standard channel used for emergency breaching, will limit the number of juveniles that are flushed out to sea before they are ready for the ocean environment. However, the project has the potential to have adverse effects on water quality, including a seasonal increase in nutrient and pathogen levels as a result of water remaining in the estuary for longer periods of time before entering the ocean. Therefore, Special Condition 6 requires flood analysis, habitat and water quality monitoring to demonstrate the impact of the project on improving rearing habitat for juvenile salmonids, in order to evaluate the effectiveness of the breaching program and best inform any future CDP authorizations.

#### **Groundwater Conditions**

Based on its natural characteristics, the area surrounding the estuary experiences seasonal impacts to groundwater. Salt water influence has been a recurring condition in wells located along the Estuary since at least the 1950s, based upon historical well logs. The wells that could be affected by the project are not part of a municipal water system nor are there municipal groundwater supply wells in the area. The Franciscan Complex that underlies the lower Russian River Valley is considered predominantly non-water-bearing and therefore, does not yield significant quantities of water to wells (DWR, 2003 cited in DEIR, 2010). The approximately two-mile portion of the underlying groundwater basin under the estuary from the Pacific Ocean upstream to approximately Willow Creek is identified as an area with a low or highly variable groundwater yield (SCWA, 2010).

Several designations indicate the current variability of groundwater quality in the area. With respect to groundwater beneficial uses identified in the North Coast RWQCB Basin Plan, the estuary portion of the Lower Russian River Basin identified Municipal and Domestic Water Supply as a "potential" beneficial use, and does not identify Groundwater Recharge as a beneficial use. The RWQCB has listed the entire Russian River on the 2006 Clean Water Act (CWA) Section 303(d) List of Water Quality Limited Segments (RWQCB, 2007a) for sedimentation/siltation and temperature impairments. Several hydrologic sub-areas within the Russian River watershed are also listed for impairments including specific conductivity, pH, low dissolved oxygen, nutrients, indicator bacteria, and mercury. The lower section of the Russian River where the project site is located includes 303(d) impairments.

The project is an adaptive management project that would increase the frequency and duration of higher freshwater levels in the estuary and is not anticipated to directly affect groundwater recharge or reduce groundwater supplies. The project includes a lagoon management period which would take place during the dry season (approximately May through October), when most of the flow in the Russian River consists of water released from Lake Mendocino or Lake Sonoma. At this time, brackish water intrusion in local groundwater wells is considered an existing condition and there is no evidence to indicate it would change under the proposed project. Data currently available does not show that the historic method of artificial breaching or other alternatives would reduce or avoid secondary effects to groundwater impacts. If the proposed project is implemented, it is anticipated that conditions would remain within the range of those experienced within the Estuary over the past 15 years and the seasonal variations of salinity in the groundwater would continue to occur. Further, groundwater impacts from the

proposed project would be less severe as compared to the impacts that would result from letting the estuary naturally breach or the impacts from historical breaching practices. Comments from local residents suggest that water in wells located close to the estuary becomes brackish (from salt water intrusion) during certain times of the year and remains that way until the rainy season begins or there are changes in estuary conditions. These comments suggest that tidally-influenced ocean water periodically flows upstream, partially mixing with freshwater, and enters the aquifer that supplies the local water wells, resulting in seasonally brackish conditions. <sup>7</sup>

As stated previously, the proposed project limits tidal influence during the summer months to maintain higher elevations of freshwater in the estuary. Information regarding the closure of the sand bar on groundwater and the exchange between groundwater and surface water of the Russian River is limited. With extended barrier beach closures, salinity conditions would be expected to follow the trends observed historically during closures. Extended closed conditions would change the local distribution of salinity levels in the estuary as fresh/saltwater stratification occurs. This would reduce salinity levels within some areas of the estuary, and may increase it within other areas of the estuary. Based on studies of surface water and groundwater interaction in upstream reaches of the Russian River, it is anticipated that the exchange between surface water and groundwater will vary based, in part, on distance from the river, amount of localized groundwater pumping and seasonal variations in river stage.

#### **Dune Habitat**

With regard to sensitive dune habitats, Tidestrom's lupine is located adjacent to the southeastern corner of the site (see Exhibit 3 – Jetty Study Location, Detail, and Photos). This lupine is federal and state-listed endangered and a CNPS List lB species. It is a perennial, rhizomatous herb of the legume family (Fabaceae) with silvery leaves. This species grows in coastal dune habitats in Marin, Sonoma, and Monterey counties. It produces light blue to lavender-colored flowers during its April through June blooming period. Tidestrom's lupine is known to occur in the sand along the east (Estuary) side of Goat Rock Beach (see Exhibit 3 – Jetty Study Location, Detail, and Photos). This population is monitored by State Parks. Also, plants have been observed within the stabilized dunes north and east of Goat Rock State Beach as recently as 2005. A site visit was conducted on May 21, 2012 with State Parks biologist Brendon O'Neil to verify the location of Tidestrom's lupine. The location of this lupine is shown on in Exhibit 3 – Jetty Study Location, Detail, and Photos. The proposed project would not impact Tidestrom's lupine or its habitat. The project would avoid known occurrences of this plant and would be located on unvegetated beach sand that does not provide suitable habitat for the lupine.

However, there is a potential to indirectly impact Tidestrom's lupine because equipment and personnel would travel in close proximity to lupine habitat. Thus, to ensure adverse impacts to Tidestrom's lupine is avoided, consistent with Section 30240(b), Special Condition 2 is applied, requiring all construction areas to avoid sensitive dune plant species, including Tidestrom's lupine. For purposes of the jetty study, the placement of the piezometers shall occur no less than fifty feet from the sensitive dune plant habitat, as outlined on Exhibit 3 – Jetty Study Location,

<sup>&</sup>lt;sup>7</sup> This is consistent with the findings of previous studies that brackish water is found in wells extending from the river mouth up to Duncans Mills (USGS, 1965 and DWR, 2003 cited in DEIR 2010).

Detail, and Photos. In addition, all sensitive species shall be avoided during construction, including through locating the defined construction areas (as required in Special Condition 2 (a)) away from such species. Furthermore, the sensitive dune plant habitat is required to be fenced off during the two weeks wherein the instruments are being placed and the seismic work is occurring, and when artificial breaching activity and maintenance is occurring. For the duration of the project, markers identifying the boundaries of the sensitive dune plant habitat must remain in place. A monitor shall be on site during instrument placement, testing, and removal to ensure that project activities occur within the defined construction, staging, and storage areas and outside of the sensitive dune plant habitat. The Applicant proposes additional mitigation and monitoring measures as outlined in the Mitigation Monitoring Plan. Thus, as proposed and conditioned and with these mitigation measures, the project will be consistent with Section 30240(b) and the protection of environmentally sensitive habitat areas.

#### **Pinniped Resources**

With regard to pinniped haulouts, the mouth of the Russian River is an important habitat area for both harbor seals and to a lesser degree California sea lions. Harbor seals haul out at the sandspit on either side of the river mouth and forage both inside the estuary and in the ocean nearby year round. During peak use periods in late winter and mid-summer, harbor seals at the river mouth number in the hundreds. Typically, seal haul-outs are located north of the jetty at the river mouth (see Exhibit 4 – Pinniped Haul Outs), where pupping activity has been documented. Page 24472 of the Federal Register notice of the 2012 IHA notes that the "Pupping season for harbor seals at the mouth of the Russian River typically peaks during May. However, pupping is known to begin in March and may continue through the end of June; pupping season for harbor seals is conservatively defined here as March 15 to June 30." A small number of California sea lions, usually no more than five individuals, forage in the area near the river mouth from December through June each year, but do not usually haul out at the site.

Seals in this area have been habituated to impacts from beach visitors, kayakers, park vehicles, and Highway 1 traffic. Page 24473 of the Federal Register notice of the 2012 IHA mentions that "Pinnipeds have coexisted with regular estuary management activity for decades, as well as with regular human use activity at the beach, and are likely habituated to human presence and activity." As such, the NMFS and NOAA-approved seal haul out plan described in the 2012 Incidental Harassment Authorization allows for some minimal disturbance to the haul out area and the proposed project is considered similar to a minimal habitual disturbance to which the seals are accustomed, according to NMFS. Project construction for the jetty study, including placement of the jetty study instruments, will avoid the most sensitive period for seals around the pupping season as defined by NMFS (March 15 to June 30) and also including the month of July. However, monitoring of the piezometers and estuary maintenance will occur during the pupping season. As stated previously, these, management events may occur over a maximum of two consecutive days per event and all estuary management events on the beach must be separated by a minimum no-work period of one week during pupping season.

The Applicant is proposing to implement the project pursuant to the requirements of the IHA. The IHA requires seal avoidance and minimizing disturbance when possible, mitigation measures, monitoring by a pinniped biologist, and reporting requirements. In addition, the IHA states that, "During pupping season, management events may occur over a maximum of two consecutive days per event and all estuary management events on the beach must be separated by

a minimum no-work period of one week." The proposed project would be carried out pursuant to these requirements. A biological monitor will be onsite during activities. If there is a significant disturbance to the seal haul out, project activities will be relocated to avoid significant impacts to seals. Special Condition 4 requires the Applicant to carry out the project in compliance with the IHA.

In addition, all work shall be conducted consistent with the NMFS and NOAA-approved seal haul out plan described in the Incidental Harassment Authorization (NMFS, 2013). Project activities shall comply with the conditions contained in the IHA, including all mitigation, monitoring and reporting requirements. In addition, the applicant shall cooperate with federal, state, or local agencies monitoring the impacts of the project activities. Along with mitigation measures to be incorporated, the IHA requires monitoring for the presence and behavior of marine mammals prior to, during, and after all management events. At a minimum, the project will comply with the following requirements as outlined in the IHA:

- SCWA crews will cautiously approach the haul-out ahead of heavy equipment to minimize
  the potential for sudden flushes, which may result in a stampede—a particular concern during
  pupping season.
- SCWA staff will avoid walking or driving equipment through the seal haul-out.
- Crews on foot will make an effort to be seen by seals from a distance, if possible, rather than appearing suddenly at the top of the sand bar, again preventing sudden flushes.
- During breaching events, all monitoring will be conducted from the overlook on the bluff along Highway 1 adjacent to the haul-out in order to minimize potential for harassment.
- Equipment will be driven slowly on the beach and care will be taken to minimize the number of shutdowns and start-ups when the equipment is on the beach. All work will be completed as efficiently as possible, with the smallest amount of heavy equipment possible, to minimize disturbance of seals at the haul-out. Boats operating near river haul-outs during monitoring will be kept within posted speed limits and driven as far from the haul-outs as safely possible to minimize flushing seals.
- SCWA will maintain a one-week no-work period between water level management events (unless flooding is an immediate threat) to allow for an adequate disturbance recovery period. During the no-work period, equipment must be removed from the beach.
- Management actions, including physical and biological monitoring, will not be conducted if a pup less than one week old is present at the monitoring site or on a path to the site. If a pup less than 1 week old is on the beach where heavy machinery will be used or on the path used

MMPA. (NMFS 2013)

<sup>&</sup>lt;sup>8</sup> The method for recording disturbances follows those in Mortenson (1996) including alerts, movement, and flight. Disturbances will be recorded on a three-point scale that represents an increasing seal response to the disturbance. The time, source, and duration of the disturbance, as well as an estimated distance between the source and haul-out, are recorded. It should be noted that only responses falling into Mortenson's Levels 2 and 3 (i.e., movement or flight) will be considered as harassment under the

to access the work location, the management action will be delayed until the pup has left the site or the latest day possible to prevent flooding while still maintaining suitable fish rearing habitat. In the event that a pup remains present on the beach in the presence of flood risk, SCWA will consult with NMFS to determine the appropriate course of action. SCWA will coordinate with the locally established seal monitoring program (Stewards' Seal Watch) to determine if pups less than 1 week old are on the beach prior to a breaching event.

• If, during monitoring, observers sight any pup that might be abandoned, SCWA will contact NMFS stranding response network immediately and also report the incident to NMFS' Southwest Regional Office and NMFS' Office of Protected Resources within 48 hours. Observers will not approach or move the pup.

#### **Seismic Survey**

As previously described, the jetty study includes some ground-penetrating radar on the north part of the jetty. Such investigations may involve a small push cart and hammer strikes. The ground penetrating radar is mounted on a small push cart which is pushed by survey personnel on foot. The seismic refraction survey requires the use of a small hammer, which will strike a plate placed on the beach. The hammer is mounted to a gas-powered, four-wheel, all-terrain vehicle. This work is dependent on the configuration of the river mouth and will be modified to protect sensitive species and will avoid seal haul outs. The proposed project includes modification of the survey work to protect sensitive species and avoid seal haul outs. Further, Special Condition 2(c) requires that all survey work occur no less than fifty feet from Tidestrom's lupine. Special Condition 4 requires that all survey work occur consistent with the provisions of the IHA. Finally, Special Condition 2(e) limits the noise levels allowed to protect marine and biological resources

#### **Water Quality**

As identified in the EIR, the project has the potential to have significant impacts on water quality in the estuary as compared to the existing practice of artificial breaching when water elevations reach 4.5 to 7 feet. Implementing the proposed project could seasonally increase nutrient and pathogen levels as a result of water remaining in the estuary for longer periods of time before being discharged to the ocean. However, these impacts are less severe as compared to the impacts that would result from leaving the estuary in its natural state or the impacts from historical breaching practices. Without the proposed project, including lagoon outlet channel or artificial breaching, water levels in the estuary could reach 9 feet or higher and cause impacts to occupied structures. The historic method of artificial breaching adversely affects water quality by creating a tidal marine environment with shallow depths and high salinity. The proposed project has the potential to benefit water quality by increasing water elevations, thereby improving salmonid rearing habitat.

To address potential impacts from increased nutrient and pathogen levels during the lagoon management period, the Applicant is proposing to continue water quality, biological, and physical processes monitoring in the Estuary. There are three constituent monitoring programs. The first is the BO's water quality monitoring, the second is the Temporary Urgency Change Petition's surface water sampling program, and the third is the Stipulated Judgment's sediment sampling requirement. The Applicant also proposes adaptive management to include refinement of management actions to achieve desired water levels to support biological productivity, while

simultaneously providing flood control for properties adjacent to the estuary. As proposed, if water quality declines below acceptable thresholds or if flooding is imminent, the Applicant will artificially breach the lagoon. Therefore, potential adverse impacts to water quality will be avoided. To ensure the project is implemented as proposed, Special Condition1 requires that the project adhere to the standard and special conditions, mitigation measures and project plans included in this Coastal Development Permit for 2-12-004.

Regarding the jetty study and breaching and maintenance activities, such construction will occur on the beach, avoiding the need for equipment in the water, and minimizing impacts on marine resources and water quality. However, construction activity at the water's edge always has the potential to cause adverse impacts. Therefore, Special Condition 2 requires maintenance activities to be conducted in accordance with the construction methods typically required by the Commission to protect water quality and marine resources during construction, including maintaining good construction site housekeeping controls and procedures, the use of appropriate erosion and sediment controls, a prohibition on equipment washing, refueling, or servicing on the beach, etc. As conditioned, the project is consistent with Coastal Act Sections 30230 and 30231 regarding protection of marine resources and offshore habitat.

#### Conclusion

The proposed project will enhance biological productivity to support sensitive marine resources, including steelhead, Coho and Chinook salmon, consistent with Coastal Act Sections 30230 and 30231. As proposed and conditioned, measures to protect marine and biological resources have been incorporated into the project and there will be minimal disruption to marine resources during construction and for the duration of the project. Measures to avoid impacts to marine mammals, including the harbor seal colony, have been incorporated into the project. The most intensive activities of the jetty study, including the placement of the piezometers and the seismic survey, will avoid the most sensitive period for seals and will adhere to the requirements of the IHA. In addition, the project will avoid all sensitive dune plants, including Tidestrom's lupine. And finally, construction best management practices have been proposed to avoid water quality impacts. The project will not have any significant adverse impacts on coastal resources, including biological resources and sensitive species. Therefore, the Commission finds that as proposed and conditioned the project is consistent with the biological resource and sensitive habitat protection requirements of Coastal Act Sections 30230, 30231, and 30240.

#### E. PUBLIC ACCESS AND RECREATION

Coastal Act Sections 30210 through 30224 specifically protect public access and recreational opportunities, including visitor-serving resources. In particular:

Section 30210: In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211: Development shall not interfere with the public's right of access to the

sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

**Section 30212(a):** Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects....

**Section 30213.** Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

## Section 30214 Implementation of public access policies; legislative intent

- (a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:
- (1) Topographic and geologic site characteristics.
- (2) The capacity of the site to sustain use and at what level of intensity.
- (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.
- (4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.
- (b) It is the intent of the Legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section or any amendment thereto shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution.
- (c) In carrying out the public access policies of this article, the commission and any other responsible public agency shall consider and encourage the utilization of innovative access management techniques, including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.
- Section 30220. Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.
- **Section 30221.** Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Section 30223. Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

#### **Analysis**

The public access and recreation policies of the Coastal Act protect public recreational access opportunities, especially lower cost visitor facilities and water-oriented activities. Section 30214 requires that public access be implemented in a manner that takes into account public safety, the capacity of the site and the fragility of natural resources in the area. As previously described, the proposed project is located in a visitor-serving area, and in and adjacent to a significant natural resource area. Goat Rock Beach offers low-cost visitor serving public access to the shore, including the coastal access day use to the beach and associated facilities. As proposed and conditioned, the project will have minimal impact on public access and recreational activities including surfing, beach access, boating, and recreation.

First, as regards surfing, compared to the artificial breach that has historically occurred, the proposed project would result in more frequent closed channel conditions and thus wave conditions less preferable for surfing at this particular location. These closed conditions are currently experienced by the local surf community and will continue to naturally occur irrespective of the proposed project (FEIR 2011). Artificially breaching the river mouth results in a minor, transitory sand bar forming off of the coast. This minor sand bar temporarily creates favorable conditions for surfing, but because it dissipates quickly and is artificially created, it is not a long-term public access resource. In addition, the project site is located in a relatively remote area, and because the sand bar is so short-lived, it is generally used only by local surfers. Furthermore, there is no substantial evidence to demonstrate that the other surfing areas south of the river, including North Side Goat Rock, South Goat, Blind Beach, and the Far Cove, would be affected by the Estuary Management Project (FEIR 2011).

Second, as regards beach access, creating an outlet channel would slightly reduce physical access to the north end of Goat Rock Beach. When the mouth of the estuary is open and tidal, access to the far north end of Goat Rock Beach is limited. However, creating the outlet channel would be generally consistent with current barrier beach conditions. Thus, there is no significant adverse impact to public access and recreation from creation of the outlet channel.

As previously mentioned, portions of the project include a two week period within which seismic work and instrument placement will occur. The work will occur Monday through Thursday to avoid impacts to park visitors during peak visitation times (Friday through Sunday). While underway, the public will still have full access to Goat Rock, Sonoma Coast State Beach, but the public will be not be allowed in the immediate vicinity of project activities. The seismic work and instrument placement will take approximately four days each to complete and will range over approximately 11 acres. For several hours during this time, the public will have limited access to certain sections of the beach while the work is completed. However, as sited, the project allows the public to pass on both the ocean side and the estuary side of the project area.

Public access impacts from the installation and monitoring of the piezometers will be also be minimal. Six piezometers are to be installed at the corners of a square approximately 3.7 acres in size. This installation will occur with the two-week period mentioned above. The only portion of the project to extend beyond this two-week period is the monitoring of the piezometers which will occur weekly. Monitoring will involve removing a small amount of sand from around the piezometers, collecting data from the piezometers, and re-burial of the piezometers – activities

which will cause little to no disturbance to public access and recreation. When not being monitored, piezometers will be capped and covered with sand to further minimize impacts. Piezometers will be installed for a temporary duration, after which they will be removed from the site. Although the project includes measures to protect public access and recreation, the project will employ heavy machinery on public property during daylight hours and the potential to adversely impact public access and recreation still exists. Thus, to ensure the project is carried out as proposed, Special Condition 5 (Public Access Management Plan) and Special Condition 2 (Construction Plan) protect public access and recreation in the area, Special Condition 5(a) and Special Condition 8 protect public safety in the area, and Special Condition 1 ensures that the project will be conducted as proposed and conditioned.

#### **Conclusion**

As proposed with the submitted mitigation measures, there will be minimal disruption to public access and recreation during construction and the life of the project. The timing and design of the project will allow for continued low-cost visitor serving uses, including public recreation and access at Goat Rock Beach, in a manner that also protects the fragility of natural resources in the area. Although the project includes measures to protect public access and recreation, the project will employ heavy machinery on public property during daylight hours and the potential to adversely impact public access and recreation still exists. Thus, Special Condition 5 (Public Access Management Plan) and Special Condition 2 (Construction Plan) protect public access and recreation in the area, Special Condition 5(a) and Special Condition 8 protect public safety in the area, and Special Condition 1 ensures that the project will be conducted as proposed and conditioned. In short, the project as proposed and conditioned and with the applicable mitigation measures outlined in the Monitoring Mitigation Plan complies with the public access and visitor serving policies of the Coastal Act.

#### F. HAZARDS

Coastal Act Section 30253 addresses the need to ensure long-term structural integrity, minimize future risk, and to avoid the need for landform altering protective measures in the future. Section 30253 provides, in applicable part:

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along-bluffs and cliffs.

## **Analysis**

The project proposes to target a water elevation of 7 feet with a maximum of 9 feet. A number of properties are potentially affected by inundation between 4.5 to 14 feet. A flood risk study submitted by the Applicant evaluated 123 river properties along the Russian River Estuary shoreline from Jenner to the Duncan Mills area. The report summarized flood risks including potential inundation elevation, and type of property, structure, and infrastructure. Structures include houses, garages, and sheds. Infrastructure types included roads, stairs, tanks, and boat docks, among other structures.

The flood risk study provides information on the ranges of water levels that would inundate existing development and is summarized here. At water levels of 4.5 to 7 feet, the following development is inundated: stairs, boat docks and ramps, riprap, seawalls, three lower house foundations, posts, and a boat house. At water levels of 7-9 feet, 9 parcels and associated structures would be impacted. Additional areas that would be inundated include a bottom viewing deck, a lower outbuilding, stilts, a boat shed, two house foundations, and a parking lot. As presented in the study, many of the structures or portions of the structures that would flood at water elevations up to 10.5 feet are either designed to flood or are not inhabited. 9 Water levels of 10 to 12 feet (the estimated water surface elevation if the barrier beach was allowed to naturally breach) may potentially inundate portions of up to 97 properties, including 16 structures. This development includes the bottom or first floor of three houses, a Visitor's Center, two propane tanks, a boat house, two house foundations, lattice, a garage, and a driveway. Most at-risk structures are located in the Jenner area accounting for 20 properties. There are two at-risk structures in Bridgehaven and one structure in Goat Rock area. The State Parks Visitor Center in Jenner is estimated to be the first occupied structure to flood at approximately 10.5 feet inundation. Water levels in the estuary could reach 12-14 feet under extreme conditions, such as sustained heavy surf coupled with large spring tides. Water levels at this height could inundate 23 structures located near the State Highway 1 Bridge over the estuary downstream to the mouth of the Russian River, including Highway 1 itself.

The purpose of the proposed breaching program is to improve rearing habitat for juvenile salmonids as directed by the BO while minimizing the risk of flooding in a manner that is consistent with Section 30253 of the Coastal Act. As such, the project proposes to meet the following water level management targets for the estuary: 1) a daily maximum water surface elevation of 3.2 feet during the winter months and 2) an average daily water surface elevation of 7 feet from May 15th to October 15th. <sup>10</sup>

As a result of implementing the project, the range of water surface elevations that occur in the estuary would not change. Development along the estuary is, and has been, subject to water elevations of 9 feet (the maximum proposed in this project) and above. Compared to previous years when artificial breaching was regularly conducted, the duration over which the target water surface elevations (e.g., 4.5 feet to 9 feet, with an average of 7 feet) would be maintained would increase. Between May 15th and October 15th, the duration of target water levels would increase from an average of less than a few days to an average of approximately one to five months. Ultimately, the duration of the target water elevations depends on the performance of the outlet channel. Thus, low lying areas at or below the 9-foot elevation contour, which were previously inundated only sporadically throughout the year, would remain inundated over longer durations during the lagoon management period.

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<sup>&</sup>lt;sup>9</sup> Expanded Russian River Estuary Preliminary Flood Risk Management Feasibility Study. Prepared by SCWA. June 4, 2012.

<sup>&</sup>lt;sup>10</sup> The Russian River BO identifies specific targets for the Estuary Management Project (NMFS 2008, page 249) that were also noted in Draft EIR Chapter 2.0, pages 2-12 and 2-14.

The largest relative increase is the area of inundation between the 4.5- and 9-foot contours over the western half of Penny Island, at the mouth of Willow Creek, and over approximately six gravel bars at and upstream of the Willow Creek Environmental Campground. The increase in the duration of inundation at the 7-foot, and, possibly, 9-foot contours in these areas, would not result in a subsequent increase in the potential for damage to existing structures or buildings, as none exist in these areas. In this case, and in this context, the increase in the duration of flooding, which currently occurs on an episodic basis, would not be considered a potentially significant impact. However, along more localized areas of the Estuary shoreline, the increase in the duration of flooding between 7 and 9 feet could have a potentially significant impact to property and structures, as further described below.

As described earlier, water surface elevations relative to parcels along the Estuary shoreline were reviewed within the Estuary Study Area, as required by the BO. Results of that review indicate that portions of approximately 78 parcels within the Estuary Study Area would be inundated at a water surface elevation of 9 feet. In most cases, the area of inundation would comprise channel margin ("shoreline") and beach areas only, and no structures (e.g., homes, sheds, septic tanks, boat docks, etc.) would be directly affected. For example, in Jenner, portions of habitable structures located along the estuary do not begin to flood until water levels reach 10.5 feet or greater. At the proposed target water levels of 7 feet up to a maximum of 9 feet, 9 parcels and associated structures would be impacted. These structures include boat docks or boat ramps on 7 of the parcels, and homes or other buildings on two parcels. Therefore, as proposed by the Applicant, SCWA shall coordinate with NMFS and work with the property owners to identify measures that would, if necessary, substantially minimize or avoid any damages to existing structures that would occur as a result of implementing the project. As appropriate, the Applicant shall survey properties within the 9 foot elevation in greater detail to more accurately and precisely determine the elevation of the structures potentially at risk, and this information shall be kept on record at SCWA and a copy shall be provided to each of the property owners. In addition to this adaptive management, the Applicant will also monitor the occurrence of sea level rise and implement adaptive management strategies to manipulate outlet channel elevation, alignment, and width, or implement more frequent outlet channel maintenance. Many of the structures, or portions of the structures, that would flood at water elevations up to 10.5 feet are either designed to flood or are not inhabited. <sup>11</sup> Further, the proposed project includes artificial breaching whenever necessary, including during the lagoon management period, to minimize flooding potential to other existing structures.

Finally, a significant hazard is associated with the breaching itself. Breaching the sand bar creates a potential hazard to the public as the water from the river rapidly discharges to the ocean. During the first several minutes immediately following breaching, standing waves in excess of 10 feet high with velocities in excess of 20 feet per second have been observed as the river drains through the breach opening. To address this hazard, the project includes Mitigation Measure 4.13.3 of the EIR which states: Following outlet channel creation or artificial breaching, the Water Agency will install semi-permanent signage notifying beach users of channel conditions, potential for safety hazards from beach erosion or hydrologic action, and emergency

<sup>&</sup>lt;sup>11</sup>Expanded Russian River Estuary Preliminary Flood Risk Management Feasibility Study. Prepared by SCWA. June 4, 2012.

contact information. Signage should be posted and maintained at key locations, such as the parking lot at Goat Rock State Beach Parking lot, the unofficial beach access trail located on the north side of the beach off Highway 1, and 100 feet on either side of the outlet channel. The Commission finds that the proposed measures would minimize the risk of hazards to the public caused by the proposed breaching consistent with the requirements of Section 30253 of the Coastal Act.

Because the Applicant proposes to undertake an inherently hazardous activity, the Commission imposes Special Condition 7, requiring the Applicant to assume the risks of any losses associated with the proposed breaching due to hazards resulting from the proposed breaching, waive any claim of liability on the part of the Commission for such losses, and indemnify the Commission in the event that third parties bring an action against the Commission as a result of the any hazards associated with the proposed breaching. The Commission finds that Special Condition 7 is required because the Applicant has voluntarily chosen to implement the project despite the risk of hazards. Therefore, as conditioned, the Commission finds that the proposed breaching would be undertaken in a manner that minimizes risks to life and property in areas of high flood hazard and is consistent with Section 30253 of the Coastal Act.

#### Conclusion

The proposed breaching program will improve rearing habitat for juvenile salmonids as directed by the BO while minimizing the risk of flooding as required by the Coastal Act. Therefore, as proposed and conditioned, the Commission finds that the proposed breaching would be undertaken in a manner that minimizes risks to life and property in areas of high flood hazard and is consistent with Section 30253 of the Coastal Act.

# G. CULTURAL RESOURCES

Section 30244 of the Coastal Act protects cultural resources. It states:

Archaeological or paleontological resources. Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

As described in the DEIR, the Native American Coastal Miwok and Kashia Pomo people have inhabited the Russian River area for thousands of years. Therefore, there may be significant archaeological sites and cultural resources in and around the Russian River estuary area. To protect and conserve these resources, the Federated Indians of Graton Rancheria and the Kashia Band of Pomo Indians, the two federally-recognized tribes with ethnographic territory along the mouth of the Russian River, were contacted in 2010 about the project activities. Previously, a records search was conducted in 2009 to (1) determine whether known cultural resources had been recorded within or adjacent to the Estuary Study Area; (2) assess the likelihood of unrecorded cultural resources based on historical references and the distribution of nearby sites; and (3) develop a context for the identification and preliminary evaluation of cultural resources.

The records search found 25 cultural resources studies on file at the NWIC<sup>12</sup> within and adjacent to the Estuary Study Area dating from 1975 to 2004. The records search also indicated that eight cultural resources have been previously recorded within a half mile of the Estuary Study Area. None of these resources are located within the immediate area of the project. Furthermore, ground-disturbing activities associated with the outlet channel creation and maintenance would occur in recently deposited and annually disturbed materials that have a very low potential to contain cultural materials. The variations in the annual water surface elevation on the Russian River would remain within previously recorded levels following project implementation. There is a low potential for archaeological materials to be uncovered from the implementation of the Estuary Management Project. However unlikely, the possibility of encountering archaeological materials cannot be entirely discounted. Thus, as part of the project SCWA proposes mitigation measures outlined in the Mitigation Monitoring Plan to address potential impacts to cultural resources consistent with the Coastal Act. Special Condition 3 requires the Applicant to adhere to the measures in the Mitigation Monitoring Plan which state as follows:

# *Inadvertent Discovery of Historical and Unique Archaeological Resources.*

If discovery is made of items of historical or archaeological interest, the contractor or Water Agency staff shall immediately cease all work activities in the area (within approximately 100 feet) of discovery. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; deposits of metal, glass, and/or ceramic refuse, and shipwreck remains. After cessation of excavation the contractor shall immediately contact the Water Agency, State Parks, the U.S. Army Corps of Engineers, and the California State Lands Commission. The contractor shall not resume work until authorization is received from all agencies.

- 1. In the event of unanticipated discovery of archaeological materials occurs during construction, the Water Agency shall retain the services of a qualified professional archaeologist to evaluate the significance of the items prior to resuming any activities that could impact the site. A qualified maritime archaeologist shall be retained to examine shipwreck remains or related submerged artifacts if discovered near the river mouth during outlet channel creation or maintenance.
- 2. In the case of an unanticipated archaeological discovery, if it is determined that the find is potentially eligible for listing in the California and/or National Registers, and the site cannot be avoided, the Water Agency shall provide a research design and excavation plan, prepared by a qualified archaeologist, outlining recovery of the resource, analysis, and reporting of the find. The research design and excavation plan shall be approved by the Water Agency, State Parks, and U.S. Army Corps of Engineers. The California State Lands Commission shall provide approval of a research design for shipwreck remains or related submerged

 $<sup>^{12}</sup>$  NWIC stands for the Northwest Information Center of the California Historical Resources Information System at Sonoma State University.

artifacts. Implementation of the research design and excavation plan shall be conducted prior to work being resumed. Upon project approval, the Water Agency will coordinate with State Parks and U.S. Army Corps of Engineers to develop an action plan that can be implemented in the event that flooding is imminent and breaching must occur immediately.

## Discovery of Human Remains.

If potential human remains are encountered, the contractor or Water Agency staff shall halt work in the vicinity of the find and contact the Sonoma County coroner in accordance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5. The Water Agency will also notify by telephone the U.S. Army Corps of Engineers archaeologist and permit manager. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission (NAHC). As provided in Public Resources Code Section 5097.98, the NAHC will identify the person or persons believed to be most likely descended from the deceased Native American. The Most Likely Descendent (MLD) makes recommendations for means of treating the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98. Work shall cease in the immediate area until the recommendations of the appropriate MLD are concluded.

Therefore, the Commission finds the proposed project as conditioned is consistent with 30244 because reasonable mitigation measures are required.

# H. OTHER AGENCY APPROVALS

Special Condition 10 requires the Applicants to provide all relevant authorizations from Sonoma County, North Coast Regional Water Quality Control Board, California State Lands Commission, California Department of Parks and Recreation, CDFW, USACE, NMFS, and USFWS, or evidence that permits, authorizations, leases or other approvals from these agencies are not necessary.

## I. REIMBURSEMENT OF COSTS AND FEES

Coastal Act Section 30620(c)(1) authorizes the Commission to require applicants to reimburse the Commission for expenses incurred in processing CDP applications. <sup>13</sup> Thus, the Commission is authorized to require reimbursement for expenses incurred in defending its action on the pending CDP application. Therefore, consistent with Section 30620(c), the Commission imposes Special Condition 11, requiring reimbursement of any costs and attorneys' fees the Commission incurs "in connection with the defense of any action brought by a party other than the Applicant/Permittee challenging the approval or issuance of this permit."

<sup>&</sup>lt;sup>13</sup> See also CCR Section 13055(e).

# J. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 of the California Code of Regulations requires that a specific finding be made in conjunction with CDP applications showing the application to be consistent with any applicable requirements of CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

SCWA, acting as lead agency, certified an EIR for the project in August of 2011. The EIR evaluated project impacts, identified mitigations to reduce certain impacts, and found some impacts to be significant and unavoidable, in particular related to recreation, water quality, and biological resources. In addition, the EIR found that the proposed project was not the "environmentally superior" alternative, although it was the most suitable to meeting all project objectives. Notwithstanding the identification and analysis of the impacts that are identified in the Final EIR as being significant and potentially significant which may not be avoided, lessened, or mitigated to a level of insignificance, SCWA, acting pursuant to Public Resources Code Section 21081 and Section 15093 of the State CEQA Guidelines, hereby determined that specific economic, legal, social, technological and other benefits of the proposed project outweighed any unavoidable, adverse impacts of the proposed project and that the project should be approved.

In particular, SCWA determined that the project will improve and enhance rearing habitat for threatened and endangered salmonid species, particularly steelhead, by reducing tidal influence and increasing the amount of habitat area and fresh water available to rearing salmon and steelhead during the Lagoon Management Period, thus increasing the likelihood of the survival and recovery of these species. By so doing, the Project will allow the Water Agency to comply with the terms of the NMFS BO, and will ensure that Water Agency operations continue to be protected by the "incidental take statement" contained in the BO, as well as the "Consistency Determination" issued by CDFW, which allows the Water Agency to "take" listed salmonid species during the course of the Water Agency's Estuary management, stream maintenance and flood control, and water supply activities without incurring liability under the federal or state Endangered Species Acts. In addition, the project will allow the Water Agency to continue to provide flood protection to properties and structures surrounding the Estuary, by allowing the Water Agency to manage estuary water levels at a target of 7 feet with a maximum of nine feet.

As a responsible agency, the Commission conducted its analysis of the potential impacts of the proposed development that the Commission is authorized by the Coastal Act to review. The Coastal Commission's review and analysis of land use proposals has been certified by the Secretary of Resources as being the functional equivalent of environmental review under CEQA. This report discusses the relevant coastal resource issues with the proposal. The Commission has reviewed the relevant coastal resource issues associated with the proposed project, and has identified appropriate and necessary conditions to assure protection of coastal resources consistent with the requirements of the Coastal Act. All public comments received to date have been addressed in the findings above. The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full.

As conditioned, there are no additional feasible alternatives or feasible mitigation measures

available which would substantially lessen any significant adverse environmental effects that approval of the proposed project, as modified, would have on the environment consistent with the Coastal Act and CEQA Section 21080.5(d)(2)(A).

#### **EXHIBIT A**

## **Mitigation Monitoring Plan**

In compliance with Section 21081.6 of the California Environmental Quality Act (CEQA), the Sonoma County Water Agency (Water Agency) has prepared this Mitigation Monitoring Plan (MMP). All mitigation measures that are applicable to components of the Project described in the *Russian River Estuary Management Project Final Environmental Impact Report* have been included in the MMP. All mitigation measures are applicable to all components of the Project unless specified otherwise. Each mitigation measure and the method of monitoring or verifying the completion of the measure are described in the MMP. Upon approval of the MMP by the Water Agency's Board of Directors, each mitigation measure was entered onto one of the Water Agency's Mitigation Monitoring Report forms (MMR) and entered into the Water Agency's Environmental Resource Section's Mitigation Monitoring Database (Database). Before monitoring of a specific mitigation measure is required, the MMR will be forwarded by the Environmental Resource Section to the appropriate Water Agency department/staff for monitoring. A sample MMR is included at the end of this MMP. This sample MMR would be used to monitor a measure to mitigate potential impacts to cultural resources.

Various Water Agency departments/staff members are responsible for monitoring or verification of project mitigation measures and their general areas of responsibility are as follows:

The **Project Engineer** is responsible for project design and specifications.

The **Technical Writing Section** is responsible for preparation of project manual.

The **Construction Inspection Section** is responsible for enforcement of the provisions of the project specifications during the construction period.

The **Environmental Resource Section** is responsible for preparation of the MMP, for informing the various departments of their mitigation responsibilities, for distribution of the appropriate monitoring forms, and for maintenance of the Database which tracks the status of mitigation measures. In some cases, the Environmental Resource Section is responsible for implementing and monitoring various mitigation measures.

The **Right-of-Way Section** is responsible for coordinating with private property owners for acquisition of property or temporary and/or permanent easements; and for coordinating any issues concerning property rights with property owners.

The **Operations and Maintenance Division** is responsible for implementation of mitigation measures during the operation and maintenance phase of the project.

The Water Agency's **Board of Directors** approves and adopts the MMP and approves the project specifications.

Following is a description of the Project's mitigation measures and the required monitoring/verification. Mitigation measure numbers correspond to the numbers presented in the Final EIR. Each mitigation measure is followed by a checklist indicating which Water Agency sections or staff is responsible for monitoring or verification of mitigation measures.

#### HYDROLOGY AND FLOODING

The following measure would mitigate for Impact 4.2.2 as identified in the Final EIR.

Mitigation Measure 4.2.2: Concerning the 9 parcels and associated structures (i.e., boat docks or boat ramps on 7 of the parcels, and homes or other buildings on the other two parcels) identified above<sup>1</sup>, and presented in more detail in a previous analysis (SCWA, 2010b), the Water Agency shall coordinate with NMFS<sup>2</sup> and work with the property owners to identify measures that would, if necessary, substantially minimize or avoid any damages to existing structures that would occur as a result of implementing the project (i.e., increased flooding durations at the 7 and 9 foot elevation). As appropriate, the Water Agency shall survey properties within the 9 foot elevation in greater detail to more accurately and precisely determine the elevation of the structures potentially at risk; this information shall be kept on record at the Water Agency and a copy shall be provided to each of the property owners.

X Project Engineer	Technical Writing
Construction Inspection	X Right-of-Way
X Environmental Resource	Operations and Maintenance

The mitigation measure will be considered effective when Water Agency staff coordinates with NMFS and property owners to survey properties identified in the Draft EIR within the 9-foot water surface elevation and identifies measures that would, if necessary, substantially minimize or avoid any damages to existing structures that would occur as a result of implementing the project. Monitoring Mitigation will be complete when Water Agency staff has concluded coordination with NMFS and property owners and has provided copies of any necessary surveys to property owners.

# **BIOLOGICAL RESOURCES**

The following measure would mitigate for Impact 4.4.1 as identified in the Final EIR.

**Mitigation Measure 4.4.1a:** The Water Agency shall conduct a pre-construction biological resources survey to identify special-status plants and butterflies (or larval host species) and nesting birds present within 150 feet of the general location of the outlet channel management area and access route. The preconstruction survey shall:

• Be conducted by a qualified biologist no more than 30 days prior to commencement of the lagoon management period (defined as from May 15 to October 15). The biologist shall have familiarity with special-status plants and butterflies (or larval host species) of the area and experience with conducting special-status species and nesting bird surveys.

<sup>&</sup>lt;sup>1</sup> As described on page 4.2-19 of the Draft EIR, the following 9 parcels, listed by Assessor's Parcel Number (APN), are those identified as containing structures (i.e. buildings and boat docks) that could be inundated at Estuary water surface elevations between 7 and 9 feet: 099-080-008, 099-080-037, 099-120-009 (Visitor Center), 099-140-052, 099-140-055, 099-140-060, 099-140-063, 099-140-065, and 099-140-089.

<sup>&</sup>lt;sup>2</sup> NMFS is the National Marine Fisheries Service.

- If no special-status plants or butterflies (or larval host species), or nesting birds are encountered, no further mitigation would be required for at least 30 days, unless additional measures are required by regulatory permit conditions obtained for the proposed project.
- Additional pre-construction surveys, specifically for nesting birds, shall be conducted such that no more than 30 days will have lapsed between the survey and outlet channel creation or maintenance activities.
- If a special-status plant or larval host species for special-status butterflies or nesting birds are encountered, the location shall be documented and species-specific avoidance and minimization measures shall be prepared by the qualified biologist in coordination with the Water Agency and appropriate resource agencies.
- The avoidance and minimization measures shall be implemented to prevent the loss of the species or abandonment of active nests, but shall also take the goal of the proposed project (i.e., managing the lagoon water surface elevations high enough to enhance salmon rearing habitat while also minimizing flooding of the low-lying properties) into consideration.

The following measure would mitigate for Impacts 4.4.1, 4.4.2, 4.4.3, and 4.4.4 as identified in the Final EIR.

**Mitigation Measure 4.4.1b:** A worker environmental awareness training shall be included to inform construction personnel of their responsibilities regarding sensitive biological resources that are present within 150 feet of the general location of the outlet channel management area and access route. The training shall comply with the following measures:

- The training shall be developed by a qualified biologist familiar with the sensitive biological resources that are known or have the potential to occur in the area.
- The training shall be completed by all construction personnel before any work occurs in the outlet channel management area, including construction equipment and vehicle mobilization. If new personnel are added to the proposed project, the Water Agency shall ensure that new personnel received training before they start working.
- The training shall provide educational information on the special-status species that are known or have potential to occur in the area, how to identify the species, as well as other sensitive biological resources (e.g., sensitive natural communities, federal and state jurisdictional waters). The training shall also review the required mitigation measures to avoid impacts on the sensitive resources, and penalties for noncompliance with biological mitigation requirements.

Project Engineer	Technical Writing
Construction Inspection	Right-of-Way
X Environmental Resource	X Operations and Maintenance

The mitigation measures 4.4.1a and 4.4.1b will be considered effective when the Water Agency's Standard Operating Procedures (SOP) for Russian River estuary management activities have been revised to include the above provisions, protection measures have been implemented and/or disturbance or

destruction of special-status plants and butterflies (or larval host species) and nesting birds has been avoided, and when each training has been completed. Monitoring will be ongoing throughout the duration of the project.

The following measure would mitigate for Impacts 4.4.8 and 4.4.10 as identified in the Final EIR.

**Mitigation Measure 4.4.8:** In compliance with the Incidental Harassment Authorization (NMFS, 2010c), the Water Agency will conduct seal counts at the Jenner haulout and at nearby coastal and river haulouts in accordance with methods described in the *Russian River Management Activities Pinniped Monitoring Plan* (Pinniped Monitoring Plan), dated September 9, 2009, or as updated by requirements of NMFS under the MMPA<sup>3</sup>. If monitoring during the lagoon management period indicates decreases in overall use at the Jenner haulout are correlated with increases in use at the three closest haulouts, the Water Agency shall consult with NMFS and CDFG<sup>4</sup> to alter the Estuary Management Plan such that the haulout site is maintained as a resource. The IHA does not provide for long-term harassment or alteration of habitat conditions that would contribute to abandonment of the Jenner haulout.

Project Engineer	Technical Writing
Construction Inspection	Right-of-Way
X Environmental Resource	Operations and Maintenance

The mitigation measure will be considered effective when seal counts have been completed as described above and consultation with NMFS and CDFG has been completed with the purpose of maintaining the Jenner haulout site as a resource. Monitoring will be ongoing throughout the duration of the project.

# **CULTURAL RESOURCES**

The following measure would mitigate for Impact 4.8.1 as identified in the Final EIR.

Mitigation Measure 4.8.1: The Water Agency will implement the following measure:

Inadvertent Discovery of Historical and Unique Archaeological Resources. If discovery is made of items of historical or archaeological interest, the contractor or Water Agency staff shall immediately cease all work activities in the area (within approximately 100 feet) of discovery. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; deposits of metal, glass, and/or ceramic refuse, and shipwreck remains. After cessation of excavation the contractor shall immediately contact the Water Agency, State Parks, the U.S. Army Corps of Engineers, and the California State Lands Commission. The contractor shall not resume work until authorization is received from all agencies.

<sup>&</sup>lt;sup>3</sup> MMPA is the Marine Mammal Protection Act.

<sup>&</sup>lt;sup>4</sup> CDFG is the California Department of Fish and Game.

- 1. In the event of unanticipated discovery of archaeological materials occurs during construction, the Water Agency shall retain the services of a qualified professional archaeologist to evaluate the significance of the items prior to resuming any activities that could impact the site. A qualified maritime archaeologist shall be retained to examine shipwreck remains or related submerged artifacts if discovered near the river mouth during outlet channel creation or maintenance.
- 2. In the case of an unanticipated archaeological discovery, if it is determined that the find is potentially eligible for listing in the California and/or National Registers, and the site cannot be avoided, the Water Agency shall provide a research design and excavation plan, prepared by a qualified archaeologist, outlining recovery of the resource, analysis, and reporting of the find. The research design and excavation plan shall be approved by the Water Agency, State Parks, and U.S. Army Corps of Engineers. The California State Lands Commission shall provide approval of a research design for shipwreck remains or related submerged artifacts. Implementation of the research design and excavation plan shall be conducted prior to work being resumed. Upon project approval, the Water Agency will coordinate with State Parks and U.S. Army Corps of Engineers to develop an action plan that can be implemented in the event that flooding is imminent and breaching must occur immediately.

X	Project Engineer	Technical Writing
	<b>Construction Inspection</b>	Right-of-Way
X	<b>Environmental Resource</b>	X Operations and Maintenance

The mitigation measure will be considered effective when the Water Agency's Standard Operating Procedures (SOP) for Russian River estuary management activities have been revised to include the above provisions. Should the contractor or Water Agency staff identify a potential cultural resource, this measure would be considered effective if construction is halted at the site until an evaluation of the site's significance can be made and suggested mitigation is implemented. Monitoring will be ongoing throughout the duration of the project.

