

## Section 14.4

# Federal Government Agencies



## National Oceanic and Atmospheric Administration, U.S. Department of Commerce, Dick Butler, Santa Rosa Area Office Supervisor, Protected Resources Division, 04/14/09

F\_NOAA-1 Based on this comment, and in addition to changes described in the response to comment G\_CalAm-211, the following two paragraphs have been added to the end of Section 4.3.3.1 of the EIR:

The Sustainable Fisheries Act of 1996 (Public Law 104-297) amended the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) to establish new requirements for Essential Fish Habitat (EFH) descriptions in federal Fishery Management Plans (FMPs) and to require federal agencies to consult with the National Marine Fisheries Service (NMFS) on activities that may adversely affect EFH. The Magnuson-Stevens Act requires all fishery management councils to amend their FMPs to describe and identify EFH for each managed fishery. The Act also requires consultation for all federal agency actions that may adversely affect EFH (i.e., direct versus indirect effects); it does not distinguish between actions in EFH and actions outside EFH. Any reasonable attempt to encourage the conservation of EFH must take into account actions that occur outside of EFH, such as upstream and upslope activities that may have an adverse effect on EFH. Therefore, EFH consultation with NMFS is required by federal agencies undertaking, permitting, or funding activities that may adversely affect EFH, regardless of the activity's location. Under section 305(b)(4) of the Magnuson-Stevens Act, NMFS is required to provide EFH conservation and enhancement recommendations to federal and state agencies for actions that adversely affect EFH. However, state agencies and private parties are not required to consult with NMFS unless state or private actions require a federal permit or receive federal funding. Although the concept of EFH is similar to that of critical habitat under the FESA, measures recommended to protect EFH by NMFS are advisory, not proscriptive.

Components of the CWP are located within areas identified as EFH for various life stages of marine and estuarine fish species (e.g., various rockfishes, flatfishes, sharks, northern anchovy, Pacific sardine, Chinook salmon, coho salmon, etc.) managed by federal FMPs. In addition, project components within Moss Landing/Elkhorn Slough are located in an area designated as coastal estuary Habitat Areas of Particular Concern (HAPC) for various federally managed fish species within the Pacific Groundfish FMP. HAPCs are described in the EFH regulations as subsets of EFH that

are rare, particularly susceptible to human-induced degradation, especially ecologically important, or located in an environmentally stressed area.

F\_NOAA-2 This comment's support of desalination, ASR, and well intakes, as well as its concern regarding once-through cooling, is acknowledged. Please refer to Master Response 13.9, Once-Through Cooling for more discussion of once-through cooling, and to Sections 1.4.3, Alternative Selection and the Proposed Decision, and 1.4.4, A Final CPUC Decision, for a description of the CWP decision-making process.

F\_NOAA-3 Several documents produced by scientific and regulatory entities have suggested that 110% of ambient salinity levels as a limit that would provide a reasonable margin for protecting marine life. As a result of this comment, Impact 4.1-4, under the heading Moss Landing Project, subheading Salinity of the EIR has been modified, as follows:

Although there are no available data to suggest a 10-percent exceedance of ambient salinity would be lethal in 26 hours, the 10-percent figure ~~is being~~ was suggested by in conversations with staff from the Central Coast Regional Water Quality Control Board and the Monterey Bay National Marine Sanctuary regulatory agencies as the maximum allowable. This maximum is consistent with that suggested by the World Health Organization (WHO, 2007) and falls within the range of salinities (i.e., 75%–125%) at which the sand crab, *Emerita analoga*, was shown to survive for 24 hours (Gross, 1957). Consequently, the duration of the exceedances of greater than 110 percent (i.e., 26 hours) of the intake salinity could be considered high. Therefore, the high duration of exceedance of the ambient salinity levels is considered to result in a significant impact. The effects of elevated salinities on marine organisms are discussed in Section 4.3, Marine Biological Resources. With implementation of Mitigation Measure 4.1-4a, the impact would be reduced to a less-than-significant level.

### References

Gross, Warren J., *An Analysis of Response to Osmotic Stress in Selected Decapod Crustacea*, Biological Bulletin, Vol. 112, No. 1 (Feb., 1957), pp. 43-62, <http://www.jstor.org/stable/1538878>, 1957.

World Health Organization (WHO), *Desalination for Safe Water Supply, Guidance for the Health and Environmental Aspects Applicable to Desalination*, [http://www.who.int/water\\_sanitation\\_health/gdwqrevision/desalination.pdf](http://www.who.int/water_sanitation_health/gdwqrevision/desalination.pdf), Geneva, 2007.

F\_NOAA-4 The following response is relevant to this comment, as well as G\_CalAm-9e. The absence of discharge and ambient salinity data, as well as the inadequacies in the

MLPP plume modeling, support the maintenance of Mitigation Measure 4.1-4a, with a slight revision. Based upon these comments, an additional two bullets have been added and the last paragraph has been modified in Mitigation Measure 4.1-4a, as follows:

- Continuously monitor salinity levels at the seabed near the discharge location, inside the zone of initial dilution (i.e., where benthic organisms could be exposed to the discharge plume); ~~and~~
- Continuously monitor discharge flow rates; -
- Frequency of measurements not less than twice per hour, preferably with real-time data availability and with analysis of monitoring data at least annually to determine the frequency and duration of exceedences; and
- Coordination between desalination plant operators and MLPP operators sufficient to allow implementation of the following remedial actions.