The following measure would mitigate for Impact 4.8.2 as identified in the Final EIR.

**Mitigation Measure 4.8.2:** The Water Agency will implement the following measures:

Discovery of Human Remains. If potential human remains are encountered, the contractor or Water Agency staff shall halt work in the vicinity of the find and contact the Sonoma County coroner in accordance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5. The Water Agency will also notify by telephone the U.S. Army Corps of Engineers archaeologist and permit manager. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission (NAHC). As provided in Public Resources Code Section 5097.98, the NAHC will identify the person or persons believed to be most likely descended from the deceased Native American. The Most Likely Descendent (MLD) makes recommendations for means of treating the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98. Work shall cease in the immediate area until the recommendations of the appropriate MLD are concluded.

Project Engine		_ Technical Writing
Construction l	inspection	Right-of-Way
X Environmenta	l Resource X	<b>Operations and Maintenance</b>

The mitigation measure will be considered effective when the Water Agency's Standard Operating Procedures (SOP) for Russian River estuary management activities have been revised to include the above provisions. Should the contractor or Water Agency staff identify potential human remains, this measure would be considered effective if construction is halted at the site until an evaluation of the site's significance can be made and suggested mitigation is implemented. Monitoring will be ongoing throughout the duration of the project.

#### **NOISE**

The following measure would mitigate for Impact 4.9.1 as identified in the Final EIR.

Mitigation Measure 4.9.1: Time of Day Limits and Notice to Residents. The Water Agency shall limit activities at the lagoon outlet channel that involve the use of heavy equipment to between local sunrise to local sunset.

X	Project Engineer	Technical Writing
	<b>Construction Inspection</b>	Right-of-Way
X	<b>Environmental Resource</b>	X Operations and Maintenance

The mitigation measure will be considered effective when the Water Agency's Standard Operating Procedures (SOP) for the Russian River estuary management activities have been revised to include the above provisions and when management activities that involve the use of heavy equipment are completed only between sunrise and sunset in compliance with the SOP. Monitoring will be ongoing throughout the duration of the project.

### HAZARDS AND HAZARDOUS MATERIALS

The following measure would mitigate for Impact 4.12.2 as identified in the Final EIR.

**Mitigation Measure 4.12-2:** To minimize the potential for accidental spills from equipment and to provide for a planned response in the event that an accidental spill does occur, the Water Agency shall implement the following construction best management practices:

- 1. Prohibit on-site fueling of vehicles and construction equipment;
- 2. Maintain spill containment and clean up equipment onsite; and,
- 3. Ensure that construction personnel are trained in proper material handling, cleanup, and disposal procedures.

X Project Engineer	Technical Writing
Construction Inspection	Right-of-Way
X Environmental Resource	<b>X</b> Operations and Maintenance

The mitigation measure will be considered effective when the Water Agency's Standard Operating Procedures (SOP) for Russian River estuary management activities have been revised to include the above provisions and the above best management practices have been implemented in compliance with the SOP. Monitoring will be ongoing throughout the duration of the project.

## PUBLIC SERVICES AND UTILITIES AND PUBLIC SAFETY

The following measure would mitigate for Impact 4.13.3 as identified in the Final EIR.

Mitigation Measure 4.13.3: Following outlet channel creation or artificial breaching, the Water Agency will install semi-permanent signage notifying beach users of channel conditions, potential for safety hazards from beach erosion or hydrologic action, and emergency contact information. Signage should be posted and maintained at key locations, such as the parking lot at Goat Rock State Beach Parking lot, the unofficial beach access trail located on the north side of the beach off Highway 1, and 100 feet on either side of the outlet channel.

X Project Engineer	Technical Writing
Construction Inspection	Right-of-Way
X Environmental Resource	X Operations and Maintenance

The mitigation measure will be considered effective when the Water Agency's Standard Operating Procedures (SOP) for Russian River estuary management activities have been revised to include the above provisions and when signage has been installed in compliance with the SOP. Monitoring will be ongoing throughout the duration of the Project.

#### **CUMULATIVE**

The following measure would mitigate for Impacts 5.1 and 5.2.1 as identified in the Final EIR.

**Mitigation Measure 5.1:** Short-term (Construction-related) Cumulative Impacts. Mitigation Measures in Chapter 4.0, Environmental Setting, Impacts, and Mitigation Measures.

X	<b>Project Engineer</b>		Technical Writing
_	<b>Construction Inspection</b>		Right-of-Way
<u>X</u>	<b>Environmental Resource</b>	X	<b>Operations and Maintenance</b>
4.4.8, 4.8.1, 4	4.8.2, 4.9.1, 4.12.2, and 4.13.3	hav	ve when the Mitigation Measures 4.2.2, 4.4.1a, 4.4.1b, we been successfully implemented as specified in the hout the duration of the Project.
The following	measure would mitigate for Imp	pacts	5.2.4 as identified in the Final EIR.
adaptive man	<del>_</del>	late	nall monitor occurrence of sea level rise and implement outlet channel elevation, alignment, and width; or nce.
<u>X</u>	Project Engineer		Technical Writing
	<b>Construction Inspection</b>		Right-of-Way
<u>X</u>	<b>Environmental Resource</b>	X	<b>Operations and Maintenance</b>
_	trategies in response to observe		ective when the Water Agency implements adaptive a level rise. Monitoring will be ongoing throughout the
The following	measure would mitigate for Imp	pacts	5.2.7 as identified in the Final EIR.
Mitigation M	easure 5.2.7: Mitigation Measu	res ii	n Section 4.4, Biological Resources.
	Project Engineer		Technical Writing
	<b>Construction Inspection</b>		Right-of-Way
<u>X</u>	<b>Environmental Resource</b>		<b>Operations and Maintenance</b>
have been suc			ve when Mitigation Measures 4.4.1a, 4.4.1b, and 4.4.8d in the sections above. Monitoring will be ongoing

The following measure would mitigate for Impacts 5.2.12 as identified in the Final EIR.

Mitigation Measure 5.2.12: Mitigation Measures in Section 4.9, Noise.

X Project Engineer	Technical Writing
Construction Inspection	Right-of-Way
X Environmental Resource	X Operations and Maintenance

The mitigation measure will be considered effective when Mitigation Measure 4.9.1 has been successfully implemented as specified in the sections above. Monitoring will be ongoing throughout the duration of the Project.

Adopted by the Water Agency's Board of Directors Resolution No.11-0432 on August 17, 2011.

# SCWA MITIGATION MONITORING REPORT

Project Name: Russian River Estuary Mana	gement Project			
Report No.:	_ Project Type:	_ Water Supply _	Flood Control Sanitat	ion X Other
Inspection/Verification Date:	·			
Inspection/Verification Performed By:				
		(print nam	e and initial)	
(division/department):	Environmental 1	Resources		
Report Prepared By:				
Impact Type: PUBLIC SERVICES AND I	UTILITIES AND	PUBLIC SAFETY		
Mitigation Measure: The Environme (SOP) for Russian River estuary managements breaching, the Water Agency will instructed potential for safety hazards from beach would be posted and maintained at key unofficial beach access trail located on outlet channel.	gement activities stall semi-permant rerosion or hydellocations, such	s provide that, followers signage notification, and as the parking lot a	owing outlet channel cre ying beach users of ch emergency contact info tt Goat Rock State Beach	eation or artificial annel conditions, ormation. Signage th parking lot, the
Mitigation Measure Status:  Exceptions From Mitigation Measure Des				
Remaining Work Needed to Complete Mi	tigation Measure	:		
<b>Estimated Date for completion of Mitigati</b>	on:	, 20		
Mitigation Monitoring Report due date: _	, 20			
To be filled out by the Environmental Resou	rce Section:			
Date sent to division/department:	, 20			
Date returned to ECS:, 20				
Date entered in MMP database & project bir	nder:	_, 20		
Entered into ECS Database by:	<u>.</u>			
Date next Mitigation Report is required:	N/A 20			

[Federal Register Volume 78, Number 77 (Monday, April 22, 2013)]
[Notices]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648-XC496

Takes of Marine Mammals Incidental to Specified Activities; Russian River Estuary Management Activities

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; issuance of an incidental harassment authorization.

\_\_\_\_\_

SUMMARY: In accordance with the regulations implementing the Marine Mammal Protection Act (MMPA) as amended, notification is hereby given that NMFS has issued an Incidental Harassment Authorization (IHA) to the Sonoma County Water Agency (SCWA) to incidentally harass, by Level B harassment only, three species of marine mammals during estuary management activities conducted at the mouth of the Russian River, Sonoma County, California.

DATES: This authorization is effective for the period of one year, from April 21, 2013, through April 20, 2014.

ADDRESSES: SCWA's application as well as a list of the references used in this document may be obtained by visiting the internet at: <a href="http://www.nmfs.noaa.gov/pr/permits/incidental.htm">http://www.nmfs.noaa.gov/pr/permits/incidental.htm</a>. Supplemental documents provided by SCWA may be found at the same web address, as can NMFS' Environmental Assessment (2010) and associated Finding of No Significant Impact, prepared pursuant to the National Environmental Policy Act, and NMFS' Biological Opinion (2008) on the effects of Russian River management activities on salmonids, prepared pursuant to the Endangered Species Act. These documents cited may also be viewed, by appointment only (see FOR FURTHER INFORMATION CONTACT), at the National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910.

FOR FURTHER INFORMATION CONTACT: Ben Laws, Office of Protected Resources, NMFS, (301) 427-8401.

SUPPLEMENTARY INFORMATION:

Background

Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 et seq.) direct the Secretary of Commerce to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than

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commercial fishing) within a specified geographical region if certain

findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed authorization is published in the Federal Register to provide public notice and initiate a 30-day comment period.

Authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant), and if the permissible methods of taking and other means of effecting the least practicable adverse impact (i.e., mitigation) and requirements pertaining to monitoring and reporting of such takings are set forth. NMFS has defined `negligible impact'' in 50 CFR 216.103 as ``\* \* an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.''

Section 101(a)(5)(D) of the MMPA established an expedited process by which citizens of the United States can apply for an authorization to incidentally take small numbers of marine mammals by Level B harassment as defined below. Section 101(a)(5)(D) establishes a 45-day time limit for NMFS review of an application followed by a 30-day public notice and comment period on any proposed authorizations for the incidental harassment of marine mammals. Within 45 days of the close of the comment period, NMFS must either issue or deny the authorization. If authorized, the IHA would be effective for one year from date of issuance.

Except with respect to certain activities not pertinent here, the MMPA defines `harassment'' as: `any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering [Level B harassment].''

## Summary of Request

We received an application on January 17, 2013, from SCWA for issuance of an IHA for the taking, by Level B harassment only, of marine mammals incidental to ongoing activities conducted in management of the Russian River estuary in Sonoma County, California. SCWA was first issued an IHA, valid for a period of one year, on April 1, 2010 (75 FR 17382), and was subsequently issued IHAs for incidental take associated with the same activities on April 21, 2011 (76 FR 23306) and April 17, 2012 (77 FR 24471). Management activities include management of a naturally-formed barrier beach at the mouth of the river in order to minimize potential for flooding of properties adjacent to the Russian River estuary and enhance habitat for juvenile salmonids, and biological and physical monitoring of the estuary. Flood controlrelated breaching of barrier beach at the mouth of the river may include artificial breaches, as well as construction and maintenance of a lagoon outlet channel. The latter activity, an alternative management technique conducted to mitigate impacts of flood control on rearing habitat for salmonids listed as threatened and endangered under the Endangered Species Act (ESA), occurs only from May 15 through October 15 (hereafter, the ``lagoon management period''). All estuary management activities are conducted by SCWA in accordance with a Reasonable and Prudent Alternative (RPA) included in NMFS' Biological Opinion (BiOp) for Water Supply, Flood Control Operations, and Channel Maintenance conducted in the Russian River watershed (NMFS, 2008). Species known from the haul-out at the mouth of the Russian River include the harbor seal (Phoca vitulina), California sea lion (Zalophus californianus), and northern elephant seal (Mirounga angustirostris).

Breaching of naturally-formed barrier beach at the mouth of the Russian River requires the use of heavy equipment (e.g., bulldozer, excavator) and increased human presence. As a result, pinnipeds hauled out on the beach may exhibit behavioral responses that indicate incidental take by Level B harassment under the MMPA. Numbers of harbor seals, the species most commonly encountered at the haul-out, have been recorded extensively since 1972 at the haul-out near the mouth of the Russian River.

The estuary is located about 97 km (60 mi) northwest of San Francisco in Sonoma County, near Jenner, California (see Figure 1 of SCWA's application). The Russian River watershed encompasses 3,847 km\2\ (1,485 mi\2\) in Sonoma, Mendocino, and Lake Counties. The mouth of the Russian River is located at Goat Rock State Beach; the estuary extends from the mouth upstream approximately 10 to 11 km (6-7 mi) between Austin Creek and the community of Duncans Mills (Heckel and McIver, 1994). The proposed action involves management of the estuary to prevent flooding while avoiding adverse modification to critical habitat for ESA-listed salmonids. During the lagoon management period only, this involves construction and maintenance of a lagoon outlet channel that would facilitate formation of a perched lagoon, which will reduce flooding while maintaining appropriate conditions for juvenile salmonids. Additional breaches of barrier beach may be conducted for the sole purpose of reducing flood risk.

There are three components to SCWA's ongoing estuary management activities: (1) Lagoon outlet channel management, during the lagoon management period only, required to accomplish the dual purposes of flood risk abatement and maintenance of juvenile salmonid habitat; (2) traditional artificial breaching, with the sole objective of flood risk abatement; and (3) physical and biological monitoring in and near the estuary, required under the terms of the BiOp, to understand response to water surface elevation management in the estuary-lagoon system. In addition to these ongoing management activities, SCWA will conduct new monitoring work at the mouth of the Russian River during the period of this IHA. This additional activity comprises a plan to study the effects of a historical, dilapidated jetty on the formation and maintenance of the Russian River estuary, as required under RPA 2 of the 2008 BiOp. Through several phases from 1929-1948, the jetty and associated seawall, roadway, and railroad were constructed, reinforced and then abandoned by various entities. The plan for study of the jetty is described in greater detail in SCWA's `Feasibility of Alternatives to the Goat Rock State Beach Jetty for Managing Lagoon Water Surface Elevations -- A Study Plan' (ESA PWA, 2011), available online (see ADDRESSES).

SCWA's estuary management activities generally involve the use of heavy equipment and increased human presence on the beach, in order to excavate and maintain an outlet channel from the lagoon to the ocean or to conduct artificial breaching. Pupping season for harbor seals at the mouth of the Russian River typically peaks during May. However, pupping is known to begin in March and may continue through the end of June; pupping season for harbor seals is conservatively defined here as March 15 to June 30. During pupping season, management

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events may occur over a maximum of two consecutive days per event and all estuary management events on the beach must be separated by a minimum no-work period of one week. The use of heavy equipment and increased human presence has the potential to harass hauled-out marine mammals by causing movement or flushing into the water. Mitigation and monitoring measures described later in this document are designed to

minimize this harassment to the lowest practicable level.

Equipment (e.g., bulldozer, excavator) is off-loaded in the parking lot of Goat Rock State Park and driven onto the beach via an existing access point. Personnel on the beach will include up to two equipment operators, three safety team members on the beach (one on each side of the channel observing the equipment operators, and one at the barrier to warn beach visitors away from the activities), and one safety team member at the overlook on Highway 1 above the beach. Occasionally, there will be two or more additional people on the beach (SCWA staff or regulatory agency staff) to observe the activities. SCWA staff will be followed by the equipment, which will then be followed by an SCWA vehicle (typically a small pickup truck, to be parked at the previously posted signs and barriers on the south side of the excavation location).

### Lagoon Outlet Channel Management

Active management of estuarine/lagoon water levels commences following the first closure of the barrier beach during this period. When this happens, SCWA monitors lagoon water surface elevation and creates an outlet channel when water levels in the estuary are between 4.5 and 7.0 ft (1.4-2.1 m) in elevation. Management practices will be incrementally modified over the course of the lagoon management period in an effort to improve performance in meeting the goals of the BiOp while preventing flooding.

Ideally, initial implementation of the outlet channel would produce a stable channel for the duration of the lagoon management period. However, the sheer number of variables and lack of past site-specific experience likely preclude this outcome, and succeeding excavation attempts may be required. The precise number of excavations would depend on uncontrollable variables such as seasonal ocean wave conditions (e.g., wave heights and lengths), river inflows, and the success of previous excavations (e.g., the success of selected channel widths and meander patterns) in forming an outlet channel that effectively maintains lagoon water surface elevations. Based on lagoon management operations under similar conditions at Carmel River, and expectations regarding how wave action and sand deposition may increase beach height or result in closure, it is predicted that up to three successive outlet channel excavation events, at increasingly higher beach elevations, may be necessary to produce a successful outlet channel. In the event that an outlet channel fails through breaching (i.e., erodes the barrier beach and forms a tidal inlet), SCWA would resume adaptive management of the outlet channel's width, slope, and alignment in consultation with NMFS and the California Department of Fish and Game (CDFG), only after ocean wave action naturally reforms a barrier beach and closes the river's mouth during the lagoon management period.

Implementation and Maintenance--Upon successful construction of an outlet channel, adaptive management, or maintenance, may be required for the channel to continue achieving performance criteria. In order to reduce disturbance to seals and other wildlife, as well as beach visitors, the amount and frequency of mechanical intervention will be minimized. As technical staff and maintenance crews gain more experience with implementing the outlet channel and observing its response, maintenance is anticipated to be less frequent, with events of lesser intensity. During pupping season, machinery may only operate on up to two consecutive working days, including during initial construction of the outlet channel. In addition, SCWA must maintain a one week no-work period between management events during pupping season, unless flooding is a threat, to allow for adequate disturbance recovery period. During the no-work period, equipment must be removed from the beach. SCWA seeks to avoid conducting management activities on weekends (Friday-Sunday) in order to reduce disturbance of beach

visitors. In addition, activities are to be conducted in such a manner as to effect the least practicable adverse impacts to pinnipeds and their habitat as described later in this document (see ``Mitigation'').

### Artificial Breaching

The estuary may close naturally throughout the year as a result of barrier beach formation at the mouth of the Russian River. Although closures may occur at any time of the year, the mouth usually closes during the spring, summer, and fall (Heckel and McIver, 1994; MSC, 1997, 1998, 1999, 2000; SCWA and MSC, 2001). Closures result in lagoon formation in the estuary and, as water surface levels rise, flooding may occur. For decades, artificial breaching has been performed in the absence of natural breaching, in order to alleviate potential flooding of low-lying shoreline properties near the town of Jenner. Artificial breaching, as defined here, is conducted for the sole purpose of reducing flood risk, and thus is a different type of event, from an engineering perspective, than are the previously described lagoon management events. Artificial breaching activities occur in accordance with the BiOp, and primarily occur outside the lagoon management period (i.e., artificial breaching would primarily occur from October 16 to May 14). However, if conditions present unacceptable risk of flooding during the lagoon management period, SCWA may artificially breach the sandbar a maximum of two times during that period. Implementation protocol would follow that described previously for lagoon outlet channel management events, with the exception that only one piece of heavy equipment is likely to be required per event, rather than two.

#### Physical and Biological Monitoring

SCWA is required by the BiOp and other state and federal permits to collect biological and physical habitat data in conjunction with estuary management. Monitoring requires the use of boats and nets in the estuary, among other activities, and will require activities to occur in the vicinity of beach and river haul-outs (see Figure 4 of SCWA's application); these monitoring activities have the potential to disturb pinnipeds. The majority of monitoring is required under the BiOp and occurs approximately during the lagoon management period (mid-May through October or November), depending on river dynamics. Beach topographic surveys occur year-round.

### Jetty Study

The jetty study will analyze the effects of the jetty on beach permeability and sand storage and transport. These physical processes are affected by the jetty, and, in turn, may affect seasonal water surface elevations and flood risk. Evaluating and quantifying these linkages will inform the development and evaluation of management alternatives for the jetty. The study involves delineation of two study transects perpendicular to the beach barrier (see Figure 5 of SCWA's application), with six water seepage monitoring wells be constructed (three

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per transect). In addition, geophysical surveys will be conducted in order to better understand the characteristics of the barrier beach substrate and the location and composition of buried portions of the jetty and associated structures. Once the initial geophysical surveys have been completed, additional surface electromagnetic profiles will be collected along the barrier beach in order to explore how the jetty impacts beach seepage relative to the natural beach berm.

We published a notice of receipt of SCWA's application and proposed IHA in the Federal Register on March 8, 2013 (78 FR 14985). During the 30-day comment period, we received a letter from the Marine Mammal Commission (MMC). The MMC recommended that we issue the requested authorization, subject to inclusion of the proposed mitigation and monitoring measures as described in our notice of proposed IHA and the application. All measures proposed in the initial Federal Register notice are included within the authorization and we have determined that they will effect the least practicable impact on the species or stocks and their habitats.

We also received a comment letter from one private citizen. The individual expressed general concern about the proposed activities and potential effects on the harbor seal haul-out at Goat Rock State Beach, describing the potential for abandonment of the haul-out by harbor seals as a result of long-term, cumulative adverse impacts of construction activity over time and the secondary impacts of estuary management; notably, the likelihood of increased human presence on the beach resulting from increased access. It is appropriate to note here that, under the MMPA, we do not have jurisdiction over the management actions required of SCWA as a result of the 2008 BiOp or over human access and use of Goat Rock Beach State Park. The portion of SCWA's specified activity of specific concern (maintenance of lagoon conditions during the summer months) is an important component of a suite of management actions prescribed for salmonid conservation. We understand and appreciate the concerns expressed but note that, while natural resource management often requires difficult choices, there is no evidence to date that the incidental harassment of harbor seals described herein will result in long-term displacement from the haulout. Further, there is no evidence that any of the potential effects to harbor seals at Goat Rock State Beach could potentially result in longterm or population level impacts to the California stock of harbor seals as a whole. The best information available, from decades of estuary management as well as the scientific literature, leads us to believe that the effects of the specified activity would result in negligible impact to the California stock of harbor seals. In addition, we have prescribed the monitoring requirements necessary to ascertain whether the specified activity is having a greater (or different) than anticipated effect on marine mammals. SCWA has fortified those requirements with additional questions of interest that will lead to a robust understanding of the effects of the specified activity over time. In the future, any requests from SCWA for incidental take authorization will continue to be evaluated on the basis of the most up-to-date information available.

Description of Marine Mammals in the Area of the Specified Activity

The marine mammal species that may be harassed incidental to estuary management activities are the harbor seal, California sea lion, and the northern elephant seal. None of these species are listed as threatened or endangered under the ESA, nor are they categorized as depleted under the MMPA. We presented a more detailed discussion of the status of these stocks and their occurrence in the action area in the notice of the proposed IHA (78 FR 14985, March 8, 2013).

Potential Effects of the Specified Activity on Marine Mammals

We provided a detailed discussion of the potential effects of the specified activity on marine mammals in the notice of the proposed IHA (78 FR 14985, March 8, 2013). A summary of anticipated effects is provided below.

A significant body of monitoring data exists for pinnipeds at the

mouth of the Russian River. Pinnipeds have co-existed with regular estuary management activity for decades, as well as with regular human use activity at the beach, and are likely habituated to human presence and activity. Nevertheless, SCWA's estuary management activities have the potential to harass pinnipeds present on the beach. During breaching operations, past monitoring has revealed that some or all of the seals present typically move or flush from the beach in response to the presence of crew and equipment, though some may remain hauled-out. No stampeding of seals--a potentially dangerous occurrence in which large numbers of animals succumb to mass panic and rush away from a stimulus--has been documented since SCWA developed protocols to prevent such events in 1999. While it is likely impossible to conduct required estuary management activities without provoking some response in hauled-out animals, precautionary mitigation measures, described later in this document, ensure that animals are gradually apprised of human approach. Under these conditions, seals typically exhibit a continuum of responses, beginning with alert movements (e.g., raising the head), which may then escalate to movement away from the stimulus and possible flushing into the water. Flushed seals typically re-occupy the haul-out within minutes to hours of the stimulus. In addition, eight other haulouts exist nearby that may accommodate flushed seals. In the absence of appropriate mitigation measures, it is possible that pinnipeds could be subject to injury, serious injury, or mortality, likely through stampeding or abandonment of pups.

California sea lions and northern elephant seals, which have been noted only infrequently in the action area, have been observed as less sensitive to stimulus than harbor seals during monitoring at numerous other sites. For example, monitoring of pinniped disturbance as a result of abalone research in the Channel Islands showed that while harbor seals flushed at a rate of 69 percent, California sea lions flushed at a rate of only 21 percent. The rate for elephant seals declined to 0.1 percent (VanBlaricom, 2011). In the unlikely event that either of these species is present during management activities, they would be expected to display a minimal reaction to maintenance activities—less than that expected of harbor seals.

Although the Jenner haul-out is not known as a primary pupping beach, harbor seal pups have been observed during the pupping season; therefore, we have evaluated the potential for injury, serious injury or mortality to pups. There is a lack of published data regarding pupping at the mouth of the Russian River, but SCWA monitors have observed pups on the beach. No births were observed during recent monitoring, but were inferred based on signs indicating pupping (e.g., blood spots on the sand, birds consuming possible placental remains). Pup injury or mortality would be most likely to occur in the event of extended separation of a mother and pup, or trampling in a stampede. As discussed previously, no stampedes have been recorded since development of appropriate protocols in 1999. Any

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California sea lions or northern elephant seals present would be independent juveniles or adults; therefore, analysis of impacts on pups is not relevant for those species. Pups less than one week old are characterized by being up to 15 kg, thin for their body length, or having an umbilicus or natal pelage.

Similarly, the period of mother-pup bonding, critical time needed to ensure pup survival and maximize pup health, is not expected to be impacted by estuary management activities. Harbor seal pups are extremely precocious, swimming and diving immediately after birth and throughout the lactation period, unlike most other phocids which normally enter the sea only after weaning (Lawson and Renouf, 1985; Cottrell et al., 2002; Burns et al., 2005). Lawson and Renouf (1987) investigated harbor seal mother-pup bonding in response to natural and

anthropogenic disturbance. In summary, they found that the most critical bonding time is within minutes after birth. Although pupping season is defined as March 15-June 30, the peak of pupping season is typically concluded by mid-May, when the lagoon management period begins. As such, it is expected that most mother-pup bonding would likely be concluded as well. The number of management events during the months of March and April has been relatively low in the past, and the breaching activities occur in a single day over several hours. In addition, mitigation measures described later in this document further reduce the likelihood of any impacts to pups, whether through injury or mortality or interruption of mother-pup bonding.

Therefore, based on a significant body of site-specific monitoring data, harbor seals are unlikely to sustain any harassment that may be considered biologically significant. Individual animals would, at most, flush into the water in response to maintenance activities but may also simply become alert or move across the beach away from equipment and crews. We have determined that impacts to hauled-out pinnipeds during estuary management activities would be behavioral harassment of limited duration (i.e., less than one day) and limited intensity (i.e., temporary flushing at most). Stampeding, and therefore injury or mortality, is not expected—nor been documented—in the years since appropriate protocols were established (see `Mitigation'' for more details). Further, the continued, and increasingly heavy, use of the haul—out despite decades of breaching events indicates that abandonment of the haul—out is unlikely.

#### Anticipated Effects on Habitat

We provided a detailed discussion of the potential effects of this action on marine mammal habitat in the notice of the proposed IHA (78 FR 14985, March 8, 2013). SCWA's estuary management activities will result in temporary physical alteration of the Jenner haul-out. With barrier beach closure, seal usage of the beach haul-out declines, and the three nearby river haul-outs may not be available for usage due to rising water surface elevations. Breaching of the barrier beach, subsequent to the temporary habitat disturbance, will likely increase suitability and availability of habitat for pinnipeds. Biological and water quality monitoring will not physically alter pinniped habitat. In summary, there will be temporary physical alteration of the beach. However, natural opening and closure of the beach results in the same impacts to habitat; therefore, seals are likely adapted to this cycle. In addition, the increase in rearing habitat quality has the goal of increasing salmon abundance, ultimately providing more food for seals present within the action area.

#### Summary of Previous Monitoring

SCWA complied with the mitigation and monitoring required under the previous authorization. In accordance with the 2012 IHA, SCWA submitted a Report of Activities and Monitoring Results, covering the period of January 1 through December 31, 2012. Previous monitoring reports provided additional analysis of monitoring results from 2009-11. In January 2012, the barrier beach was artificially breached after two days of breaching activity. There were also several periods over the course of the year where the barrier beach closed or became naturally perched and then subsequently breached naturally. In 2011 no water level management activities occurred. In 2010 one lagoon management event and two artificial breaching events occurred. Pinniped monitoring occurred the day before, the day of, and the day after each water level management activity. In 2009 eleven artificial breaching events occurred. Pinniped monitoring occurred during each breaching event. In addition, SCWA conducted biological and physical monitoring as described previously. During the course of these activities, SCWA did

not exceed the take levels authorized under the relevant IHAs. We provided a detailed description of previous monitoring results in the notice of the proposed IHA (78 FR 14985, March 8, 2013).

#### Mitigation

In order to issue an IHA under Section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to such activity, and other means of effecting the least practicable adverse impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for taking for certain subsistence uses.

SCWA will continue the following mitigation measures, as implemented during the previous IHA, designed to minimize impact to affected species and stocks:

SCWA crews will cautiously approach the haul-out ahead of heavy equipment to minimize the potential for sudden flushes, which may result in a stampede--a particular concern during pupping season.

SCWA staff will avoid walking or driving equipment through the seal haul-out.

Crews on foot will make an effort to be seen by seals from a distance, if possible, rather than appearing suddenly at the top of the sandbar, again preventing sudden flushes.

During breaching events, all monitoring will be conducted from the overlook on the bluff along Highway 1 adjacent to the haul-out in order to minimize potential for harassment.

A water level management event may not occur for more than two consecutive days unless flooding threats cannot be controlled.

In addition, SCWA will continue mitigation measures specific to pupping season (March 15-June 30), as implemented in the previous IHA:

SCWA will maintain a 1 week no-work period between water level management events (unless flooding is an immediate threat) to allow for an adequate disturbance recovery period. During the no-work period, equipment must be removed from the beach.

If a pup less than 1 week old is on the beach where heavy machinery will be used or on the path used to access the work location, the management action will be delayed until the pup has left the site or the latest day possible to prevent flooding while still maintaining suitable fish rearing habitat. In the event that a pup remains present on the beach in the presence of flood risk, SCWA will consult with us to determine the appropriate course of action. SCWA will coordinate with the locally established seal monitoring program (Stewards' Seal Watch) to determine if pups less than 1 week old are on the beach prior to a breaching event.

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Physical and biological monitoring will not be conducted if a pup less than 1 week old is present at the monitoring site or on a path to the site.

Equipment will be driven slowly on the beach and care will be taken to minimize the number of shutdowns and start-ups when the equipment is on the beach. All work will be completed as efficiently as possible, with the smallest amount of heavy equipment possible, to minimize disturbance of seals at the haul-out. Boats operating near river haul-outs during monitoring will be kept within posted speed limits and driven as far from the haul-outs as safely possible to minimize flushing seals.

We have carefully evaluated the applicant's mitigation measures as proposed and considered their effectiveness in past implementation, to determine whether they are likely to effect the least practicable adverse impact on the affected marine mammal species and stocks and

their habitat. Our evaluation of potential measures includes consideration of the following factors in relation to one another: (1) The manner in which, and the degree to which, the successful implementation of the measure is expected to minimize adverse impacts to marine mammals, (2) the proven or likely efficacy of the specific measure to minimize adverse impacts as planned; (3) the practicability of the measure for applicant implementation, including consideration of personnel safety, and practicality of implementation.

Injury, serious injury, or mortality to pinnipeds would likely result from startling animals inhabiting the haul-out into a stampede reaction, or from extended mother-pup separation as a result of such a stampede. Long-term impacts to pinniped usage of the haul-out could result from significantly increased presence of humans and equipment on the beach. To avoid these possibilities, we have worked with SCWA to develop the previously described mitigation measures. These are designed to reduce the possibility of startling pinnipeds, by gradually apprising them of the presence of humans and equipment on the beach, and to reduce the possibility of impacts to pups by eliminating or altering management activities on the beach when pups are present and by setting limits on the frequency and duration of events during pupping season. During the past twelve years of flood control management, implementation of similar mitigation measures has resulted in no known stampede events and no known injury, serious injury, or mortality. Over the course of that time period, management events have generally been infrequent and of limited duration. Based upon the SCWA's record of management at the mouth of the Russian River, as well as information from monitoring SCWA's implementation of the improved mitigation measures as prescribed under the previous IHA, we have determined that the mitigation measures included in the final IHA provide the means of effecting the least practicable adverse impacts on marine mammal species or stocks and their habitat.

## Monitoring and Reporting

In order to issue an ITA for an activity, Section 101(a)(5)(D) of the MMPA states that NMFS must set forth `requirements pertaining to the monitoring and reporting of such taking''. The MMPA implementing regulations at 50 CFR 216.104(a)(13) indicate that requests for IHAs must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present.

The applicant has developed a Pinniped Monitoring Plan which describes the proposed monitoring efforts. The purpose of this monitoring plan, which is carried out collaboratively with the Stewards of the Coasts and Redwoods (Stewards) organization, is to detect the response of pinnipeds to estuary management activities at the Russian River estuary. SCWA has designed the plan both to satisfy the requirements of the IHA, and to address the following questions of interest:

- 1. Under what conditions do pinnipeds haul out at the Russian River estuary mouth at Jenner?
- 2. How do seals at the Jenner haul-out respond to activities associated with the construction and maintenance of the lagoon outlet channel and artificial breaching activities?
- 3. Does the number of seals at the Jenner haul-out significantly differ from historic averages with formation of a summer (May 15 to October 15) lagoon in the Russian River estuary?
- 4. Are seals at the Jenner haul-out displaced to nearby river and coastal haul-outs when the mouth remains closed in the summer?

In summary, monitoring includes the following:

Seals at the Jenner haul-out are counted twice monthly for the term of the IHA. This baseline information will provide SCWA with details that may help to plan estuary management activities in the future to minimize pinniped interaction. This census begins at local dawn and continues for 8 hours. All seals hauled out on the beach are counted every 30 minutes from the overlook on the bluff along Highway 1 adjacent to the haul-out using high powered spotting scopes. Monitoring may conclude for the day if weather conditions affect visibility (e.g., heavy fog in the afternoon). Counts are scheduled for 2 days out of each month, with the intention of capturing a low and high tide each in the morning and afternoon. Depending on how the sandbar is formed, seals may haul out in multiple groups at the mouth. At each 30-minute count, the observer indicates where groups of seals are hauled out on the sandbar and provides a total count for each group. If possible, adults and pups are counted separately.

In addition to the census data, disturbances of the haul-out are recorded. The method for recording disturbances follows those in Mortenson (1996). Disturbances will be recorded on a three-point scale that represents an increasing seal response to the disturbance. The time, source, and duration of the disturbance, as well as an estimated distance between the source and haul-out, are recorded. It should be noted that only responses falling into Mortenson's Levels 2 and 3 (i.e., movement or flight) will be considered as harassment under the MMPA. Weather conditions are recorded at the beginning of each census. These include temperature, percent cloud cover, and wind speed (Beaufort scale). Tide levels and estuary water surface elevations are correlated to the monitoring start and end times.

In an effort towards understanding possible relationships between use of the Jenner haul-out and nearby coastal and river haul-outs, several other haul-outs on the coast and in the Russian River estuary are monitored as well. The peripheral haul-outs are visited for 10-minute counts twice during each baseline monitoring day. All pinnipeds hauled out were counted from the same vantage point(s) at each haul-out using a high-powered spotting scope or binoculars.

### Estuary Management Event Monitoring

Activities associated with artificial breaching or initial construction of the outlet channel, as well as the maintenance of the channel that may be required, will be monitored for disturbances to the seals at the Jenner haul-out. A 1-day pre-event channel survey will be made within 1-3 days prior to constructing the outlet channel.

### [[Page 23752]]

The haul-out will be monitored on the day the outlet channel is constructed and daily for up to the maximum 2 days allowed for channel excavation activities. Monitoring will also occur on each day that the outlet channel is maintained using heavy equipment for the duration of the lagoon management period. Monitoring will correspond with that described under the `Baseline'' section previously, with the exception that management activity monitoring duration is defined by event duration, rather than being set at 8 hours. On the day of the management event, pinniped monitoring begins at least 1 hour prior to the crew and equipment accessing the beach work area and continues through the duration of the event, until at least 1 hour after the crew and equipment leave the beach.

In an attempt to understand whether seals from the Jenner haul-out are displaced to coastal and river haul-outs nearby when management events occur, other nearby haul-outs are monitored concurrently with event monitoring. This provides an opportunity to qualitatively assess whether these haul-outs are being used by seals displaced from the

Jenner haul-out. This monitoring will not provide definitive results regarding displacement to nearby coastal and river haul-outs, as individual seals are not marked, but is useful in tracking general trends in haul-out use during disturbance. As volunteers are required to monitor these peripheral haul-outs, haul-out locations may need to be prioritized if there are not enough volunteers available. In that case, priority will be assigned to the nearest haul-outs (North Jenner and Odin Cove), followed by the Russian River estuary haul-outs, and finally the more distant coastal haul-outs.

For all counts, the following information will be recorded in thirty minute intervals: (1) Pinniped counts, by species; (2) behavior; (3) time, source and duration of any disturbance; (4) estimated distances between source of disturbance and pinnipeds; (5) weather conditions (e.g., temperature, wind); and (5) tide levels and estuary water surface elevation.

Monitoring During Pupping Season—As described previously, the pupping season is defined as March 15 to June 30. Baseline, lagoon outlet channel, and artificial breaching monitoring during the pupping season will include records of neonate (pups less than 1 week old) observations. Characteristics of a neonate pup include: Body weight less than 15 kg; thin for their body length; an umbilicus or natal pelage present; wrinkled skin; and awkward or jerky movements on land. SCWA will coordinate with the Seal Watch monitoring program to determine if pups less than 1 week old are on the beach prior to a water level management event.

If, during monitoring, observers sight any pup that might be abandoned, SCWA will contact the NMFS stranding response network immediately and also report the incident to NMFS' Southwest Regional Office and NMFS Office of Protected Resources within 48 hours. Observers will not approach or move the pup. Potential indications that a pup may be abandoned are no observed contact with adult seals, no movement of the pup, and the pup's attempts to nurse are rebuffed.

#### Reporting

SCWA is required to submit a report on all activities and marine mammal monitoring results to the Office of Protected Resources, NMFS, and the Southwest Regional Administrator, NMFS, 90 days prior to the expiration of the IHA if a renewal is sought, or within 90 days of the expiration of the permit otherwise. This annual report will also be distributed to California State Parks and Stewards, and would be available to the public on SCWA's Web site. This report will contain the following information:

The number of seals taken, by species and age class (if possible);

Behavior prior to and during water level management events;

Start and end time of activity;

Estimated distances between source and seals when disturbance occurs;

Weather conditions (e.g., temperature, wind, etc.);
Haul-out reoccupation time of any seals based on post
activity monitoring;

Tide levels and estuary water surface elevation; and Seal census from bi-monthly and nearby haul-out monitoring.

The annual report includes descriptions of monitoring methodology, tabulation of estuary management events, summary of monitoring results, and discussion of problems noted and proposed remedial measures. SCWA will report any injured or dead marine mammals to NMFS' Southwest Regional Office and NMFS Office of Protected Resources.

Estimated Take by Incidental Harassment

We are authorizing SCWA to take harbor seals, California sea lions, and northern elephant seals, by Level B harassment only, incidental to estuary management activities. These activities, involving increased human presence and the use of heavy equipment and support vehicles, are expected to harass pinnipeds present at the haul-out through behavioral disturbance only. In addition, monitoring activities prescribed in the BiOp may result in harassment of additional individuals at the Jenner haul-out and at the three haul-outs located in the estuary. Estimates of the number of harbor seals, California sea lions, and northern elephant seals that may be harassed by the activities is based upon the number of potential events associated with Russian River estuary management activities and the average number of individuals of each species that are present during conditions appropriate to the activity. As described previously in this document, monitoring effort at the mouth of the Russian River has shown that the number of seals utilizing the haul-out declines during bar-closed conditions. Tables 1 and 2 detail the total number of authorized takes. Methodology of take estimation was discussed in detail in our notice of proposed IHA (78 FR 14985, March 8, 2013).

Table 1--Estimated Number of Harbor Seal Takes Resulting From Russian

Table 1Estimated Number of Harbor Seal Takes Resulting From Russian  River Estuary Management Activities		
Number of animals expected to occur Number of events \a\ b c		Potential total number of
Lagoon Ou	itlet Channel Manage	ement (May 15 to October 15)
<pre>Implementation: 120 \d\</pre>	Implementation: 3	Implementation: 360.
	Maintenance:  May: 1 June-Sept: 4/ month	Maintenance: 1,213.
[[Page 23753]]		
July: 117	Oct: 1	
Aug: 17 Sept: 18	Monitoring: June-Sept: 2/ month	
Oct: 22	Oct: 1	Total: 2,139.
	Artificial	
Oct: 22 Nov: 11 Dec: 42 Jan: 32 Feb: 83 Mar: 135 Apr: 173 May: 103	Nov: 2 Dec: 2 Jan: 1 Feb: 1 Mar: 1	Oct: 44. Nov: 22. Dec: 84. Jan: 32. Feb: 83. Mar: 135. Apr: 173. May: 103.
	11 events maximum	

Jan:	97		Jan:	: 20.
Feb:	83		Feb:	: 16.
Mar:	135	<pre>1 topographic survey/month</pre>	Mar:	: 14.
Apr:	143		Apr:	: 14.
May:	134	2 geophysical	May:	: 13.
Jun:	149	<pre>surveys/month, Sep-Dec; 1/ month, Jul-Aug, Jan-Feb</pre>	Jun:	: 15.
Jul:	214		Jul:	: 42.
Aug:	112		Aug:	: 22.
Sep:	63	Surveys	Sep:	: 18.
Oct:	50	considered to have potential for take of 10 percent of animals present	Oct:	: 15.
Nov:	106		Nov:	: 33.
Dec:	42			: 12. 
			T-	Total: 234.
				onitoring in the Estuary
1 \e\		81	81	

- \a\ For Lagoon Outlet Channel Management and Artificial Breaching, average daily number of animals corresponds with data from Table 2. For Topographic and Geophysical Beach Surveys, average daily number of animals corresponds with 2009-12 data from Table 1. Exceptions include the months of February and March, for which there are no data on barclosed conditions, and December, when the few bar-closed surveys have resulted in a zero average. For this latter, the more conservative value was used.
- \b\ For implementation of the lagoon outlet channel, an event is defined as a single, two-day episode. It is assumed that the same individual seals would be hauled out during a single event. For the remaining activities, an event is defined as a single day on which an activity occurs. Some events may include multiple activities.
- \c\ Number of events for artificial breaching derived from historical data. The average number of events for each month was rounded up to the nearest whole number; estimated number of events for December was increased from one to two because multiple closures resulting from storm events have occurred in recent years during that month. These numbers likely represent an overestimate, as the average annual number of events is six.
- \d\ Although implementation could occur at any time during the lagoon management period, the highest daily average per month from the lagoon management period was used.
- \e\ Based on past experience, SCWA expects that no more than one seal may be present, and thus have the potential to be disturbed, at each of the three river haul-outs.

Table	2Estin	nated	Number	of	California	Sea	Lion	and	Elephant	Seal	Takes	Resulting	From
Russian	River Es	stuary	7										

Management Activities

-----

Potential total	Number of animals					
number of individual	ornogted to organs. Numbers of organs					
Species \a\ animals that may be	expected to occur Number of events					
taken	\a\					
	el Management (May 15 to October 15)					
California sea lion (potential to encounter 6 6	1					
once per event)  Northern elephant seal (potential to encounter 6 6	1					
once per event)						
[[Page 23754]]						
Ar	Artificial Breaching					
California sea lion (potential to encounter 8 8	1					
once per event, Sep-Apr)  Northern elephant seal (potential to encounter 8	1					
once per event, Dec-Mar)						
Topographic	and Geophysical Beach Surveys					
	1					
20 20 once per event, Sep-Apr)	1					
20 20 once per event, Dec-Mar)						
Biological and Physic	cal Habitat Monitoring in the Estuary					
California sea lion (potential to encounter 8	1					
once per event, Sep-Apr)  Northern elephant seal (potential to encounter 8	1					
once per event, Dec-Mar)						
Total: California sea lion						
42  Elephant seal						
42						

\_\_\_\_\_

\a\ SCWA expects that California sea lions and/or northern elephant seals could occur during any month of the

year, but that any such occurrence would be infrequent and unlikely to occur more than once per month.

Negligible Impact and Small Numbers Analysis and Determination

NMFS has defined ``negligible impact'' in 50 CFR 216.103 as ``\* \* \* an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.'' In determining whether or not authorized incidental take will have a negligible impact on affected species stocks, we consider a number of criteria regarding the impact of the proposed action, including the number, nature, intensity, and duration of Level B harassment take that may occur. Although SCWA's estuary management activities may harass pinnipeds hauled out at the mouth of the Russian River, as well as those hauled out at several locations in the estuary during recurring monitoring activities, impacts are occurring to a small, localized group of animals. No mortality or injury is anticipated, nor will the action result in long-term impacts such as permanent abandonment of the haul-out. Seals will likely become alert or, at most, flush into the water in reaction to the presence of crews and equipment on the beach. However, breaching the sandbar has been shown to increase seal abundance on the beach, with seals quickly re-inhabiting the haul-out following cessation of activity. In addition, the implementation of the lagoon management plan may provide increased availability of prey species (salmonids). No impacts are expected at the population or stock level.

No pinniped stocks known from the action area are listed as threatened or endangered under the ESA or determined to be strategic or depleted under the MMPA. Recent data suggests that harbor seal populations have reached carrying capacity; populations of California sea lions and northern elephant seals in California are also considered healthy.

The number of animals authorized to be taken for each species of pinnipeds can be considered small relative to the population size. There are an estimated 30,196 harbor seals in the California stock, 296,750 California sea lions, and 124,000 northern elephant seals in the California breeding population. Based on extensive monitoring effort specific to the affected haul-out and historical data on the frequency of the specified activity, we are authorizing take, by Level B harassment only, of 3,130 harbor seals, 42 California sea lions, and 42 northern elephant seals, representing 10.4, 0.01, and 0.03 percent of the populations, respectively. However, this represents an overestimate of the number of individuals harassed over the duration of the proposed IHA, because the take estimates include multiple instances of harassment to a given individual.

California sea lion and elephant seal pups are not known to occur within the action area and thus will not be affected by the specified activity. The action is not likely to cause injury or mortality to any harbor seal pup, nor will it impact mother-pup bonding. The peak of harbor seal pupping season occurs during May, when few management activities are anticipated. However, the pupping season has been conservatively defined as March 15-June 30 for mitigation purposes, and any management activity that is required during pupping season will be delayed in the event that a pup less than one week old is present on the beach. As described previously in this document, harbor seal pups are precocious, and mother-pup bonding is likely to occur within minutes. Delay of events will further ensure that mother-pup bonding is not likely to be interfered with.

Based on the foregoing analysis, behavioral disturbance to pinnipeds at the mouth of the Russian River will be of low intensity and limited duration. To ensure minimal disturbance, SCWA will implement the mitigation measures described previously, which we have determined will serve as the means for effecting the least practicable adverse effect on marine mammals stocks or populations and their habitat. We find that SCWA's estuary management activities will result in the incidental take of small numbers of marine mammals, and that the authorized number of takes will have no more than a negligible impact on the affected species and stocks.

[[Page 23755]]

Impact on Availability of Affected Species for Taking for Subsistence Uses

There are no relevant subsistence uses of marine mammals implicated by this action.

Endangered Species Act (ESA)

There are no ESA-listed marine mammals found in the action area; therefore, no consultation under the ESA is required for such species. As described elsewhere in this document, SCWA and the Corps consulted with NMFS under section 7 of the ESA regarding the potential effects of their operations and maintenance activities, including SCWA's estuary management program, on ESA-listed salmonids. As a result of this consultation, NMFS issued the Russian River Biological Opinion (NMFS, 2008), including Reasonable and Prudent Alternatives, which prescribes modifications to SCWA's estuary management activities. The effects of the proposed activities and authorized take would not cause additional effects for which section 7 consultation would be required.

National Environmental Policy Act (NEPA)

In compliance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), as implemented by the regulations published by the Council on Environmental Quality (40 CFR parts 1500-1508), and NOAA Administrative Order 216-6, we prepared an Environmental Assessment (EA) to consider the direct, indirect and cumulative effects to the human environment resulting from issuance of the original IHA to SCWA for the specified activities and found that it would not result in any significant impacts to the human environment. We signed a Finding of No Significant Impact (FONSI) on March 30, 2010. We have reviewed SWCA's application for a renewed IHA for ongoing estuary management activities for 2013 and the 2012 monitoring report. Based on that review, we have determined that the proposed action follows closely the IHAs issued and implemented in 2010-12 and does not present any substantial changes, or significant new circumstances or information relevant to environmental concerns which would require a supplement to the 2010 EA or preparation of a new NEPA document. Therefore, we have determined that a new or supplemental EA or Environmental Impact Statement is unnecessary, and reaffirm the existing FONSI for this action. The 2010 EA and FONSI for this action are available for review at http://www.nmfs.noaa.gov/pr/permits/incidental.htm.

#### Determinations

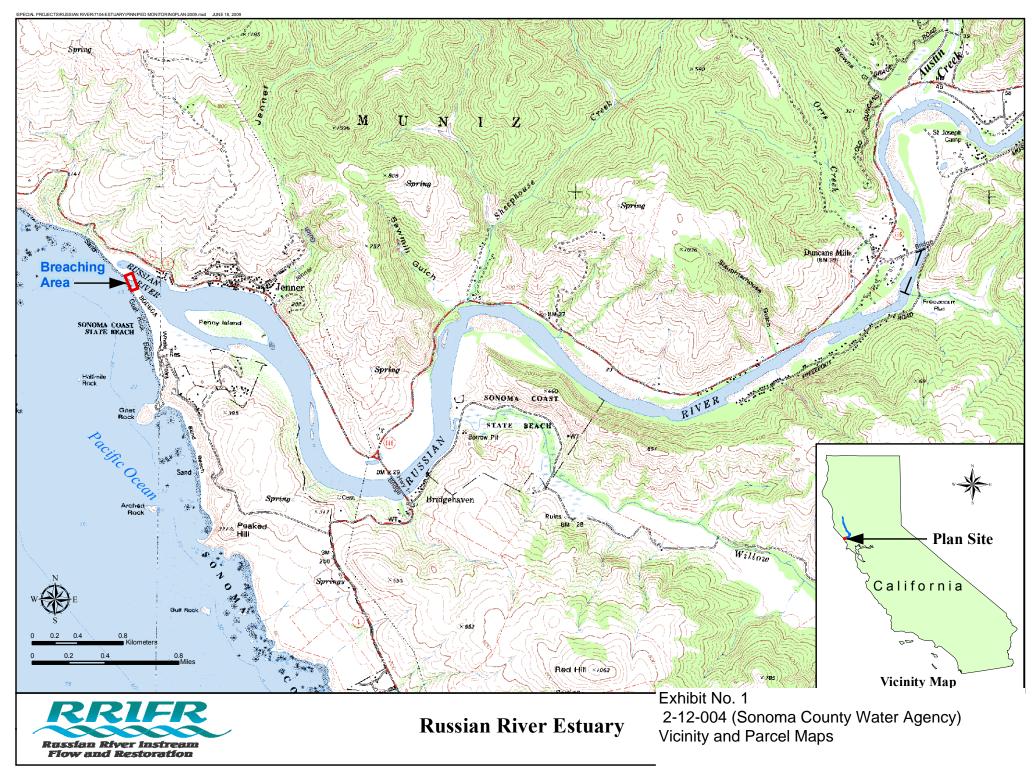
We have determined that the impact of conducting the specific estuary management activities described in this notice and in the IHA request in the specific geographic region in Sonoma County, California may result, at worst, in a temporary modification in behavior (Level B harassment) of small numbers of marine mammals. Further, this activity

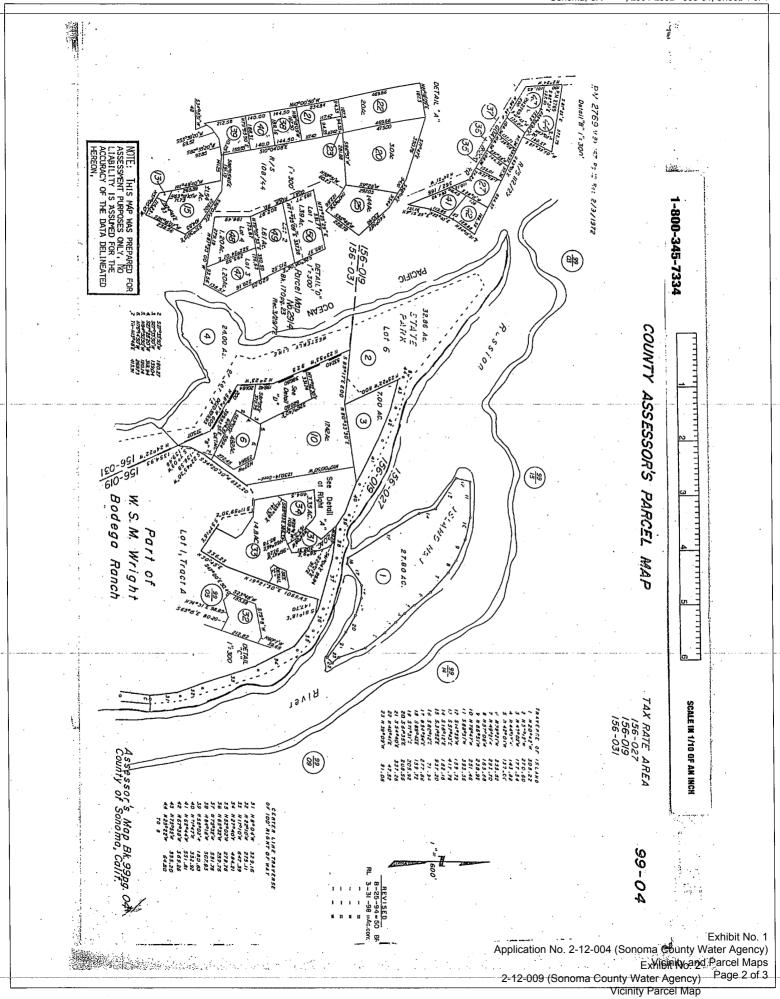
is expected to result in a negligible impact on the affected species or stocks of marine mammals. The provision requiring that the activity not have an unmitigable impact on the availability of the affected species or stock of marine mammals for subsistence uses is not implicated for this action.

#### Authorization

As a result of these determinations, we have issued an IHA to SCWA to conduct estuary management activities in the Russian River from the period of April 21, 2013, through April 20, 2014, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated.

Dated: April 16, 2013.
Helen M. Golde,
Acting Director, Office of Protected Resources, National Marine
Fisheries Service.
[FR Doc. 2013-09273 Filed 4-19-13; 8:45 am]
BILLING CODE 3510-22-P





Page 1 of 1

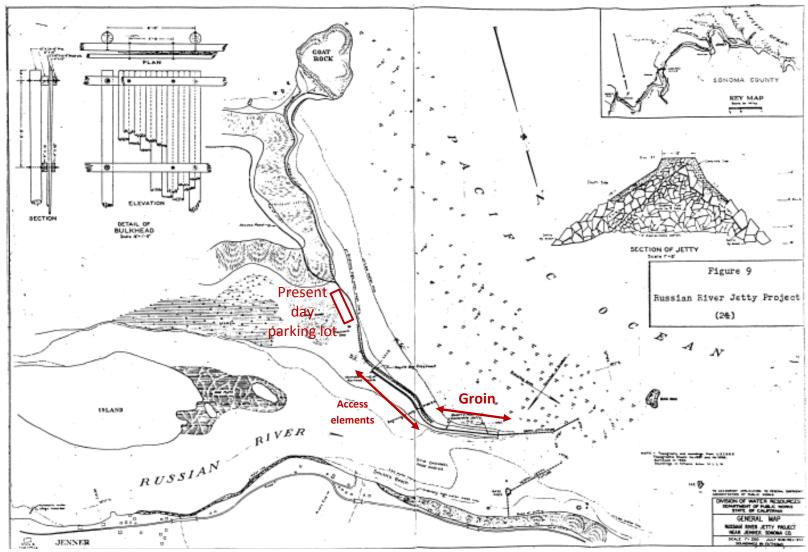


Figure 3. Drawing of Jenner Jetty – Groin, Roadway, Seawall, and Railway

Jetty Section and Detail

Page 1 of 1



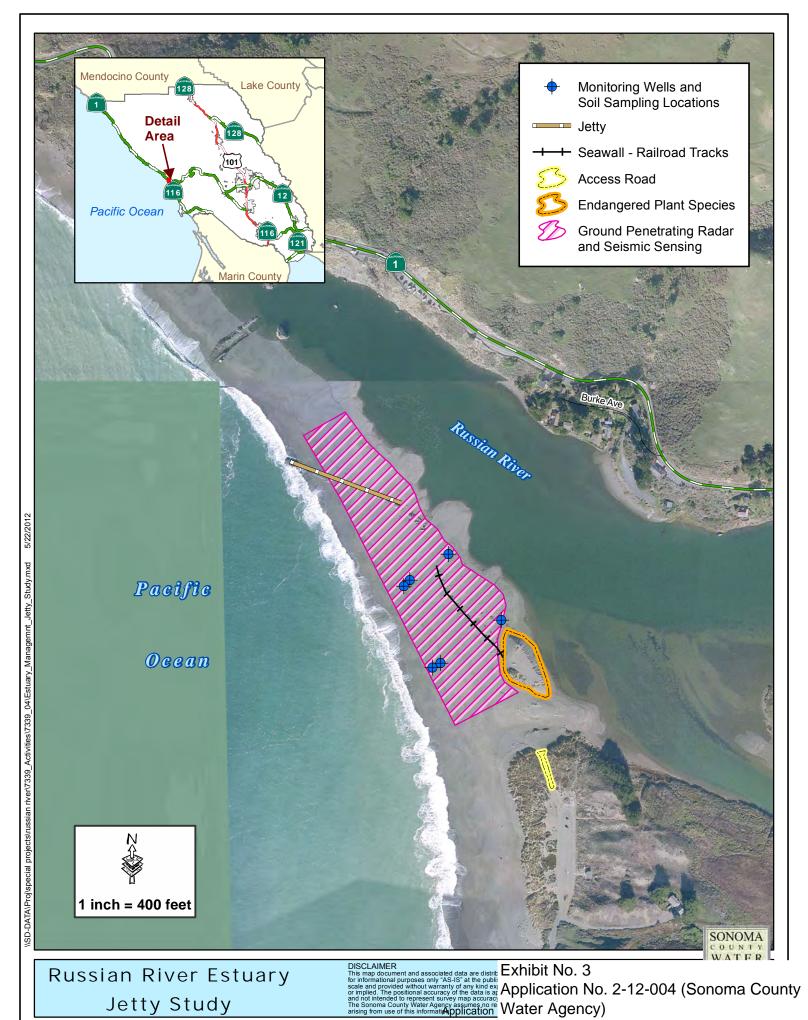
Figure 2. Aerial oblique view of the Russian River mouth and Goat Rock (rock headland to right), looking east such that north is on the left side of the image (Source, Behrens, 2008). Note the narrow beach to the south of Goat Rock, and the wider beach to the north.



Figure 2: Russian River mouth breaching and lagoon management area.



Figure 3: Russian River mouth at the Pacific Ocean. The top photo shows a closed-mouth condition ending near the historic jetty to the left and Haystack Rock on the right. The bottom photo shows an open mouth extending north of Haystack Rock. Sandbar shown in both photos consists of the artificial breaching management area.



Jetty Study Location, Detail, and Photos



Looking North (approximately)



Looking South (approximately)



Looking Northwest (approximately)



- Russian River Estuary Management Project . 207734.01

Figure 6-1 Jenner Jetty from the North, c. 1929



SOURCE: PWA, 2010

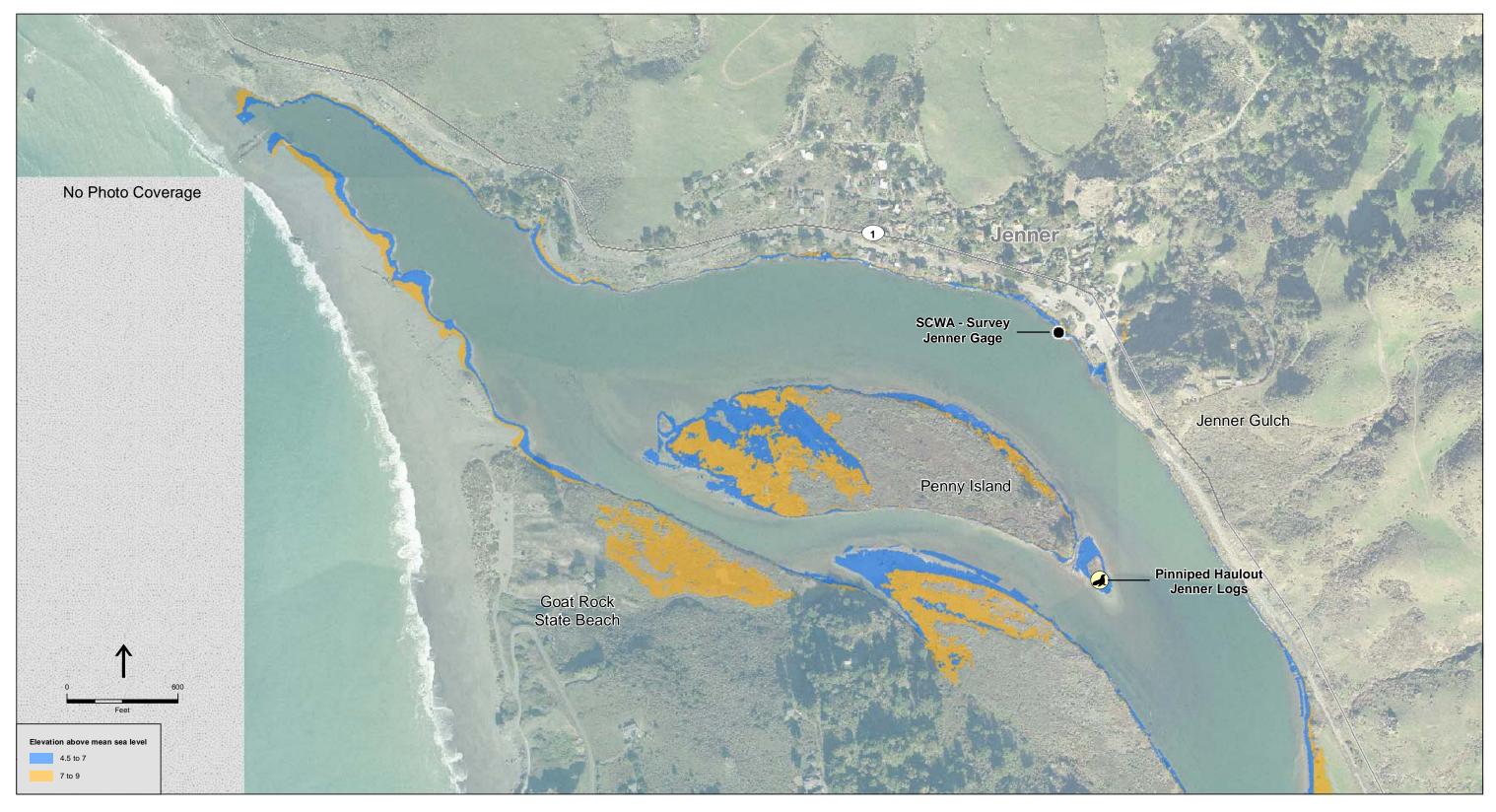
- Russian River Estuary Management Project . 207734.01

Figure 6-3
Approach to the Jenner Jetty from the South, 2010



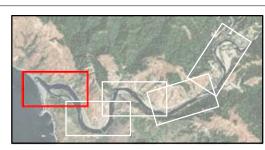
Russian River Estuary Management Project . 207734.01 Figure 6-4 Jenner Jetty from the South, 2010





SOURCE: EDS, 2009; SCWA, 2010; (aerial photo, 2008)

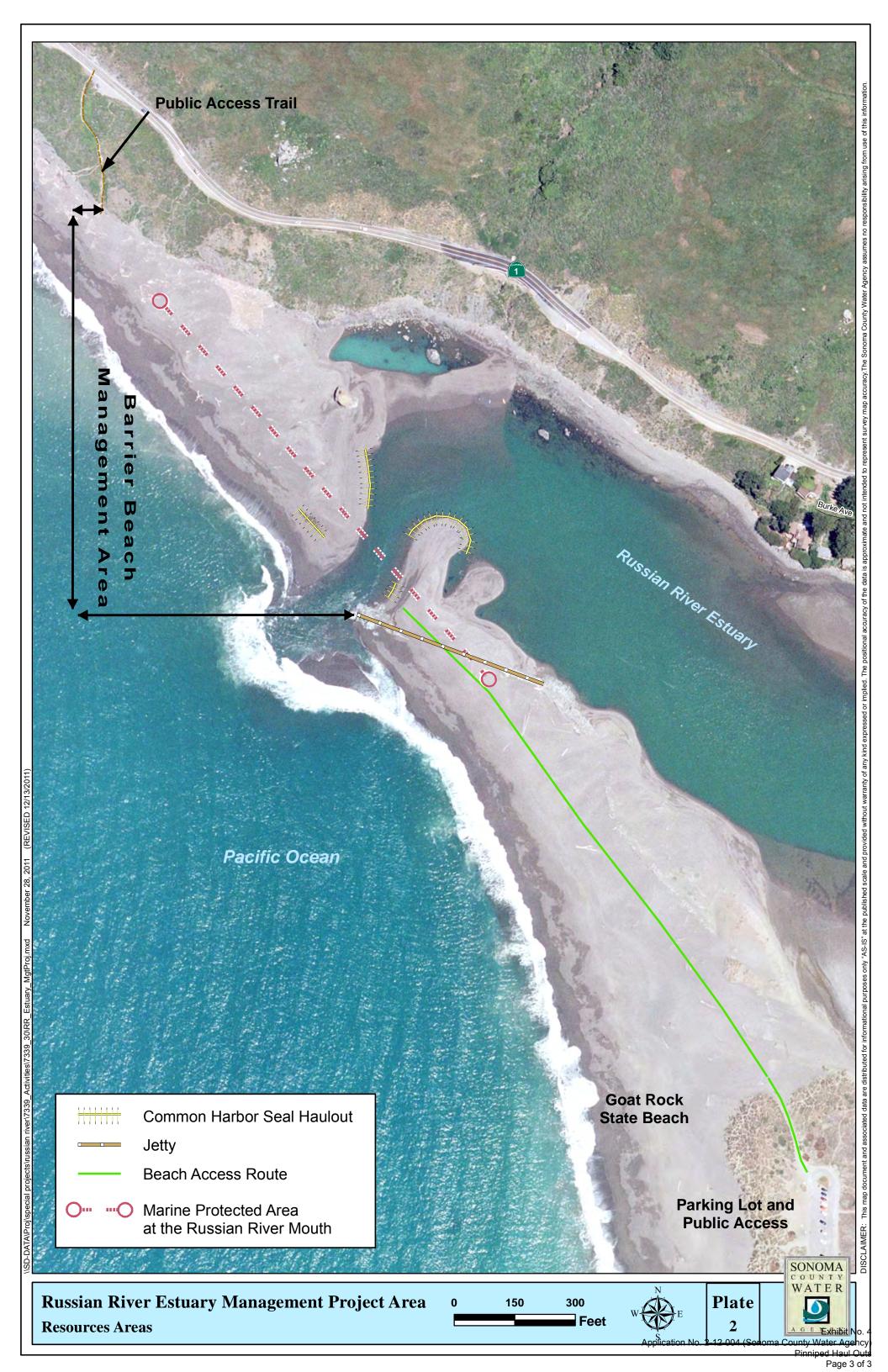
Note: Elevations shown for display purposes only; areas between elevations are shaded to depict incremental inundation areas relative to 7 and 9 foot elevations.



Russian River Estuary Management Project. 207734.01

Figure 3-4a

Estuary Study Area: Elevation Contours



# COUNTY OF SONOMA BOARD OF SUPERVISORS

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### EFREN CARRILLO

FIFTH DISTRICT SUPERVISOR

efren.carrillo@sonoma-county.org

January 10, 2013

Steve Kinsey, Commissioner Dr. Charles Lester, Executive Director 45 Fremont Street, Suite 2000 San Francisco, CA 94105-2219

Copies to Staff:

North Central Coast District Office Dan Carl, Deputy Director Madeline Cavalieri, District Manager Laurel Kellner, Coastal Analyst

Dear Commissioner Kinsey and Dr. Lester,

I hope that you can join me for a tour of the Russian River estuary on Wednesday, January 23. Jessica Martini-Lamb at the Sonoma County Water Agency has been working with Coastal Commission staff (Madeline Cavalieri and Laurel Kellner) on this educational tour, and I think it would be a good opportunity for you to see the estuary, too.

The Russian River Estuary Management Project is being implemented under the Russian River Biological Opinion and is a critical effort in restoring rearing habitat for juvenile steelhead to the estuary, while simultaneously minimizing flood risk for low-lying properties along the Russian River estuary.

The Water Agency received the Russian River Biological Opinion from the National Marine Fisheries Service in 2008, followed by a consistency determination from the California Department of Fish and Game in 2009. The Biological Opinion outlines measures to avoid jeopardizing steelhead populations in the Russian River as a result of Water Agency and U.S. Army Corps of Engineers flood control and water supply activities in the watershed. The Biological Opinion directs the Water Agency to manage the estuary for freshwater lagoon conditions from May 15 to October 15 each year. The Water Agency has applied to the Commission for a coastal development permit for the Estuary Management Project, as well as a separate application for a related study of the existing jetty at the mouth of the Russian River.

This tour will be an opportunity for the Commission to meet with staff of the Water Agency, National Marine Fisheries Service and California Department of Fish and Game about the flood risk management issues, habitat enhancement efforts, and other concerns. Staff members from the U.S. Army Corps of Engineers and North Coast Regional Water Quality Control Board are also planning to attend.

I look forward to seeing you in Jenner on January 23rd.

Efren Carrillo

Since

Supervisor, Fifth District

Exhibit No. 5 2-12-004 (Sonoma County Water Agency) ExParte Communication Page 1 of 8 From: NORMA JELLISON [normalj@sonic.net] Sent: Saturday, July 13, 2013 11:45 AM

To: mkshallenberger@gmail.com

**Cc:** Lester, Charles@Coastal; Kellner, Laurel@Coastal **Subject:** Russian River Estuary Management Project

#### Dear Chair Shallenberger:

I understand staff is considering agendizing the Sonoma County Water Agency's CDP Permit for the Russian River Estuary Management Project on the August agenda in Santa Cruz.

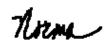
I again ask, as I have in past, that this item be agendized at a meeting that is <u>closer in</u> geographic proximity to Sonoma County.

That would be the meeting in San Francisco or the meeting in Marin County.

The Sonoma County Surfrider Foundation representative as already made the same request of staff, pointing out that the issues involved are vital and complex and deserve to be scheduled to allow the fullest opportunity for public comment.

Sonoma County Water Agency staff is paid to travel and stay over nite to attend Commission meetings. The public should not be financially or logistically burdened in order to participate.

Your consideration of our request is appreciated. Norma Jellison POBOX 1636 Bodega Bay CA 94923



A new ethic for the ocean where the ocean is not seen as a commodity we own but as a community of which we are a part.

The sea is worth saving for its own sake. Bill Ballantine NZ And take this to the land as well.

From: NORMA JELLISON [mailto:normalj@sonic.net]

**Sent:** Thursday, July 18, 2013 9:08 AM

**To:** <a href="mailto:mkshallenberger@gmail.com">mkshallenberger@gmail.com</a> **Cc:** Lester, Charles@Coastal

Subject: Re: Russian River Estuary Management Project

Dear Mary,

Thank you for your reply. I appreciate your taking the time to do so.

I also appreciate the balancing act you describe.

As to the item pending a long time, I can only state the the reasons it has been pending is that the applicant has not been able to adequately respond to questions raised by Commission staff - specifically those raised when the application was being handled in the Santa Cruz office by Daniel Robinson. To my knowledge issues raised and data requested at that point in time is still pending adequate response by the applicant.

A further the reason the application is still pending is that SF Commission staff has complied with every request by the applicant to segment the project - specifically by putting pieces of the project (the Jetty Study) before the Commission on the Deputy Director's Report. The latter tactic comes close to totally eliminating public participation, as those items are not agendized on the regular CCC agenda when it is released. Thus, the public may be unaware the item is even going to the Commission until the very last minute! On two occasions, once we discovered that this was happening, we objected and the items were removed from handling in this fashion on the DD Report and by segmenting from the full application.

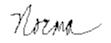
I am aware of the difficulties of scheduling, altho' given the preponderance of items are Southern CA items and more meetings take place there, I don't feel it is unreasonable to ask that special efforts be taken to schedule this item closer to its physical location. San Francisco is closer than Santa Cruz and of course Marin is closest, since meetings are no longer held in Sonoma County.

Finally, I would add that a schedule should not be driving the thoroughness of CCC consideration OR of the right of the public to participate without undue burdens of travel added on, especially when we, the public, have specifically requested postponement to a closer meeting.

Thank you for your consideration of my comments.

Regards,

Norma Jellison



A new ethic for the ocean where the ocean is not seen as a commodity we own but as a community of which we are a part.

The sea is worth saving for its own sake. Bill Ballantine NZ And take this to the land as well.

-----Original Message-----

From: Mary Shallenberger

Date: 7/17/2013 5:39:45 PM

To: NORMA JELLISON

Cc: Lester, Charles@Coastal

Subject: Re: Russian River Estuary Management Project

Dear Norma,

Thank you for your note. Scheduling is always a difficult balance between hearing items as close to home as possible, while not unduly delaying them to fit the geography of our meeting schedule. This issue has already been pending a long time and we aren't scheduled to meet in Sonoma/Marin until next May, which is probably not a reasonable delay.

I know that staff is acutely aware of the local interest in this project. I'm confident they'll do their very best to schedule it as close as possible. I wish we had the ability to have every controversial project heard in it's home county, but sadly that's not possible.

Thank you for your ongoing involvement in coastal protection.

Best,

Mary

On Sat, Jul 13, 2013 at 11:45 AM, NORMA JELLISON < normalj@sonic.net > wrote:

Dear Chair Shallenberger:

I understand staff is considering agendizing the Sonoma County Water Agency's CDP Permit for the Russian River Estuary Management Project on the August agenda in Santa Cruz.

I again ask, as I have in past, that this item be agendized at a meeting that is <u>closer in geographic proximity to Sonoma County</u>.

That would be the meeting in San Francisco or the meeting in Marin County.

The Sonoma County Surfrider Foundation representative as already made the same request of staff, pointing out that the issues involved are vital and complex and deserve to be scheduled to allow the fullest opportunity for public comment.

Sonoma County Water Agency staff is paid to travel and stay over nite to attend Commission meetings. The public should not be financially or logistically burdened in order to participate.

Your consideration of our request is appreciated. Norma Jellison POBOX 1636 Bodega Bay CA 94923

Norma

A new ethic for the ocean where the ocean is not seen as a commodity we own but as a community of which we are a part.

The sea is worth saving for its own sake. Bill Ballantine NZ And take this to the land as well.

No virus found in this message. Checked by AVG - <u>www.avg.com</u>

Version: 2013.0.3349 / Virus Database: 3204/6498 - Release Date: 07/17/13

From: NORMA JELLISON [mailto:normalj@sonic.net]

Sent: Monday, July 29, 2013 9:37 AM

To: Lester, Charles@Coastal

**Cc:** Carl, Dan@Coastal; <a href="mailto:mkshallenberger@gmail.com">mkshallenberger@gmail.com</a>

Subject: RE: August CCC Agenda

Charles - Thank you for your response. I was about to call you this morning. I do appreciate the many challenges faced by the Commission.

I appreciate your consideration for the importance of public involvement, a key tenant of the Coastal Act.

Norma

A new ethic for the ocean where the ocean is not seen as a commodity we own but as a community of which we are a part.

The sea is worth saving for its own sake. Bill Ballantine NZ And take this to the land as well.

-----Original Message-----

From: Lester, Charles@Coastal Date: 7/29/2013 9:27:04 AM
To: 'NORMA JELLISON'

Cc: Carl, Dan@Coastal; mkshallenberger@gmail.com

Subject: RE: August CCC Agenda

Ms. Jellison,

I can assure you that that there is no "maneuvering" going on. The Agenda heading you reference is generic for the section. This item will not be on the consent calendar given the public interest and important issues involved. We are doing our best to balance the various factors that we must consider when scheduling matters, as Chair Shallenberger previously explained to you. Thank you for your understanding.

#### **Charles Lester**

Executive Director
California Coastal Commission
www.coastal.ca.gov
45 Fremont Street, Suite 2000
San Francisco, CA 94105
415-904-5202

From: NORMA JELLISON [mailto:normalj@sonic.net]

Sent: Sunday, July 28, 2013 11:43 AM To: <a href="mailto:mkshallenberger@gmail.com">mkshallenberger@gmail.com</a>
Cc: Lester, Charles@Coastal
Subject: August CCC Agenda

Dear Mary - How is it possible that after so many communications regarding this item and agendizing it closer to home to facilitate public participation, now it is not only on the August 15th agenda in Santa Cruz, but potentially slated for handling as a consent item? I am astounded to say the least. I heartily protest this highly offensive maneuver.

THURSDAY, AUGUST 15, 2013

#### NORTH CENTRAL COAST DISTRICT

13.**DEPUTY DIRECTOR'S REPORT**. Report by Deputy Director on permit waivers, emergency permits, immaterial amendments & extensions, LCP matters not requiring public hearings, and on comments from the public. For specific information contact the Commission's San Francisco office at (415) 904-5260.

14.CONSENT CALENDAR (removed from Regular Calendar). See <u>AGENDA</u> CATEGORIES.

15.LOCAL COASTAL PROGRAMS (LCPs) See AGENDA CATEGORIES.

A. <u>City of Half Moon Bay LCP Amendment No. HMB-1-13 (Zoning Map Realignment)</u>. Public hearing and action on request by the City of Half Moon Bay to realign the boundary between existing public services (P-S) and industrial (IND) zoned areas to conform to parcel boundaries near 151 Main Street, Half Moon Bay. (SR-SF)

16.NEW APPEALS. See AGENDA CATEGORIES.

A.Appeal No. A-2-HMB-12-005 (Stoloski, Half Moon Bay) Appeal by Commissioners Shallenberger and Zimmer, and Marc Grandstein and Jane Gorman of City of Half Moon Bay decision granting permit with conditions to Mark Stoloski for subdivision of 2 parcels, totaling 2.1 acres, into 4 residential lots with associated infrastructure improvements, including utilities, in 2700 block of North Cabrillo Highway (State Highway One) in City of Half Moon Bay, San Mateo County. (KG-SC)

17.COASTAL PERMIT APPLICATIONS. See AGENDA CATEGORIES. Attention: Items appearing in this section of the agenda may be moved to the Consent Calendar for this area by the Executive Director when, prior to taking up the Consent Calendar, staff and the applicant are in agreement on the staff recommendation. If an item is moved to the Consent Calendar it will be processed in the same manner as other Consent Calendar items (See AGENDA CATEGORIES) except that if that item is subsequently removed from the Consent Calendar by a vote of three or more commissioners, the item will be acted upon at the meeting in the order in which it originally appears on this Meeting Notice and in the manner Coastal Permit Applications are processed. The purpose of this procedural change is to expedite the Commission's coastal development permit process.

A. Application No. 2-10-039 (Lands' End Associates, LLC, Pacifica) Application of Lands' End Associates, LLC for follow-up permit authorization for development completed under emergency permits 2-10-007-G and 2-11-005-G for approx. 640 ft.-long concrete faux bluff seawall, public access walkway, stairway, and related development at 100 Esplanade Drive in Pacifica, San Mateo County. (KG-SC)

B. Application No. 2-12-004 (Sonoma County Water Agency, Sonoma Co.)
Application of Sonoma County Water Agency to manage mouth of Russian River to address flooding and habitat issues in Jenner, Sonoma County. (LK-SF)

A new ethic for the ocean where the ocean is not seen as a commodity we own but as a community of which we are a part.

The sea is worth saving for its own sake. Bill Ballantine NZ And take this to the land as well.

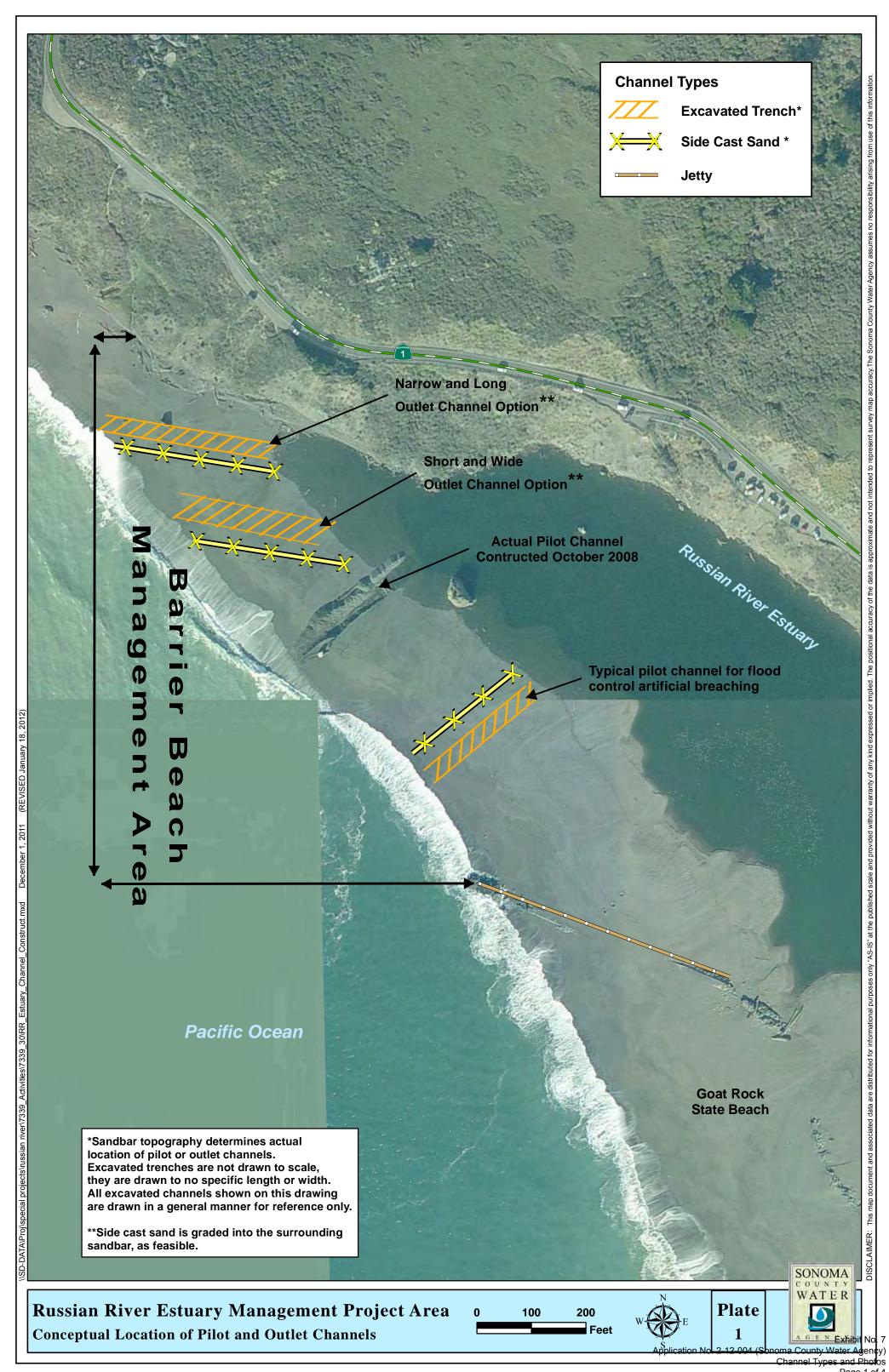
Norma.

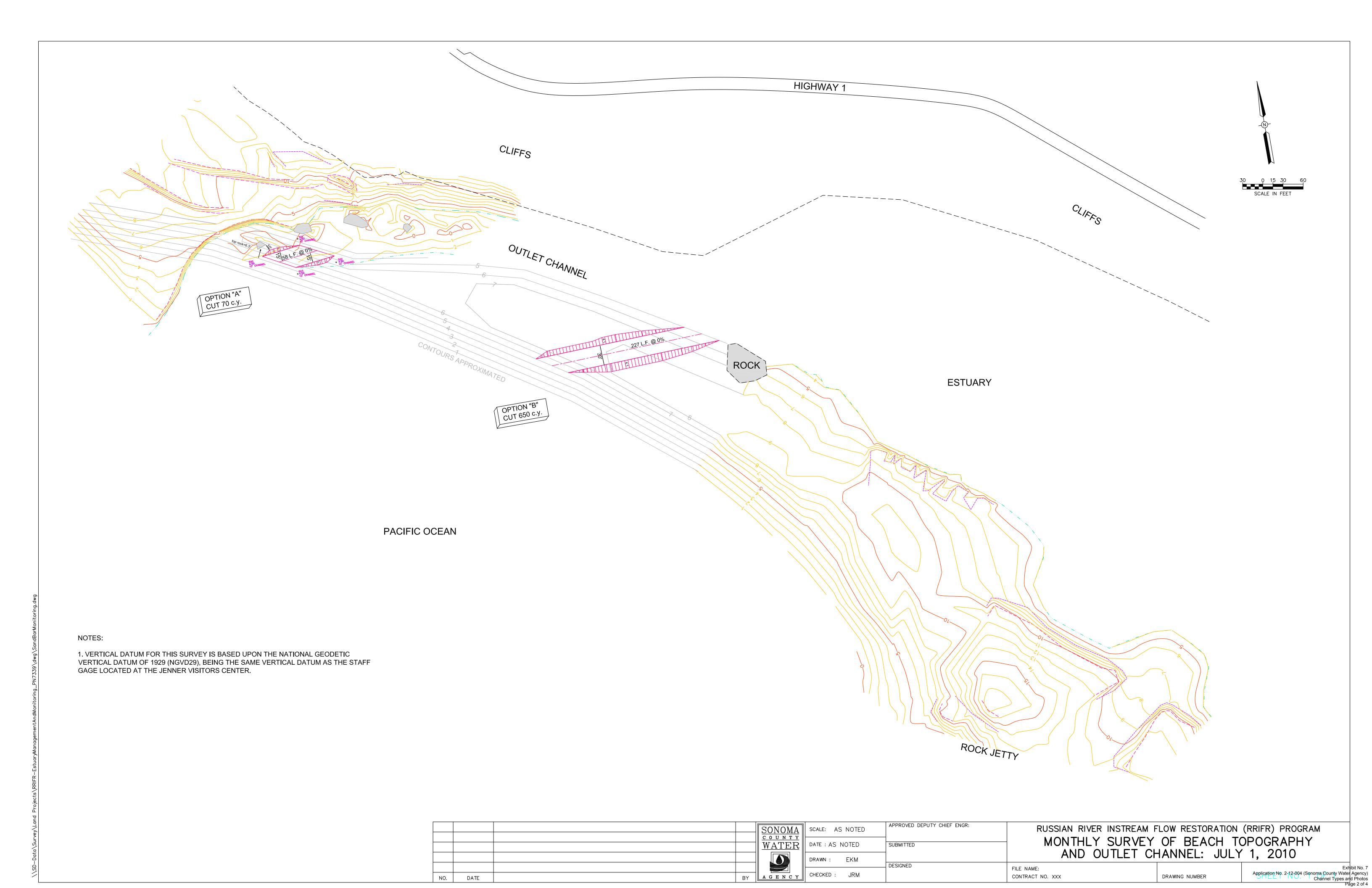
# Exhibit 11 – Drill Rig Dimensions

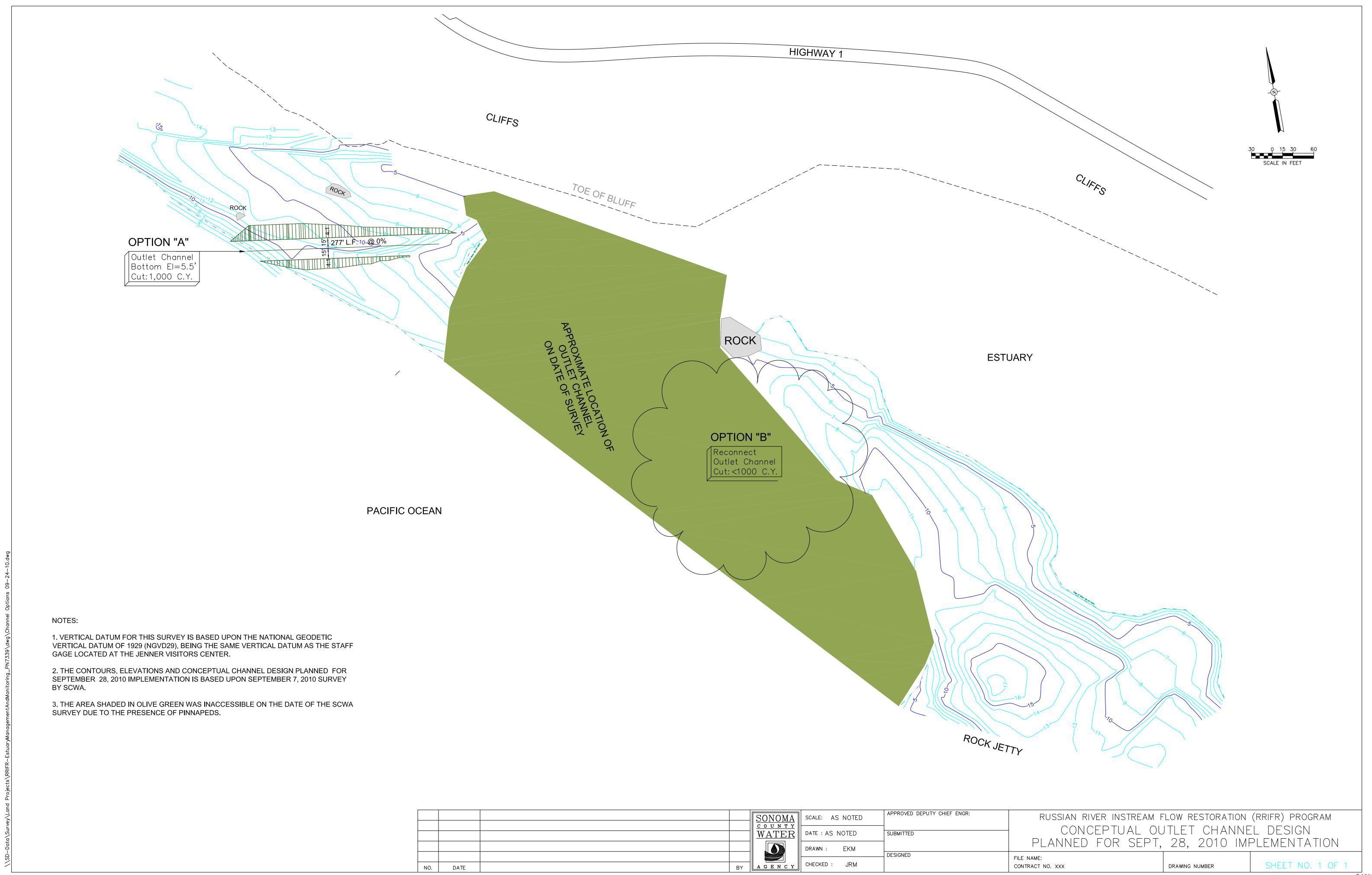


## **DIMENSIONS**

5 '-2" Wide 13' Long 7 '3" high (mast down) Min. Ht. 8'-9" with SFA Min. Ht. 9'-6" with HSA Weight 10,3 00 lbs.









July 1, 2010 Natural Open Channel. Photo from Highway 1 Overlook.



July 7, 2010 Channel Closed by Tidal Action. Photo from Highway 1 Overlook.



July 8, 2010 Created Outlet Channel. Photo from Highway 1 Overlook.

Figure 5: Russian River mouth with a northerly direction. Photographs show sequence of events over one week period: mouth naturally open, naturally closed, and created lagoon outlet channel.

#### CALIFORNIA COASTAL COMMISSION

CENTRAL COAST AND NORTH CENTRAL COAST DISTRICT OFFICES
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## Memorandum

# August 14, 2013

To: Commissioners and Interested Parties

FROM: Dan Carl, North Central Coast District Deputy Director

North Central Coast District

Re: Additional Information for Commission Meeting

Thursday, August 15, 2013

Agenda Item	<u>Applicant</u>	<u>Description</u>	<u>Page</u>
Th17a	2-10-039 Lands' End Associates, LLC	Email, David A. Goldberg Email, Anne Blemker Ex Parte Communication, Carole Groom	1-21 22 23
Th17b	2-12-004 Sonoma County Water Agency	Email, Dian Hardy Email, Norma Jellison Email, Dana Zimmerman Correspondence, Darrell B. Sukovitzen Correspondence, John Pearson Email, Richard Holmer Email, Cea Higgins Email, Norma Jellison Email, Richard Holmer Email, Jessica Martini-Lamb Email, Richard Holmer Email, Norma Jellison Email, Carol Sklenicka/Richard Ryan Email, Cea Higgins Email, Cea Higgins Email, Norma Jellison	24-26 27-30 31-34 35-36 37-40 41-45 46-66 67 68-70 71-72 73-84 85-87 88 89-93 94-95 96-97 98-99 100-102 103-104 105-111

Email, Kate Fenton	116-117
Email, Stephen Bargsten	118
Emails, Norma Jellison	119-124
Emails, Cea Higgins	125-152
Email, Brenda Adelman	153-155

From: Dian Hardy [mailto:themis@sonic.net] Sent: Sunday, August 11, 2013 9:07 PM

To: Staben, Jeff@Coastal

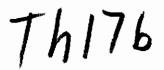
Cc: Lester, Charles@Coastal; Dian Hardy

**Subject:** Application No. 2-12-004 Russian River Estuary Management Project North Central Coast District -Agenda Item 17b on Thursday August 15, 2013

When we try to pick anything out by itself, we find it hitched to everything else in the universe. - John Muir



DIAN HARDY 7777 Bodega Avenue R304 Sebastopol, CA 95472 themis@sonic.net



Subject: Application No. 2-12-004 Russian River Estuary Management Project North Central Coast District -Agenda Item 17b on Thursday August 15, 2013

Chair Shallenberger and Commissioners -

I write as a near 40 year resident of Sonoma County, long active in environmental and animal advocacy. In 1985, following an illegal spill of 800 million gallons of secondarily treated wastewater into the Russian, I founded the Sealwatch program, committed to safeguarding the harbor seals at their haulout and nursery. Sealwatch was the impetus for the formation of Stewards of Slavianka, now known as Stewards of the Coast and Redwoods, working in cooperation with State Parks.

"We understand and appreciate the concerns expressed but note that, while natural resource management often requires difficult choices, there is no evidence to date that the incidental harassment of harbor seals described herein will result in long-term displacement from the haulout." (CDP Application, page 57, July 2012)

Having observed the harbor seal haulout and nursery over many years and all seasons, I must disagree with the statement above. While harbor seals at this haulout are nocturnal predators, faced with a lagoon filled with young salmonids, why would these opportunistic predators ignore such a feast? And if their presence does impact the salmonids why would the same agencies who have begun this work ignore this impediment to their plan?

Sea lions at Ballard Docks in Oregon are now being killed for taking salmon and next year barred owls will be killed in order to save spotted owls. Between 2000 and 2006, golden eagles were captured and removed from the Channel Islands to protect the island fox. Five thousand feral pigs were killed in an attempt to restore Santa Cruz island's ecosystem. Killing one species to save another is an accepted technique in wildlife management. If management activities at the mouth of the Russian do not cause abandonment of the site, harbor seal predation may demand such extreme measures.

"In the future, any requests from SCWA for incidental take authorization will continue to be evaluated on the basis of the most up-to-date information available."

Thus it would seem appropriate that any such requests from SCWA for IHAs be done each year rather than in three years.

I append a letter I sent to the Press Democrat in December 2012, in pertinent part, to again express my concerns:

Here we go again, folks. What I'm learning to call the Humpty-Dumpty School of Resource Management is in full spate; in order to save three endangered salmonid runs, agencies - federal, state and county - appear willing to overlook the totality of the ecology found at the mouth of the Russian: the harbor seal haulout, a resting and foraging site for migratory birds and a fishery that includes Dungeness crabs, amongst other species.

I do not understand this almost willful failure of agencies to carry forward an ecological perspective as called for, one would assume, in the enabling language for the Endangered Species Act. If such a vision is not part of the ESA, I submit that we need a Department of the Ecology, capable of seeing the forest AND the trees, the ocean AND the river, the seals AND the salmon and lest any of my two-legged comrades despair of me completely, the people who reside and recreate at the coast, river and ocean.

A holistic perspective would consider the human impact on our planet's natural systems of primary concern. In the present case, Warm Springs Dam had a huge impact on the native fishery, essentially destroying it and replacing it with a mechanistic model. The dam allowed enormous population growth in Sonoma County and the resulting inputs from agriculture, forestry, gravel mining and residential and commercial development further decimated the salmon. Native American gathering lands and a way of life that was sustainable fell to the dam's construction.

I say it's time we start demanding that agencies responsible for policy decisions make them based on a holistic understanding of what an ecosystem is. I remember one winter when a series of storm washed out the road to Goat Rock and the hundreds and hundreds of birds and seals who gathered there for weeks, unmolested by even our curiosity, benevolent though it may be.

I appreciate your consideration of the concerns expressed.

Dian Hardy

Th 176

From: NORMA JELLISON [mailto:normalj@sonic.net]

**Sent:** Saturday, August 10, 2013 7:23 PM

**To:** Staben, Jeff@Coastal **Cc:** Lester, Charles@Coastal

Subject: Application No. 2-12-004 Russian River Estuary Management Project North Central Coast

District -Agenda Item 17b on Thursday August 15, 2013

Importance: High

Chair Shallenberger and Commissioners -

I write to you as a coastal resident, advocate and long time Seal Watch volunteer at the Harbor Seal colony at the mouth of the Russian River.

I focus my comments on several vital aspects of the Coastal Act impacted by this CDP application by the Sonoma County Water Agency (SCWA), w/ selected applicable, tho' by no means all inclusive, sections of the Act cited.

I believe it is premature to allow this project to proceed for 3 Yrs + 3 Yr renewal. NO EXTENSION should be allowed until initial impacts of the implementation of the project are identified and assessed - based on practical observed & monitored results AND critical information/impacts associated with the lowered river flows and the national marine sanctuary expansion are available from the respective pending EIR and the EIS to factor into the analysis.

#### Sec 30210 -

I request a 1 Yr permit in keeping with 1Yr permits given to SCWA by State Parks - in furtherance of their jurisdiction under Article X of CA Constitution. The Estuary Management Project (EMP) is to be constructed on State Park land - Goat Rock State Beach - where a majority of the impacts will be borne.

A 1 Yr permit is also consistent with the 4 separate 1 Yr Incidental Harassment Authorizations (IHA) given by NMFS, associated with the Harbor Seal Colony.

Both public resource agencies, one State and one Federal, obviously considered the merits of identifying the impacts of the project critical before giving the SCWA approval to operate the project for any longer duration.

**Sec 30210/30211/30220et seq** - Despite assertions that impacts to Public Access are minimal and will be managed by applicant, the EMP significantly impairs Public Access. The Biological Opionion/SCWA in carrying out the EMP, treats the Public's land and waters as an experiment/an experimental construction site. There is no proof that this outlet channel will succeed. In fact, attempts to implement in 2011 failed, due to the forces of nature.

Prior breaching activities, done solely for flood control, took place for a couple of

hours on 1 day. References to "no difference from past activities; no impacts associated with prior activities translates to current proposal" are false.

By implementing the EMP, Public Access will be eliminated/impaired/reduced for many consecutive days/weeks/months/years as this experiment is conducted. Construction equipment carving the outlet channel, installing wells, weekly well monitoring, equipment removal, fencing off sections of the beach - all will reduce or impair Public Access to large portions of the beach/river/ocean at those times.

Up to 2,000 cu yds of sand will be moved at each of 18 outlet construction events!

Clearly this is not the same as past practices of merely breaching - opening up - the sandbar one day.

Why treat a Public Beach as a construction site and suggest that a Public Access Management Plan could mitigate? Public Access should not have to be managed to avoid negative impacts to State Park/Beach visitors. Public Access should not be compromised in the first place in order to carry out an experiment. NMFS admits this is an experiment - the current term is "adaptive management."

Impacts to Public Recreation - families with children use the river side of Goat Rock State Beach extensively as a safer environment (than the ocean) for wading and swimming and picnicking. Construction & monitoring activities will reduce Public Access. Public Access should not be compromised. A Public Access Management Plan should not be necessary to manage Public Access to a Public Beach!

Impacts to Public Access - surfing - could be impaired by the sedimentation released when the outlet lagoon is eliminated each year by winter water levels that will naturally breach the sandbar or prior if river levels threaten flooding of several buildings. Staff dismissal that potential impacts are minimal as this is "just a local surfing spot" misses the fact that all surfing spots are local. Just because this is not Maverick's doesn't make it any less important a surfing locale.

Sec 30230/31/30240 - Impacts to sensitive species are minimized by comparing past activities and lack of impacts to proposed actions.

The SCWA has received four **1 Yr** Incidental Harassment Authorizations (2010, 2011, 2012, 2013) from NMFS for incidental takes of marine mammals, primarily Harbor Seals of the colony at the mouth of the Russian River on the outlet channel beach & adjacent to the jetty at Goat Rock State Beach.

The 30+-year old Harbor Seal colony are protected species under the Marine Mammal Protection Act. Regardless of IHA mitigations required, these sensitive species at the EMP construction site are potentially at risk of harassment from proposed construction and maintenance activities of the EMP and the invasive geotechnical activities of the associated jetty study.

Previous breaching activities are in no way similar to proposed EMP activities.

Prior sandbar breaching took place during a couple of hours on 1 day; in some years, e.g. this year and last, not at all. EMP activities proposed would take place over a number of consecutive days over a number of weeks/months/years.

Thus all references to "no difference from past activities; no impacts associated with prior activities translates to current proposal" are false.

The unknown impacts to this Harbor Seal colony are the reason that the IHAs have been issued for only 1 Yr in duration and not the potential longer term IHA that might be issued once impacts of the construction and maintenance of the outlet channel/EMP are monitored and known.

Impacts to other sensitive estuary species e.g. the estuary is a Dungeness crab nursery and home to many other species of fish - are unstudied & unknown.

Water Quality impacts: Influences/impacts of Russian River lowered flows remain to be assessed in an EIR to be published in 2014. Impacts to aquatic species/marine species; recreational users associated w/concentrations of contaminants in water contained by the sandbar in the lagoon are unknown. No study plan or monitoring for these specific WQ impacts to body contact sports or to the ocean environment is proposed for this CDP.

Lowering the flows in the river is a requirement to enable a sustained closure of the mouth of the river. Lowering the flows creates impacts to recreational boating. Lowering the flows in the river will impact water quality. Water quality impacts of lowered flows in the estuary (*elevated bacterial levels; nutrients; dissolved oxygen conditions*) will surely impact wading and swimming on the river side of the State Beach and at nearby upstream beaches, as well as kayaking, canoeing, and the many waterfowl, river and marine mammals and fish that live in and use the estuary. As an oddity, the BO acknowledges that some die off/take of salmonids may be associated with the perched lagoon of the EMP.

The pending EIS for National Marine Sanctuary (S) expansion adjacent to Russian River mouth will provide critical information about the ocean environment, including WQ. Sanctuary jurisdiction is over all submerged lands, water & associated marine resources therein from the MHW line; alteration of stream & river drainage & surface water runoff into The Sanctuary (S).

Impacts from "first flush", either emergency (based on WQ or flood danger) planned breaches, or natural breaches from winter storm river water levels or ocean conditions, releasing lagoon waters into nearshore ocean waters are unstudied and unknown, as are released sediment impacts.

When the retained waters behind the sandbar/outlet channel are released into the ocean environment, the concentrated contaminants and sediment built up behind the sandbar for sustained periods, <u>up to 5 months</u>, will have potentially significant impacts to the nearshore beaches and marine life. These all could be significant impacts, yet

remain unknown; unstudied and are not addressed in any proposed monitoring.

Again, it is simply premature to allow this project to proceed for 3 Yrs + 3 Yr renewal. NO EXTENSION should be allowed until impacts of the implementation of the project are identified and assessed - based on practical observed & monitored results AND critical information/impacts associated with the lowered river flows and the marine sanctuary expansion are available from the respective pending EIR and the EIS to factor into the analysis.

Thank you for your consideration of my comments

Norma Jellison PO Box 1636 Bodega Bay 94923

Norma

A new ethic for the ocean where the ocean is not seen as a commodity we own but as a community of which we are a part.

The sea is worth saving for its own sake. Bill Ballantine NZ And take this to the land as well.

Th 176

August 9, 2013 California Coastal Commission

Please distribute the following comments to staff and all Commissioners prior to the hearing.

Re: Application No. 2-12-004 Russian River Estuary Management Project North Central Coast District -Agenda Item 17b on Thursday August 15, 2013

These comments advocate the issuance of a permit with a tenure of one year for the Russian River Estuary Management Project which follows the permit tenure granted by State Parks.

The estuary, as proposed, affects dam releases and the flow in the lower Russian River. The goal for flow in the lower Russian River should remain at 125 cfs. The estuary should be designed to accommodate a flow of 125 cfs.

The height of the water in the estuary can be controlled shutting off the water or by opening a drain set at the desired level of water in the estuary. A bathtub or sink is designed on that bases. The water may be shut off at the faucet or the excess water may blow down a high drain so that it doesn't flow over the top edge of the tub or sink.

The height of the water in the estuary should be controlled using tub/sink technology and not by decreasing water flow in the Russian River that would affect the recreational use of the river.

The Estuary Management Project proposes a construction project on a State Park/State Beach and in State waters w/ significant negative impacts to public access and potential negative water quality impacts to public recreation - swimming, boating, fishing and biological resources in the estuary and the near shore ocean environment.

Coastal Act Provisins Sections:30006 & 3006.5 provide for maximum public input and scientific data in Commission decisions

Two pending environmental documents - the Russian River Low Flow EIR (due 2014) and EIS for National Marine Sanctuary(S) Expansion (due 2014) w/jurisdiction here will provide critical data and information that would better inform CCC decisions on this project/CDP and argue for a shortened permit duration.

The permit should be issued with a tenure of one year to allow this information to be considered in any estuary decision.

Influences of changes to flows of the Russian River have been acknowledged by the applicant and the Biological Opinion (references below) and should therefore be included and considered as soon as available rather than waiting for three years. A Coastal Commission permit with tenure of one year would allow the maximum opportunity for public input and results of the

DEIR on the Low Flow to be considered before extension of the permit so that the Commission can determine the extent of the impacts to habitat, water quality and other coastal, estuary, and lower Russian River resources.

"NMFS biologists believe that reducing summertime flows in the Russian River and Dry Creek would provide better fishery habitat by reducing velocity, minimizing the need to artificially breach the sandbar at the river mouth, and potentially improving estuary conditions for steelhead by allowing the formation of a freshwater lagoon.

"Also, minimum instream flows lower than those required by Decision 1610 could encourage formation of a closed or perched lagoon at the mouth of the Russian River and therefore noticeably enhance the salmonid estuarine rearing habitat while preventing flooding of adjacent properties.

The "low flow" caused by turning off the water supply for the river advocated by NMFS would cause significant changes in the recreational use of the Russian River. Solving the breaching problem would not decrease recreational use.

Solving the breaching problem would involve understanding the impact of the flow in the National Marine Santuary.

Pending EIS for National Marine Sanctuary expansion (also available in early 2014) which will expand jurisdiction to include the Russian River mouth will provide critical information about the ocean environment, including Water Quality. Sanctuary jurisdiction is over all submerged lands, water & associated marine resources therein from the mean high water line; alteration of stream & river drainage & surface water runoff into The Sanctuary.

Coastal Act Provisions Sections: 30230, 30231, and 30240 afford protection of marine and biological resources and their productivity, Coastal Act Provisions Section 30220 & 30213 protect public access and public recreational facilities.

Lowering the flows in the river(in lew of solving the breaching problem) is a requirement to enable a sustained closure of the mouth of the river. Lowering the flows creates impacts to recreational boating.

"The Russian River has been declared a navigable river. *Hitchings v. Del Rio Woods Recreation and Parks District*, 55 Cal. App. 3d 560, 567 (1976). There simply is no line where the Estuary stops and the river begins in so far as recreation goes. In 2004 & 2007 the SWRCB approved Temporary Urgency Change Petitions on behalf of Sonoma County Water Agency to reduce minimum flows to 85 cubic feet per second at the Hacienda Bridge USGS gauging station.

The impacts from low flow on recreation are profound. At flows of less than 90 cfs as measured at Hacienda Bridge, Russian Riverkeeper received dozens of reports from boaters concerned that navigation in the free flowing portion of the lower Russian River was being impeded, resulting in more perilous conditions for boaters. As flows were reduced, areas below riffles were narrower and often boaters were swept dangerously into overhanging vegetation resulting in over-turned watercraft. Russian Riverkeeper has numerous pictures of boaters (including the Sonoma County Sheriff's Water

Safety Patrol boat) having to push their boats through shallows, and other river users were forced to walk due to shallow water, resulting in serious impediments to navigation. Several canoe and kayak rental outfitters, principally Burke's Canoe Trips, and the Monte Rio Park and Recreation District, have been impacted by previous Temporary Urgency Change Petitions issued to Sonoma County Water Agency (SCWA) by the SWRCB in 2004 and 2007 that impeded the navigability of the Russian River. The owners of Burke's and River's Edge have received numerous complaints and that many regular customers did not return in successive years due to lower flows.

These realities sharply contrast with the blithe assertion in the RRBO (see pp. 264-265of Russian River Biological Opinion) that recreation would not be impacted at 70-85 cfs. Additionally, when the temperatures spike during the summer diversions from the river (for both municipal and agricultural uses), the operating margin of 10-15 cfs is depressed at the same time as record crowds go to the River to cool off and canoe. Sonoma County residents regularly canoe and kayak the Russian River and the Estuary for exercise, recreation and fishing and there have been several dozen complaints about navigation being impeded by previous temporary urgency change petitions that reduced flows below 90 cfs in the lower Russian River."

The impacts of lowering the flow in the river and failure to maintain an open estuary creates impacts to recreational boating that need to be considered in any analysis of this project.

Water Quality (30230, 30231) may be drastically affected by decreased river flow. Lowering the flows in the river and closing the estuary creates impacts to water quality that require further study. The project contains no performance standards with regards to when corrective measures should occur. RUSSIAN RIVER ESTUARY OUTLET CHANNEL ADAPTIVE MANAGEMENT PLAN (AMP) p. 43

9.3.2 Decline in Water Quality

Declines in water quality could have impacts to salmonids rearing in the estuary, other species which reside in the estuary and the public. Potential water quality concerns include, but are not limited to:

- Dissolved oxygen conditions becoming dangerously low to fish and other species;
- · Elevated salinity levels in domestic water wells; and
- Elevated bacterial levels.

#### FEIR 2-14 Nutrients and Bacteria

Potential significant and unavoidable impacts to water quality associated with nutrient and bacteria levels are acknowledged and analyzed in Draft EIR Section 4.3, Water Quality. As noted on Draft EIR pages 4.3-7 and 4.3-12, there are currently no specific limits on nutrient and bacteria levels for estuarine systems, only freshwater. As discussed in the Draft EIR (page 4.3-24), the precise response of the Estuary to the Estuary Management Project cannot be predicted with certainty. As discussed in Draft EIR Section 4.3, it is anticipated that nutrient and bacteria conditions would remain within the range of those experienced within the Estuary over the past 15 years, but that the duration of those conditions would likely increase as a result of the project. Therefore, based upon the best available information, this to bacterial and nutrient levels in the EsEIR concludes that the proposed project would have the potential to result in significant and unavoidable impacts to water quality related tuary.

# The Coastal Commission should issue a permit with tenure of one year to allow the maximum opportunity for public input and the conclusion of important related research projects.

Sincerely,

Dana Zimmerman

Chairman Russian River Recreation and Park District Guerneville, CA

Darrell B. Sukovitzen P.O. Box 849 Guerneville, CA 95446 (707) 887-1017

Re12-12-004 Th176 Agenda NO. Th176

RECEIVED

AUG 0 9 2013

CALIFORNIA COASTAL COMMISSION CENTRAL COAST AREA

May 23, 2010

SCWA vs. Harbor Seal Pups: The Water Grab

Once again the Sonoma County Water Agency has come up with a boondoggle of a venture that entails harassment and perhaps "incidental" kills of harbor seals at the mouth of the Russian River. The impetus for this proposal is a mandate called the Biological Opinion produced by the National Marine Fisheries Service. The project is intended to create a rearing grounds in the estuary for threatened salmonid species. It involves dramatically dropping the river flow in summer to create a millpond of the estuary; heavy equipment on the beach (chasing the seals away) will create a sandbar with a small V-shaped outlet for overspill. According to Bill Hearn, primary author of the Biological Opinion, "We expect some toxic waters to form." Does this mean that a "take" permit must also be required for steelhead die-off as it has been for harassment and take of marine mammals and their pups?

The proposal completely overlooks the rest of the estuary's forms of life. According to Dian Hardy, founder of SealWatch, "In what I'm learning to call the Humpty Dumpty School of Resource Management, in order to save three salmonid runs, agencies – federal, state and county – appear willing to overlook the totality of the ecology found at the mouth of the Russian: the harbor seal haul out, a resting and foraging site for migratory birds and a fishery that includes Dungeness crabs, amongst other species."

It is interesting to me that the data collected from the \$90,000 contract between SCWA and Stewards of the Coast & Redwoods for monitoring the seals will not be available for public review in time for comment during the EIR process. Also in this contract, it is stated that in the event of disturbance or harm to harbor seals or pups during heavy equipment use on the beach, Stewards is only to report in writing to SCWA, who in turn will report in writing to NOAA, for input on what to do. This is not a satisfactory method of dealing with what could be urgent situations.

Some of the real causes of salmonid demise are decidedly not being addressed by this Biological Opinion, such as vineyard production next to streams, tributaries and the main stem of the river and the silt runoff, habitat loss and drift, and runoff from pesticides, herbicides and fungicides that result. Many of the chemicals used in vineyard production clearly state in their risk assessment labels and material safety

data that they are toxic to fish and should not be used where drift and/or runoff would cause them to enter any stream. Sewage releases include pharmaceuticals and hazardous chemicals. Generations of improper logging operations have caused massive siltation issues; and there has been inflated development adjacent to these streams and tributaries, which in any case are currently too impaired to become salmon runs again. To focus on restoration of these waterways would be a better approach to bringing back to salmon.

At a recent scoping session in Jenner sponsored by SCWA, 5<sup>th</sup> District Supervisor Efren Carrillo seemed reluctant to discuss the question of what happens to the water that will NOT be going down the Russian River during the summer once the permanent low flow is established. The answer, of course, is that SCWA has oversold its contractual allotments for water to the cities and northern Marin. In turn the cities have issued building permits based on these assumptions.

One could extrapolate that endangering the harbor seals and their pups is good for business for SCWA, allowing them to sell yet more water.

Very truly yours

Darrell B. Sukovitzen

Award-Winning Environmentalist

## RECEIVED

AUG 0 9 2013

CALIFORNIA COASTAL COMMISSION CENTRAL COAST AREA Th/75K

AGENDA #: TH17B APPLIC. #: 2-12-004

John Pearson, RCE Not For Flooding Jenner

California Coastal Commission District Offices 725 Front St., Suite 300 Santa Cruz, CA 95060

The attached photos show the water levels reached on my property when the river mouth is not managed. For over 50 years (and many more) the mouth has been managed (opened) by Cal Trans and the County to prevent flooding of the lower properties.

And in the 60's and 70's, fish life and my fishing was great in this river. If the SCWA knew what was best for the fish and river, I would be behind their proposal, but their proposals seem to be a guess at best (a prior County study 10 years ago+\_ concluded the managed opening of the mouth was best for the fish life, etc..). Now it's better to keep it closed??

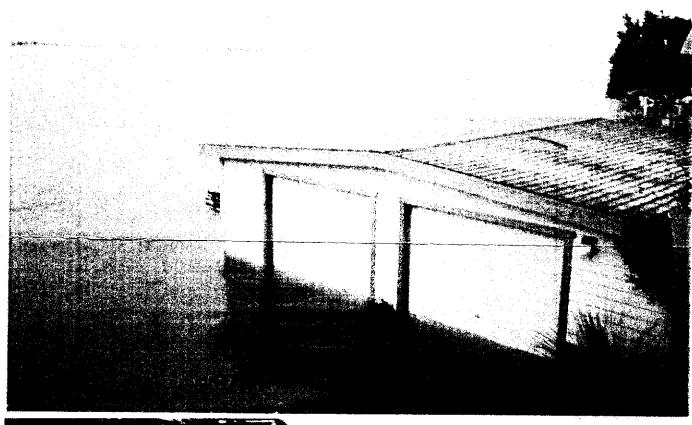
THE BOTTOM LINE IS I'M NOT FOR THE FLOODING OF MY PROPERTY!!

John Pearson Box 58

Forestville, Cal. 95436

THE ATTACHED IS MY PROPERTY WITH THE MOUTH NOT BEING OPENED OR MANAGED.

WOULD YOU VOTE FOR THIS?? I WOULDN'T!!





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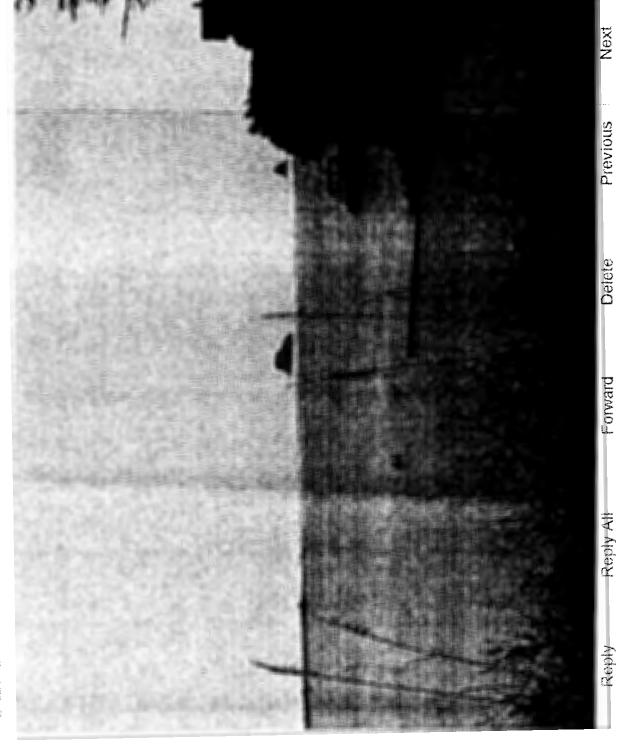
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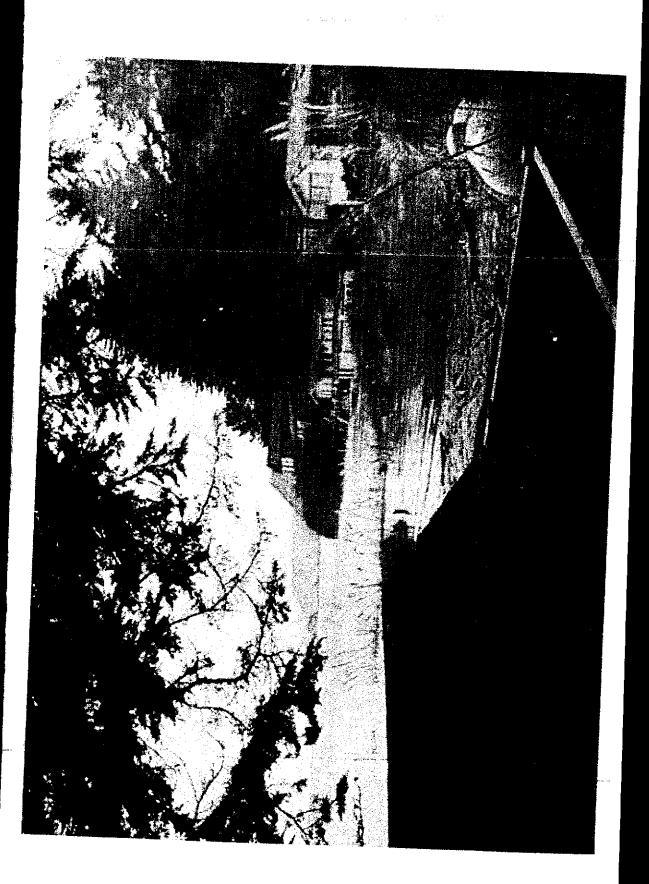
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One for the books.



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Th176

From: richandwanda@sbcglobal.net [mailto:richandwanda@sbcglobal.net]

Sent: Thursday, August 08, 2013 6:17 PM

To: Keliner, Laurel@Coastal

Cc: greg sampson; Kyra Wink; Roberto Esteves; Rich and Wanda Holmer; Wackerman, Tom; Wikle, Ken;

Kyla Brooke; Victoria Wikle; Craig, Susan@Coastal

Subject: Comments on item 2-12-004 for the August 15 Coastal Commission meeting

#### Dear Laurel:

Attached are comments by the Friends of Villa Grande regarding the subject project. We will make every attempt to have representation at the meeting but this may be difficult due to the short notice and the location of the meeting.

We would appreciate you making sure that our comments are presented to the Commission. We feel that this is a very serious issue that needs careful deliberation.

Thank you for your assistance.

Richard Holmer, President of Board of Directors, Friends of Villa Grande

VILLA GRANDE

Th176

August 8, 2013

California Coastal Commission Attn: Laurel Kellner 725 Front St., Suite 300 Santa Cruz, CA 95060

Dear Ms. Kellner:

Subject: August 15, 2013 hearing on item 2-12-004, Sonoma County Water Agency

The Friends of Villa Grande (FOVG) a public-benefit 501 (c)(3) owns and operates a public access point to the Russian River and a biotic preserve (Patterson Point Preserve) located in the community of Villa Grande. The Patterson Point Preserve and the two associated beaches were purchased by the FOVG in 2007 with partial funding from the Sonoma County Agricultural Preservation and Open Space District. There is a permanent easement across the preserve for public access to the Russian River.

The proposed project will create significant adverse impacts to Patterson Point Preserve's beaches as well as to recreational beaches in the surrounding community. The project has been hastily put together in response to pressure from NOAA and is based upon questionable science which is not directly related to the Russian River. Instead, the Sonoma County Water Agency plans to use adaptive management as new information is discovered, which will result in impacts occurring which may or may not be able to be corrected. In addition, the impact analysis that was conducted focused onto the estuary area and gave only cursory analysis to impacts upstream from the estuary. The FOVG would like to see modifications to the project to address the following concerns:

#### WATER QUALITY

The project proposes maintaining a barrier at the mouth of the Russian River in order to cause an estuary depth of 7 feet to 9 feet as measured at Jenner. Although this condition occurs naturally, it normally only occurs for a few brief periods each summer. The project proposes maintaining these water levels all summer. At the proposed water level in Jenner, the Russian River will backwater approximately 12 miles upstream as far as the community of Vacation Beach near Guerneville. All recreational areas along this stretch will become fully to partially inundated and this condition will be artificially maintained throughout the entire summer.

During mouth closures, this 12 mile long pool of water becomes stagnant with minimal flow of current. Contaminants migrating downstream or originating in the area are trapped and are not flushed out as normally occurs when the river is flowing to the ocean. The pool of water concentrates bacteria, nutrients, algae and floating scum. It becomes unsuitable for the historic recreational activities and presents a danger to public health. The bulk of the area affected by the proposed project is heavily developed and is not served by a public sewer system. Contaminants from individual septic systems leach toward the river and will not be dispersed.

The stagnant pool also creates warm water conditions which are favorable for algae growth and growth of Ludwigia. Ludwigia is an invasive, non-native noxious aquatic weed which is currently creating extensive problems throughout the watershed and in the area of the proposed project.



#### **Concerns for Recreational Water Quality**

The mouth of the river closed naturally this June and did not reopen until July 3. During this time, the County of Sonoma conducted bacteriological monitoring at Monte Rio beach, one mile upstream of Patterson Point Preserve. The results of this monitoring showed that the State of California draft guidelines for fresh water bathing places were exceeded on June 25 for both total coliforms and for E. coli and were exceeded again on June 27 for E. coli. Since the river mouth reopened, the Monte Rio beach has been sampled 4 times by the County with no exceedances of the state standards. In addition, the 30 day geometric mean level of E. coli levels while the mouth was closed exceeded 126 colonies per 100 ml. At this level of contamination, the standards recommend a sanitary survey to identify sources of contamination and increased levels of monitoring.

The Sonoma County Water Agency did not respond to these documented levels of gross contamination of public recreational areas. The mouth of the river reopened naturally, at which point, the contamination problems were resolved.

The proposed project will perpetuate these contamination problems over the entire summer and will expose bathers at all of the recreational beaches along this 12 mile stretch of the Russian River to potential public health risks. In addition, the water supply wells for the public water system which serves Monte Rio are located downstream of the Monte Rio Beach. The wells draw partially from the underflow of the river and will be subjected to these increased levels of contamination.

#### Impact upon Wildlife:

The project may displace and even kill seal pups. The elevated water levels have already destroyed duck nests in Villa Grande. The effect on plant and animal life upstream is unknown and may impact the salmonids and other marine life as the water quality degrades. Visitors to Goat Rock will be impacted, and the elevated pathogens may also impact wildlife and livestock.

While the mandate to implement measures to reduce or avoid impacts on the Salmonids (Russian River Biological Opinion 2008) is important, the impact this project has on the salmon and steelhead remains unclear and unjustified. Patterson Point Preserve plants, animals and people may be jeopardized by the amount of rising water. We request that further study and better science be implemented prior to beginning this project. We advocate the "No Project" Or a "Reduced Alternative of five feet with a Maximum of 6 feet or less" be implemented until environmental impacts are fully defined.

#### RECREATIONAL IMPACTS

#### California Coastal Act

Among the primary objectives of the California Coastal Act is the protection of public access and recreational opportunities of the California coast and it related lands and tributaries.

#### **Patterson Point Preserve**

In 2009, the citizens of Villa Grande joined together to purchase property on the lower Russian River in order to restore the land to its native riparian state and to ensure ongoing recreational opportunities that had been available to the townspeople for over a hundred years. This property, now known as Patterson Point Preserve, is two miles upriver from Duncans Mills, and is frequently visited by seals and other ocean-identified species. With cooperation of the Sonoma Agricultural Preservation and Open Space District, Patterson Point Preserve

P.O. Box 28, Villa Grande, California, 95486

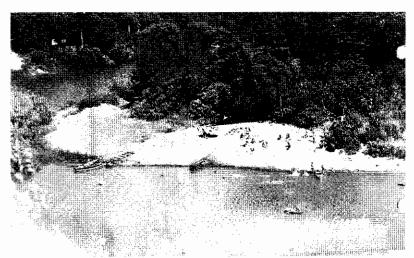


has not only a Conservation Easement in place, but also a Recreational Covenant that guarantees ongoing beach access and water-related recreational opportunities.

#### Impacts of the Estuary Management Project

Despite the claim of the report that "there will be minimum disruption to public access and recreation during the construction and life of the project" (page 34), we have already experienced the effect of a 7 foot flood level during the summer period. During this past July, the river naturally rose to 7.6 feet and virtually eliminated both beaches at Patterson Point Preserve. The river self-breached on July 3<sup>rd</sup>, bringing the level to its normal 3-4 foot level. Maintaining an estuary depth between 7 and 9 feet will virtually eliminate the recreational use of Patterson Point Preserve, destroying a century of historic public access to the Russian River by the town, tourists, and other visitors.

The summary states that a goal will be to "maintain the water elevation in the estuary at a slightly higher



elevation than has typically been the case in the past" (Summary, page 2). The raising of the estuary to an elevation of 7-9 feet is more than twice the normal elevation and cannot be considered "slight" by any measure of judgment. We respectfully request the level of the estuary be maintained at a level of five feet with a maximum level not to exceed six feet.

Below is a side-by-side view of Patterson Point Preserve. One taken circa 1910, the other is contemporary (2009) at approximately 5 foot

elevation. Both are summertime photos and demonstrate the normal elevation of the river in the past.





#### **RECOMMENDATIONS:**

- The FOVG requests that the project be modified to maintain a water level of 5 feet as measured at Jenner with a maximum water height of 6 feet. At these water levels, the beach areas along the river are less impacted and the water flow in the river is increased which will provide better dispersal of contaminants.
- We also request that the Sonoma County Water Agency be ordered to increase the river monitoring program including weekly bacteriological monitoring at Patterson Point Preserve.
- Finally, we request that the Sonoma County Water Agency be directed to take action to open the mouth of the river if unacceptable bacterial levels are measured in the Russian River.

Thank you for your attention to our concerns.

Sincerely,

The Friends of Villa Grande Estuary Committee and the Board of Directors of the Friends of Villa Grande

Rich Holmer, President FOVG Board of Directors
Kyla Brooke
Roberto Esteves
Greg Sampson
Ken Wikle
Kyra Wink
Victoria Wikle
Tom Wackerman

cc: Supervisor Efren Carrillo SCWA

North Coast Regional Water Quality Control Board Sonoma County Agricultural Preservation and Open Space District.



COMONS COSST CHASTED

The Surfrider Foundation is a non-profit grassroots organization dedicated to the protection and enjoyment of our world's oceans, waves and beaches. The Surfrider Foundation now maintains over 100,000 members and 90 chapters worldwide.

#### Re: Application No. 2-12-004 Russian River Estuary Management Project North Central Coast Agenda Item 17b on Thursday August 15, 2013

The Sonoma Coast Surfrider Foundation, as a long-term stakeholder in the Russian River Estuary Management Project, requests that any permit approved by the commission follow the permit tenure of California State Parks (who owns and operates the land around the project) and only be granted for a maximum of one year initially due to the necessity to evaluate the significant impacts of the proposed project, the failure of the applicant to include study of impacts to the marine environment, and also to allow the pending data required for a more thorough analysis of estuary management practices and influences to be completed.

Sonoma Coast Surfrider continues to advocate for:

- 1. The inclusion of ocean water quality data monitoring plan.
- 2. The study of the effects of the EMP on sandbar formation at the Russian River Mouth and Goat Rock State Beach Surf zones.
- 3. Shortening the tenure of the permit to allow for the results and determinations of the jetty study on outlet channel/perched lagoon formation before the possibility of renewal or Executive Director extension of the approval for another year.
- 4. Shortening the tenure of the permit to allow for results and determinations of the DEIR for the Russian River Low Flow due in early 2014 (reducing flows of the Russian River by ½ the current flow mandated by the same Biological Opinion that is driving the current application before the Commission) and prior to extension of the permit for a second year.
- 5. Review of Federal Consistency in consideration of the Gulf of the Farallones Northern Boundary Expansion EIS which includes the mouth of the Russian River prior to issuing CCC permits for more than one year or allowing extension of the permit for a second year.

Sonoma Coast Surfrider has commented extensively over a four year period regarding the Estuary Management Project with commission staff via official comment letters, public comment at CCC hearings, emails, and numerous phone conversations with staff yet acknowledgement and consideration of comments and concerns were excluded from the staff report.

#### 1. Marine Environment & Ocean Water Quality Data

MARINE AND BIOLOGICAL RESOURCES

Coastal Act Sections 30230, 30231, and 30240 afford protection of marine resources and their associated biological productivity and state:

Section 30230: "Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes."

Section 30231: "The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams."

Section 30240(b) "requires development in areas adjacent to environmentally sensitive habitat areas to prevent impacts that would degrade those areas. It states:

Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas"

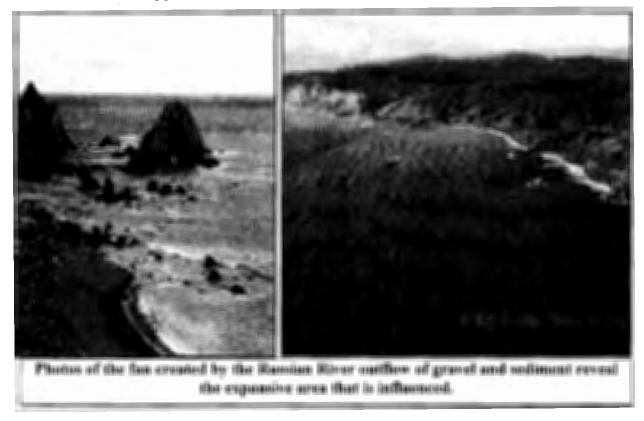
"The Adaptive Management Plan (PWA, 2011) provides for breaching (of the estuary into the ocean) in the event significant adverse water quality conditions are observed" Final Environmental Impact Report 2-18 & Staff report 2-12-004 p. 31

The Russian River Estuary Management Project as proposed allocates that the applicant artificially breach the lagoon if water quality declines below acceptable thresholds after formation of the perched lagoon utilizing the outlet channel construction.

In essence, this plan mandates that the solution to an impaired estuary created by long term closure is the sudden flushing and releasing of impaired water into the immediate ocean environment and inter tidal zone.

Sonoma Coast Surfrider advocates that study of ocean water quality be implemented prior to formation of the outlet channel to establish a baseline and be continued throughout the management period and following any emergency breaching so that impacts to the marine environment can be monitored.

#### 2. Recreational opportunities:



Section 30220. "Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses."

Section 30213. "Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred."

#### Staff Report page 33:

"First, as regards surfing, compared to the artificial breach that has historically occurred, the proposed project would result in more frequent closed channel conditions and thus wave conditions less preferable for surfing at this particular location."

The Surfrider organization and supporters are particularly protective of surfing locations on the Sonoma Coast, especially the high quality ones, as they are available to the public in very limited supply. Surfrider wishes to express our continued concern on the impact to surfing at the Russian River Mouth as well as surfing areas south of the river including North Side Goat Rock, South Goat, Blind Beach, and the Far Cove that will be the result of the Estuary Management Project. These premier Sonoma County surf recreation areas depend greatly on the influx of new sand and gravel. The combination of modifying breaching practices and lower flows will reduce the possibility of surfing these areas.

Surfrider believes that the mouth of the Russian River is a high quality surfing location that should be legally protected under the California Coastal Act.

#### Staff Report page 33:

These closed conditions are currently experienced by the local surf community and will continue to naturally occur irrespective of the proposed project (FEIR 2011).

Except for extreme drought years, the mouth has usually been open during the summer over the last 100 years. The SCWA Estuary Management events from 1996-2010 have averaged about 3 breachings during the May 15<sup>th</sup>-Oct. 15<sup>th</sup> time period. Therefore the mouth is open almost all of the 150 days of that period and allows for formation of sandbars which combined with swell create surf for residents to enjoy. Closing the mouth of the river and preventing the movement of sand and gravel will result in the loss of surf at the River Mouth as well as surfing at Goat Rock State Beach which also depends on this influx.

#### Staff Report page 33:

Artificially breaching the river mouth results in a minor, transitory sand bar forming off of the coast. This minor sand bar temporarily creates favorable conditions for surfing, but because it dissipates quickly and is artificially created, it is not a long-term public access resource. In addition, the project site is located in a relatively remote area, and because the sand bar is so short-lived, it is generally used only by local surfers.

While it is true that breaching creates a unique type of wave condition that attracts highly experienced surfers due to the rapid wave velocity and height, wave conditions exist through-out the open mouth period and designated management period. There are over 10 films and scores of photographic evidence to document the history of surfing at this location.

The quality of a surf area is not determined by who surfs the area and the term "local" is being used as a term of reference to marginalize the individuals who surf the Russian River mouth. Every surf area is surfed by locals and the classification of the Russian River mouth as a world class surf zone is due to the geographic beauty, presence of wildlife, remote location, and water quality.

#### Staff Report page 33:

Furthermore, there is no substantial evidence to demonstrate that the other surfing areas south of the river, including North Side Goat Rock, South Goat, Blind Beach, and the Far Cove, would be affected by the Estuary Management Project (FEIR 2011).

There is also no evidence or attempt to gather evidence by the applicant to demonstrate that there is not an impact. There is evidence that the current placement of the parking area has contributed to the lack of sediment flow which is deteriorating both the surf zones in the above listed areas and erosion of the shoreline. It is natural to presume that further manipulation of the gravel outflow from the mouth would only exacerbate this existing deterioration and that monitoring methods of shoreline erosion and reduced sandbar formation should be included in the management practices.

The recent Coastal Commission denial of the Sand Replenishment Project proposed for Encinitas and Solana Beach acknowledges that the influx of sand could hurt the wave quality at surfing breaks and negatively impact a marine protected area. The reduced outflow of sand and gravel should also be considered when evaluating impacts to sand bars and marine environments. The lessons learned from the Malibu Lagoon Restoration and Enhancement Project should be considered as well.

#### 3. Low Flow Connection

Section 30006: "Legislative findings and declarations; public participation
The Legislature further finds and declares that the public has a right to fully participate in
decisions affecting coastal planning, conservation and development; that achievement of
sound coastal conservation and development is dependent upon public understanding and
support; and that the continuing planning and implementation of programs for coastal
conservation and development should include the widest opportunity for public
participation."

Section 30006.5 "Legislative findings and declarations; technical advice and recommendations The Legislature further finds and declares that sound and timely scientific recommendations are necessary for many coastal planning, conservation, and development decisions and that the commission should, in addition to developing its own expertise in significant applicable fields of science, interact with members of the scientific and academic communities in the social, physical, and natural sciences so that the commission may receive technical advice and recommendations with regard to its decision making, especially with regard to issues such as coastal erosion and geology, marine biodiversity, wetland restoration, the question of sea level rise, desalination plants, and the cumulative impact of coastal zone developments."

Influences of changes to flows of the Russian River have been acknowledged by the applicant and the Biological Opinion (references below) and should therefore be included and considered as soon as available rather than waiting for three years. A Coastal Commission permit with tenure of one year would allow the maximum opportunity for public input and results of the DEIR on the Low Flow to be considered before extension of the permit so that the Commission can determine the extent of the impacts to habitat, water quality and other coastal resources.

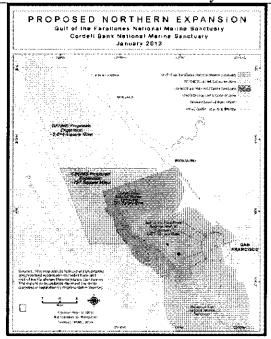
"NMFS biologists believe that reducing summertime flows in the Russian River and Dry Creek would provide better fishery habitat by reducing velocity, minimizing the need to artificially breach the sandbar at the river mouth, and potentially improving estuary conditions for steelhead by allowing the formation of a freshwater lagoon.

"Also, minimum instream flows lower than those required by Decision 1610 could encourage formation of a closed or perched lagoon at the mouth of the Russian River and therefore noticeably enhance the salmonid estuarine rearing habitat while preventing flooding of adjacent properties

#### 4. Sanctuary Expansion & Jurisdiction

- Section 307 of the Coastal Zone Management Act
- Federal Consistency and the National Interest (Chapter 11 from the California Combined Coastal Management Program/Final Environmental Impact Statement)

#### Expansion of Gulf of the Farallones Sanctuary boundary will include jurisdiction in the Russian River Estuary



The Gulf of the Farallones National Marine Sanctuary Boundary Expansion currently in the EIS process will include jurisdiction in the Russian River Mouth and will apply existing regulations in expanded areas. Coastal Commission Federal Consistency Regulations should be adjusted and reviewed to include considerations, goals, and management of the new Sanctuary borders.

#### Gulf of the Farallones MANAGEMENT PLANS AND REGULATIONS (Sections 5 & 7).

- (1) Application of Existing Regulations.--The regulations for the Gulf of the Farallones National Marine Sanctuary and the Cordell Bank National Marine Sanctuary shall apply to the areas added to each Sanctuary,
  - (a) Gulf of the Farallones .--
  - (1) Boundary adjustment- areas added to the existing Gulf of the Farallones National include(i) All submerged lands and waters, including living marine and other resources
    within and on those lands and waters, from the mean high water line to the
    sanctuary boundary
- (2) Regulation of specific activities-the Secretary shall consider appropriate regulations for the following activities:
- (B) The alteration of stream and river drainage into the Sanctuaries, with the primary objective of sanctuary resource protection;
  - (A) establish temporal and geographical zoning if necessary to ensure protection of sanctuary resources;
- (3) identify priority needs for research that will--
  - (A) improve management of the Sanctuaries;
  - (B) diminish threats to the health of the ecosystems in the Sanctuaries; or
  - (C) fulfill both of subparagraphs (A) and (B):

- (4) establish a long-term ecological monitoring program and database, including the development and implementation of a resource information system to disseminate information on the Sanctuaries' ecosystem, history, culture, and management;
- (6) ensure coordination and cooperation between sanctuary superintendents and other Federal, State, and local authorities with jurisdiction over areas within or adjacent to the Sanctuaries to deal with issues affecting the Sanctuaries, including surface water run-off, stream and river drainages, and navigation.



## The potential failure of the Estuary Management Project is acknowledged in the EIR Conclusion 4.6-22

"It remains unclear whether the proposed project would result in a highly productive freshwater lagoon system during the lagoon management period, or whether the less productive and potentially adverse conditions characteristic of a partially converted stratified lagoon would predominantly occur."

#### It goes on:

"A partially converted lagoon could potentially impact resident fish species, especially rearing steelhead, due to a reduction of water quality and habitat function, leading to increased stress or mortality as a result of increased water temperatures, reduced dissolved oxygen levels, or reduced foraging potential due to loss of estuarine productivity. A reduction in productivity or habitat function within the Estuary could result in a further potential indirect impact related to increased competition in unaffected areas where suitable habitat persists. Additionally, stratification could result in a reduction in the total area of available suitable habitat for a range of fish species due to adverse water quality conditions in the lower water column."

# And acknowledged in the Adaptive Management Plan: RUSSIAN RIVER ESTUARY OUTLET CHANNEL ADAPTIVE MANAGEMENT PLAN (AMP) p. 38

"Actual feasibility with regards to the full range of dynamic conditions has not been determined. Risks associated with outlet channel failure have not been quantified. In addition to the channel's performance criteria, there are also water quality and ecological performance criteria for the perched lagoon. These additional criteria have not been evaluated as part of the outlet channel management plan."

# RUSSIAN RIVER ESTUARY OUTLET CHANNELADAPTIVE MANAGEMENT PLAN (AMP) p. 37

7.6 EXCAVATION FREQUENCY

"Creating and maintaining the outlet channel will probably employ one or two pieces of heavy machinery (e.g. excavator or bulldozer) to move sand on the beach. At the start of the management period (late spring or early summer), when configuring the outlet channel for the first time that year, conditions may require operating machinery for up to two consecutive days.

The precise number of excavations would depend on uncontrollable variables such as seasonal ocean wave conditions (e.g. wave heights and lengths), river inflows, and the success of previous excavations (e.g. the success of selected channel widths and meander patterns) in forming an outlet channel that effectively maintains lagoon water surface elevations."

The project is unspecific about the number of excavations and maintenance events resulting in beach closures; therefore the impact on public access cannot be fully evaluated.

The adaptive management mandated by the project simultaneously mandates more frequent review by the Commission to ensure preservation and adherence to Coastal Act provisions.

Th/76

To:

California Coastal Commission North Central Coast District Office 45 Fremont Street, Suite 2000 San Francisco, CA 94105-2219

Attention:

Charles Lester, Executive Director Ruby Pap, District Supervisor Daniel Robinson

From:

Sonoma Coast Chapter of Surfrider PO Box 2280 Sebastopol, CA, 95473 sonomacoastsurfrider@comcast.net

The Surfrider Foundation is a non-profit grassroots organization dedicated to the protection and enjoyment of our world's oceans, waves and beaches. The Surfrider Foundation now maintains over 80,000 members and 90 chapters worldwide.

Re: Russian River Estuary Management Project Permit 2-01-033-A2

The Sonoma County Water Agency has submitted an application to the California Coastal Commission for an amended permit for management of the Russian River Estuary at Goat Rock State Beach in Jenner to continue previous flood management practices during the months of Oct. 15th-May 15<sup>th</sup> and to implement a new Adaptive Management Plan (AMP) of the Russian River Estuary during the months of May -Oct. 15<sup>th</sup>. The implementation of the proposed new lagoon outlet channel raises many concerns in the areas of public access, economic viability, water quality, public recreation, and loss of species habitat that deserve the attention of the Commission. We believe the current permit application should not be accepted as an amended permit. If however, it is accepted, we recommend that it be denied. As detailed below, the current proposal is inconsistent with numerous policies of the Coastal Act, including:

- 1. Water quality and rights (section 30231)
- 2. Marine resources (section 30230)
- 3. Environmentally sensitive habitat areas (section 30240)
- 4. Public access (section 30211)
- 5. Lower cost visitor and recreational facilities (30213)
- 6. Protection of certain water-oriented activities (30220)
- 7. Recreational boating use (30224)
- 8. Economic, commercial, and recreational importance of fishing (30234.5)
- 9. Wetlands (30233)

These numerous impacts cannot be balanced against the possible benefit to one listed species. The standard of review is the Coastal Act not the Endangered Species Act. Section 30007.5 mandates "that in carrying out the provisions of this division such conflicts be resolved in a manner which on balance is the most protective of significant coastal resources". Given the multitude of unmitigated and un-mitigatable impacts there is no way the present project can be considered to be most protective of significant coastal resources.

#### Public Access (30211)

The use of large equipment will result in partial closure of Goat Rock Beach and impacts to public access.

Each time the Russian River is breached or the proposed lagoon channel is created or maintained, SCWA operations will impact park visitor use through partial closure of Goat Rock Beach. The FEIR acknowledges that the proposed project will result in an increase in equipment use and subsequent beach closures and concludes that the impact is not significant, as the increase is not substantial. During the last 14 years SCWA has breached the estuary an average of 6.2 times/year. At least 2 of those breaches occurred during the months of January, February, November, and December (non-management period). Under the new management plan two days of initial construction would be required followed by maintenance activity (undetermined #) throughout the management period. In addition to the number of days required to implement and maintain the new outlet channel, NMFS estimates "that SCWA will need to artificially breach the lagoon using methods that do not create a perched lagoon twice per year between May 15<sup>th</sup> and October 15<sup>th</sup>.

<sup>1</sup> "There are 153 days in the management period (May 15 – October 15). The proposed project will restrict public access to Goat Rock Beach during the most heavily used time of the year. Goat Rock Beach is also one of the easiest beaches to access along the Sonoma Coast." The frequency and duration of beach closures will significantly increase, is substantial without limitation, and the subsequent limitations to coastal access ARE significant. There are no measure included in the plan regarding procedures that might be taken during these days to alleviate the impacts to public access.

The project is unspecific about the number of beach closures and therefore the impact on public access can not be fully evaluated.

# RUSSIAN RIVER ESTUARY OUTLET CHANNELADAPTIVE MANAGEMENT PLAN (AMP) p. 37

7.6 EXCAVATION FREQUENCY

"Creating and maintaining the outlet channel will probably employ one or two pieces of heavy machinery (e.g. excavator or bulldozer) to move sand on the beach. At the start of the management period (late spring or early summer), when configuring the outlet channel for the first time that year, conditions may require operating machinery for up to two consecutive days. The precise number of excavations would depend on uncontrollable variables such as seasonal ocean wave conditions (e.g. wave heights and lengths), river inflows, and the success of previous excavations (e.g. the success of selected channel widths and meander patterns) in forming an outlet channel that effectively maintains lagoon water surface elevations."

Therefore the number of excavations and subsequent beach closures is also uncontrollable.

From July 1, 2009 through June 30, 2010, Sonoma Coast State Beach received almost 3 million day use visitors. Goat Rock Beach is the second most popular beach on the Sonoma Coast. It is reasonable to assume that a significant portion (10%) of park visitors visit this beach. The lagoon management period corresponds with the most impacted time of year for park visitors with approximately 66.5% of visits.

#### **Public Recreation (30220, 30224)**

The project will result in significant impacts to public recreation

According to the FEIR, the proposed project would result in significant impacts to public recreation.

#### **Swimming**

The impacts of the Adaptive Management Plan (AMP) on swimming at Goat Rock State Beach, specifically the river side beach area have not been assessed nor analyzed. This riverside beach area is heavily used especially by families with children.

<sup>2</sup> "Higher water levels in the estuary, up to 9' in some locations, as posited in the FEIR will inundate riverside beaches for the long periods of time that the lagoon is in place – up to 5 months. The loss of river side wading/swimming opportunities at Goat Rock State Beach is a significant impact to the many families with children who use the riverside beach area at Goat Rock State Beach exclusively due to the dangers of the ocean side area and there can be no mitigation for this impact with the plan as proposed. This river side beach area is arguably the only State Beach that is safe for children to wade and swim along the entire 10 mile length of the Sonoma Coast State Beach. All other State Beaches have only ocean side beach areas. Further, the FEIR fails to identify the existence of or assess the impacts of loss of the beaches below Rivers End used by Inn guests and residents of the houses on Burke Avenue. The inundation caused by the implementation of the outlet channel of these two prime riverside beach areas restricts access to these PUBLIC recreational sites."

#### Surfing

Surfing locations are a prime example of low cost visitor and recreational opportunities and legally protected under the California Coastal Act (Section 30213). No baseline monitoring of surf conditions has been done by the Water Agency. As stated in the SCWA's FEIR, impacts to surfing at the River Mouth as well as surfing areas south of the river including North Side Goat Rock, South Goat, Blind Beach, and the Far Cove will result with the implementation of the Estuary Management Project. These premier Sonoma County surf recreation areas depend greatly on the influx of new sand and gravel. The combination of modifying breaching practices and lower flows will remove the possibility of surfing these areas. Surfrider has determined that the mouth of the Russian River is a high quality surfing location.

### To quote SCWA's FEIR Impact 4.7.2: Eliminate or Modify an Existing Recreational Resource:

"The proposed project would likely reduce the occurrence of open channel tidal conditions conducive to surfing activities." It goes on to say "This potential impact may be inconsistent with

the California Coastal Act, which protects water based recreation (Section 30220) and low costs recreational opportunities (Section 30213). The California Coastal Commission has jurisdiction and would be responsible for making a consistency determination of the project with these policies; however it is recognized that alteration of the opportunity for surfing may not be consistent.

#### ...... yet no feasible mitigation measures are identified.

Surfing in Sonoma County can only be practiced in the ocean and never at inland areas. The Surfrider organization and supporters are particularly protective of surfing locations on the Sonoma Coast, especially the high quality ones, as they are available to the public in very limited supply. Sonoma County has only 9 surfing areas. As of today, out of those 9 areas, 3 are totally closed to public access, one is partially closed (Bodega Head) and access to Salmon Creek is greatly reduced (the Dunes & Bean Avenue Parking lot closures). There are also fees for ½ of these areas. Access to surfing is already limited to Sonoma County residents.

The loss of surfing at the River Mouth for half of the year due to the inlet channel and its construction efforts will now eliminate surfing at one of the only free surfing areas on the entire Sonoma Coast. In addition-the more northern surf areas and Bodega Head are less frequently used due to level of experience required or travel time, therefore, only 2 possible areas remain for surfing –primarily-Salmon Creek & the River Mouth. The Estuary Management project therefore reduces the potential surf areas by ½ in Sonoma County during the months proposed.

Except for extreme drought years, the mouth has usually been open during the summer over the last 100 years. The SCWA Estuary Management events from 1996-2010 have averaged about 3 breechings during the May 15<sup>th</sup>-Oct. 15<sup>th</sup> time period. Therefore the mouth is open almost all of the 150 days of that period and allows for formation of sandbars which combined with swell create surf for residents to enjoy. Closing the mouth of the river and preventing the movement of sand and gravel will result in the loss of surf at the River Mouth as well as surfing at Goat Rock State Beach which also depends on this influx. The loss of over 5 months of surf at two locations which are free and accessible to the residents of Sonoma County IS a significant impact to recreation for Sonoma County residents and should be unacceptable to the State.

As to date, no baseline quantification of the frequency and quality of waves at the Russian River exists; however, estimates can be made by reviewing; weather records, breaching records, hydrograph records, seal data notes, locally produced films and photography, and consultation from surfers who frequent the Russian River mouth. These need to be analyzed and included in any review of this project.

#### Recreational Boating

Lowering the flows in the river is a requirement to enable a sustained closure of the mouth of the river. Lowering the flows creates impacts to recreational boating.

<sup>&</sup>lt;sup>3</sup> "The Russian River has been declared a navigable river. *Hitchings v. Del Rio Woods Recreation and Parks District*, 55 Cal. App. 3d 560, 567 (1976). There simply is no line where the Estuary stops and the river begins in so far as recreation goes. In 2004 & 2007 the SWRCB approved

Temporary Urgency Change Petitions on behalf of Sonoma County Water Agency to reduce minimum flows to 85 cubic feet per second at the Hacienda Bridge USGS gauging station.

The impacts from low flow on recreation are profound. At flows of less than 90 cfs as measured at Hacienda Bridge, Russian Riverkeeper received dozens of reports from boaters concerned that navigation in the free flowing portion of the lower Russian River was being impeded, resulting in more perilous conditions for boaters. As flows were reduced, areas below riffles were narrower and often boaters were swept dangerously into overhanging vegetation resulting in over-turned watercraft. Russian Riverkeeper has numerous pictures of boaters (including the Sonoma County Sheriff's Water Safety Patrol boat) having to push their boats through shallows, and other river users were forced to walk due to shallow water, resulting in serious impediments to navigation. Several canoe and kayak rental outfitters, principally Burke's Canoe Trips, and the Monte Rio Park and Recreation District, have been impacted by previous Temporary Urgency Change Petitions issued to Sonoma County Water Agency (SCWA) by the SWRCB in 2004 and 2007 that impeded the navigability of the Russian River. The owners of Burke's and River's Edge have received numerous complaints and that many regular customers did not return in successive years due to lower flows.

These realities sharply contrast with the blithe assertion in the RRBO (see pp. 264-265of Russian River Biological Opinion) that recreation would not be impacted at 70-85 cfs. Additionally, when the temperatures spike during the summer diversions from the river (for both municipal and agricultural uses), the operating margin of 10-15 cfs is depressed at the same time as record crowds go to the River to cool off and canoe. Sonoma County residents regularly canoe and kayak the Russian River and the Estuary for exercise, recreation and fishing and there have been several dozen complaints about navigation being impeded by previous temporary urgency change petitions that reduced flows below 90 cfs in the lower Russian River." The impacts of lowering the flow in the river and failure to maintain an open estuary creates impacts to recreational boating that need to be considered in any analysis of this project.

#### Water Quality (30230, 30231)

Lowering the flows in the river and closing the estuary creates impacts to water quality that require further study. The project contains no performance standards with regards to when corrective measures should occur.

## RUSSIAN RIVER ESTUARY OUTLET CHANNELADAPTIVE MANAGEMENT PLAN (AMP) p. 43

9.3.2 Decline in Water Quality

Declines in water quality could have impacts to salmonids rearing in the estuary, other species which reside in the estuary and the public. Potential water quality concerns include, but are not limited to:

- Dissolved oxygen conditions becoming dangerously low to fish and other species;
- Elevated salinity levels in domestic water wells; and
- Elevated bacterial levels.

#### FEIR 2-14 Nutrients and Bacteria

Potential significant and unavoidable impacts to water quality associated with nutrient and bacteria levels are acknowledged and analyzed in Draft EIR Section 4.3, Water Quality. As noted

on Draft EIR pages 4.3-7 and 4.3-12, there are currently no specific limits on nutrient and bacteria levels for estuarine systems, only freshwater. As discussed in the Draft EIR (page 4.3-24), the precise response of the Estuary to the Estuary Management Project cannot be predicted with certainty. As discussed in Draft EIR Section 4.3, it is anticipated that nutrient and bacteria conditions would remain within the range of those experienced within the Estuary over the past 15 years, but that the duration of those conditions would likely increase as a result of the project. Therefore, based upon the best available information, this EIR concludes that the proposed project would have the potential to result in significant and unavoidable impacts to water quality related to bacterial and nutrient levels in the Estuary.

The low flows and perched lagoon will create significant impacts to water quality yet there has been no data available to the public on bacteria, nutrients, and pathogens for the Lower Russian River and Russian River Estuary. Current County of Sonoma Department of Health data only tests and reports to the public the area of the Russian River from Alexander Valley to Monte Rio Beach for total coliform ,escherichia coli, and enterococcus.

Water quality monitoring in the Adaptive Management Plan should require that this testing occur in the lower river and estuary, a baseline established, and data made available to the public before the water agency's experimental implementation of the perched lagoon and low flows is allowed. We are concerned that extended periods of low flow or stagnant lagoon conditions will result in increased bacteria levels with associated human health impacts for swimmers in the lagoon/river beach areas.

## The Estuary Project and low flow (permanent changes to Decision 110) must be reviewed by California Coastal Commission together in order to fully understand the impacts.

Lowered flows are necessary for successful sustained mouth closure but the analysis provided does not deal with this issue because the lowering of the river is not included in the project considered in the EIR and therefore no analysis of the impacts is available to the Commission. The Commission cannot determine the extent of the impacts to habitat, water quality and other coastal resources without such analysis.

<sup>4</sup> "The California Environmental Quality Act (CEQA) requires that the whole of a project be considered in one EIR. Bifurcation of the Estuary Management Plan and the Fish Flow Project avoids full examination of the environmental impacts that will result from the Estuary Project. Many, many people provided comments on this issue, as it is one of the most serious lapses in the FEIR, and one noted by almost every commenter. The FEIR gives numerous justifications in their Master Response (2.1) for separating these two projects. For instance, they insist that the BO prioritizes the Estuary Project before D1610 revisions because it will take much longer to process changes to D1610. What they don't mention however, is that the Temporary Urgency Change Petition process, which requires the same lowered Hacienda flows called for in the BO and the Fish Flow Project, mitigates for the delay. Conveniently, the TUCP does not require CEQA review. Furthermore, the BO was never subjected to environmental review either. An overarching criticism of the current analysis is that it is not comprehensive as to assessing the impacts of modifying Decision 1610 and the AMP." Segmenting is illegal under CEQA and this

bifurcating of the analysis of the two projects, which are intrinsically linked, is flawed and does not provide the CCC with the information needed to fully analyze the project and its impacts.

#### Impacts to Environmentally Sensitive Habitat Areas (ESHA) (30240)

The project has numerous impacts to species and their habitats.

#### Species Habitat Considerations

It is clear that with SCWA's efforts to promote conditions advantageous to one threatened species; they will impact, in some cases severely, other species. The Biological Opinion aimed at one listed species does not consider the impacts to other species, including other sensitive species. Even if we agreed with the BO, and we do not, the ESA (Endangered Species Act) is not the basis for approval of a project under the Coastal Act. To evaluate the impact of the AMP on ESHA and the wildlife it supports it is necessary to determine if it will have a substantial adverse effect, either directly or through habitat modifications, on any species identified, but not limited to candidates for listing, sensitive, or special-status species in local or regional plans, policies, or regulations or by the CDFG, USFWS, or NMFS. In this case it is clear that the project will cause significant disruption to the habitat values of ESHA and the numerous species that depend on it.

#### Pinnapeds, Specifically Harbor Seals

Impacts on the Harbor Seal colony are inadequately assessed and the CCC needs to take a closer look at this issue. The conclusion that the impacts are reduced to less than significant by virtue of the Incidental Harassment Authorization (IHA) permit and its protocols is disputed. The Jenner Harbor Seal colony has been established on Goat Rock Beach at the mouth of the Russian River since 1974 - 37 years. Of the 21+ Sonoma Coast Harbor Seal haul outs that constitute the Sonoma County Harbor Seal Census, the Jenner/Goat Rock haul out is the most significant. The Jenner colony is the largest and most significant Harbor Seal colony in Sonoma County and from Drakes Beach in Marin County to the mouth of the Eel River in Mendocino County.

Harbor Seals are colonial and have a large degree of site fidelity. Being diurnal, they haul out during the day. The haul out period is critical for metabolic processes (e.g. re-oxygenation) that allow them to dive in cold ocean waters when they feed at night, for bonding with pups, nursing pups and generally resting in a colony where there is safety in numbers. Harbor Seals are easily disturbed. Disturbances, whether natural by birds flushing or man-induced harassment whatever the source – boats, beach walkers approaching too close, mechanical equipment associated with the project - interfere with the needed biological processes, rest and restoration. The FEIR documents the short time frame after a harassment incident that the Harbor Seals will return to the haul out site. However, what has been observed over time is short term incidences of harassment for short periods of time. At no time over the years that breaching activities have been implemented has the river mouth been closed for more than one month maximum.

The protocols of the IHA permit are intended to mitigate the impacts of harassment associated with the mechanical breaching of the river and the construction associated with creating the lagoon. These protocols CAN NOT and DO NOT mitigate the impacts of 1) the vast increase in

the number of times/year the colony can/will be disrupted by these actions nor 2) the up to 5 month closure of the river mouth. Long term, chronic disturbances result in 1) reduced use of a site, 2) a shift to nocturnal rather than diurnal feeding, 3) reduced pup production and 4) site abandonment.

There is a lack of assessment of the effect on harbor seal colony from the multiple times the colony will be harassed and disrupted in any given year, year after year of the project life (undefined as to number of incidents or length anywhere in the FEIR document or AMP).

The Sonoma County Water Agency should also be required to do a full assessment of the long term impacts of a 5 month closed mouth on the seal colony. Creating a closed mouth for up to 5 months and the associated long barrier beach which will result in multiple ongoing disturbances/harassment associated with beach walkers approaching the colony – ignoring the signs warning them to maintain the statutory distance -when no Seal Watch volunteers are present to interpret and maintain the statutory distance is "having a substantial adverse effect, either directly or through habitat modifications" The protocols of the IHA Permit, intended for individual incidents of construction equipment and associated staff presence on the beach, cannot be used as the basis for declaring these substantial adverse effects which were not assessed as less than significant. Moreover, the harassment protocols for short term impacts cannot be used as mitigating the long term potential for loss of the colony associated with ongoing, continual, chronic disturbance/harassment of the colony and the likely resulting abandonment of the site.

A full cumulative assessment of the harassment needs to be required by the CCC. Additionally, there are no benchmarks to determine when review of the impacts should occur and no performance standards in the AMP with regard to when, if or what should happen, if the impacts are greater than those contemplated.

#### Dungeness Crab (section 30234.5)

<sup>5</sup> "The Russian River Estuary is an important nursery area for juvenile Dungeness crab, which is an economically important species for the local fishing fleets. Several studies have documented the fact that juvenile Dungeness crab that are able to access coastal estuaries have accelerated growth rates due to warmer temperatures and better foraging opportunities (Stevens, Armstrong, 1984). According to studies completed by the University of Washington's School of Aquatic and Fisheries Science (Stevens, Armstrong, 1984), adverse environmental effects on juvenile Dungeness crab nurseries directly impact adult populations. In the Russian River, Dungeness crab use of the estuary is well documented by SCWA seine netting performed in 2004, although no juveniles were trapped in 2005 this was also observed in the San Francisco Bay in 2005 and is likely due to ocean conditions.

The availability of the Russian River estuary to Dungeness crab could be a significant factor in their abundance on the Sonoma Coast (Pauley et al, 1989), but no studies have been conducted to determine the contribution Russian River estuary juvenile Dungeness make towards the total adult abundance in coastal waters."

The CCC should require the analysis of the impact of the project on this species, including requiring studies to determine the importance of the estuary to the Dungeness Crab population.

Additionally, there should again be benchmarks to determine when additional reviews of the crab population should occur and specific remedial actions that should be taken if significant impacts occur.

#### Birds

"Impacts on birds are inadequately assessed. The beach at Goat Rock State Beach is a colonial site. Not only does it provide a resting place for Harbor Seals, it provides a resting place for birds. At any one time, hundreds of gulls, terns, Brown Pelicans and/or cormorants rest on this beach. This is a community haul out! There are few places like this along the coast – large sandy beach area with access to both the river and the ocean. As such it is a very important site for birds to rest and preen, giving them access to the river and to the ocean to swim and to feed. Gulls nest on Haystack Rock, cormorants congregate on it and on the smaller rocks disbursed in the river. As with Harbor Seals, birds are easily disturbed. The major disturbance for birds is beach walkers whose approach results in flushing the birds. There has been no assessment made of the impacts of prolonged closure of the river mouth on the flushing of birds which rest on the beach as a necessary part of their metabolic processes. Regardless of whether flushing the birds is considered a take under the Federal Migratory Bird Treaty Act, the fact that both equipment operation and beach alteration will increase flushing is an impact of the project on species that inhabit/use the beach and are a part of the ecosystem of the estuary." and therefore inconsistent with 30240

#### Impacts of invasive species: Ludwigia

The recent years the invasive non-native plant Ludwigia Hexapetla has rapidly colonized the lower Russian River resulting in lost beach and river access and unknown impacts to aquatic organisms in particular endangered Coho Salmon and Steelhead Trout. According to invasive plant experts at UC Davis and the Laguna Foundation one of the limiting factors for Ludwigia growth is depth, velocity and amount of shade. The flow reductions mandated by the RRBO could encourage the spread of ludwigia by slowing the river velocity and reducing the depth. In addition, the currently saline Russian River estuary if turned to a freshwater lagoon as envisioned in the RRBO, could encourage the spread of ludwigia to that portion of the river. Increases in plant growth in a freshwater system result in conditions that do not favor aquatic animals especially cold-water fish like Coho Salmon and Steelhead Trout." The project does not contain remedial actions that should be mandated if an increase in the amount of Ludwigia Hexapetla occurs.

#### Section 30233

The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects.

The diking and filling contemplated in this project does not fall under one of the 7 allowable uses of Section 30233. Even if it were an allowable use it is not the least damaging feasible alternative required under Section 30233.

# Consideration of Alternatives and Economic Viability RUSSIAN RIVER ESTUARY OUTLET CHANNEL ADAPTIVE MANAGEMENT PLAN (AMP) p. 38

"Actual feasibility with regards to the full range of dynamic conditions has not been determined. Risks associated with outlet channel failure have not been quantified. In addition to the channel's performance criteria, there are also water quality and ecological performance criteria for the perched lagoon. These additional criteria have not been evaluated as part of the outlet channel management plan."

There has been no economic analysis for the project or any possible alternatives.

The economic viability of the SCWA's proposed project is questionable. No cost analysis for the Estuary Management Project has been made available to the public. The Water Agency steadfastly claims that they must proceed with their project as designed because the Russian River Biological Opinion requires it. This is not true. The required outcome of improved fish habitat could be accomplished by other methods not chosen by the Water Agency, and cost comparisons should be a major consideration for the final project design.

No analysis of feasible alternatives resulting in un-necessary expense and environmental impacts. According to SCWA, the Estuary Management Project has two fundamental objectives - enhance juvenile salmonid habitat by maintaining a seasonal freshwater lagoon and alleviate potential flooding of properties along the estuary as a result of higher estuary water levels. The former is required by the Russian River Biological Opinion (RRBO) but the later is not. Although the RRBO states that the goal is to benefit fish, the estuary is still controlled by flood control levels that have nothing to do with improving fishery habitat, so the goal is already compromised. This places non-fish centric constraints on any effort to improve estuarine conditions.

Natural estuary breaching would provide a deeper lagoon of freshwater for fish habitat. It should be noted that review of estuarine science and the RRBO and RRBA (Russian River Biological Assessment) suggests that either an always open or always closed estuary could produce the same benefit to listed fish species. If the low-lying structures were elevated or relocated, an always open sandbar regime could produce a benefit to the fish without the negative impacts to the Lower River community. The extremely dynamic nature of coastal areas such as the sandbar at the mouth of the Russian River have proven to be difficult to manage, as evidenced by past mechanical breaching events that were followed by wave action closing the sandbar within days. This shows that any attempt to control or manage the sandbar to achieve some desired condition is problematic and fraught with risk of failure to obtain desired conditions.

The Water Agency made an initial project design decision to continue the historical estuary management practice of artificial breaching for flood protection. This concept remained in the project throughout the vetting process of environmental impact review without any cost analysis of alternate flood prevention methods. It is fact that only a few properties have structures threatened by water levels if the estuary is allowed to breach naturally. SCWA offers no cost comparison of natural breaching and requiring the small number of vulnerable properties to lift

structures above the flood zone vs. using heavy machinery every week between May and October for 15 years to artificially maintain a flat outlet channel in the sand.

It is noteworthy that most other property owners along the Russian River are required to follow FEMA guidelines and remove structures from the flood plain by means of lifting or relocation (as has been done for almost 150 homes in the Lower Russian River due to repetitive flooding). SCWA refuses to explain why this tactic was ignored or eliminated from their proposed project even though it appears to have cost advantages. The SCWA has flood control jurisdiction and could mandate the elevation of low lying structures via its flood control authority and reduce the impacts to the Lower River community. There is no explanation as to why this has not been considered.

SCWA's own environmental review determined that the estuary's water quality might deteriorate as a result of their proposed project. The term "adaptive management" is used by the Water Agency as a euphemism for "figure it out as they go" when desired outcomes are not realized. If water quality issues plague the fish habitat and "adaptive management" begins, the cost of their estuary management plan is completely unknown. This project, as designed, is fiscally irresponsible and should be called an expensive experiment.

The Estuary Management Project's EIR identified many "significant and unavoidable" impacts for which there are no "feasible" mitigation measures. At the same time, no back-up information with cost analysis is offered to support the claims that mitigation measures are unfeasible.

#### In closing, it must be stated that

This project is inconsistent with the Chapter 3 policies of the Coastal Act and must be denied. It is unacceptable to take and alter a public resource – Goat Rock State Beach – a part of the commons owned by the citizens of California, to alter a State owned Beach, interfere with multiple State owned and state protected resources, impact numerous species and their habitats, and alter the river and its recreational uses as well as access to the river for so many users who have few safe alternatives to enjoy the coast side environment.

This is a highly expensive and prolonged experiment with an important coastal and marine resource. It is an experiment that cannot be justified. Many of the impacts are permanent and the Coastal Commission must consider what condition the Estuary will be in at the end of the Adaptive Management period. Given the numerous permanent impacts and uncertain consequences of other aspects of this experiment it is fair to assume that it will be far worse then it is today, possibly making restoration impossible.

#### References

<sup>&</sup>lt;sup>1</sup> Liz Burko, Russian River District Superintendent State Parks Comments to SCWA in DEIR

<sup>&</sup>lt;sup>2</sup> Norma Jellison, -comments on the Russian River Estuary Management Plan Draft EIR

<sup>&</sup>lt;sup>3</sup> Don McEnhill, Executive Director, Russian Riverkepers –protest and petition to State of California State Water Resources Control Board relative to a petition requesting modification to Water Rights Permits submitted by the Sonoma County Water Agency

<sup>&</sup>lt;sup>4</sup> Brenda Adleman, Russian River Water Protection Council Letter to Sonoma County Board of Supervisors

<sup>&</sup>lt;sup>5</sup> Don McEnhill, Executive Director, Russian Riverkepers –protest and petition to State of California State Water Resources Control Board relative to a petition requesting modification to Water Rights Permits submitted by the Sonoma County Water Agency

<sup>&</sup>lt;sup>6</sup> Norma Jellison, -comments on the Russian River Estuary Management Plan Draft EIR

Oon McEnhill, Executive Director, Russian Riverkepers –protest and petition to State of California State Water Resources Control Board relative to a petition requesting modification to Water Rights Permits submitted by the Sonoma County Water Agency

Th/76

From: sonomacoastsurfrider@comcast.net [mailto:sonomacoastsurfrider@comcast.net]

Sent: Thursday, August 08, 2013 11:44 AM

**To:** Kellner, Laurel@Coastal **Cc:** Lester, Charles@Coastal

Subject: re: Surfrider Historical Comments re Russian River Mouth Estuary Management Plan

#### Hello Laurel

Upon review of the staff report for the upcoming Russian River Mouth Estuary Management Plan, I do not see any reference to or inclusion of the comments and concerns that Sonoma Coast Surfrider has submitted over the last three years regarding this permit. We began commenting over 3 years ago when the applicant initially presented this to the Commission as an amendment (attached above-2-011-033-A2). We have continued to comment via email, submission of written comments, public comment at Coastal Commission Hearings, and phone conversations.

We would appreciate that the staff report more accurately reflect our level of involvement and include our concerns. I have also attached a copy of our most recent comments regarding the staff report for this permit.

We appreciate all the hard work that has been involved with this project and understand the pressure that the applicant faces; however, the Commission is governed by the provisions of the Coastal Act rather than the Endangered Species Act and must consider impacts to all marine resources, public access, and recreation in its decision. It is our hope that the comments that we have been submitted help to clarify those impacts.

Sincerely
Cea Higgins
Volunteer Coordinator & Environmental Campaign Manager
Sonoma Coast Surfrider

Th/76

From: NORMA JELLISON [normalj@sonic.net]
Sent: Tuesday, August 06, 2013 11:55 AM

To: Kellner, Laurel@Coastal

Subject: Th 17b

Hi Laurel - I was rather surprised to see my EMs included in the staff report documents as Ex Partes and yet substantive comments previously forwarded in EMs, especially those from the Sonoma Coast Surfrider representative, not included. Further, I do not belive Cea received a public hearing notice. Some people in Jenner did receive the mailed notices, as did I. They will not be able to attend the public hearing, but will hopefully be able to submit written comments prior to the meeting.

Norma

A new ethic for the ocean where the ocean is not seen as a commodity we own but as a community of which we are a part.

The sea is worth saving for its own sake. Bill Ballantine NZ And take this to the land as well.

From: richandwanda@sbcglobal.net [mailto:richandwanda@sbcglobal.net]

**Sent:** Monday, August 05, 2013 3:46 PM **To:** Craig, Susan@Coastal

Cc: Roberto Esteves; Kellner, Laurel@Coastal

**Subject:** Application number 2-12-004, Sonoma County Water Agency

Dear Ms. Craig,

On behalf of Friends of Villa Grande, I am requesting that the hearing on this application be changed to a venue closer to Sonoma County. This project has severe impacts onto the recreational uses at the public access point to the Russian River at Villa Grande and these impacts have not been adequately considered in the project as proposed.

We only became aware of this hearing today and we feel it is imperative that we be able to attend and adequately present our case. Please change the hearing location on this project to a location where we can attend.

I have attached a letter that we sent to the Water Agency that explains our concerns.

Thank you for your consideration.

Richard Holmer President, Friends of Villa Grande

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ThITh

June 12, 2013



Jessica Martini-Lamb Environmental Resources Coordinator Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, CA 95403

Dear Ms. Martini-Lamb

Subject: Russian River Estuary Management Project

The Friends of Villa Grande (FOVG) owns and operates a public river access and biotic preserve (Patterson Point Preserve) located in the community of Villa Grande. During the EIR process for the subject project, we requested information on the extent of inundation that would occur to our beaches as well as information on the expected water quality changes that may result from extended estuary closures. We never received a response to our question on the extent of inundation. The EIR did state that water quality monitoring would be performed and, during a community meeting on May 16, 2013, a slide was presented which showed a monitoring station at Villa Grande.

During the river mouth closure that occurred up to June 2, 2013, our beaches at Patterson Point Preserve were inundated to an extent that caused 2/3 of the beach areas to be under water. In addition, we totally lost a sand bar beach that was almost an acre in size. You informed me via a phone message that the water had reached an elevation of 6 ½ feet in Jenner before the mouth naturally reopened and the river returned to normal levels. It is our understanding that SCWA intends to maintain the river level at 4 to 9 feet at Jenner with an average of 7 feet during the summer months. This level will clearly cause significant degradation of the recreational value of our river beaches. We would like to note that the beaches at Villa Grande have been used for well over 100 years by the community and the general public and that the historic river levels have normally allowed ample area for beach usage.

The Patterson Point Preserve and the two associated beaches were purchased by the FOVG in 2007 with partial funding from the Sonoma County Agricultural Preservation and Open Space District. There is a permanent easement across the preserve for public access to the Russian River. It is a significant and unacceptable loss to the public to have these beaches inundated by the estuary project during the summer months. It should be possible for SCWA to enhance the estuary for fish breeding without raising river levels to heights that adversely impact recreational opportunities upstream.

During the recent river mouth closure, the water quality at Villa Grande became degraded. There was a loss of water clarity and the presence of floating scum. Given the potential sources of upstream contamination, it appears possible that the water quality may become unsuitable for swimming during the extended mouth closures proposed

under the estuary plan. I cannot find any record of water sampling at Villa Grande on your website. If there is a sampling station at Villa Grande, our organization would like to have access to the results. If there is not, we would like to see sampling instituted.

In addition, during the mouth closure, there were at least two duck nests lost at Villa Grande due to inundation. It is probable that the rising water caused significant loss of wild life habitat throughout the area that was inundated from the coast to Monte Rio.

We respectfully request that the estuary project be modified as follows:

- The FOVG requests that the water level at Jenner be maintained at an average level of 5 feet with a maximum level of 6 feet. This would protect our recreational areas and would help mitigate the wildlife impacts.
- The FOVG also requests that weekly water sampling be initiated at the Patterson Point Preserve beaches to determine the effects on water quality resulting from the mouth closures and to protect the health and safety of recreational river users.

Both of these requests are well within the parameters of the estuary project EIR and could be accomplished relatively easily.

I can be contacted at richandwanda@sbcglobal.net or 7074-865-2998.

Thank you for your consideration.

Richard Holmer

President of the Board of Directors of FOVG

cc: Grant Davis, General Manager, SCWA Supervisor Efren Carrillo



Th176

CF/45-5.1-2 RUSSIAN RIVER ESTUARY MANAGEMENT PROJECT (ID 2544)

July 19, 2013

Richard Holmer – President of the Board of Directors Friends of Villa Grande P.O. Box 28 Villa Grande, CA 95486

RE: Russian River Estuary Management Project

Dear Mr. Holmer:

This letter is in response to your request for additional information on the Russian River Estuary Management Project (Estuary Project) with regards to the Patterson Point Preserve (Preserve) along the Russian River in Villa Grande. Your letter indicated that backwatering of the river from the June Russian River mouth closure was observed at the Preserve and expressed concern that the loss of beach area impacted recreational activities at the beach, water quality for swimmers, and wildlife habitat. This letter provides information on the purpose of the Estuary Project and addresses your concerns.

The National Marine Fisheries Service (NMFS) issued the Russian River Biological Opinion in 2008, following more than a decade of consultation and study under the federal Endangered Species Act. The Biological Opinion requires the Water Agency to implement the Estuary Project to enhance habitat for the threatened steelhead and endangered coho salmon to avoid jeopardizing these species populations and their critical habitat. The California Department of Fish and Wildlife issued a Consistency Determination in 2009. The Estuary Project is a habitat enhancement project that is aimed at improving summer rearing habitat for juvenile steelhead and salmon while continuing to minimize flood risk to low-lying structures in the Russian River Estuary. The Estuary Project involves managing water levels in the Estuary at a target of 7 feet elevation, as identified in the Biological Opinion, following formation of a barrier beach at the river mouth and implementation of an outlet channel to increase aquatic habitat for fish while minimizing flood risk to low-lying properties.

As part of the monitoring requirements of the Russian River Biological Opinion, the Water Agency conducts extensive water quality monitoring in the lower Russian River and Estuary. Water quality conditions (temperature, dissolved oxygen, pH, and salinity/conductivity) were monitored during 2011 and 2012 near Villa Grande at Sheridan Ranch. Also, the Water Agency conducts bacteria and nutrient sampling at Monte Rio and Casini Ranch among other sites in the area. The results of these studies are posted at the Water Agency's website at http://www.scwa.ca.gov/. A summary of water quality monitoring results can be found in the Russian River Biological Opinion Annual Report, chapter 4.1, at http://www.scwa.ca.gov/files/docs/projects/rrifr/Final\_BO\_Report\_2011\_2012.pdf.

404 Aviation Boulevard - Santa Rosa, CA 95403-9019 • (707) 526-5370 - Fax (707) 544-6123 - www.sonomacountywater.org/

Richard Holmer – President of the Board of Directors Friends of Villa Grande July 19, 2013 Page 2 of 2

Also, tabular data of water quality can be found at http://www.scwa.ca.gov/2012-tucp/. Water quality from 2013 sampling will be posted at the Water Agency's website when available.

The Estuary Project contains an adaptive management process where new information is incorporated into the management of the Estuary. We understand a portion of the beach at Patterson Point Preserve was inundated during the June 2013 barrier beach formation/river mouth closures that resulted in water surface elevations reaching around 7 feet in elevation before self-breaching. Although there was no implementation of an outlet channel during the June closures, we will include your comments in the next review of the adaptive management plan and discussions with National Marine Fisheries Service and California Department of Fish and Wildlife.

The issue of the effects of backwatering on recreational beaches, wildlife, and other impacts were addressed and disclosed in the Estuary Project's Environmental Impact Report (EIR). A comment letter from Friends of Villa Grande, dated February 12, 2011, on the Draft EIR requested additional information on the impacts to recreation and wildlife at the Patterson Point Preserve. As disclosed in the Draft EIR, increased duration of elevated water levels may preclude use of riverfront beach areas. The Final EIR specifically acknowledges impacts to Patterson Point Preserve Area and does not change the conclusions presented in the Draft EIR. For additional information please refer to Master Response 2.4, Water Quality, in the Final EIR for a discussion regarding water quality and public health. Also, for a discussion of mitigation to avoid impacts to recreational and restoration uses refer to Master Response 2.6, Recreational Impacts, Socioeconomic Impacts and Mitigation Feasibility, in Chapter 2, Master Responses in the Final EIR. The Final EIR can be downloaded at http://www.scwa.ca.gov/estuary-eir/.

Thank you for your input on the Estuary Management Project. Please feel free to contact me at (707) 547-1903 with further questions or concerns.

Sincerely,

Jessica Martini-Lamb

**Environmental Resources Coordinator** 

Justini- Lamb

c William Hearn, National Marine Fisheries Service
Eric Larson, California Department of Fish and Wildlife
Efren Carrillo, Sonoma County Board of Supervisors
Susan Upchurch, Sonoma County Board of Supervisors
Grant Davis, Sonoma County Water Agency

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To:

California Coastal Commission North Central Coast District Office 45 Fremont Street, Suite 2000 San Francisco, CA 94105-2219

Attention:

From: richandwanda@sbcglobal.net [mailto:richandwanda@sbcglobal.net]

Sent: Monday, August 05, 2013 3:46 PM

To: Craig, Susan@Coastal

Cc: Roberto Esteves; Kellner, Laurel@Coastal

Subject: Application number 2-12-004, Sonoma County Water Agency

Dear Ms. Craig,

On behalf of Friends of Villa Grande, I am requesting that the hearing on this application be changed to a venue closer to Sonoma County. This project has severe impacts onto the recreational uses at the public access point to the Russian River at Villa Grande and these impacts have not been adequately considered in the project as proposed.

We only became aware of this hearing today and we feel it is imperative that we be able to attend and adequately present our case. Please change the hearing location on this project to a location where we can attend.

I have attached a letter that we sent to the Water Agency that explains our concerns.

Thank you for your consideration.

Richard Holmer President, Friends of Villa Grande Charles Lester, Executive Director Ruby Pap, District Supervisor Daniel Robinson

From:

Sonoma Coast Chapter of Surfrider PO Box 2280 Sebastopol, CA, 95473 sonomacoastsurfrider@comcast.net

The Surfrider Foundation is a non-profit grassroots organization dedicated to the protection and enjoyment of our world's oceans, waves and beaches. The Surfrider Foundation now maintains over 80,000 members and 90 <u>chapters</u> worldwide.

Re: Russian River Estuary Management Project Permit 2-01-033-A2

The Sonoma County Water Agency has submitted an application to the California Coastal Commission for an amended permit for management of the Russian River Estuary at Goat Rock State Beach in Jenner to continue previous flood management practices during the months of Oct. 15th-May 15<sup>th</sup> and to implement a new Adaptive Management Plan (AMP) of the Russian River Estuary during the months of May -Oct. 15<sup>th</sup>. The implementation of the proposed new lagoon outlet channel raises many concerns in the areas of public access, economic viability, water quality, public recreation, and loss of species habitat that deserve the attention of the Commission. We believe the current permit application should not be accepted as an amended permit. If however, it is accepted, we recommend that it be denied. As detailed below, the current proposal is inconsistent with numerous policies of the Coastal Act, including:

- 1. Water quality and rights (section 30231)
- 2. Marine resources (section 30230)
- 3. Environmentally sensitive habitat areas (section 30240)
- 4. Public access (section 30211)
- 5. Lower cost visitor and recreational facilities (30213)
- 6. Protection of certain water-oriented activities (30220)
- 7. Recreational boating use (30224)
- 8. Economic, commercial, and recreational importance of fishing (30234.5)
- 9. Wetlands (30233)

These numerous impacts cannot be balanced against the possible benefit to one listed species. The standard of review is the Coastal Act not the Endangered Species Act. Section 30007.5 mandates "that in carrying out the provisions of this division such conflicts be resolved in a manner which on balance is the most protective of significant coastal resources". Given the multitude of unmitigated and un-mitigatable impacts there is no way the present project can be considered to be most protective of significant coastal resources.

#### Public Access (30211)

The use of large equipment will result in partial closure of Goat Rock Beach and impacts to public access.

Each time the Russian River is breached or the proposed lagoon channel is created or maintained, SCWA operations will impact park visitor use through partial closure of Goat Rock Beach. The FEIR acknowledges that the proposed project will result in an increase in equipment use and subsequent beach closures and concludes that the impact is not significant, as the increase is not substantial. During the last 14 years SCWA has breached the estuary an average of 6.2 times/year. At least 2 of those breaches occurred during the months of January, February, November, and December (non-management period). Under the new management plan two days of initial construction would be required followed by maintenance activity (undetermined #) throughout the management period. In addition to the number of days required to implement and maintain the new outlet channel, NMFS estimates "that SCWA will need to artificially breach the lagoon using methods that do not create a perched lagoon twice per year between May 15<sup>th</sup> and October 15<sup>th</sup>.

<sup>1</sup> "There are 153 days in the management period (May 15 – October 15). The proposed project will restrict public access to Goat Rock Beach during the most heavily used time of the year.

Goat Rock Beach is also one of the easiest beaches to access along the Sonoma Coast." The frequency and duration of beach closures will significantly increase, is substantial without limitation, and the subsequent limitations to coastal access ARE significant. There are no measure included in the plan regarding procedures that might be taken during these days to alleviate the impacts to public access.

The project is unspecific about the number of beach closures and therefore the impact on public access can not be fully evaluated.

### RUSSIAN RÎVER ESTUARY OUTLET CHANNELADAPTIVE MANAGEMENT PLAN (AMP) p. 37

7.6 EXCAVATION FREQUENCY

"Creating and maintaining the outlet channel will probably employ one or two pieces of heavy machinery (e.g. excavator or bulldozer) to move sand on the beach. At the start of the management period (late spring or early summer), when configuring the outlet channel for the first time that year, conditions may require operating machinery for up to two consecutive days. The precise number of excavations would depend on uncontrollable variables such as seasonal ocean wave conditions (e.g. wave heights and lengths), river inflows, and the success of previous excavations (e.g. the success of selected channel widths and meander patterns) in forming an outlet channel that effectively maintains lagoon water surface elevations."

Therefore the number of excavations and subsequent beach closures is also uncontrollable.

From July 1, 2009 through June 30, 2010, Sonoma Coast State Beach received almost 3 million day use visitors. Goat Rock Beach is the second most popular beach on the Sonoma Coast. It is reasonable to assume that a significant portion (10%) of park visitors visit this beach. The lagoon management period corresponds with the most impacted time of year for park visitors with approximately 66.5% of visits.

#### **Public Recreation (30220, 30224)**

The project will result in significant impacts to public recreation

According to the FEIR, the proposed project would result in significant impacts to public recreation.

#### Swimming

The impacts of the Adaptive Management Plan (AMP) on swimming at Goat Rock State Beach, specifically the river side beach area have not been assessed nor analyzed. This riverside beach area is heavily used especially by families with children.

<sup>2</sup> "Higher water levels in the estuary, up to 9' in some locations, as posited in the FEIR will inundate riverside beaches for the long periods of time that the lagoon is in place – up to 5 months. The loss of river side wading/swimming opportunities at Goat Rock State Beach is a significant impact to the many families with children who use the riverside beach area at Goat Rock State Beach exclusively due to the dangers of the ocean side area and there can be no mitigation for this impact with the plan as proposed. This river side beach area is arguably the only State Beach that is safe for children to wade and swim along the entire 10 mile length of the Sonoma Coast State Beach. All other State Beaches have only ocean side beach areas. Further,

the FEIR fails to identify the existence of or assess the impacts of loss of the beaches below Rivers End used by Inn guests and residents of the houses on Burke Avenue. The inundation caused by the implementation of the outlet channel of these two prime riverside beach areas restricts access to these PUBLIC recreational sites."

#### Surfing

Surfing locations are a prime example of low cost visitor and recreational opportunities and legally protected under the California Coastal Act (Section 30213). No baseline monitoring of surf conditions has been done by the Water Agency. As stated in the SCWA's FEIR, impacts to surfing at the River Mouth as well as surfing areas south of the river including North Side Goat Rock, South Goat, Blind Beach, and the Far Cove will result with the implementation of the Estuary Management Project. These premier Sonoma County surf recreation areas depend greatly on the influx of new sand and gravel. The combination of modifying breaching practices and lower flows will remove the possibility of surfing these areas. Surfrider has determined that the mouth of the Russian River is a high quality surfing location.

### To quote SCWA's FEIR Impact 4.7.2: Eliminate or Modify an Existing Recreational Resource:

"The proposed project would likely reduce the occurrence of open channel tidal conditions conducive to surfing activities." It goes on to say "This potential impact may be inconsistent with the California Coastal Act, which protects water based recreation (Section 30220) and low costs recreational opportunities (Section 30213). The California Coastal Commission has jurisdiction and would be responsible for making a consistency determination of the project with these policies; however it is recognized that alteration of the opportunity for surfing may not be consistent.

#### ...... yet no feasible mitigation measures are identified.

Surfing in Sonoma County can only be practiced in the ocean and never at inland areas. The Surfrider organization and supporters are particularly protective of surfing locations on the Sonoma Coast, especially the high quality ones, as they are available to the public in very limited supply. Sonoma County has only 9 surfing areas. As of today, out of those 9 areas, 3 are totally closed to public access, one is partially closed (Bodega Head) and access to Salmon Creek is greatly reduced (the Dunes & Bean Avenue Parking lot closures). There are also fees for ½ of these areas. Access to surfing is already limited to Sonoma County residents.

The loss of surfing at the River Mouth for half of the year due to the inlet channel and its construction efforts will now eliminate surfing at one of the only free surfing areas on the entire Sonoma Coast. In addition-the more northern surf areas and Bodega Head are less frequently used due to level of experience required or travel time, therefore, only 2 possible areas remain for surfing –primarily-Salmon Creek & the River Mouth. The Estuary Management project therefore reduces the potential surf areas by ½ in Sonoma County during the months proposed.

Except for extreme drought years, the mouth has usually been open during the summer over the last 100 years. The SCWA Estuary Management events from 1996-2010 have averaged about 3

breechings during the May 15<sup>th</sup>-Oct. 15<sup>th</sup> time period. Therefore the mouth is open almost all of the 150 days of that period and allows for formation of sandbars which combined with swell create surf for residents to enjoy. Closing the mouth of the river and preventing the movement of sand and gravel will result in the loss of surf at the River Mouth as well as surfing at Goat Rock State Beach which also depends on this influx. The loss of over 5 months of surf at two locations which are free and accessible to the residents of Sonoma County IS a significant impact to recreation for Sonoma County residents and should be unacceptable to the State.

As to date, no baseline quantification of the frequency and quality of waves at the Russian River exists; however, estimates can be made by reviewing; weather records, breaching records, hydrograph records, seal data notes, locally produced films and photography, and consultation from surfers who frequent the Russian River mouth. These need to be analyzed and included in any review of this project.

#### Recreational Boating

Lowering the flows in the river is a requirement to enable a sustained closure of the mouth of the river. Lowering the flows creates impacts to recreational boating.

<sup>3</sup> "The Russian River has been declared a navigable river. *Hitchings v. Del Rio Woods Recreation and Parks District*, 55 Cal. App. 3d 560, 567 (1976). There simply is no line where the Estuary stops and the river begins in so far as recreation goes. In 2004 & 2007 the SWRCB approved Temporary Urgency Change Petitions on behalf of Sonoma County Water Agency to reduce minimum flows to 85 cubic feet per second at the Hacienda Bridge USGS gauging station.

The impacts from low flow on recreation are profound. At flows of less than 90 cfs as measured at Hacienda Bridge, Russian Riverkeeper received dozens of reports from boaters concerned that navigation in the free flowing portion of the lower Russian River was being impeded, resulting in more perilous conditions for boaters. As flows were reduced, areas below riffles were narrower and often boaters were swept dangerously into overhanging vegetation resulting in over-turned watercraft. Russian Riverkeeper has numerous pictures of boaters (including the Sonoma County Sheriff's Water Safety Patrol boat) having to push their boats through shallows, and other river users were forced to walk due to shallow water, resulting in serious impediments to navigation. Several canoe and kayak rental outfitters, principally Burke's Canoe Trips, and the Monte Rio Park and Recreation District, have been impacted by previous Temporary Urgency Change Petitions issued to Sonoma County Water Agency (SCWA) by the SWRCB in 2004 and 2007 that impeded the navigability of the Russian River. The owners of Burke's and River's Edge have received numerous complaints and that many regular customers did not return in successive years due to lower flows.

These realities sharply contrast with the blithe assertion in the RRBO (see pp. 264-265of Russian River Biological Opinion) that recreation would not be impacted at 70-85 cfs. Additionally, when the temperatures spike during the summer diversions from the river (for both municipal and agricultural uses), the operating margin of 10-15 cfs is depressed at the same time as record crowds go to the River to cool off and canoe. Sonoma County residents regularly canoe and kayak the Russian River and the Estuary for exercise, recreation and fishing and there have been several dozen complaints about navigation being impeded by previous temporary urgency change

petitions that reduced flows below 90 cfs in the lower Russian River." The impacts of lowering the flow in the river and failure to maintain an open estuary creates impacts to recreational boating that need to be considered in any analysis of this project.

#### Water Quality (30230, 30231)

Lowering the flows in the river and closing the estuary creates impacts to water quality that require further study. The project contains no performance standards with regards to when corrective measures should occur.

### RUSSIAN RIVER ESTUARY OUTLET CHANNELADAPTIVE MANAGEMENT PLAN (AMP) p. 43

9.3.2 Decline in Water Quality

Declines in water quality could have impacts to salmonids rearing in the estuary, other species which reside in the estuary and the public. Potential water quality concerns include, but are not limited to:

- Dissolved oxygen conditions becoming dangerously low to fish and other species;
- Elevated salinity levels in domestic water wells; and
- Elevated bacterial levels.

#### FEIR 2-14 Nutrients and Bacteria

Potential significant and unavoidable impacts to water quality associated with nutrient and bacteria levels are acknowledged and analyzed in Draft EIR Section 4.3, Water Quality. As noted on Draft EIR pages 4.3-7 and 4.3-12, there are currently no specific limits on nutrient and bacteria levels for estuarine systems, only freshwater. As discussed in the Draft EIR (page 4.3-24), the precise response of the Estuary to the Estuary Management Project cannot be predicted with certainty. As discussed in Draft EIR Section 4.3, it is anticipated that nutrient and bacteria conditions would remain within the range of those experienced within the Estuary over the past 15 years, but that the duration of those conditions would likely increase as a result of the project. Therefore, based upon the best available information, this EIR concludes that the proposed project would have the potential to result in significant and unavoidable impacts to water quality related to bacterial and nutrient levels in the Estuary.

The low flows and perched lagoon will create significant impacts to water quality yet there has been no data available to the public on bacteria, nutrients, and pathogens for the Lower Russian River and Russian River Estuary. Current County of Sonoma Department of Health data only tests and reports to the public the area of the Russian River from Alexander Valley to Monte Rio Beach for total coliform ,escherichia coli, and enterococcus.

Water quality monitoring in the Adaptive Management Plan should require that this testing occur in the lower river and estuary, a baseline established, and data made available to the public before the water agency's experimental implementation of the perched lagoon and low flows is allowed. We are concerned that extended periods of low flow or stagnant lagoon conditions will result in increased bacteria levels with associated human health impacts for swimmers in the lagoon/river beach areas.

The Estuary Project and low flow (permanent changes to Decision 110) must be reviewed by California Coastal Commission together in order to fully understand the impacts.

Lowered flows are necessary for successful sustained mouth closure but the analysis provided does not deal with this issue because the lowering of the river is not included in the project considered in the EIR and therefore no analysis of the impacts is available to the Commission. The Commission cannot determine the extent of the impacts to habitat, water quality and other coastal resources without such analysis.

<sup>4</sup> "The California Environmental Quality Act (CEQA) requires that the whole of a project be considered in one EIR. Bifurcation of the Estuary Management Plan and the Fish Flow Project avoids full examination of the environmental impacts that will result from the Estuary Project. Many, many people provided comments on this issue, as it is one of the most serious lapses in the FEIR, and one noted by almost every commenter. The FEIR gives numerous justifications in their Master Response (2.1) for separating these two projects. For instance, they insist that the BO prioritizes the Estuary Project before D1610 revisions because it will take much longer to process changes to D1610. What they don't mention however, is that the Temporary Urgency Change Petition process, which requires the same lowered Hacienda flows called for in the BO and the Fish Flow Project, mitigates for the delay. Conveniently, the TUCP does not require CEQA review. Furthermore, the BO was never subjected to environmental review either. An overarching criticism of the current analysis is that it is not comprehensive as to assessing the impacts of modifying Decision 1610 and the AMP." Segmenting is illegal under CEQA and this bifurcating of the analysis of the two projects, which are intrinsically linked, is flawed and does not provide the CCC with the information needed to fully analyze the project and its impacts.

#### Impacts to Environmentally Sensitive Habitat Areas (ESHA) (30240)

The project has numerous impacts to species and their habitats.

#### Species Habitat Considerations

It is clear that with SCWA's efforts to promote conditions advantageous to one threatened species; they will impact, in some cases severely, other species. The Biological Opinion aimed at one listed species does not consider the impacts to other species, including other sensitive species. Even if we agreed with the BO, and we do not, the ESA (Endangered Species Act) is not the basis for approval of a project under the Coastal Act. To evaluate the impact of the AMP on ESHA and the wildlife it supports it is necessary to determine if it will have a substantial adverse effect, either directly or through habitat modifications, on any species identified, but not limited to candidates for listing, sensitive, or special-status species in local or regional plans, policies, or regulations or by the CDFG, USFWS, or NMFS. In this case it is clear that the project will cause significant disruption to the habitat values of ESHA and the numerous species that depend on it.

#### Pinnapeds, Specifically Harbor Seals

Impacts on the Harbor Seal colony are inadequately assessed and the CCC needs to take a closer look at this issue. The conclusion that the impacts are reduced to less than significant by virtue of the Incidental Harassment Authorization (IHA) permit and its protocols is disputed. The Jenner

Harbor Seal colony has been established on Goat Rock Beach at the mouth of the Russian River since 1974 - 37 years. Of the 21+ Sonoma Coast Harbor Seal haul outs that constitute the Sonoma County Harbor Seal Census, the Jenner/Goat Rock haul out is the most significant. The Jenner colony is the largest and most significant Harbor Seal colony in Sonoma County and from Drakes Beach in Marin County to the mouth of the Eel River in Mendocino County.

Harbor Seals are colonial and have a large degree of site fidelity. Being diurnal, they haul out during the day. The haul out period is critical for metabolic processes (e.g. re-oxygenation) that allow them to dive in cold ocean waters when they feed at night, for bonding with pups, nursing pups and generally resting in a colony where there is safety in numbers. Harbor Seals are easily disturbed. Disturbances, whether natural by birds flushing or man-induced harassment whatever the source – boats, beach walkers approaching too close, mechanical equipment associated with the project - interfere with the needed biological processes, rest and restoration. The FEIR documents the short time frame after a harassment incident that the Harbor Seals will return to the haul out site. However, what has been observed over time is short term incidences of harassment for short periods of time. At no time over the years that breaching activities have been implemented has the river mouth been closed for more than one month maximum.

The protocols of the IHA permit are intended to mitigate the impacts of harassment associated with the mechanical breaching of the river and the construction associated with creating the lagoon. These protocols CAN NOT and DO NOT mitigate the impacts of 1) the vast increase in the number of times/year the colony can/will be disrupted by these actions nor 2) the up to 5 month closure of the river mouth. Long term, chronic disturbances result in 1) reduced use of a site, 2) a shift to nocturnal rather than diurnal feeding, 3) reduced pup production and 4) site abandonment.

There is a lack of assessment of the effect on harbor seal colony from the multiple times the colony will be harassed and disrupted in any given year, year after year of the project life (undefined as to number of incidents or length anywhere in the FEIR document or AMP).

The Sonoma County Water Agency should also be required to do a full assessment of the long term impacts of a 5 month closed mouth on the seal colony. Creating a closed mouth for up to 5 months and the associated long barrier beach which will result in multiple ongoing disturbances/harassment associated with beach walkers approaching the colony – ignoring the signs warning them to maintain the statutory distance -when no Seal Watch volunteers are present to interpret and maintain the statutory distance is "having a substantial adverse effect, either directly or through habitat modifications" The protocols of the IHA Permit, intended for individual incidents of construction equipment and associated staff presence on the beach, cannot be used as the basis for declaring these substantial adverse effects which were not assessed as less than significant. Moreover, the harassment protocols for short term impacts cannot be used as mitigating the long term potential for loss of the colony associated with ongoing, continual, chronic disturbance/harassment of the colony and the likely resulting abandonment of the site.

A full cumulative assessment of the harassment needs to be required by the CCC. Additionally, there are no benchmarks to determine when review of the impacts should occur and no

performance standards in the AMP with regard to when, if or what should happen, if the impacts are greater than those contemplated.

<u>Dungeness Crab (section 30234.5)</u>
<sup>5</sup> "The Russian River Estuary is an important nursery area for juvenile Dungeness crab, which is an economically important species for the local fishing fleets. Several studies have documented the fact that juvenile Dungeness crab that are able to access coastal estuaries have accelerated growth rates due to warmer temperatures and better foraging opportunities (Stevens, Armstrong, 1984). According to studies completed by the University of Washington's School of Aquatic and Fisheries Science (Stevens, Armstrong, 1984), adverse environmental effects on juvenile Dungeness crab nurseries directly impact adult populations. In the Russian River, Dungeness crab use of the estuary is well documented by SCWA seine netting performed in 2004, although no juveniles were trapped in 2005 this was also observed in the San Francisco Bay in 2005 and is likely due to ocean conditions.

The availability of the Russian River estuary to Dungeness crab could be a significant factor in their abundance on the Sonoma Coast (Pauley et al, 1989), but no studies have been conducted to determine the contribution Russian River estuary juvenile Dungeness make towards the total adult abundance in coastal waters."

The CCC should require the analysis of the impact of the project on this species, including requiring studies to determine the importance of the estuary to the Dungeness Crab population. Additionally, there should again be benchmarks to determine when additional reviews of the crab population should occur and specific remedial actions that should be taken if significant impacts occur.

#### Birds

<sup>6</sup> "Impacts on birds are inadequately assessed. The beach at Goat Rock State Beach is a colonial site. Not only does it provide a resting place for Harbor Seals, it provides a resting place for birds. At any one time, hundreds of gulls, terns, Brown Pelicans and/or cormorants rest on this beach. This is a community haul out! There are few places like this along the coast – large sandy beach area with access to both the river and the ocean. As such it is a very important site for birds to rest and preen, giving them access to the river and to the ocean to swim and to feed. Gulls nest on Haystack Rock, cormorants congregate on it and on the smaller rocks disbursed in the river. As with Harbor Seals, birds are easily disturbed. The major disturbance for birds is beach walkers whose approach results in flushing the birds. There has been no assessment made of the impacts of prolonged closure of the river mouth on the flushing of birds which rest on the beach as a necessary part of their metabolic processes. Regardless of whether flushing the birds is considered a take under the Federal Migratory Bird Treaty Act, the fact that both equipment operation and beach alteration will increase flushing is an impact of the project on species that inhabit/use the beach and are a part of the ecosystem of the estuary." and therefore inconsistent with 30240

### Impacts of invasive species: Ludwigia

<sup>7</sup> "In recent years the invasive non-native plant Ludwigia Hexapetla has rapidly colonized the lower Russian River resulting in lost beach and river access and unknown impacts to aquatic organisms in particular endangered Coho Salmon and Steelhead Trout. According to invasive plant experts at UC Davis and the Laguna Foundation one of the limiting factors for Ludwigia growth is depth, velocity and amount of shade. The flow reductions mandated by the RRBO could encourage the spread of ludwigia by slowing the river velocity and reducing the depth. In addition, the currently saline Russian River estuary if turned to a freshwater lagoon as envisioned in the RRBO, could encourage the spread of ludwigia to that portion of the river. Increases in plant growth in a freshwater system result in conditions that do not favor aquatic animals especially cold-water fish like Coho Salmon and Steelhead Trout." The project does not contain remedial actions that should be mandated if an increase in the amount of Ludwigia Hexapetla occurs.

#### Section 30233

The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects.

The diking and filling contemplated in this project does not fall under one of the 7 allowable uses of Section 30233. Even if it were an allowable use it is not the least damaging feasible alternative required under Section 30233.

# Consideration of Alternatives and Economic Viability RUSSIAN RIVER ESTUARY OUTLET CHANNEL ADAPTIVE MANAGEMENT PLAN (AMP) p. 38

"Actual feasibility with regards to the full range of dynamic conditions has not been determined. Risks associated with outlet channel failure have not been quantified. In addition to the channel's performance criteria, there are also water quality and ecological performance criteria for the perched lagoon. These additional criteria have not been evaluated as part of the outlet channel management plan."

There has been no economic analysis for the project or any possible alternatives.

The economic viability of the SCWA's proposed project is questionable. No cost analysis for the Estuary Management Project has been made available to the public. The Water Agency steadfastly claims that they must proceed with their project as designed because the Russian River Biological Opinion requires it. This is not true. The required outcome of improved fish habitat could be accomplished by other methods not chosen by the Water Agency, and cost comparisons should be a major consideration for the final project design.

No analysis of feasible alternatives resulting in un-necessary expense and environmental impacts. According to SCWA, the Estuary Management Project has two fundamental objectives - enhance juvenile salmonid habitat by maintaining a seasonal freshwater lagoon and alleviate potential flooding of properties along the estuary as a result of higher estuary water levels. The former is required by the Russian River Biological Opinion (RRBO) but the later is not. Although the

RRBO states that the goal is to benefit fish, the estuary is still controlled by flood control levels that have nothing to do with improving fishery habitat, so the goal is already compromised. This places non-fish centric constraints on any effort to improve estuarine conditions.

Natural estuary breaching would provide a deeper lagoon of freshwater for fish habitat. It should be noted that review of estuarine science and the RRBO and RRBA (Russian River Biological Assessment) suggests that either an always open or always closed estuary could produce the same benefit to listed fish species. If the low-lying structures were elevated or relocated, an always open sandbar regime could produce a benefit to the fish without the negative impacts to the Lower River community. The extremely dynamic nature of coastal areas such as the sandbar at the mouth of the Russian River have proven to be difficult to manage, as evidenced by past mechanical breaching events that were followed by wave action closing the sandbar within days. This shows that any attempt to control or manage the sandbar to achieve some desired condition is problematic and fraught with risk of failure to obtain desired conditions.

The Water Agency made an initial project design decision to continue the historical estuary management practice of artificial breaching for flood protection. This concept remained in the project throughout the vetting process of environmental impact review without any cost analysis of alternate flood prevention methods. It is fact that only a few properties have structures threatened by water levels if the estuary is allowed to breach naturally. SCWA offers no cost comparison of natural breaching and requiring the small number of vulnerable properties to lift structures above the flood zone vs. using heavy machinery every week between May and October for 15 years to artificially maintain a flat outlet channel in the sand.

It is noteworthy that most other property owners along the Russian River are required to follow FEMA guidelines and remove structures from the flood plain by means of lifting or relocation (as has been done for almost 150 homes in the Lower Russian River due to repetitive flooding). SCWA refuses to explain why this tactic was ignored or eliminated from their proposed project even though it appears to have cost advantages. The SCWA has flood control jurisdiction and could mandate the elevation of low lying structures via its flood control authority and reduce the impacts to the Lower River community. There is no explanation as to why this has not been considered.

SCWA's own environmental review determined that the estuary's water quality might deteriorate as a result of their proposed project. The term "adaptive management" is used by the Water Agency as a euphemism for "figure it out as they go" when desired outcomes are not realized. If water quality issues plague the fish habitat and "adaptive management" begins, the cost of their estuary management plan is completely unknown. This project, as designed, is fiscally irresponsible and should be called an expensive experiment.

The Estuary Management Project's EIR identified many "significant and unavoidable" impacts for which there are no "feasible" mitigation measures. At the same time, no back-up information with cost analysis is offered to support the claims that mitigation measures are unfeasible.

#### In closing, it must be stated that

This project is inconsistent with the Chapter 3 policies of the Coastal Act and must be denied. It is unacceptable to take and alter a public resource — Goat Rock State Beach — a part of the commons owned by the citizens of California, to alter a State owned Beach, interfere with multiple State owned and state protected resources, impact numerous species and their habitats, and alter the river and its recreational uses as well as access to the river for so many users who have few safe alternatives to enjoy the coast side environment.

This is a highly expensive and prolonged experiment with an important coastal and marine resource. It is an experiment that cannot be justified. Many of the impacts are permanent and the Coastal Commission must consider what condition the Estuary will be in at the end of the Adaptive Management period. Given the numerous permanent impacts and uncertain consequences of other aspects of this experiment it is fair to assume that it will be far worse then it is today, possibly making restoration impossible.

#### References

<sup>&</sup>lt;sup>1</sup> Liz Burko, Russian River District Superintendent State Parks Comments to SCWA in DEIR

<sup>&</sup>lt;sup>2</sup> Norma Jellison, -comments on the Russian River Estuary Management Plan Draft EIR

<sup>&</sup>lt;sup>3</sup> Don McEnhill, Executive Director, Russian Riverkepers –protest and petition to State of California State Water Resources Control Board relative to a petition requesting modification to Water Rights Permits submitted by the Sonoma County Water Agency

<sup>&</sup>lt;sup>4</sup> Brenda Adleman, Russian River Water Protection Council Letter to Sonoma County Board of Supervisors

<sup>&</sup>lt;sup>5</sup> Don McEnhill, Executive Director, Russian Riverkepers –protest and petition to State of California State Water Resources Control Board relative to a petition requesting modification to Water Rights Permits submitted by the Sonoma County Water Agency

<sup>&</sup>lt;sup>6</sup> Norma Jellison, -comments on the Russian River Estuary Management Plan Draft EIR

<sup>&</sup>lt;sup>7</sup> Don McEnhill, Executive Director, Russian Riverkepers --protest and petition to State of California State Water Resources Control Board relative to a petition requesting modification to Water Rights Permits submitted by the Sonoma County Water Agency

Th 176

Chair Shallenberger and Commissioners -

I write to you as a coastal resident, advocate and long time Seal Watch volunteer at the Harbor Seal colony at the mouth of the Russian River.

I focus my comments on several vital aspects of the Coastal Act impacted by this CDP application by the Sonoma County Water Agency (SCWA), w/ selected applicable, tho' by no means all inclusive, sections of the Act cited.

I believe it is premature to allow this project to proceed for 3 Yrs + 3 Yr renewal. NO EXTENSION should be allowed until initial impacts of the implementation of the project are identified and assessed - based on practical observed & monitored results AND critical information/impacts associated with the lowered river flows and the national marine sanctuary expansion are available from the respective pending EIR and the EIS to factor into the analysis.

#### Sec 30210 -

I request a <u>1 Yr</u> permit in keeping with 1Yr permits given to SCWA by State Parks - in furtherance of their jurisdiction under Article X of CA Constitution. The Estuary Management Project (EMP) is to be constructed on State Park land - Goat Rock State Beach - where a majority of the impacts will be borne.

A 1 Yr permit is also consistent with the 4 separate 1 Yr Incidental Harassment Authorizations (IHA) given by NMFS, associated with the Harbor Seal Colony.

Both public resource agencies, one State and one Federal, obviously considered the merits of identifying the impacts of the project critical before giving the SCWA approval to operate the project for any longer duration.

Sec 30210/30211/30220et seq - Despite assertions that impacts to Public Access are minimal and will be managed by applicant, the EMP significantly impairs Public Access. The Biological Opionion/SCWA in carrying out the EMP, treats the Public's land and waters as an experiment/an experimental construction site. There is no proof that this outlet channel will succeed. In fact, attempts to implement in 2011 failed, due to the forces of nature.

Prior breaching activities, done solely for flood control, took place <u>for a couple of hours on 1 day</u>. References to "no difference from past activities; no impacts associated with prior activities translates to current proposal" are false.

By implementing the EMP, Public Access will be eliminated/impaired/reduced for many consecutive days/weeks/months/years as this experiment is conducted. Construction equipment carving the outlet channel, installing wells, weekly well monitoring, equipment removal, fencing off sections of the beach - all will reduce or impair Public Access to large portions of the beach/river/ocean at those times.

Up to 2,000 cu yds of sand will be moved at each of 18 outlet construction events!

Clearly this is not the same as past practices of merely breaching - opening up - the sandbar one day.

Why treat a Public Beach as a construction site and suggest that a Public Access

Management Plan could mitigate? Public Access should not have to be managed to avoid negative impacts to State Park/Beach visitors. Public Access should not be compromised in the first place in order to carry out an experiment. NMFS admits this is an experiment - the current term is "adaptive management."

Impacts to Public Recreation - families with children use the river side of Goat Rock State Beach extensively as a safer environment (than the ocean) for wading and swimming and picnicking. Construction & monitoring activities will reduce Public Access. Public Access should not be compromised. A Public Access Management Plan should not be necessary to manage Public Access to a Public Beach!

Impacts to Public Access - surfing - could be impaired by the sedimentation released when the outlet lagoon is eliminated each year by winter water levels that will naturally breach the sandbar or prior if river levels threaten flooding of several buildings. Staff dismissal that potential impacts are minimal as this is "just a local surfing spot" misses the fact that all surfing spots are local. Just because this is not Maverick's doesn't make it any less important a surfing locale.

**Sec 30230/31/30240** - Impacts to sensitive species are minimized by comparing past activities and lack of impacts to proposed actions.

The SCWA has received four **1 Yr** Incidental Harassment Authorizations (2010, 2011, 2012, 2013) from NMFS for incidental takes of marine mammals, primarily Harbor Seals of the colony at the mouth of the Russian River on the outlet channel be ach & adjacent to the jetty at Goat Rock State Beach.

The 30+-year old Harbor Seal colony are protected species under the Marine Mammal Protection Act. Regardless of IHA mitigations required, these sensitive species at the EMP construction site are potentially at risk of harassment from proposed construction and maintenance activities of the EMP and the invasive geotechnical activities of the associated jetty study.

Previous breaching activities are in no way similar to proposed EMP activities.

Prior sandbar breaching took place during a couple of hours on 1 day; in some years, e.g. this year and last, not at all. EMP activities proposed would take place over a number of consecutive days over a number of weeks/months/years.

Thus all references to "no difference from past activities; no impacts associated with prior activities translates to current proposal" are false.

The unknown impacts to this Harbor Seal colony are the reason that the IHAs have been issued for only 1 Yr in duration and not the potential longer term IHA that might be issued once impacts of the construction and maintenance of the outlet channel/EMP are monitored and known.

Impacts to other sensitive estuary species e.g. the estuary is a Dungeness crab nursery and home to many other species of fish - are unstudied & unknown.

Water Quality impacts: Influences/impacts of Russian River lowered flows remain to be assessed in an EIR to be published in 2014. Impacts to aquatic species/marine species; recreational users associated w/concentrations of contaminants in water contained by the sandbar in the lagoon are unknown. No study plan or monitoring for these specific

WQ impacts to body contact sports or to the ocean environment is proposed for this CDP.

Lowering the flows in the river is a requirement to enable a sustained closure of the mouth of the river. Lowering the flows creates impacts to recreational boating. Lowering the flows in the river will impact water quality. Water quality impacts of lowered flows in the estuary (elevated bacterial levels; nutrients; dissolved oxygen conditions) will surely impact wading and swimming on the river side of the State Beach and at nearby upstream beaches, as well as kayaking, canoeing, and the many waterfowl, river and marine mammals and fish that live in and use the estuary. As an oddity, the BO acknowledges that some die off/take of salmonids may be associated with the perched lagoon of the EMP.

The pending EIS for National Marine Sanctuary (S) expansion adjacent to Russian River mouth will provide critical information about the ocean environment, including WQ. Sanctuary jurisdiction is over all submerged lands, water & associated marine resources therein from the MHW line; alteration of stream & river drainage & surface water runoff into The Sanctuary (S).

Impacts from "first flush", either emergency (based on WQ or flood danger) planned breaches, or natural breaches from winter storm river water levels or ocean conditions, releasing lagoon waters into nearshore ocean waters are unstudied and unknown, as are released sediment impacts.

When the retained waters behind the sandbar/outlet channel are released into the ocean environment, the concentrated contaminants and sediment built up behind the sandbar for sustained periods, <u>up to 5 months</u>, will have potentially significant impacts to the nearshore beaches and marine life. These all could be significant impacts, yet remain unknown; unstudied and are not addressed in any proposed monitoring.

Again, it is simply premature to allow this project to proceed for 3 Yrs + 3 Yr renewal. NO EXTENSION should be allowed until impacts of the implementation of the project are identified and assessed - based on practical observed & monitored results AND critical information/impacts associated with the lowered river flows and the marine sanctuary expansion are available from the respective pending EIR and the EIS to factor into the analysis.

Thank you for your consideration of my comments

Norma Jellison PO Box 1636 Bodega Bay 94923



Th176

As a residents of the lower Russian River area (specifically we live near Goat Rock), I am particular concerned about the impacts of Lowered River Flow on our area. We are entirely reliant on a well for our domestic water. One of the many concerns about the Estuary Outlet Channel Adaptive Management Plan is DECLINE IN WATER QUALITY due to conditions listed below. Below is a brief except that I would like to bring to your attention:

#### RUSSIAN RIVER ESTUARY OUTLET CHANNEL ADAPTIVE MANAGEMENT PLAN (AMP) p. 43

9.3.2 Decline in Water Quality

Declines in water quality could have impacts to salmonids rearing in the estuary, other specieswhich reside in the estuary and the public. Potential water quality concerns include, but are notlimited to:

- Dissolved oxygen conditions becoming dangerously low to fish and other species;
- Elevated salinity levels in domestic water wells; and
- · Elevated bacterial levels.

#### FEIR 2-14 Nutrients and Bacteria

Potential significant and unavoidable impacts to water quality associated with nutrient and bacteria levels are acknowledged and analyzed in Draft EIR Section 4.3, Water Quality. As noted on Draft EIR pages 4.3-7 and 4.3-12, there are currently no specific limits on nutrient and bacteria levels for estuarine systems, only freshwater. As discussed in the Draft EIR (page 4.3-24), the precise response of the Estuary to the Estuary Management Project cannot be predicted with certainty. As discussed in Draft EIR Section 4.3, it is anticipated that nutrient and bacteria conditions would remain within the range of those experienced within the Estuary over the past 15 years, but that the duration of those conditions would likely increase as a result of the project. Therefore, based upon the best available information, this EIR concludes that the proposed project would have the potential to result in significant and unavoidable impacts to water quality related to bacterial and nutrient levels in the Estuary.

WE STRONGLY URGE YOU TO DENY THE REQUEST OF SONOMA COUNTY WATER AGENCY (SCWA) FOR A 3-YEAR PERMIT.

AS A COMPROMISE WE URGE YOU TO JOIN STATE PARKS IN ISSUING ONLY A ONE-YEAR PERMIT.

THE EIR FOR IMPACT ON WATER QUALITY MUST BE COMPLETED BEFORE ANY LONGER TERM DECISIONS ARE MADE ABOUT THIS PROJECT.

Sincerely,

CAROL SKLENICKA RICHARD RYAN

P. O. Box 21 Duncans Mills CA 95430-0021

Th/7h

From: Cea Higgins [mailto:sonomacoastsurfrider@comcast.net]

Sent: Wednesday, October 31, 2012 11:05 PM

To: Kellner, Laurel@Coastal

**Subject:** Re: SCWA Russian River Jetty Study

Hello Laurel

Thank you for the opportunity to speak today about the proposed waiver for the Russian River Jetty Study. We sincerely appreciate that some modifications were made but continue to have concerns and are not comfortable that the study is moving forward as a waiver. To summarize the issues that we discussed today

- 1. Sonoma Coast Surfrider is one of many groups who have concerns regarding the activities that will be included in the study and a waiver denies all groups involved the opportunity to review the scope of the study and make public comment.
- 2. There is no opportunity to review the language in the waiver to be assured that other concerns are addressed such as accounting for the dynamic nature of the opening of the rivermouth and the accompanying shift in the harbor seal colony hub into the locations of the well sites and seismic testing areas.
- 3. We recognize the value of conducting the study as part of evaluating strategies for estuary management but Sonoma Coast Surfrider continues to advocate for a CDP which will not obstruct the opportunity to conduct the jetty study but will improve the possibilities to better understand the relationship between the Jetty Study and the Estuary Management Project and promote the best possible outcome for sensitive species in the area and the least impact to public access and recreation.

Best regards Cea

---- Original Message -----From: Kellner, Laurel@Coastal

To: sonomacoastsurfrider@comcast.net

Cc: Cavalieri, Madeline@Coastal

Sent: Tuesday, October 30, 2012 11:56 AM Subject: SCWA Russian River Jetty Study

Hi Cea-

We spoke to SCWA about your concerns with the timeframe of the work and the IHA and they accommodated both of your suggested modifications.

- 1) The SCWA indicated that they will extend the period in which they will not do any placement of instruments from April - June to April - July.
- 2) The SCWA will incorporate any new direction and operate under any new guidelines from the new IHA that may be released in 2013

Lastly, the SCWA clarified that the placement of the instruments and the seismic work cannot occur simultaneously, thus there will be an approximate ten-day (no longer than two-weeks) period in which these activities will occur, subject to the protections for sensitive species, public access, water quality and other coastal resources.

Please contact me with any feedback you may have at this time as we have a very short deadline. We are looking to proceed on this waiver for November.

Best-

Laurel

Laurel Kellner Coastal Analyst California Coastal Commission 45 Fremont Street, Suite 2000 San Francisco, CA 94105 (415) 904-5260 Phone (415) 904-5400 Fax laurel.kellner@coastal.ca.gov No virus found in this message.

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Version: 2012.0.2221 / Virus Database: 2441/5365

Th/76

From: sonomacoastsurfrider@comcast.net [mailto:sonomacoastsurfrider@comcast.net]

Sent: Thursday, September 27, 2012 12:03 PM

To: Kellner, Laurel@Coastal

Subject: Re: EMP date of completion

My only window is between 4:30-5. Tomorrow I have from 1-2:30

Sent via BlackBerry by AT&T

From: "Kellner, Laurel@Coastal" < Laurel.Kellner@coastal.ca.gov>

**Date:** Thu, 27 Sep 2012 18:54:56 +0000

To: 'Cea Higgins' < sonomacoastsurfrider@comcast.net >

Subject: RE: EMP date of completion

Hi Cea-

Thank you for your follow-up.

We typically do not send letters to the applicant when an application is considered complete.

We filed the Russian River EMP application as complete on July 6, 2012.

We have more information about the Jetty Study. I would like to speak with you today about this.

415-904-5260.

Best-Laurel

**From:** Cea Higgins [mailto:sonomacoastsurfrider@comcast.net]

Sent: Thursday, September 27, 2012 11:31 AM

To: Kellner, Laurel@Coastal
Cc: Cavalieri, Madeline@Coastal
Subject: re: EMP date of completion

Hello Laurel

Thank you for this information regarding the date of completion of the Jetty Studies.

Could you also please provide the date of completion for the Russian River EMP.

I am presuming, according to CCC regulations Article 5 §13056, that a letter was sent by you to the applicant regarding completion of the prior requests made by staff, Daniel Robinson on February 23, 2012 and notifying applicant that the application was complete. Here is the text of that request from Daniel Robinson.

Grant Davis Sonoma County Water Agency 404 Aviation Boulevard Santa Rosa, CA 95403

### Subject: Coastal Development Permit (CDP) Application No. 2-12-004 for the Russian River Estuary Management Plan

Dear Mr. Davis:

Thank you for submitting additional information in response to our application status letter dated October, 24, 2011 regarding the Sonoma County Water Agency's (SCWA) application proposing certain management activities at the mouth of the Russian River near Jenner (CDP 2-12-004). We have reviewed the CDP file along with the materials that you have submitted to date and are still in need of additional information to adequately analyze the proposed project for Coastal Act conformance. We are unable to file this application until the following is submitted:

1.

Definition of Flood Problem. Thank you for providing the additional information about the structures and properties that would be at risk during flooding. However, it is still not clear exactly which structures would be in danger at various flood elevations, or the degree of danger that such flooding would pose to each of the structures. Please provide a clear graphic that depicts, in site plan view and cross-sections, as appropriate, all at-risk structures in relation to base and expected flood elevations.

Alternatives. Thank you for providing the description of the alternatives to the proposed project that SCWA has considered, including as outlined in the Draft EIR and FEIR. As part of the requested information, the Coastal Commission requires additional detail over the same range of evaluation factors (including all expected costs and impacts to purchasing easements, raising structures, and general implementation of the alternatives, as well as degree of resource protection benefit provided) to allow a clearer feasibility comparison of the alternatives described.

Upstream Flows. Thank you for providing additional information about potential reduced instream flows. However, it is still unclear how the "Fish Flow Project" could improve or enhance various salmonid life stages in the Russian River to the point where it would become unnecessary to artificially manage the Estuary and Lagoon. Please provide any information on how the estuary management project proposes to adaptively manage its project based on the soon-forthcoming EIR and subsequent potential results of the Fish Flow Project, once implemented. In other words, how would the SCWA alter its flood-protection lagoon management activities to address expected changed circumstances that result from the Fish Flow Project, if at all?

**State Lands Commission.** It is our understanding that the State Lands Commission has recently approved a three-year lease for the proposed estuary management project. Please submit a copy of the SLC staff report and lease.

Grant Davis Sonoma County Water Agency Russian River Estuary Management Plan February 23, 2012 Page 2

Aside from the above filing requirements, please submit two copies of the 2011-2012 Russian River Biological Opinion Status and Data Report (available in spring 2012), the renewed IHA when and if approved by NMFS, and two copies of the jetty study, as required by the Russian River Biological Opinion, when completed.

We will hold your application for three months from today's date (i.e., until May 23rd, 2012) pending receipt of material items #1-4 above. After all of the above-listed materials have been received, your client's application will again be reviewed and will be filed if all is in order (Government Code Section 65943(a)). Please submit all of the requested materials at the same time. Please note that there may be additional materials necessary for filing purposes depending upon the nature of the information provided pursuant to the above-listed materials. If all of the above-listed materials are not received within three months, the application will be considered withdrawn and will be returned to you. This submittal deadline may be extended for good cause if such request is made prior to May 23rd, 2012.

Could you please verify the date you sent a letter to the SCWA, determining that the application was complete and if no such letter was sent, the date staff received all the materials listed above as to deem the EMP application complete.

I realize and appreciate that you have suggested that I review the file in person at the San Francisco office. Please understand that this involves missing work and pay for me so I have asked you in repeated inquiries since April of 2012 for a confirmation that you received the additionally requested materials from the applicant before traveling to San Francisco. This seems a reasonable request especially in the light that you are making the determination that the application is complete-it would seem that this would involve the knowledge that the necessary documents to make that determination were submitted and reviewed. I look forward to your follow-up call.

Thank you Cea Higgins volunteer coordinator Sonoma Coast Chapter of Surfrider



From: NORMA JELLISON [mailto:normalj@monitor.net]

Sent: Monday, September 24, 2012 9:02 AM

To: Cavalieri, Madeline@Coastal; Kellner, Laurel@Coastal

**Cc:** Cea; Lester, Charles@Coastal **Subject:** Re: Russian River Jetty Study

Hi Laurel - I am resending this email sent after our call last Monday hoping for the promised reply regarding last sentence below.

We are also wondering about a date and time for the follow up call you and Madeline proposed.

Thanks, Norma

-----Original Message-----

From: NORMA JELLISON
Date: 9/17/2012 9:13:04 PM

To: madeline.cavalieri@coastal.ca.gov; laurel.kellner@coastal.ca.gov

Cc: Cea

Subject: Russian River Jetty Study

Re:SCWA CDP Waiver Jetty Study CDP 2-12-009-W

Madeline and Laurel -

Thank you for today's opportunity to discuss our concerns with the proposed Waiver of a CDP for the Jetty Study.

It is clear that we believe there are a number of questions and missing details regarding what is being proposed by the applicant with regards to methodologies, duration, location, and impacts.

As we stated, we do not believe there is sufficient knowledge about the many outstanding issues to have allowed staff to recommend a CDP Waiver in the first instance.

We further do not believe it possible for the Sonoma County Water Agency to adequately respond to the outstanding issues timely to 1) allow this matter to continue to be recommended as a CDP Waiver and 2) to move this matter forward to the October 2012 Commission meeting.

We look forward to follow up emails regarding dates that both the Jetty Study and Estuary Management Project application were deemed complete by staff and the

suggested status phone call next week.

Cea Higgins & Norma Jellison Sonoma Coast Surfrider

Th176

**From:** NORMA JELLISON [mailto:normalj@sonic.net] **Sent:** Tuesday, September 04, 2012 10:53 AM

To: mkshallenberger@qmail.com

Cc: Lester, Charles@Coastal; Kellner, Laurel@Coastal

Subject: CDP Waiver 2-12-009-W Applicant Sonoma County Water Agency

Commissioner and Chair Shallenberger:

I object to the proposed Coastal Development Permit Waiver 2-12-009-W for Sonoma County Water Agency (SCWA) to conduct a geophysical study of the existing rock and concrete jetty at the Russian River Mouth being imbedded in a Deputy Director's report.

It was my understanding that this waiver was to be taken up in the Deputy Director's Report (as was intended for the August Santa Cruz meeting) at the September meeting in Caspar.

I am now told it is "likely" not to be taken up in Caspar, but deferred to the October meeting.

I object to this CDP Waiver being imbedded in a Deputy Director's Report, favoring the matter being brought out in a manner that allows full public participation as guaranteed by the Coastal Act.. Imbedding a Waiver in a Deputy Director's Report does not provide an adequate opportunity for interested parties/stakeholders, of which I am only one, to participate and provide comment.

I challenge the Waiver. This Jetty Study should be processed as a CDP. Further, the Jetty Study should not be segmented as a CDP Waiver from the larger major pending permit CDP 2-12-004. The Estuary Management Project CDP 2-12-004 is pending processing by the Commission. This is piecemeal planning and doe not comport with the intent of the Coastal Act.

### I object to an inaccurate basis for the CDP Waiver "that no sensitive animal species exist in the area."

The SCWA has received 3 Incidental Harassment Authorizations from National Marine Fisheries Service, NOAA, for incidental takes of marine mammals, particularly Harbor Seals of the colony at this location on the beach adjacent to the jetty at and on Goat Rock State Beach at the mouth of the Russian River in Jenner, Sonoma County.

The Harbor Seals at this location are protected under the Marine Mammal Protection Act. Hence the need for the Incidental Harassment Authorization to conduct the Estuary Management Project activities, including the jetty studies, the latter of which involve invasive geotechnical activities. Under separate cover to the staff and Commission last month, I provided photos showing the Harbor Seal colony and the haul out location immediately adjacent to and <u>in the area</u> of the jetty. In addition to the Harbor Seal colony, Goat Rock Beach provides a resting place for large numbers of coastal birds: Brown Pelicans, numerous types of Gulls, Terns and Cormorants - all of which are sensitive to and

would be disrupted by the proposed activities on the beach.

At a minimum, I ask that the Commission postpone consideration of this item at the

September meeting for lack of adequate notice to interested parties.

Thank you for your consideration, Norma Jellison P O Box 1636 Bodega Bay CA 94923

Th 176

**From:** sonomacoastsurfrider [mailto:sonomacoastsurfrider@comcast.net]

Sent: Tuesday, September 04, 2012 11:25 AM

To: Mary Shallenberger

Cc: Lester, Charles@Coastal; Kellner, Laurel@Coastal

Subject: re: CDP Waiver 2-12-009-W Applicant Sonoma County Water Agency

Commissioner and Chair Shallenberger:

Sonoma Coast Surfrider objects to the proposed Coastal Development Permit Waiver 2-12-009-W for Sonoma County Water Agency (SCWA) to conduct a geophysical study of the existing rock and concrete jetty at the Russian River Mouth being imbedded in a Deputy Director's report.

It was our understanding that this waiver was to be taken up in the Deputy Director's Report (as was intended for the August Santa Cruz meeting) at the September meeting in Caspar.

We are now told it is "likely" not to be taken up in Caspar, but deferred to the October meeting.

We object to this CDP Waiver being imbedded in a Deputy Director's Report, favoring the matter being brought out in a manner that allows full public participation as guaranteed by the Coastal Act.. Imbedding a Waiver in a Deputy Director's Report does not provide an adequate opportunity for interested parties/stakeholders, of which I am only one, to participate and provide comment.

I challenge the Waiver. This Jetty Study should be processed as a CDP. Further, the Jetty Study should not be segmented as a CDP Waiver from the larger major pending permit CDP 2-12-004. The Estuary Management Project CDP 2-12-004 is pending processing by the Commission. This is piecemeal planning and doe not comport with the intent of the Coastal Act.

## We object to an inaccurate basis for the CDP Waiver "that no sensitive animal species exist in the area."

The SCWA has received 3 Incidental Harassment Authorizations from National Marine Fisheries Service, NOAA, for incidental takes of marine mammals, particularly Harbor Seals of the colony at this location on the beach adjacent to the jetty at and on Goat Rock State Beach at the mouth of the Russian River in Jenner, Sonoma County.

The Harbor Seals at this location are protected under the Marine Mammal Protection Act. Hence the need for the Incidental Harassment Authorization to conduct the Estuary Management Project activities, including the jetty studies, the latter of which involve invasive geotechnical activities.

ESA/PWA who will be conducting the jetty studies have not specified which methodology will be used in the seismic sensing and have included the possibility of "hammer strikes" to make determinations in this study that will continue covering approximately 1400 ft. of coastline for up to a year in the proximity of the colony. Under separate cover to the staff and Commission last month, photos showing the Harbor Seal colony and the haul out location immediately adjacent to and in the area of the jetty were provided.

In addition to the Harbor Seal colony, Goat Rock Beach provides a resting place for large numbers of coastal birds: Brown Pelicans, numerous types of Gulls, Terns and Cormorants - all of which are sensitive to and would be disrupted by the proposed activities on the beach.

At a minimum, We ask that the Commission postpone consideration of this item at the September meeting for lack of adequate notice to interested parties.

Thank you for your consideration

Cea Higgins Sonoma Coast Surfrider P.O. Box 2280 Sebastopol, CA 95473

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From: NORMA JELLISON [mailto:normalj@sonic.net]

Sent: Tuesday, September 04, 2012 1:42 PM

**To:** Kellner, Laurel@Coastal **Cc:** Cea; Lester, Charles@Coastal

Subject: SCWA CDP Waiver Jetty Study CDP 2-12-009-W

Th176

#### Hi Laurel -

I would appreciate it if you would notify Cea and I when you know <u>for certain</u> that this CDP Waiver will not be taken up under the Deputy Director's Report at the September CCC meeting in Caspar.

I also would point out that, unlike the staff of the Sonoma County Water Agency who would have their travel paid for by the County- SCWA, as members of the public, we would have to pay our own way to fly to southern California to attend a Coastal Commission meeting. It would be a financial hardship that would prevent our participation. Thus, we would hope the Commission would consider this item for a meeting closer to our residences, like the December meeting in San Francisco.

Norma

Th 176

From: Mary Shallenberger [mailto:mkshallenberger@gmail.com]

Sent: Wednesday, September 05, 2012 1:09 AM

To: NORMA JELLISON

Cc: Lester, Charles@Coastal; Kellner, Laurel@Coastal

Subject: Re: CDP Waiver 2-12-009-W Applicant Sonoma County Water Agency

I am out of the country for the month of September. I am forwarding your request to staff for their consideration.

Thank you,

Mary

On Tue, Sep 4, 2012 at 7:53 PM, NORMA JELLISON < normali@sonic.net> wrote:

Commissioner and Chair Shallenberger:

I object to the proposed Coastal Development Permit Waiver 2-12-009-W for Sonoma County Water Agency (SCWA) to conduct a geophysical study of the existing rock and concrete jetty at the Russian River Mouth being imbedded in a Deputy Director's report.

It was my understanding that this waiver was to be taken up in the Deputy Director's Report (as was intended for the August Santa Cruz meeting) at the September meeting in Caspar.

I am now told it is "likely" not to be taken up in Caspar, but deferred to the October meeting.

I object to this CDP Waiver being imbedded in a Deputy Director's Report, favoring the matter being brought out in a manner that allows full public participation as guaranteed by the Coastal Act.. Imbedding a Waiver in a Deputy Director's Report does not provide an adequate opportunity for interested parties/stakeholders, of which I am only one, to participate and provide comment.

I challenge the Waiver. This Jetty Study should be processed as a CDP. Further, the Jetty Study should not be segmented as a CDP Waiver from the larger major pending permit CDP 2-12-004. The Estuary Management Project CDP 2-12-004 is pending processing by the Commission. This is piecemeal planning and doe not comport with the intent of the Coastal Act.

### I object to an inaccurate basis for the CDP Waiver " that no sensitive animal species exist in the area."

The SCWA has received 3 Incidental Harassment Authorizations from National Marine Fisheries Service, NOAA, for incidental takes of marine mammals, particularly Harbor Seals of the colony at this location on the beach adjacent to the <u>jetty</u> at and on Goat

Rock State Beach at the mouth of the Russian River in Jenner, Sonoma County. The Harbor Seals at this location are protected under the Marine Mammal Protection Act. Hence the need for the Incidental Harassment Authorization to conduct the Estuary Management Project activities, including the jetty studies, the latter of which involve invasive geotechnical activities.

Under separate cover to the staff and Commission last month, I provided photos showing the Harbor Seal colony and the haul out location immediately adjacent to and in the area of the jetty.

In addition to the Harbor Seal colony, Goat Rock Beach provides a resting place for large numbers of coastal birds: Brown Pelicans, numerous types of Gulls, Terns and Cormorants - all of which are sensitive to and

would be disrupted by the proposed activities on the beach.

At a minimum, I ask that the Commission postpone consideration of this item at the September meeting for lack of adequate notice to interested parties.

Thank you for your consideration, Norma Jellison P O Box 1636 Bodega Bay CA 94923



From: Dian Hardy [mailto:themis@sonic.net]
Sent: Wednesday, August 22, 2012 1:00 PM

To: Kellner, Laurel@Coastal

Subject: Re: Coastal Commission notification list

Thanks, Laurel.

Was wondering if Lynn Woolsey's proposed legislation to move MPAs up through Sonoma to Pt Arena will impact the work at the estuary? Norma said it's in federal waters so that may moot my inquiry.

Dian

On 8/22/2012 9:47 AM, Kellner, Laurel@Coastal wrote:

Hi Dian-

You are on the list for Russian River items.

Best-Laurel

From: Dian Hardy [mailto:themis@sonic.net]
Sent: Tuesday, August 21, 2012 8:14 PM

**To:** Kellner, Laurel@Coastal **Cc:** NORMA JELLISON; Dian Hardy

Subject: Re: Coastal Commission notification list

Hi, Laurel.

Please add me to the notifications list for any hearings relating to the Russian, its tributaries and the mouth, if not already done.

Thanks, Norma, for the connect to Laurel.

Dian Hardy 7777 Bodega Avenue R304 Sebastopol, CA 95472 707.824.8405

On 8/21/2012 7:35 PM, NORMA JELLISON wrote:

Dian - Laurel is the contact person. The same person who sent you the email saying the item was continued.

#### laurel.kellner@coastal.ca.gov;

I believe that you are now on the EM list for this item.

I don't think you want to be on the email list to receive all CCC meeting notices. If so,

that is arranged on the CCC website.

#### Norma

-----Original Message-----

From: Dian Hardy

Date: 8/21/2012 5:15:51 PM

To: Norma Jellison

Subject: Coastal Commission notification list

Went to the CCC website, found the appropriate district office, no email to request to be on their notifications list. Do you have an email contact for them? Trying to avoid a long distance call to SF.

No virus found in this message. Checked by AVG - <u>www.avg.com</u>

Version: 2012.0.1913 / Virus Database: 2437/5213 - Release Date: 08/21/12

Th/76

From: NORMA JELLISON [mailto:normalj@sonic.net]

Sent: Saturday, August 10, 2013 7:23 PM

**To:** Staben, Jeff@Coastal **Cc:** Lester, Charles@Coastal

Subject: Application No. 2-12-004 Russian River Estuary Management Project North Central Coast

District -Agenda Item 17b on Thursday August 15, 2013

Importance: High

Chair Shallenberger and Commissioners -

I write to you as a coastal resident, advocate and long time Seal Watch volunteer at the Harbor Seal colony at the mouth of the Russian River.

I focus my comments on several vital aspects of the Coastal Act impacted by this CDP application by the Sonoma County Water Agency (SCWA), w/ selected applicable, tho' by no means all inclusive, sections of the Act cited.

I believe it is premature to allow this project to proceed for 3 Yrs + 3 Yr renewal. NO EXTENSION should be allowed until initial impacts of the implementation of the project are identified and assessed - based on practical observed & monitored results AND critical information/impacts associated with the lowered river flows and the national marine sanctuary expansion are available from the respective pending EIR and the EIS to factor into the analysis.

#### Sec 30210 -

I request a 1 Yr permit in keeping with 1Yr permits given to SCWA by State Parks - in furtherance of their jurisdiction under Article X of CA Constitution. The Estuary Management Project (EMP) is to be constructed on State Park land - Goat Rock State Beach - where a majority of the impacts will be borne.

A 1 Yr permit is also consistent with the 4 separate **1 Yr** Incidental Harassment Authorizations (IHA) given by NMFS, associated with the Harbor Seal Colony.

Both public resource agencies, one State and one Federal, obviously considered the merits of identifying the impacts of the project critical before giving the SCWA approval to operate the project for any longer duration.

Sec 30210/30211/30220et seq - Despite assertions that impacts to Public Access are minimal and will be managed by applicant, the EMP significantly impairs Public Access. The Biological Opionion/SCWA in carrying out the EMP, treats the Public's land and waters as an experiment/an experimental construction site. There is no proof that this outlet channel will succeed. In fact, attempts to implement in 2011 failed, due to the forces of nature.

Prior breaching activities, done solely for flood control, took place for a couple of

hours on 1 day. References to "no difference from past activities; no impacts associated with prior activities translates to current proposal" are false.

By implementing the EMP, Public Access will be eliminated/impaired/reduced for many consecutive days/weeks/months/years as this experiment is conducted. Construction equipment carving the outlet channel, installing wells, weekly well monitoring, equipment removal, fencing off sections of the beach - all will reduce or impair Public Access to large portions of the beach/river/ocean at those times.

Up to 2,000 cu yds of sand will be moved at each of 18 outlet construction events!

Clearly this is not the same as past practices of merely breaching - opening up - the sandbar one day.

Why treat a Public Beach as a construction site and suggest that a Public Access Management Plan could mitigate? Public Access should not have to be managed to avoid negative impacts to State Park/Beach visitors. Public Access should not be compromised in the first place in order to carry out an experiment. NMFS admits this is an experiment - the current term is "adaptive management."

Impacts to Public Recreation - families with children use the river side of Goat Rock State Beach extensively as a safer environment (than the ocean) for wading and swimming and picnicking. Construction & monitoring activities will reduce Public Access. Public Access should not be compromised. A Public Access Management Plan should not be necessary to manage Public Access to a Public Beach!

Impacts to Public Access - surfing - could be impaired by the sedimentation released when the outlet lagoon is eliminated each year by winter water levels that will naturally breach the sandbar or prior if river levels threaten flooding of several buildings. Staff dismissal that potential impacts are minimal as this is "just a local surfing spot" misses the fact that all surfing spots are local. Just because this is not Maverick's doesn't make it any less important a surfing locale.

**Sec 30230/31/30240** - Impacts to sensitive species are minimized by comparing past activities and lack of impacts to proposed actions.

The SCWA has received four **1 Yr** Incidental Harassment Authorizations (2010, 2011, 2012, 2013) from NMFS for incidental takes of marine mammals, primarily Harbor Seals of the colony at the mouth of the Russian River on the outlet channel beach & adjacent to the jetty at Goat Rock State Beach.

The 30+-year old Harbor Seal colony are protected species under the Marine Mammal Protection Act. Regardless of IHA mitigations required, these sensitive species at the EMP construction site are potentially at risk of harassment from proposed construction and maintenance activities of the EMP and the invasive geotechnical activities of the associated jetty study.

Previous breaching activities are in no way similar to proposed EMP activities.

Prior sandbar breaching took place during a couple of hours on 1 day; in some years, e.g. this year and last, not at all. EMP activities proposed would take place over a number of consecutive days over a number of weeks/months/years.

Thus all references to "no difference from past activities; no impacts associated with prior activities translates to current proposal" are false.

The unknown impacts to this Harbor Seal colony are the reason that the IHAs have been issued for only 1 Yr in duration and not the potential longer term IHA that might be issued once impacts of the construction and maintenance of the outlet channel/EMP are monitored and known.

Impacts to other sensitive estuary species e.g. the estuary is a Dungeness crab nursery and home to many other species of fish - are unstudied & unknown.

Water Quality impacts: Influences/impacts of Russian River lowered flows remain to be assessed in an EIR to be published in 2014. Impacts to aquatic species/marine species; recreational users associated w/concentrations of contaminants in water contained by the sandbar in the lagoon are unknown. No study plan or monitoring for these specific WQ impacts to body contact sports or to the ocean environment is proposed for this CDP.

Lowering the flows in the river is a requirement to enable a sustained closure of the mouth of the river. Lowering the flows creates impacts to recreational boating. Lowering the flows in the river will impact water quality. Water quality impacts of lowered flows in the estuary (*elevated bacterial levels; nutrients; dissolved oxygen conditions*) will surely impact wading and swimming on the river side of the State Beach and at nearby upstream beaches, as well as kayaking, canoeing, and the many waterfowl, river and marine mammals and fish that live in and use the estuary. As an oddity, the BO acknowledges that some die off/take of salmonids may be associated with the perched lagoon of the EMP.

The pending EIS for National Marine Sanctuary (S) expansion adjacent to Russian River mouth will provide critical information about the ocean environment, including WQ. Sanctuary jurisdiction is over all submerged lands, water & associated marine resources therein from the MHW line; alteration of stream & river drainage & surface water runoff into The Sanctuary (S).

Impacts from "first flush", either emergency (based on WQ or flood danger) planned breaches, or natural breaches from winter storm river water levels or ocean conditions, releasing lagoon waters into nearshore ocean waters are unstudied and unknown, as are released sediment impacts.

When the retained waters behind the sandbar/outlet channel are released into the ocean environment, the concentrated contaminants and sediment built up behind the sandbar for sustained periods, up to 5 months, will have potentially significant impacts to the nearshore beaches and marine life. These all could be significant impacts, yet

remain unknown; unstudied and are not addressed in any proposed monitoring.

Again, it is simply premature to allow this project to proceed for 3 Yrs + 3 Yr renewal. NO EXTENSION should be allowed until impacts of the implementation of the project are identified and assessed - based on practical observed & monitored results AND critical information/impacts associated with the lowered river flows and the marine sanctuary expansion are available from the respective pending EIR and the EIS to factor into the analysis.

Thank you for your consideration of my comments

Norma Jellison PO Box 1636 Bodega Bay 94923

Norma

A new ethic for the ocean where the ocean is not seen as a commodity we own but as a community of which we are a part.

The sea is worth saving for its own sake. Bill Ballantine NZ And take this to the land as well.

From: NORMA JELLISON [mailto:normalj@sonic.net]

Sent: Sunday, August 05, 2012 9:47 AM

To: Kellner, Laurel@Coastal

Cc: Lester, Charles@Coastal; jeffrey.staben@coastal.ca.gov; madelline.cavalieri@coastal.ca.gov

Subject: Coastal Development Permit Waiver 2-12-009-W

Laurel - Today I retrieved from my PO Box, a letter Notice of Proposed Permit Waiver for the above referenced CDP Waiver at Goat Rock Beach State Park.

I sent you an email on 6/18/2012 asking about this permit notice I found posted to a sign at Goat Rock Beach that I happened upon going to my Seal Watch shift. In my email I noted the following and asked for further information:

CCC permit notice - Development Permit pending.

No permit number, that line was blank.

Posting date was June 14. No length of time noted prior to issuance, ditto no indication comments were in order. Just contact CCC.

It said it was for Goat Rock State Beach Jetty Study: Temporary Subsurface Investigations of the Extent of an Abandoned Rock and Concrete Jetty near Russian River Mouth and Groundwater Flow through the Sandbar.

Applicant is Sonoma County Water Agency (SCWA).

You never responded to my inquiry asking for information about the permit, despite a follow up email on 6/30/2012.

Now I receive a notice that you recommend the Coastal Commission approve a CDP Waiver. Not an email that I might have responded to more timely, but a letter dated July 31 to my PO Box sent by US Mail, guaranteeing that I would not get timely notice.

I hereby object to the waiver on the grounds that the applicants statements that there are no sensitive animal species in the area of the proposed study.

I further object to not being provided information in response to my public information requests and not being provided adequate notice of pending action by the Commission.

In addition, I object to this single aspect of the Estuary Management Plan, which is pending before the Commission as CDP 2-12-004, being processed as a separate action and as a separate permit when it is part and parcel of the pending CDP 2-12-004.

In a February 23, 2012 letter from the Commission staff, additional information was requested by staff, Daniel Robinson at the time was the assigned staff, specific to CDP 2-12-004.

My requests and those of other interested parties for copies of the information provided by SCWA in response to that February letter have gone unresponded to in the interim months.

There is in fact a Harbor Seal colony on this beach, Goat Rock State Beach. Harbor Seals are a protected species under the Marine Mammal Protection Act and thus they are a sensitive species.

The attached photos show the sensitive species in the study area - the Jenner Harbor Seal colony. Photo 1 was taken July 4, 2012 from the overlook on Route 1 and shows the mouth of the Russian River, the jetty and the sandbars and beach with 3 groupings of the Harbor Seal colony. Photo 2 was taken July 22, 2012 from Goat Rock State Beach with the jetty on the left and one of the three groups of the Harbor Seal colony hauled out across the river mouth on the north side beach facing the Pacific Ocean. Photo 3, July 4, shows more of the beach and the jetty covered with sand extending back to left from the concrete section.

Further, the Sonoma County Water Agency (SCWA) has been issued 3 Incidental Harassment Authorizations by the National Marine Fisheries Service, NOAA for "Small Takes of Marine Mammals Incidental to Specified Activities; Russian River Estuary Water Level Management Activities."

The most recent Incidental Harassment Authorization (RIN 0648-XB132) effective April 21, 2012 to April 20, 2013 added to the prior activities covered by previous IHA (artificial breaching of the sandbar and lagoon management outlet channel adaptive management plan when the sandbar closes naturally), jetty studies. The jetty studies were authorized in the same window, May 15 - October 15, as allowed for the lagoon management outlet channel adaptive management plan.

In order to issue an Incidental Harassment Authorization under Section 101 (a)(5)(D) of the Marine Mammal Protection Act, National Marine Fisheries Service sets forth permissible methods of taking protected species, in this case small numbers of protected species by Level B harassment, and requires mitigation.

Sonoma County Water Agency's Incidental Harassment Authorization defines the mitigation measures required to <u>minimize impacts to affected species and</u> <u>stock.</u> There are 8 detailed and specific mitigation measures required of SCWA under the Incidental Harassment Authorization issued under the authorities of the Marine Mammal Protection Act.

For an Incidental Harassment Authorization to be issued there have to be protected species under the Marine Mammals Protection Act present and under threat of harassment by activities contemplated.

It therefore is contradictory for the applicant for the applicant, SCWA which is one and

the same as the County of Sonoma, the local coastal zone management plan regulatory agency - the Sonoma County Board of Supervisors is the Board of the SCWA - to now say in this CDP Permit Waiver there are no sensitive species present in the area of the proposed study.

The photos clearly show the Harbor Seals hauled out adjacent to the jetty on the sandbar and beach areas of Goat Rock State Beach at Jenner. The existence of 1 Year Incidental Harassment Authorizations in 2010, 2011 and 2012 clearly prove that sensitive species exist at Goat Rock State Beach, marine mammals protected under the Marine Mammal Protection Act. The Harbor Seal colony has existed on this beach for 30 years, is one of the most studied Harbor Seal colonies on the northern California coast and is the largest colony north of Drakes Bay in Marin County to the Eel River to the north.

For these reasons, I object to the CDP Waiver 2-12-009-W.

Norma Jellison P O BOX 1636 Bodega Bay CA 94923

Th176

From: sonomacoastsurfrider [mailto:sonomacoastsurfrider@comcast.net]

Sent: Sunday, August 05, 2012 11:20 AM

To: Lester, Charles@Coastal; Kellner, Laurel@Coastal; Mary Shallenberger

Subject: re: CDP Waiver 2-12-009-for Jetty Studies for Jenner Russian River Mouth Estuary

Sonoma Coast Surfrider hereby objects to the Coastal Development Permit Waiver 2-12-009 for SCWA to conduct a geophysical study of the existing rock and concrete jetty at the Russian River Mouth which is to be presented to the Commission at the upcoming meetings in Santa Cruz on the following grounds:

- 1. The inaccurate statement from the applicants, Sonoma County Water Agency, that there are no sensitive animal species in the area of the proposed study.
- 2. We further object to not being provided information in response to several public information requests and not being provided adequate notice of pending action by the Commission.
- 3. We also object to the segmentation of this waiver from the pending CDP application: Russian River Estuary Management Project **Permit 2-01-004** which requires that all agencies involved issue a permit for changes in management of the estuary. There has been no evidence or notices posted of other agency permits for the jetty studies.
- 1. First point of objection involves the fact that there is an established and documented Harbor Seal colony on this beach, Goat Rock State Beach. Harbor Seals are a protected species under the Marine Mammal Protection Act and they are a sensitive species.

Further, the Sonoma County Water Agency (SCWA) has been issued 3 Incidental Harassment Authorizations by the National Marine Fisheries Service, NOAA for "Small Takes of Marine Mammals Incidental to Specified Activities; Russian River Estuary Water Level Management Activities."

The most recent Incidental Harassment Authorization (RIN 0648-XB132) effective April 21, 2012 to April 20, 2013 added to the prior activities covered by previous IHA (artificial breaching of the sandbar and lagoon management outlet channel adaptive management plan when the sandbar closes naturally), jetty studies. The jetty studies were authorized in the same window, May 15 - October 15, as allowed for the lagoon management outlet channel adaptive management plan.

In order to issue an Incidental Harassment Authorization under Section 101 (a)(5)(D) of the Marine Mammal Protection Act, National Marine Fisheries Service sets forth permissible methods of taking protected species, in this case small numbers of protected species by Level B harassment, and requires mitigation.

Sonoma County Water Agency's Incidental Harassment Authorization defines the mitigation measures required to minimize impacts to affected species and stock. There are 8 detailed and specific mitigation measures required of SCWA under the Incidental Harassment Authorization issued under the authorities of the Marine Mammal Protection Act.

For an Incidental Harassment Authorization to be issued there have to be protected species under the Marine Mammals Protection Act present and under threat of harassment by activities contemplated.

It therefore is contradictory for the applicant, SCWA which is one and the same as the County of Sonoma, the local coastal zone management plan regulatory agency - the Sonoma County Board of Supervisors is the Board of the SCWA - to now say in this CDP Permit Waiver there are no sensitive species present in the area of the proposed study.

The existence of 1 Year Incidental Harassment Authorizations in 2010, 2011 and 2012 clearly prove that sensitive species exist at Goat Rock State Beach, marine mammals protected under the Marine Mammal Protection Act.

The Harbor Seal colony has existed on this beach for 30 years, is one of the most studied Harbor Seal colonies on the northern California coast and is the largest colony north of Drakes Bay in Marin County to the Eel River to the north.

- Our second point of objection deals with lack of adequate notice from Coastal Commission staff on this Sonoma Coast Surfrider has unequivocally established itself as a stakeholder on all issues relevant to the Russian River Estuary permit application process through comment letters, repeated email inquiries, and public comment at Commission hearings. We were not notified either by post or by email of the waiver application for the August 8-10 Commission hearings in Santa Cruz nor was this item listed on the calendar agenda. We have made numerous email inquires as to the status of both jetty studies and permit progress (attachment is only one example) and have been repeatedly told that "the issue was still under investigation and more time was needed to respond to the direct inquiries" It is troubling if staff is repeatedly proclaiming that "My supervisors and I have not had a chance to check in on these issues." which indicates that these issues have not been completely investigated that they are simultaneously comfortable in submitting waiver applications.
- 3. In both comments submitted for the EIR and to the Commission regarding the Russian River Estuary Management Plan Permit Application, Sonoma Coast Surfrider recommended that impacts of the existing jetty be evaluated and considered before issuing permits for construction of an outlet channel. At no time, did we suggest that this be done without proper protocol and following guidelines of notice, opportunity to make public comment or without consideration of impacts or mitigation measures. Projects in the Russian River mouth require authorization from State Parks, Regional Water Quality Control Board, Army Corp of Engineers, State Lands Commission, NMS, and Department of Fish and

Game. The applicant's arguments for the waiver are similar to their arguments for the Estuary Management Project in that they claim no substantive issues with Public Access, Recreation, Water Quality, or Sensitive Marine and Plant species. The Commission itself has responded to these arguments with demands for further information to substantiate these impacts which have yet to be fully provided by the applicant. How then can the waiver be granted based on these arguments?

Sonoma Coast Surfrider strongly opposes this waiver and asks that a full CDP be required for studies of the jetty at the Russian River Mouth or that the item be postponed for lack of notice to interested parties.

Cea Higgins Sonoma Coast Surfrider

Th/76

From: Kate Fenton [mailto:kafenton@sonic.net]
Sent: Saturday, August 04, 2012 2:41 PM

To: Kellner, Laurel@Coastal; Cavalieri, Madeline@Coastal

Cc: Lester, Charles@Coastal; NORMA JELLISON; <a href="mailto:nxokada@yahoo.com">nxokada@yahoo.com</a>; <a href="mailto:orca-sonoma@calorca.org">orca-sonoma@calorca.org</a>; <a href="mailto:Diana">Diana</a>

Hardy

Subject: CDP Waiver for Jetty Studies, Mouth of Russian River

Dear Ms. Keilner:

I object to the waiver on the grounds that the applicants' statements that there are no sensitive animal species in the area of the proposed study. There is in fact a Harbor Seal colony on this beach, Goat Rock State Beach. Harbor Seals are a protected species under the Marine Mammal Protection Act and they are a sensitive species.

Norma Jellison's photos show the sensitive species in the study area; you have received them from her. Further, the Sonoma County Water Agency (SCWA) has been issued 3 Incidental Harassment Authorizations by the National Marine Fisheries Service, NOAA for "Small Takes of Marine Mammals Incidental to Specified Activities; Russian River Estuary Water Level Management Activities."

The most recent Incidental Harassment Authorization (RIN 0648-XB132) effective April 21, 2012 to April 20, 2013 added to the prior activities covered by previous IHA (artificial breaching of the sandbar and lagoon management outlet channel adaptive management plan when the sandbar closes naturally), jetty studies. The jetty studies were authorized in the same window, May 15 - October 15, as allowed for the lagoon management outlet channel adaptive management plan.

In order to issue an Incidental Harassment Authorization under Section 101 (a)(5)(D) of the Marine Mammal Protection Act, National Marine Fisheries Service sets forth permissible methods of taking protected species, in this case small numbers of protected species by Level B harassment, and requires mitigation.

Sonoma County Water Agency's Incidental Harassment Authorization defines the mitigation measures required to <u>minimize impacts to affected species and</u> <u>stock.</u> There are 8 detailed and specific mitigation measures required of SCWA under the Incidental Harassment Authorization issued under the authorities of the Marine Mammal Protection Act.

For an Incidental Harassment Authorization to be issued there have to be protected species under the Marine Mammals Protection Act present and under threat of harassment by activities contemplated.

It therefore is contradictory for the applicant for the applicant, SCWA which is one and the same as the County of Sonoma, the local coastal zone management plan regulatory agency - the Sonoma County Board of Supervisors is the Board of the SCWA - to now say in this CDP Permit Waiver there are no sensitive species present in the area of the proposed study.

The photos clearly show the Harbor Seals hauled out adjacent to the jetty on the sandbar and beach areas of Goat Rock State Beach at Jenner. The existence of 1 Year Incidental Harassment Authorizations in 2010, 2011 and 2012 clearly prove that sensitive species exist at Goat Rock State Beach, marine mammals protected under the Marine Mammal Protection Act. The Harbor Seal colony has existed on this beach for 30 years, is one of the most studied Harbor Seal colonies on the northern California coast and is the largest colony north of Drakes Bay in Marin County to the Eel River to the north.

For these reasons, I object to the CDP Waiver 2-12-009-W.

Kate Fenton PO Box 86 Jenner, CA 95450 www.willowcreekdesigns.net

Th175

From: Kellner, Laurel@Coastal

**Sent:** Thursday, July 26, 2012 1:49 PM **To:** Bargsten, Stephen@Waterboards

Subject: RE: Status of Coastal Commission permit for SCWA Russian River Estuary management

Hi Stephen-

Thank you for being in touch. We are still reviewing the materials (CDP application and supplemental info) for the SCWA Russian River Estuary management project.

We are also moving forward on a subsequent application from SCWA regarding the Jetty Study. Let's put it on our calendars to check back in next month on the Management CDP if that works for you. Thanks for your patience in this process.

Best-Laurel

From: Bargsten, Stephen@Waterboards Sent: Thursday, July 26, 2012 1:14 PM

**To:** Kellner, Laurel@Coastal **Cc:** Neely, Mark@Waterboards

Subject: Status of Coastal Commission permit for SCWA Russian River Estuary management

Hi Laurel,

Hope all is well with you. I was just checking in with you to see what the status of your permit is for the SCWA Russian River Estuary Breaching project. I haven't heard from you since the Confab, and have heard through the grapevine that there may be some issues that are still being resolved. I was waiting for the Coastal Commission permit before we issue our 401 Water Quality Certification, in case there were any changes to the project that you'd require and that I would need to include in the 401. I look forward to hearing from you.

Cheers, Stephen

STEPHEN BARGSTEN
ENVIRONMENTAL SCIENTIST
401 WATER QUALITY CERTIFICATION PROGRAM
NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD
5550 SKYLANE BLVD. SUITE 100
SANTA ROSA, CA 95403

OFFICE: 707-576-2653 FAX: 707-523-0135



From: Kellner, Laurel@Coastal Sent: Monday, July 02, 2012 9:08 PM

To: NORMA JELLISON

Subject: RE: CCC Development Permit Pending

Hi Norma-

Thank you for following up with us on this matter.

We appreciate your years of work on the coast and your dedication to the protection of coastal resources. I want to clarify that this permit has not yet been filed.

We are reviewing additional materials received from SCWA last month.

We welcome any additional materials or comments that you would like to send to our office. Additionally, you are welcome to come to the office to review materials submitted by SCWA. Also, your name is on the mailing list for this item so you will be notified.

I want to assure you that no parties are receiving preferential treatment in this matter.

We unfortunately are working with very limited permitting staff for the entire Sonoma and Marin County regions. You may also be aware that recent budget cuts require staff to take one un-paid day out of the office starting this month. We appreciate your understanding of these constraints, while we do our best to respond in a timely manner to materials and requests.

Sincerely-Laurel

From: NORMA JELLISON [normalj@sonic.net]
Sent: Saturday, June 30, 2012 12:59 PM

**To:** Kellner, Laurel@Coastal **Cc:** Lester, Charles@Coastal

Subject: RE: CCC Development Permit Pending

Laurel - I am writing because I am noticing a pattern in your response to my inquiries > I ask questions, you say you have received my inquiry and will look into it, as in below May 8 reply to my question about the SCWA RR Estuary Permit #2 OR, as in 6/20 reply below, you have to consult w/ your supervisors to respond.

Unfortunately, the "I'll get back to you" is then followed by silence. In first instance, it has been almost 2 months w/O a reply. In the second instance, I have no way to know if there is a permit comment period timeline ticking away that could well result in my being preempted from commenting.

The below link is to an article in the local newspaper about the jetty. It talks about the studies of the jetty. Obviously, they are pending receipt of the development permit from CCC along with a permit from State Parks and others. What exactly is the status of the development permit before the Commission.

I would appreciate a real response to my request about the pending permit from CCC for the jetty studies, as well as to my inquiry about lacking information to Permit #2 requested by CCC staff on <u>February 23</u>, <u>2012</u>, precedent to your assignment to the permit application.

I sincerely doubt that you are this non responsive to the Sonoma County Water Agency staff. Preferential treatment to an applicant over a citizen request, and I am not the only one inquiring about SCWA activities who is not being responded to, is most troublesome. I am an interested party to matters before

the CCC. I am not an adversary of the CCC. In fact, in past I have been an advocate, lobbying legislators not to cut funding to the agency. I do not expect preferential treatment as a result, just even and commensurate responsiveness w/ that afforded an applicant.

Thanks, Norma

http://www.pressdemocrat.com/article/20120626/ARTICLES/120629630/1010/sports?Title=Low-water-levels-reveal-jetty-at-mouth-of-Russian-River

From: Kellner, Laurel@Coastal Date: 5/8/2012 4:37:46 PM
To: NORMA JELLISON

Subject: RE: Russian River Estuary SCWA Permit #2



Hi Norma-

I just want to let you know that I received your message and I will look into your request.

Best-

Laurel

-----Original Message-----

From: Kellner, Laurel@Coastal Date: 6/20/2012 3:01:03 PM
To: 'NORMA JELLISON'

Subject: RE: CCC Development Permit Pending

Hi Norma-

Thank you for being in touch. I just wanted to confirm that I have received this message and I am checking with my supervisors to work on a response for you.

Best-

Laurel

From: NORMA JELLISON [mailto:normalj@sonic.net]

Sent: Monday, June 18, 2012 11:10 AM

To: Kellner, Laurel@Coastal

Cc: Lester, Charles@Coastal; 'O'Neil Brendan' Subject: CCC Development Permit Pending Hi Laurel - I was at Goat Rock State Beach doing my Seal Watch shift yesterday and noticed a CCC permit notice - Development Permit pending.

There was no permit number, that line was blank.

Posting date was June 14. No length of time noted prior to issuance, ditto no indication comments were in order. Just contact CCC.

It said it was for Goat Rock State Beach Jetty Study: Temporary Subsurface Investigations of the Extent of an Abandoned Rock and Concrete Jetty near Russian River Mouth and Groundwater Flow through the Sandbar.

Applicant is Sonoma County Water Agency (SCWA).

Please advise status of this permit application and exactly what the studies (jetty and groundwater) propose to do/consist of, when CCC will consider this permit and if you are accepting public comment on the permit application.

I would appreciate receiving a copy of the project/study description so I can better understand it and its potential impact on the Harbor Seal colony and other natural resources in the river and ocean as well as the impact on visitors to the State Beach.

The attached EM shows the current configuration of the river mouth, with minor variation. Yesterday, the entire Harbor Seal haul out (170 adults and pups) was tucked up against the jetty on the beach, ocean and river side.

I would also appreciate a status report on the SCWA's Russian River Estuary SCWA Permit #2 unresponded to questions posed by CCC staff.

This is in regards to my EM of May 7 which you replied to on May 8th saying you were looking into my inquiry.

Regards,

Norma -

From: NORMA JELLISON [mailto:normalj@sonic.net]

Sent: Monday, June 18, 2012 11:10 AM

To: Kellner, Laurel@Coastal

**Cc:** Lester, Charles@Coastal; 'O'Neil Brendan' **Subject:** CCC Development Permit Pending



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Regards,

Norma -

Th/75

From: NORMA JELLISON [mailto:normalj@sonic.net]

Sent: Monday, May 07, 2012 8:42 PM

To: Kellner, Laurel@Coastal

Cc: c.lester@coastal.ca.gov; d.robinson@coastal.ca.gov Subject: RE: Russian River Estuary SCWA Permit #2

Hi Laurel - Thank you for the attached October 2011 letter from CCC staff and the January 2012 letter from SCWA, which I already had copies of.

I trust you realize that the letter from Daniel Robinson dated February 23, <u>2011</u> was in fact a February 23, <u>2012</u> letter! It was misdated.

His first sentence of that February 23, 2012 letter says "Thank you for submitting additional information in response to our application status letter dated October 24, 2011....."

The SCWA additional information he references was transmitted by the letter dated January 23, 2012, thus his letter acknowledging receipt could only be dated February **2012**.

He states 4 items that require addressing "...before the application can be filed...": Definition of Flood Problem, Alternatives, Upstream Flows and provision of State Lands Commission lease.

My EM inquiry below was asking if SCWA had provided the information requested and asking for a copy of their information if so.

The February 23, 2012 letter gave SCWA until May 23, 2012 to provide the additional materials requested and stated that only after receipt and review could the application be filed, "if all is in order according to GC 65943(a)."

I look forward to your response.

I hope to schedule a time in the near future to come into the SF offices to meet with you.

Thanks, Norma

-----Original Message-----

From: Kellner, Laurel@Coastal Date: 4/26/2012 11:04:38 AM

To: NORMA JELLISON

Subject: RE: Russian River Estuary SCWA Permit #2

Hi Norma-

Thank you for being in touch. This is some of the latest information that was submitted in regards to some of our earlier inquiries. The entire file documents are in the San Francisco office and you are welcome to go through them.

Best-

Laurel

From: NORMA JELLISON [mailto:normalj@sonic.net]

Sent: Monday, April 23, 2012 4:50 PM

To: Kellner, Laurel@Coastal

Subject: Russian River Estuary SCWA Permit #2

Hi Laurel - Please advise if there has been a response to the above letter written to the SCWA by Daniel Robinson on Feb 23, <u>2012</u>, and if so, please provide a copy of that response to me.

Please add my name to those to be advised of the scheduling of this permit request in advance of its being published on the CCC agendas, which I receive.

Thank You,

Norma Jellison P O BOX 1636

Norma -

Bodega Bay CA 94923

Th 176

**From:** sonomacoastsurfrider [mailto:sonomacoastsurfrider@comcast.net]

Sent: Monday, May 07, 2012 8:56 PM

To: Kellner, Laurel@Coastal

**Cc:** Robinson, Daniel@Coastal; Lester, Charles@Coastal **Subject:** Fw: Russian River Estuary SCWA Permit #2

Hello Laurel-I am resending as I believe I had the wrong format for the proper email addresses. Could you please confirm that you have received this email. Sorry for the mix-up

Cea

Re: CDP application No. 2-12-004 for the Russian River Estuary Management Project

Attachments: 1. Central Coast District Office review letter Feb 23, 2012 (misdated 2011)

2. Sonoma Coast Surfrider Comment Letter

3. ICCE 2008 Lost Jetty of California's Russian River

Attn: Laurel Kellner Charles Lester Daniel Robinson

April 30, 2012 and May 7,2012

Dear Ms Kellner

Thank you for mailing the following documents

- 1. Updated Russian River Estuary Flood Risk Management Feasibility Study -January 9, 2012
- 2. Response letter to status letter 1.23.12
- 3. Russian River Estuary Management Plan Project Status letter 2.23.2012

I have had a chance to review the response of the Sonoma County Water Agency that was submitted on January 23<sup>rd</sup>, 2011. That letter was sent as a response to the original request by Commission staff for further information regarding the permit application dated October 24<sup>th</sup>, 2011. In their letter, the Commission staff stated that an amended permit was not possible and that a new CDP was necessary.

Following a review of the SCWA response letter dated January 23<sup>rd</sup>, Commission staff forwarded another request for materials. That letter is dated Feb, 23, 2011. I believe it was written February 23, 2012, as it is requesting that further information be provided by May 23<sup>rd</sup>, 2012. The Commission staff letter stated that the SCWA application would be held for 3 months from the date of the letter ("i.e. May 23, 2012") pending receipt of certain information. Following receipt of the listed materials and review by Commission staff it would then be determined if the application could once again be filed.

It is this inquiry from the Commission that was the basis of my email to you on April 2<sup>nd</sup>, 2012.

The <u>Feb 23, 2102 letter</u> from the Commission staff to the SCWA requested additional information by May 23, 2012, to wit:

- **"1. Definition of Flood Problems-** a clear graphic that depicts, in site plan view and cross-sections, as appropriate, all at-risk *structures* in relation to base and expected flood elevations. **2. Alternatives-** additional detail over the same range of evaluation factors (including all expected costs and impacts to purchasing easements, raising structures, and general implementation of the alternatives, as well as degree of resource protection benefit provided) to allow a clearer feasibility comparison of the alternatives described.
- 3. Upstream Flows. Thank you for providing additional information about potential reduced instream flows. However, it is still unclear how the "Fish Flow Project" could improve or enhance various salmonid life stages in the Russian River to the point where it would become unnecessary to artificially manage the Estuary and Lagoon. Please provide any information on how the estuary management project proposes to adaptively manage its project based on the soon-forthcoming EIR and subsequent potential results of the Fish Flow Project, once implemented. In other words, how would the SCWA alter its flood-protection lagoon management activities to address expected changed circumstances that result from the Fish Flow Project, if at all? "
  - Are all these materials now submitted by the SCWA?
  - If there has been a response by the SCWA could you please forward that document.

I am still unclear as to the wording in your email which stated that "I wanted to let you know that yes, there will be a new permit with full public review and we have received materials from SCWA

Can you please clarify what is meant by "yes, there will be a new permit"?

In addition the water agency has stated in their response of January 23<sup>rd</sup> that the jetty studies (which were a part of the original CCC request for materials from October 24th) will not be completed until December of 2012.

Also, the EIR for the "Fish Flow Project" has yet to be released. Information requested by the Commission staff in the February 2012 letter has yet to be provided.

Is the Commission staff now considering issuing a permit without the vital information previously stated as necessary for proper evaluation along with/ full public review?

- What full public review is contemplated and what tenure of permit is being considered?
- What management operations are currently allowed for the May 14th-October 14th 2012 management period?

Permits issued by State Parks (the management area is located on State Parks lands) and the NMFS' IHA permit (a Harbor Seal colony located on Goat Rock State Beach and the Jenner Estuary requires a permit from NMFS) do not exceed one year . Both of these agencies clearly feel evaluation of the impacts of the proposed outlet channel and the adaptive management plan is required before issuing any longer term permit.

Until there is an opportunity to study ecosystem changes associated with outlet construction and upstream flows, there can not be an understanding of what those impacts will be. It is the hope of Sonoma Coast Surfrider and other stakeholders that the adaptive nature of this proposal and the potential significant effects on the ecosystem in the estuary will be considered in any decision making.

I would appreciate the opportunity to come to the Commission offices to meet with you. Would you be available in the latter part of the week of May 14<sup>th</sup>?

Thank you
Cea Higgins
Sonoma Coast Surfrider
707-217-9741
sonomacoastsurfrider@comcast.net

---- Original Message ---From: Kellner, Laurel@Coastal
To: sonomacoastsurfrider

Sent: Friday, 13 April, 2012 4:16 PM

Subject: RE: Russian River Estuary SCWA Permit #2

Hi Cea-

This is a very large file, but I attempted to pick out the sections you noted.

Please find the information you requested attached.

Best-Laurel

**From:** sonomacoastsurfrider [mailto:sonomacoastsurfrider@comcast.net]

Sent: Wednesday, April 11, 2012 5:12 PM

To: Kellner, Laurel@Coastal

Subject: Re: Russian River Estuary SCWA Permit #2

thank you-I was just worried that some correspondence got lost during your time out of office. I realize this is a time consuming request and will wait to hear back from you before scheduling a trip down to review the file. The management period does begin in May; however, so it would be helpful to know what practices will be permitted for this season.

-Cea

---- Original Message ---From: Kellner, Laurel@Coastal
To: sonomacoastsurfrider

Sent: Thursday, 12 April, 2012 4:57 PM

Subject: RE: Russian River Estuary SCWA Permit #2

Hi Cea-

I apologize for the delay in responding. Due to some other pressing regulatory deadlines, I have not had a chance to look into this file to confirm that it contains the information that you have referenced.

You are welcome to look at the entire file at any time.

I am not sure at this moment if the elements can be sent to you in pdf format.

I will get back to you on these points as soon as I am able.

Thanks for your understanding.

Best-

#### Laurel

**From:** sonomacoastsurfrider [mailto:sonomacoastsurfrider@comcast.net]

Sent: Wednesday, April 11, 2012 4:53 PM

To: Kellner, Laurel@Coastal

Subject: Fw: Russian River Estuary SCWA Permit #2

Dear Ms. Kellner

As I have not heard back from you, I am sending this email again in case you did not receive this

correspondence or my phone message. I look forward to hearing from you

Sincerely Cee Higgins

---- Original Message ----- From: sonomacoastsurfrider

To: Laurel Kellner

Sent: Sunday, 08 April, 2012 10:45 AM

Subject: Re: Russian River Estuary SCWA Permit

---- Original Message ---- From: sonomacoastsurfrider To: Kellner, Laurel@Coastal

Sent: Monday, 02 April, 2012 6:07 PM

Subject: Re: Russian River Estuary SCWA Permit

Hello Laurel

Thank you for the reply.

The last correspondance from the Commission to the SCWA requested:

**Definition of Flood Problem-** a clear graphic that depicts, in site plan view and cross-sections, as appropriate, all at-risk *structures* in relation to base and expected flood elevations.

Alternatives- additional detail over the same range of evaluation factors (including all expected costs and impacts to purchasing easements, raising structures, and general implementation of the alternatives, as well as degree of resource protection benefit provided) to allow a clearer feasibility comparison of the alternatives described.

Are all these materials now submitted by the SCWA?

What will be the tenure of the permit?

It would be helpful to know this before scheduling a day off to come to the Commission office and review the current file. I appreciate your time and would like the opportunity to schedule either an appointment or a phone conference with you.

Cea

---- Original Message ----- From: Kellner, Laurel@Coastal

To: Sonoma Coast Chapter of Surfrider Foundation

Sent: Tuesday, 03 April, 2012 5:24 PM

Subject: E: Russian River Estuary SCWA Permit

Hi Cea-

Thank you for being in touch.

I wanted to let you know that yes, there will be a new permit with full public review and we have received materials from SCWA. You will be able to review the file materials, if you like.

When we know the hearing date, we will let you know.

Please send me your mailing address and I will add you to the mailing list.

Best-Laurel

Laurel Kellner
Coastal Analyst
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105
(415) 904-5266 Voicemail
(415) 904-5400 Fax
laurel.kellner@coastal.ca.gov

From: Sonoma Coast Chapter of Surfrider Foundation [mailto:sonomacoastsurfrider@comcast.net]

Sent: Friday, March 30, 2012 5:26 PM

To: Kellner, Laurel@Coastal

Cc: Spencer Nilson

Subject: re: Russian River Estuary SCWA Permit

### Hello

Our chapter has been working with Daniel Robinson on the Russian River Estuary Permit and would like to have the opportunity to review the file and dialogue with you concerning updates. It is our understanding that you are currently the staff person handling this permit application and that the file is currently located at the SF CCC office. We would appreciate any information confirming this. We have followed this issue carefully and have made extensive comments to the Commission.

Thank you
Cea Higgins
Volunteer Coordinator
Sonoma Coast Chapter of Surfrider
707-217-9741
sonomacoastsurfrider@comcast.net

Th 176

# ICCE 2008 31st International Conference on Coastal Engineering Hamburg, Germany

### LOST JETTY OF CALIFORNIA'S RUSSIAN RIVER

Orville T. Magoon<sup>1</sup>, Donald D. Treadwell<sup>2</sup>, Paul S. Atwood<sup>3</sup>, and Billy L. Edge<sup>4</sup>

This paper presents a history of the repeated attempts to construct a single jetty at the mouth of the Russian River near Jenner, California, USA. This "lost jetty" at Jenner provides a useful example of the futility of designing, building, and maintaining a coastal project in ignorance and/or disregard of the powerful forces of nature.

### INTRODUCTION

The Russian River basin is a 3,846 square kilometer watershed in northern California (Figure 1). Attracted more than 150 years ago by the world's premier redwood groves, pioneer European loggers first came to the Russian River to exploit the ancient forests. Today, the Russian River area is in large measure a holiday destination, including the town of Jenner (located about 100 kilometers north of San Francisco) where the Russian River empties into the Pacific Ocean.

Construction of the jetty (locally referred to as the Jenner Jetty) at the mouth of the Russian River (Figure 2) began in 1929. It was originally initiated for the stated purpose of creating and maintaining a permanent navigable opening at the mouth of the river in support of the proposed commercial development of natural sand and gravel deposits in the lower reaches of the stream. However, the value of such a structure (if it could be built) for recreational purposes was soon realized by local citizens and entrepreneurs and the California Fish and Game Commission became interested in the project as a means of allowing ingress and egress of fish to and from upstream spawning grounds.

### **CONSTRUCTION AND REPAIR (1929-1948)**

With the goal of creating and maintaining a navigable entrance from the Pacific Ocean to the Russian River, a number of construction and repair attempts were made between 1929 and 1948, all of which have been unsuccessful. The initial attempt was developed by the Russian River Improvement Company in February 1924. The driving force behind the company was C. A. Nelson of San Francisco, who arranged the initial capital investment of US\$75,000.

Based on historic photographic images it appears that the original plan was to remove sand and gravel from the Russian River immediately landward of the shoreline by providing appropriate cables to haul small barges of gravel from the river across the river mouth bar to be loaded on the schooner Caroline which was anchored offshore of the river mouth. Due to the very difficult task

<sup>&</sup>lt;sup>1</sup> Consulting Engineer, San Francisco, California, USA; omagoon@sbcglobal.net

<sup>&</sup>lt;sup>2</sup> Consulting Engineer, Sausalito, California, USA; ddtreadwell@comcast.net

<sup>&</sup>lt;sup>3</sup> University of California, Berkeley, California, USA; patwood@library.berkeley.edu

<sup>&</sup>lt;sup>4</sup> Texas A&M University, College Station, Texas, USA; bedge@civil.tamu.edu

of transporting sand and gravel from the Russian River for subsequent shipment to the San Francisco Bay Area across the bar at the mouth, it proved not practicable to commercially operate in this fashion.

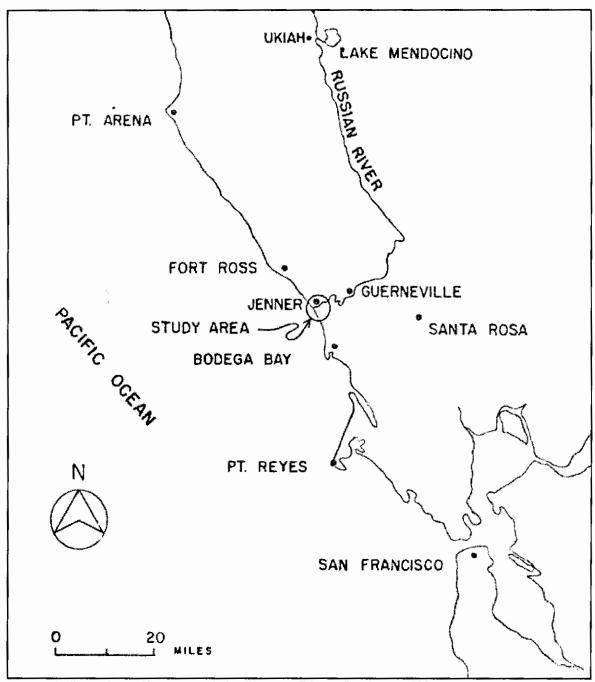


Figure 1: Location of Jenner and the Russian River, California, USA



Figure 2: Russian River and Pacific Ocean at Jenner, California, USA

As the original plan was unsuccessful, the capital investment in the Russian River Improvement Company was raised to US\$300,000 and Francis Betts Smith, PE, a California engineer, was retained to design a jetty at the river mouth. It is not clear why a single jetty at the southerly side of the Russian River mouth was implemented; however, one possibility is that at about the same time noted Professor L. M. Haupt (1908) expounded that the use of a single jetty (a "reaction jetty") was all that would be required to maintain a navigable entrance.

The initial work on the jetty included opening a quarry located at Goat Rock approximately 1000 meters south of the proposed jetty, construction of a narrow gauge railroad (Figure 3) between the Goat Rock quarry site and the jetty site, and construction of the south wall to preventing overtopping of the rail line. Initial work on the jetty consisted of the construction of a wooden pile trestle structure that would allow stone from the quarry at Goat Rock to be placed at the desired jetty location.

In order to haul material from the quarry to the jetty, a narrow gauge railroad was built between the quarry and the jetty and two engines and appropriate cars that had been surplus from the construction of the Twin Peaks tunnel in San Francisco were mobilized at the site. Construction was terminated when all available funds were expended.

At about the same time, the value of a structure that would ensure a permanent opening between the river and the ocean was realized by local resort owners and sportsmen. The California Fish and Game Commission also became interested in the project as a means of allowing ingress and egress of fish to and from the spawning grounds in the Russian River and the Pacific Ocean. On August

16, 1929 by the provisions of legislative enactment set forth in Chapters 640 and 641, statues of 1929, the State of California became part of the project and contributed US\$35,000 to match the

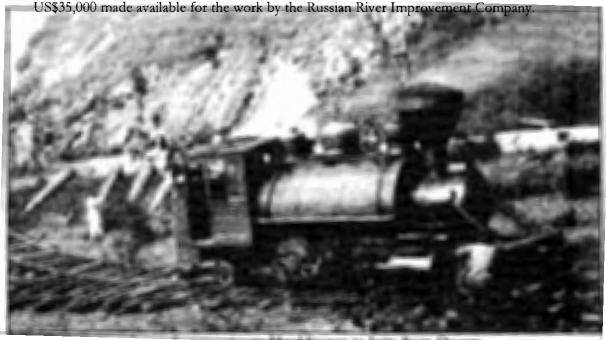


Figure 3: Narrow Gauge Locomotive to read stones to jetty non-

With the involvement of the State of California, the Goat Rock quarry was re-opened and approximately 3500 feet of narrow gauge industrial railroad was completed to transport the quarried stone. Approximately 1000 linear feet of combined timber pile trestle and core wall (Figure 4) were constructed from which the stone was placed in an excavated trench to form the jetty.

All work was discontinued in the late fall of 1930 when all allocated and contributed funds had been expended. During the winter of 1929-1930, a major portion of the jetty trestle was destroyed and much of the stone that had been placed was lost.

In 1932, an additional US\$30,000 was appropriated by the State of California to continue construction of the jetty. The destroyed wooden trestle was replaced by a steel trestle 225 feet in length for the forward extension of the stone section. A large portion of the stone placed during 1932 (Figure 5), which was used to widen the jetty base and to keep the section in place continued to settle in the underlying sand. It was believed that this would create a stable base which would allow more permanent construction in the future. Additional maintenance on the structure continued to January 1934 when very severe storms occurred. At that point in time, approximately US\$140,700 had been expended on the jetty project.

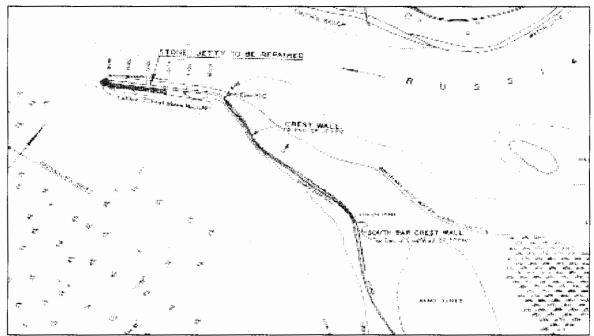


Figure 4: Layout of Narrow Gauge Rail System (Northern Portion)

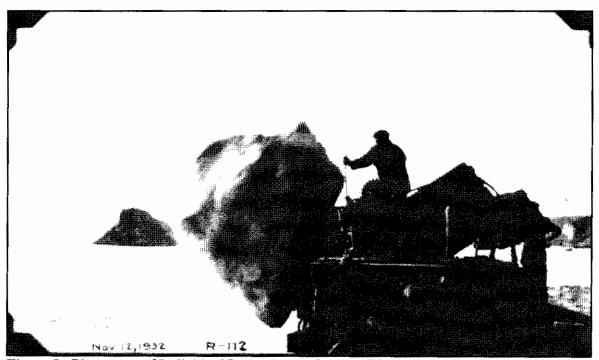


Figure 5: Placement of Individual Large Armor Stone in November 1932

Plans for a more permanent type of jetty construction including a concrete cap were formulated in 1933 with the assumption that stone placed during the preceding years would undergo sufficient settlement to form a reasonably stable foundation to support a more rigid concrete structure. Extensive boring operations in the spring of 1940 indicated that the existing stone had been displaced by two large floods during February and March 1940 which moved the smaller stones into the ocean.

After continued settlement of the jetty (Figure 6), the "final" contract was awarded to the PIMBO Construction Company for US\$59,784 in May 1948. The plans provided for placement of 4280 tons of quarry stone along the ocean side the jetty from station 12+00 seaward, around the seaward jetty head, and additional stone on the north side of the jetty. The voids between the stone were filled with 651 cubic yards of Portland cement concrete to as low an elevation as possible.

Exploration holes were drilled through the existing cap to ensure concrete penetration in the voids between the stones. Additional displaced stone was salvaged from the river and placed in the berm which was about 15 feet wide with an elevation of about plus 4 feet above Mean Lower Low Water. The reinforced berm extended from the jetty head to about 100 feet landward on the riverside. The stone for the jetty repair obtained from the Goat Rock quarry was loaded on trucks with a power shovel. At the jetty, trucks were backed out on the jetty crest to a truck crane with each stone lifted and placed individually with cable slings. The planned typical cross-section is shown in Figure 7.

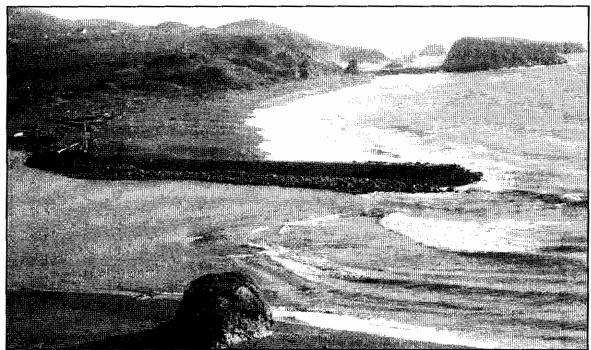


Figure 6: Condition of the Jenner Jetty in January 1946

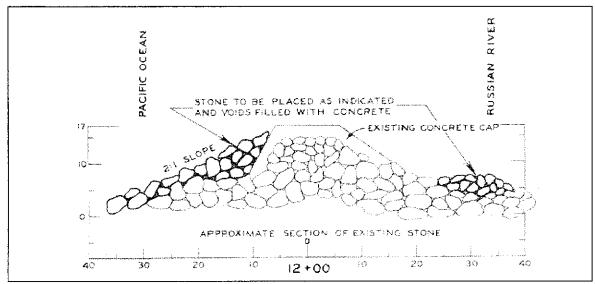


Figure 7: Planned Typical Cross-Section of Jetty Repair in 1948

### JENNER JETTY FROM 1948 TO 2008

Given the poor economic conditions of the 1930s followed by worldwide conflict in the 1940s, very little work was done at the Jenner Jetty from 1948 until the 1960s, when the potential for sand and gravel mining in the lower reaches of the stream was again evaluated (Johnson, 1964). Eventually, however, the possible benefits were far outweighed by the costs and the permitting difficulties. The jetty still exists in a damaged state (Figure 8) and is mainly an important and instructive artifact from an earlier time.



Figure 8: Jenner Jetty in July 2004

The final attempt to maintain a navigable channel from the ocean to the Russian River was undertaken by the Utah Construction & Mining Company in the mid-1960s. This plan was to provide an entrance by use of a hydraulic dredge (Figure 9) to mine sand and gravel to be shipped to San Francisco, and development of river oriented boating and recreational facilities. Although work was initiated, the plan was never completed, largely due to local opposition to associated plans for the major residential development project.

The opening at the mouth of the Russian River continues to be intermittent and unpredictable, with the jetty providing shelter for seals and other wildlife. Volunteers occasionally open the sandbar using shovels (Figure 10). The conditions at Jenner have also been studied and reported by investigators such as Schulz (1942), Rice (1974), and Behrens, Bombardelli, and Largier (2008).

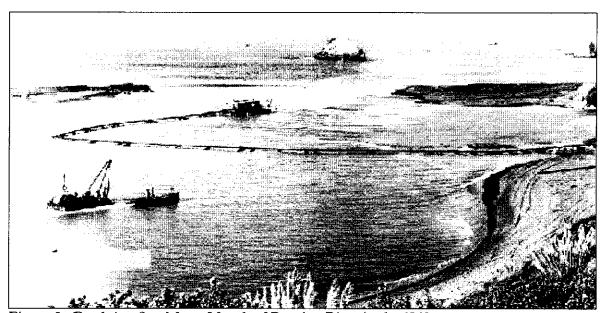


Figure 9: Dredging Sand from Mouth of Russian River in the 1960s

#### CONCLUSION

The repeated cycles of construction and repair of the single jetty at the mouth of the Russian River demonstrate the need for thorough investigation and understanding of conditions and forces prior to undertaking specific coastal installations. The Jenner Jetty remains a monument to the folly of attempting such works without fully understanding the power and complexity of natural forces along the coastlines of the world.

#### ACKNOWLEDGMENTS

The authors appreciate the support, encouragement, and enthusiasm of their families, friends, and colleagues. In particular, the authors wish to note the collegial support and historical information provided by Elinor Twohy of Jenner, California and by the Sonoma County Historical Society.

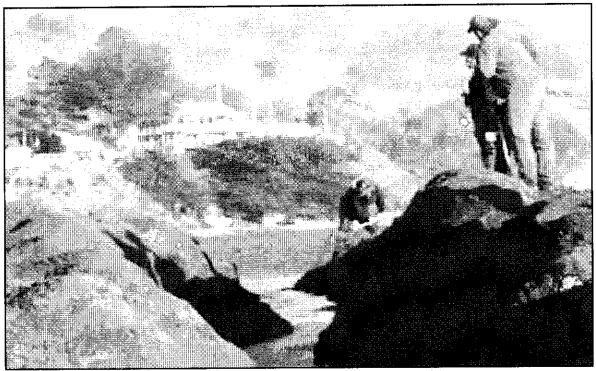


Figure 10: Using Shovels to Open the Russian River Sandbar in 2005

### **REFERENCES**

Behrens, D., Bombardelli, F., and Largier, J. (2008), Stability of River Mouths: The Case of the Russian River, California, Proceedings, ICCE 2008, 31st International conference on Coastal Engineering, Hamburg, Germany, September 2008.

Haupt, L. M. (1908), History of the Reaction Breakwater at Aransas Pass, Texas, Journal of the Franklin Institute, Volume CLXV, Number 2, February 1908.

Johnson, J. W. (1964), Potential for Sand and Gravel Mining at Mouth of the Russian River, Consulting Report for Utah Construction and Mining Company, San Francisco, California.

Rice, M. (1974), Closure Conditions of the Mouth of the Russian River, Shore and Beach, Volume 42, Number 1, April 1974.

Schulz, W. G. (1942), Report on Jenner Jetty at Mouth of Russian River, Department of Public Works, Division of Water Resources, State of California.

Th176

To:

California Coastal Commission North Central Coast District Office 45 Fremont Street, Suite 2000 San Francisco, CA 94105-2219

Attention:

Charles Lester, Executive Director Ruby Pap, District Supervisor Daniel Robinson

From:

Sonoma Coast Chapter of Surfrider PO Box 2280 Sebastopol, CA, 95473 sonomacoastsurfrider@comcast.net

The Surfrider Foundation is a non-profit grassroots organization dedicated to the protection and enjoyment of our world's oceans, waves and beaches. The Surfrider Foundation now maintains over 80,000 members and 90 <u>chapters</u> worldwide.

Re: Russian River Estuary Management Project Permit 2-01-033-A2

The Sonoma County Water Agency has submitted an application to the California Coastal Commission for an amended permit for management of the Russian River Estuary at Goat Rock State Beach in Jenner to continue previous flood management practices during the months of Oct. 15th-May 15<sup>th</sup> and to implement a new Adaptive Management Plan (AMP) of the Russian River Estuary during the months of May -Oct. 15<sup>th</sup>. The implementation of the proposed new lagoon outlet channel raises many concerns in the areas of public access, economic viability, water quality, public recreation, and loss of species habitat that deserve the attention of the Commission. We believe the current permit application should not be accepted as an amended permit. If however, it is accepted, we recommend that it be denied. As detailed below, the current proposal is inconsistent with numerous policies of the Coastal Act, including:

- 1. Water quality and rights (section 30231)
- 2. Marine resources (section 30230)
- 3. Environmentally sensitive habitat areas (section 30240)
- 4. Public access (section 30211)
- 5. Lower cost visitor and recreational facilities (30213)
- 6. Protection of certain water-oriented activities (30220)
- 7. Recreational boating use (30224)
- 8. Economic, commercial, and recreational importance of fishing (30234.5)
- 9. Wetlands (30233)

These numerous impacts cannot be balanced against the possible benefit to one listed species. The standard of review is the Coastal Act not the Endangered Species Act. Section 30007.5 mandates "that in carrying out the provisions of this division such conflicts be resolved in a manner which on balance is the most protective of significant coastal resources". Given the multitude of unmitigated and un-mitigatable impacts there is no way the present project can be considered to be most protective of significant coastal resources.

### Public Access (30211)

The use of large equipment will result in partial closure of Goat Rock Beach and impacts to public access.

Each time the Russian River is breached or the proposed lagoon channel is created or maintained, SCWA operations will impact park visitor use through partial closure of Goat Rock Beach. The FEIR acknowledges that the proposed project will result in an increase in equipment use and subsequent beach closures and concludes that the impact is not significant, as the increase is not substantial. During the last 14 years SCWA has breached the estuary an average of 6.2 times/year. At least 2 of those breaches occurred during the months of January, February, November, and December (non-management period). Under the new management plan two days of initial construction would be required followed by maintenance activity (undetermined #) throughout the management period. In addition to the number of days required to implement and maintain the new outlet channel, NMFS estimates "that SCWA will need to artificially breach the lagoon using methods that do not create a perched lagoon twice per year between May 15<sup>th</sup> and October 15<sup>th</sup>.

<sup>1</sup> "There are 153 days in the management period (May 15 – October 15). The proposed project will restrict public access to Goat Rock Beach during the most heavily used time of the year. Goat Rock Beach is also one of the easiest beaches to access along the Sonoma Coast." The frequency and duration of beach closures will significantly increase, is substantial without limitation, and the subsequent limitations to coastal access ARE significant. There are no measure included in the plan regarding procedures that might be taken during these days to alleviate the impacts to public access.

The project is unspecific about the number of beach closures and therefore the impact on public access can not be fully evaluated.

### RUSSIAN RIVER ESTUARY OUTLET CHANNELADAPTIVE MANAGEMENT PLAN (AMP) p. 37

7.6 EXCAVATION FREQUENCY

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"Creating and maintaining the outlet channel will probably employ one or two pieces of heavy machinery (e.g. excavator or bulldozer) to move sand on the beach. At the start of the management period (late spring or early summer), when configuring the outlet channel for the first time that year, conditions may require operating machinery for up to two consecutive days. The precise number of excavations would depend on uncontrollable variables such as seasonal ocean wave conditions (e.g. wave heights and lengths), river inflows, and the success of previous excavations (e.g. the success of selected channel widths and meander patterns) in forming an outlet channel that effectively maintains lagoon water surface elevations."

Therefore the number of excavations and subsequent beach closures is also uncontrollable.

From July 1, 2009 through June 30, 2010, Sonoma Coast State Beach received almost 3 million day use visitors. Goat Rock Beach is the second most popular beach on the Sonoma Coast. It is reasonable to assume that a significant portion (10%) of park visitors visit this beach. The lagoon management period corresponds with the most impacted time of year for park visitors with approximately 66.5% of visits.

### **Public Recreation (30220, 30224)**

The project will result in significant impacts to public recreation

According to the FEIR, the proposed project would result in significant impacts to public recreation.

### Swimming

The impacts of the Adaptive Management Plan (AMP) on swimming at Goat Rock State Beach, specifically the river side beach area have not been assessed nor analyzed. This riverside beach area is heavily used especially by families with children.

<sup>2</sup> "Higher water levels in the estuary, up to 9' in some locations, as posited in the FEIR will inundate riverside beaches for the long periods of time that the lagoon is in place – up to 5 months. The loss of river side wading/swimming opportunities at Goat Rock State Beach is a significant impact to the many families with children who use the riverside beach area at Goat Rock State Beach exclusively due to the dangers of the ocean side area and there can be no mitigation for this impact with the plan as proposed. This river side beach area is arguably the only State Beach that is safe for children to wade and swim along the entire 10 mile length of the Sonoma Coast State Beach. All other State Beaches have only ocean side beach areas. Further, the FEIR fails to identify the existence of or assess the impacts of loss of the beaches below Rivers End used by Inn guests and residents of the houses on Burke Avenue. The inundation caused by the implementation of the outlet channel of these two prime riverside beach areas restricts access to these PUBLIC recreational sites."

#### Surfing

Surfing locations are a prime example of low cost visitor and recreational opportunities and legally protected under the California Coastal Act (Section 30213). No baseline monitoring of surf conditions has been done by the Water Agency. As stated in the SCWA's FEIR, impacts to surfing at the River Mouth as well as surfing areas south of the river including North Side Goat Rock, South Goat, Blind Beach, and the Far Cove will result with the implementation of the Estuary Management Project. These premier Sonoma County surf recreation areas depend greatly on the influx of new sand and gravel. The combination of modifying breaching practices and lower flows will remove the possibility of surfing these areas. Surfrider has determined that the mouth of the Russian River is a high quality surfing location.

### To quote SCWA's FEIR Impact 4.7.2: Eliminate or Modify an Existing Recreational Resource:

"The proposed project would likely reduce the occurrence of open channel tidal conditions conducive to surfing activities." It goes on to say "This potential impact may be inconsistent with

the California Coastal Act, which protects water based recreation (Section 30220) and low costs recreational opportunities (Section 30213). The California Coastal Commission has jurisdiction and would be responsible for making a consistency determination of the project with these policies; however it is recognized that alteration of the opportunity for surfing may not be consistent.

#### ...... yet no feasible mitigation measures are identified.

Surfing in Sonoma County can only be practiced in the ocean and never at inland areas. The Surfrider organization and supporters are particularly protective of surfing locations on the Sonoma Coast, especially the high quality ones, as they are available to the public in very limited supply. Sonoma County has only 9 surfing areas. As of today, out of those 9 areas, 3 are totally closed to public access, one is partially closed (Bodega Head) and access to Salmon Creek is greatly reduced (the Dunes & Bean Avenue Parking lot closures). There are also fees for ½ of these areas. Access to surfing is already limited to Sonoma County residents.

The loss of surfing at the River Mouth for half of the year due to the inlet channel and its construction efforts will now eliminate surfing at one of the only free surfing areas on the entire Sonoma Coast. In addition-the more northern surf areas and Bodega Head are less frequently used due to level of experience required or travel time, therefore, only 2 possible areas remain for surfing –primarily-Salmon Creek & the River Mouth. The Estuary Management project therefore reduces the potential surf areas by ½ in Sonoma County during the months proposed.

Except for extreme drought years, the mouth has usually been open during the summer over the last 100 years. The SCWA Estuary Management events from 1996-2010 have averaged about 3 breechings during the May 15<sup>th</sup>-Oct. 15<sup>th</sup> time period. Therefore the mouth is open almost all of the 150 days of that period and allows for formation of sandbars which combined with swell create surf for residents to enjoy. Closing the mouth of the river and preventing the movement of sand and gravel will result in the loss of surf at the River Mouth as well as surfing at Goat Rock State Beach which also depends on this influx. The loss of over 5 months of surf at two locations which are free and accessible to the residents of Sonoma County IS a significant impact to recreation for Sonoma County residents and should be unacceptable to the State.

As to date, no baseline quantification of the frequency and quality of waves at the Russian River exists; however, estimates can be made by reviewing; weather records, breaching records, hydrograph records, seal data notes, locally produced films and photography, and consultation from surfers who frequent the Russian River mouth. These need to be analyzed and included in any review of this project.

#### Recreational Boating

Lowering the flows in the river is a requirement to enable a sustained closure of the mouth of the river. Lowering the flows creates impacts to recreational boating.

<sup>&</sup>lt;sup>3</sup> "The Russian River has been declared a navigable river. *Hitchings v. Del Rio Woods Recreation and Parks District*, 55 Cal. App. 3d 560, 567 (1976). There simply is no line where the Estuary stops and the river begins in so far as recreation goes. In 2004 & 2007 the SWRCB approved

Temporary Urgency Change Petitions on behalf of Sonoma County Water Agency to reduce minimum flows to 85 cubic feet per second at the Hacienda Bridge USGS gauging station.

The impacts from low flow on recreation are profound. At flows of less than 90 cfs as measured at Hacienda Bridge, Russian Riverkeeper received dozens of reports from boaters concerned that navigation in the free flowing portion of the lower Russian River was being impeded, resulting in more perilous conditions for boaters. As flows were reduced, areas below riffles were narrower and often boaters were swept dangerously into overhanging vegetation resulting in over-turned watercraft. Russian Riverkeeper has numerous pictures of boaters (including the Sonoma County Sheriff's Water Safety Patrol boat) having to push their boats through shallows, and other river users were forced to walk due to shallow water, resulting in serious impediments to navigation. Several canoe and kayak rental outfitters, principally Burke's Canoe Trips, and the Monte Rio Park and Recreation District, have been impacted by previous Temporary Urgency Change Petitions issued to Sonoma County Water Agency (SCWA) by the SWRCB in 2004 and 2007 that impeded the navigability of the Russian River. The owners of Burke's and River's Edge have received numerous complaints and that many regular customers did not return in successive years due to lower flows.

These realities sharply contrast with the blithe assertion in the RRBO (see pp. 264-265of Russian River Biological Opinion) that recreation would not be impacted at 70-85 cfs. Additionally, when the temperatures spike during the summer diversions from the river (for both municipal and agricultural uses), the operating margin of 10-15 cfs is depressed at the same time as record crowds go to the River to cool off and canoe. Sonoma County residents regularly canoe and kayak the Russian River and the Estuary for exercise, recreation and fishing and there have been several dozen complaints about navigation being impeded by previous temporary urgency change petitions that reduced flows below 90 cfs in the lower Russian River." The impacts of lowering the flow in the river and failure to maintain an open estuary creates impacts to recreational boating that need to be considered in any analysis of this project.

#### Water Quality (30230, 30231)

Lowering the flows in the river and closing the estuary creates impacts to water quality that require further study. The project contains no performance standards with regards to when corrective measures should occur.

## RUSSIAN RIVER ESTUARY OUTLET CHANNELADAPTIVE MANAGEMENT PLAN (AMP) p. 43

9.3.2 Decline in Water Quality

Declines in water quality could have impacts to salmonids rearing in the estuary, other species which reside in the estuary and the public. Potential water quality concerns include, but are not limited to:

- Dissolved oxygen conditions becoming dangerously low to fish and other species;
- Elevated salinity levels in domestic water wells, and
- Elevated bacterial levels.

#### FEIR 2-14 Nutrients and Bacteria

Potential significant and unavoidable impacts to water quality associated with nutrient and bacteria levels are acknowledged and analyzed in Draft EIR Section 4.3, Water Quality. As noted

on Draft EIR pages 4.3-7 and 4.3-12, there are currently no specific limits on nutrient and bacteria levels for estuarine systems, only freshwater. As discussed in the Draft EIR (page 4.3-24), the precise response of the Estuary to the Estuary Management Project cannot be predicted with certainty. As discussed in Draft EIR Section 4.3, it is anticipated that nutrient and bacteria conditions would remain within the range of those experienced within the Estuary over the past 15 years, but that the duration of those conditions would likely increase as a result of the project. Therefore, based upon the best available information, this EIR concludes that the proposed project would have the potential to result in significant and unavoidable impacts to water quality related to bacterial and nutrient levels in the Estuary.

The low flows and perched lagoon will create significant impacts to water quality yet there has been no data available to the public on bacteria, nutrients, and pathogens for the Lower Russian River and Russian River Estuary. Current County of Sonoma Department of Health data only tests and reports to the public the area of the Russian River from Alexander Valley to Monte Rio Beach for total coliform ,escherichia coli, and enterococcus.

Water quality monitoring in the Adaptive Management Plan should require that this testing occur in the lower river and estuary, a baseline established, and data made available to the public before the water agency's experimental implementation of the perched lagoon and low flows is allowed. We are concerned that extended periods of low flow or stagnant lagoon conditions will result in increased bacteria levels with associated human health impacts for swimmers in the lagoon/river beach areas.

## The Estuary Project and low flow (permanent changes to Decision 110) must be reviewed by California Coastal Commission together in order to fully understand the impacts.

Lowered flows are necessary for successful sustained mouth closure but the analysis provided does not deal with this issue because the lowering of the river is not included in the project considered in the EIR and therefore no analysis of the impacts is available to the Commission. The Commission cannot determine the extent of the impacts to habitat, water quality and other coastal resources without such analysis.

<sup>4</sup> "The California Environmental Quality Act (CEQA) requires that the whole of a project be considered in one EIR. Bifurcation of the Estuary Management Plan and the Fish Flow Project avoids full examination of the environmental impacts that will result from the Estuary Project. Many, many people provided comments on this issue, as it is one of the most serious lapses in the FEIR, and one noted by almost every commenter. The FEIR gives numerous justifications in their Master Response (2.1) for separating these two projects. For instance, they insist that the BO prioritizes the Estuary Project before D1610 revisions because it will take much longer to process changes to D1610. What they don't mention however, is that the Temporary Urgency Change Petition process, which requires the same lowered Hacienda flows called for in the BO and the Fish Flow Project, mitigates for the delay. Conveniently, the TUCP does not require CEQA review. Furthermore, the BO was never subjected to environmental review either. An overarching criticism of the current analysis is that it is not comprehensive as to assessing the impacts of modifying Decision 1610 and the AMP." Segmenting is illegal under CEQA and this

bifurcating of the analysis of the two projects, which are intrinsically linked, is flawed and does not provide the CCC with the information needed to fully analyze the project and its impacts.

#### Impacts to Environmentally Sensitive Habitat Areas (ESHA) (30240)

The project has numerous impacts to species and their habitats.

#### Species Habitat Considerations

It is clear that with SCWA's efforts to promote conditions advantageous to one threatened species; they will impact, in some cases severely, other species. The Biological Opinion aimed at one listed species does not consider the impacts to other species, including other sensitive species. Even if we agreed with the BO, and we do not, the ESA (Endangered Species Act) is not the basis for approval of a project under the Coastal Act. To evaluate the impact of the AMP on ESHA and the wildlife it supports it is necessary to determine if it will have a substantial adverse effect, either directly or through habitat modifications, on any species identified, but not limited to candidates for listing, sensitive, or special-status species in local or regional plans, policies, or regulations or by the CDFG, USFWS, or NMFS. In this case it is clear that the project will cause significant disruption to the habitat values of ESHA and the numerous species that depend on it.

### Pinnapeds, Specifically Harbor Seals

Impacts on the Harbor Seal colony are inadequately assessed and the CCC needs to take a closer look at this issue. The conclusion that the impacts are reduced to less than significant by virtue of the Incidental Harassment Authorization (IHA) permit and its protocols is disputed. The Jenner Harbor Seal colony has been established on Goat Rock Beach at the mouth of the Russian River since 1974 - 37 years. Of the 21+ Sonoma Coast Harbor Seal haul outs that constitute the Sonoma County Harbor Seal Census, the Jenner/Goat Rock haul out is the most significant. The Jenner colony is the largest and most significant Harbor Seal colony in Sonoma County and from Drakes Beach in Marin County to the mouth of the Eel River in Mendocino County.

Harbor Seals are colonial and have a large degree of site fidelity. Being diurnal, they haul out during the day. The haul out period is critical for metabolic processes (e.g. re-oxygenation) that allow them to dive in cold ocean waters when they feed at night, for bonding with pups, nursing pups and generally resting in a colony where there is safety in numbers. Harbor Seals are easily disturbed. Disturbances, whether natural by birds flushing or man-induced harassment whatever the source – boats, beach walkers approaching too close, mechanical equipment associated with the project - interfere with the needed biological processes, rest and restoration. The FEIR documents the short time frame after a harassment incident that the Harbor Seals will return to the haul out site. However, what has been observed over time is short term incidences of harassment for short periods of time. At no time over the years that breaching activities have been implemented has the river mouth been closed for more than one month maximum.

The protocols of the IHA permit are intended to mitigate the impacts of harassment associated with the mechanical breaching of the river and the construction associated with creating the lagoon. These protocols CAN NOT and DO NOT mitigate the impacts of 1) the vast increase in

the number of times/year the colony can/will be disrupted by these actions nor 2) the up to 5 month closure of the river mouth. Long term, chronic disturbances result in 1) reduced use of a site, 2) a shift to nocturnal rather than diurnal feeding, 3) reduced pup production and 4) site abandonment.

There is a lack of assessment of the effect on harbor seal colony from the multiple times the colony will be harassed and disrupted in any given year, year after year of the project life (undefined as to number of incidents or length anywhere in the FEIR document or AMP).

The Sonoma County Water Agency should also be required to do a full assessment of the long term impacts of a 5 month closed mouth on the seal colony. Creating a closed mouth for up to 5 months and the associated long barrier beach which will result in multiple ongoing disturbances/harassment associated with beach walkers approaching the colony – ignoring the signs warning them to maintain the statutory distance -when no Seal Watch volunteers are present to interpret and maintain the statutory distance is "having a substantial adverse effect, either directly or through habitat modifications" The protocols of the IHA Permit, intended for individual incidents of construction equipment and associated staff presence on the beach, cannot be used as the basis for declaring these substantial adverse effects which were not assessed as less than significant. Moreover, the harassment protocols for short term impacts cannot be used as mitigating the long term potential for loss of the colony associated with ongoing, continual, chronic disturbance/harassment of the colony and the likely resulting abandonment of the site.

A full cumulative assessment of the harassment needs to be required by the CCC. Additionally, there are no benchmarks to determine when review of the impacts should occur and no performance standards in the AMP with regard to when, if or what should happen, if the impacts are greater than those contemplated.

#### Dungeness Crab (section 30234.5)

<sup>5</sup> "The Russian River Estuary is an important nursery area for juvenile Dungeness crab, which is an economically important species for the local fishing fleets. Several studies have documented the fact that juvenile Dungeness crab that are able to access coastal estuaries have accelerated growth rates due to warmer temperatures and better foraging opportunities (Stevens, Armstrong, 1984). According to studies completed by the University of Washington's School of Aquatic and Fisheries Science (Stevens, Armstrong, 1984), adverse environmental effects on juvenile Dungeness crab nurseries directly impact adult populations. In the Russian River, Dungeness crab use of the estuary is well documented by SCWA seine netting performed in 2004, although no juveniles were trapped in 2005 this was also observed in the San Francisco Bay in 2005 and is likely due to ocean conditions.

The availability of the Russian River estuary to Dungeness crab could be a significant factor in their abundance on the Sonoma Coast (Pauley et al, 1989), but no studies have been conducted to determine the contribution Russian River estuary juvenile Dungeness make towards the total adult abundance in coastal waters."

The CCC should require the analysis of the impact of the project on this species, including requiring studies to determine the importance of the estuary to the Dungeness Crab population.

Additionally, there should again be benchmarks to determine when additional reviews of the crab population should occur and specific remedial actions that should be taken if significant impacts occur.

#### <u>Birds</u>

"Impacts on birds are inadequately assessed. The beach at Goat Rock State Beach is a colonial site. Not only does it provide a resting place for Harbor Seals, it provides a resting place for birds. At any one time, hundreds of gulls, terns, Brown Pelicans and/or cormorants rest on this beach. This is a community haul out! There are few places like this along the coast – large sandy beach area with access to both the river and the ocean. As such it is a very important site for birds to rest and preen, giving them access to the river and to the ocean to swim and to feed. Gulls nest on Haystack Rock, cormorants congregate on it and on the smaller rocks disbursed in the river. As with Harbor Seals, birds are easily disturbed. The major disturbance for birds is beach walkers whose approach results in flushing the birds. There has been no assessment made of the impacts of prolonged closure of the river mouth on the flushing of birds which rest on the beach as a necessary part of their metabolic processes. Regardless of whether flushing the birds is considered a take under the Federal Migratory Bird Treaty Act, the fact that both equipment operation and beach alteration will increase flushing is an impact of the project on species that inhabit/use the beach and are a part of the ecosystem of the estuary." and therefore inconsistent with 30240

#### Impacts of invasive species: Ludwigia

<sup>7</sup> "In recent years the invasive non-native plant Ludwigia Hexapetla has rapidly colonized the lower Russian River resulting in lost beach and river access and unknown impacts to aquatic organisms in particular endangered Coho Salmon and Steelhead Trout. According to invasive plant experts at UC Davis and the Laguna Foundation one of the limiting factors for Ludwigia growth is depth, velocity and amount of shade. The flow reductions mandated by the RRBO could encourage the spread of ludwigia by slowing the river velocity and reducing the depth. In addition, the currently saline Russian River estuary if turned to a freshwater lagoon as envisioned in the RRBO, could encourage the spread of ludwigia to that portion of the river. Increases in plant growth in a freshwater system result in conditions that do not favor aquatic animals especially cold-water fish like Coho Salmon and Steelhead Trout." The project does not contain remedial actions that should be mandated if an increase in the amount of Ludwigia Hexapetla occurs.

#### Section 30233

The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects.

The diking and filling contemplated in this project does not fall under one of the 7 allowable uses of Section 30233. Even if it were an allowable use it is not the least damaging feasible alternative required under Section 30233.

# Consideration of Alternatives and Economic Viability RUSSIAN RIVER ESTUARY OUTLET CHANNEL ADAPTIVE MANAGEMENT PLAN (AMP) p. 38

"Actual feasibility with regards to the full range of dynamic conditions has not been determined. Risks associated with outlet channel failure have not been quantified. In addition to the channel's performance criteria, there are also water quality and ecological performance criteria for the perched lagoon. These additional criteria have not been evaluated as part of the outlet channel management plan."

#### There has been no economic analysis for the project or any possible alternatives.

The economic viability of the SCWA's proposed project is questionable. No cost analysis for the Estuary Management Project has been made available to the public. The Water Agency steadfastly claims that they must proceed with their project as designed because the Russian River Biological Opinion requires it. This is not true. The required outcome of improved fish habitat could be accomplished by other methods not chosen by the Water Agency, and cost comparisons should be a major consideration for the final project design.

No analysis of feasible alternatives resulting in un-necessary expense and environmental impacts. According to SCWA, the Estuary Management Project has two fundamental objectives - enhance juvenile salmonid habitat by maintaining a seasonal freshwater lagoon and alleviate potential flooding of properties along the estuary as a result of higher estuary water levels. The former is required by the Russian River Biological Opinion (RRBO) but the later is not. Although the RRBO states that the goal is to benefit fish, the estuary is still controlled by flood control levels that have nothing to do with improving fishery habitat, so the goal is already compromised. This places non-fish centric constraints on any effort to improve estuarine conditions.

Natural estuary breaching would provide a deeper lagoon of freshwater for fish habitat. It should be noted that review of estuarine science and the RRBO and RRBA (Russian River Biological Assessment) suggests that either an always open or always closed estuary could produce the same benefit to listed fish species. If the low-lying structures were elevated or relocated, an always open sandbar regime could produce a benefit to the fish without the negative impacts to the Lower River community. The extremely dynamic nature of coastal areas such as the sandbar at the mouth of the Russian River have proven to be difficult to manage, as evidenced by past mechanical breaching events that were followed by wave action closing the sandbar within days. This shows that any attempt to control or manage the sandbar to achieve some desired condition is problematic and fraught with risk of failure to obtain desired conditions.

The Water Agency made an initial project design decision to continue the historical estuary management practice of artificial breaching for flood protection. This concept remained in the project throughout the vetting process of environmental impact review without any cost analysis of alternate flood prevention methods. It is fact that only a few properties have structures threatened by water levels if the estuary is allowed to breach naturally. SCWA offers no cost comparison of natural breaching and requiring the small number of vulnerable properties to lift

structures above the flood zone vs. using heavy machinery every week between May and October for 15 years to artificially maintain a flat outlet channel in the sand.

It is noteworthy that most other property owners along the Russian River are required to follow FEMA guidelines and remove structures from the flood plain by means of lifting or relocation (as has been done for almost 150 homes in the Lower Russian River due to repetitive flooding). SCWA refuses to explain why this tactic was ignored or eliminated from their proposed project even though it appears to have cost advantages. The SCWA has flood control jurisdiction and could mandate the elevation of low lying structures via its flood control authority and reduce the impacts to the Lower River community. There is no explanation as to why this has not been considered.

SCWA's own environmental review determined that the estuary's water quality might deteriorate as a result of their proposed project. The term "adaptive management" is used by the Water Agency as a euphemism for "figure it out as they go" when desired outcomes are not realized. If water quality issues plague the fish habitat and "adaptive management" begins, the cost of their estuary management plan is completely unknown. This project, as designed, is fiscally irresponsible and should be called an expensive experiment.

The Estuary Management Project's EIR identified many "significant and unavoidable" impacts for which there are no "feasible" mitigation measures. At the same time, no back-up information with cost analysis is offered to support the claims that mitigation measures are unfeasible.

#### In closing, it must be stated that

This project is inconsistent with the Chapter 3 policies of the Coastal Act and must be denied. It is unacceptable to take and alter a public resource – Goat Rock State Beach – a part of the commons owned by the citizens of California, to alter a State owned Beach, interfere with multiple State owned and state protected resources, impact numerous species and their habitats, and alter the river and its recreational uses as well as access to the river for so many users who have few safe alternatives to enjoy the coast side environment.

This is a highly expensive and prolonged experiment with an important coastal and marine resource. It is an experiment that cannot be justified. Many of the impacts are permanent and the Coastal Commission must consider what condition the Estuary will be in at the end of the Adaptive Management period. Given the numerous permanent impacts and uncertain consequences of other aspects of this experiment it is fair to assume that it will be far worse then it is today, possibly making restoration impossible.

#### References

<sup>&</sup>lt;sup>1</sup> Liz Burko, Russian River District Superintendent State Parks Comments to SCWA in DEIR

<sup>&</sup>lt;sup>2</sup> Norma Jellison, -comments on the Russian River Estuary Management Plan Draft EIR

<sup>&</sup>lt;sup>3</sup> Don McEnhill, Executive Director, Russian Riverkepers –protest and petition to State of California State Water Resources Control Board relative to a petition requesting modification to Water Rights Permits submitted by the Sonoma County Water Agency

<sup>&</sup>lt;sup>4</sup> Brenda Adleman, Russian River Water Protection Council Letter to Sonoma County Board of Supervisors

Don McEnhill, Executive Director, Russian Riverkepers –protest and petition to State of California State Water Resources Control Board relative to a petition requesting modification to Water Rights Permits submitted by the Sonoma County Water Agency

<sup>&</sup>lt;sup>6</sup> Norma Jellison, -comments on the Russian River Estuary Management Plan Draft EIR

<sup>&</sup>lt;sup>7</sup> Don McEnhill, Executive Director, Russian Riverkepers –protest and petition to State of California State Water Resources Control Board relative to a petition requesting modification to Water Rights Permits submitted by the Sonoma County Water Agency

From: sonomacoastsurfrider [mailto:sonomacoastsurfrider@comcast.net]

Sent: Sunday, April 08, 2012 10:46 AM

To: Keliner, Laurel@Coastal

Subject: Re: Russian River Estuary SCWA Permit

---- Original Message ---From: sonomacoastsurfrider
To: Kellner, Laurel@Coastal

Sent: Monday, 02 April, 2012 6:07 PM

Subject: Re: Russian River Estuary SCWA Permit

Hello Laurel

Thank you for the reply.

The last correspondance from the Commission to the SCWA requested:

**Definition of Flood Problem-** a clear graphic that depicts, in site plan view and cross-sections, as appropriate, all at-risk *structures* in relation to base and expected flood elevations.

Alternatives- additional detail over the same range of evaluation factors (including all expected costs and impacts to purchasing easements, raising structures, and general implementation of the alternatives, as well as degree of resource protection benefit provided) to allow a clearer feasibility comparison of the alternatives described.

Are all these materials now submitted by the SCWA?

What will be the tenure of the permit?

It would be helpful to know this before scheduling a day off to come to the Commission office and review the current file. I appreciate your time and would like the opportunity to schedule either an appointment or a phone conference with you.

Cea

---- Original Message ----From: Kellner, Laurel@Coastal

To: Sonoma Coast Chapter of Surfrider Foundation

Sent: Tuesday, 03 April, 2012 5:24 PM

Subject: E: Russian River Estuary SCWA Permit

Hi Cea-

Thank you for being in touch.

I wanted to let you know that yes, there will be a new permit with full public review and we have received materials from SCWA. You will be able to review the file materials, if you like.

When we know the hearing date, we will let you know.

Please send me your mailing address and I will add you to the mailing list.

Best-Laurel Laurel Kellner
Coastal Analyst
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105
(415) 904-5266 Voicemail
(415) 904-5400 Fax
laurel.kellner@coastal.ca.gov

From: Sonoma Coast Chapter of Surfrider Foundation [mailto:sonomacoastsurfrider@comcast.net]

Sent: Friday, March 30, 2012 5:26 PM

To: Kellner, Laurel@Coastal

Cc: Spencer Nilson

Subject: re: Russian River Estuary SCWA Permit

#### Hello

Our chapter has been working with Daniel Robinson on the Russian River Estuary Permit and would like to have the opportunity to review the file and dialogue with you concerning updates. It is our understanding that you are currently the staff person handling this permit application and that the file is currently located at the SF CCC office. We would appreciate any information confirming this. We have followed this issue carefully and have made extensive comments to the Commission.

Thank you
Cea Higgins
Volunteer Coordinator
Sonoma Coast Chapter of Surfrider
707-217-9741
sonomacoastsurfrider@comcast.net

From: Brenda Adelman [mailto:rrwpc@comcast.net]

Sent: Tuesday, April 03, 2012 4:26 PM

**To:** Kellner, Laurel@Coastal

Subject: Re: Sonoma County Water Agency Estuary Project Permit

Thank you for getting back to me Laurel. Can you give me a sense of what is in the file and how big it is? I am elderly, partially disabled and it's not always easy for me to travel. Also, I am quite overwhelmed with work right now and can't take a day off to drive to SF and back (I'm about 85 miles away.) Any help you can give me would be very appreciated. Also, I am able to take large files on my computer, so whatever you can send electronically would be accessible to me.

Brenda Adelman

From: "Kellner, Laurel@Coastal" < Laurel.Kellner@coastal.ca.gov >

Date: Tue, 3 Apr 2012 11:48:32 -0700

To: Brenda Adelman <rrwpc@comcast.net>

Subject: RE: Sonoma County Water Agency Estuary Project Permit

Hi Brenda-

Thank you for being in touch.

I wanted to let you know that yes, there will be a new permit with full public review and we have received materials from SCWA. You will be able to review the file materials, if you like.

When we know the hearing date, we will let you know.

Please send me your mailing address and I will add you to the mailing list.

Best-Laurel

From: Brenda Adelman [mailto:rrwpc@comcast.net]

Sent: Thursday, March 29, 2012 9:44 AM

To: Kellner, Laurel@Coastal

Subject: Sonoma County Water Agency Estuary Project Permit

Importance: High.

Laurel:

I just got your email address from Daniel Robinson. I would be interested in learning the status of SCWA's Estuary Permit. I had been in touch with Daniel over the last year and had entered some concerns into the file on behalf of Russian River Watershed Protection Committee. I was wondering where things were at? It was my understanding that there would be a new permit with full public review. Is that the case?

Brenda Adelman Russian River Watershed Protection Committee (707) 869-0410 From: Brenda Adelman [mailto:rrwpc@comcast.net]

**Sent:** Thursday, March 29, 2012 9:44 AM

To: Kellner, Laurel@Coastal

Subject: Sonoma County Water Agency Estuary Project Permit

Importance: High

#### Laurel:

I just got your email address from Daniel Robinson. I would be interested in learning the status of SCWA's Estuary Permit. I had been in touch with Daniel over the last year and had entered some concerns into the file on behalf of Russian River Watershed Protection Committee. I was wondering where things were at? It was my understanding that there would be a new permit with full public review. Is that the case?

Brenda Adelman Russian River Watershed Protection Committee (707) 869-0410 Th/76

From: Daniel Robinson

Sent: Tuesday, February 28, 2012 9:47 AM

**To:** Brenda Adelman **Cc:** Laurel Kellner

Subject: RE: SCWA Permit

Hi Brenda.

I'll attach our status letter (#2 - dated 2.23.12) that we just sent out last week in response to their submittal of information in response to our status letter (#1 - dated 10.24.11) (also attached).

Also, this project is being transferred back up to our San Francisco office and the North Central District. I've CC'ed Laurel Kellner who is now taking over the day to day workings of the project. I'm transitioning down to work on SLO county matters, but I'll still be here at the SC office if you have questions.

And bonus! The entire project file is/or soon will be up in SF so a visit to review any file material is now closer to you.

Cheers, Daniel

From: Brenda Adelman [mailto:rrwpc@comcast.net]

Sent: Tuesday, February 28, 2012 8:40 AM

**To:** Daniel Robinson **Subject:** SCWA Permit

Daniel:

I haven't heard anything in awhile about the SCWA Permit for the Russian River Estuary Project.

I was wondering if you could give me an update and any reports or information that has been prepared? Is there any way to see reports SCWA submitted to you without traveling to your office? I have arthritis and don't get around as much as I used to.

Thank you.

Brenda Adelman Russian River Watershed Protection Committee (707) 869-0410