In the event the salinity in the project discharge is ~~greater~~ averages more than 110 percent of ambient salinity in Monterey Bay at the seabed near the discharge location for any 12-hour period, either the operations of the desalination facility shall be reduced or additional dilution shall be provided until the project discharge salinity in Monterey Bay at the seabed is less than 110 percent of ambient salinity in Monterey Bay.

F\_NOAA-5 Based on the comment, information on “Green Sturgeon” has been added to **Table 4.3-1** of the EIR. The complete revised table is shown in the response to comments for G\_CalAm-209 (and G\_CalAm-211). The revised line is shown below:

<u>Green Sturgeon</u>	<u>Acipenser medirostris</u>	<u>FT; ST</u>	<u>Like salmon, sturgeon are anadromous, migrating to the ocean and returning to freshwater to spawn. Only three known spawning grounds remain, in the Sacramento and Klamath rivers in California and the Rogue River in Oregon.</u>	<u>Coastal Marine Habitat</u>	<u>Possible. Closest known location Sacramento River Delta.<sup>10</sup></u>
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F\_NOAA-6 The comment inquires about the effectiveness of the MLPP’s technologic changes and funding of the Elkhorn Slough Enhancement Program (ESEP) in minimizing and mitigating entrainment and impingement impacts of the facility’s seawater intake for cooling, as required by MLPP’s NPDES permit.

As discussed in Section 4.3 of the EIR, in order to minimize adverse impacts of the intake system to the Elkhorn Slough watershed, the MLPP was required to

modify the intake system (RWQCB, 2000) and currently utilizes angled traveling screens which reduce approach velocities to help maintain the intake free of debris that might otherwise entangle and impinge aquatic organisms.

Additionally, the MLPP's new power generation technology installed at that time is designed to reduce permitted intake volumes, thereby reducing potential entrainment. In 2005-2006, MLPP completed an impingement study of the modified intakes. The results of this study (Tenera, 2007) are briefly summarized in Section 4.3 of the EIR. However, while the Tenera (2007) report describes the study methods and results in great detail, the report does not compare these results to pre-intake modification impingement study results. In the introduction to the 2007 report, the authors state that the "[r]esults from the 2005-2006 impingement study will be combined with the results of an earlier (1999-2000) entrainment and source water study in the final Impingement Mortality and Entrainment (IM&E) report to be submitted at a later date" (Tenera, 2007). We suspect that this final report may provide the effectiveness comparison sought by the commenter, but to the best of our knowledge, the report has not yet been completed and/or released publicly.

As also described in Section 4.3 of the EIR, conditions in the MLPP's current NPDES permit (RWQCB, 2000) directed the facility's operator to provide \$7 million to the Elkhorn Slough Foundation to implement the ESEP as a way to offset the unavoidable impacts of cooling water intake on marine and estuarine resources. The enhancement plan called for the acquisition and restoration of land and water in the slough watershed that would improve the aquatic health and productivity of the slough. The Elkhorn Slough Foundation is nearing the final phase of implementation of this plan and regular reports have been filed with the RWQCB tracking progress. According to the Elkhorn Slough Foundation, approximately 2,500 acres of the watershed lands have been protected, several hundred acres of degraded eroding lands that were impacting the slough directly and indirectly by shedding sediment and nutrients into the waterways have been restored, and close to 200 acres of wetland habitats have been restored to date (Silberstein, pers. comm.). The foundation estimates that sedimentation to the slough has been reduced by thousands of cubic yards and that hundreds of acres of land adjoining the marshes and waterways have been restored. The original requirement of the mitigation fund was to set aside \$2 million as a permanent stewardship fund and allocate \$5 million to land acquisition and restoration. The Elkhorn Slough Foundation has leveraged these funds to over \$30 million for land acquisition and several million dollars for restoration (Silberstein, pers. comm.). NOAA Fisheries recently granted the foundation an additional \$4 million for the restoration of tidal function in Parson's Slough. While it is difficult, if not impossible, to estimate the "effectiveness" of mitigating the loss of estuarine and marine life at cooling water intakes through the acquisition and restoration of nearby slough habitat, the ESEP appears to have contributed considerably to the protection and enhancement of Elkhorn Slough.

F\_NOAA-7 The comment notes that the EIR did not evaluate the impacts of once-through-cooling at MLPP remaining in effect for a period of time if a desalination plant is co-located with the power plant than if there were no desalination facility associated with it. Refer to the Master Response 13.11, CEQA Evaluation of Once-Through-Cooling under the subheading “Extension of OTC Use Due to Moss Landing Project.”

F\_NOAA-8 Based on the comment, Impact 4.4-1, has been revised as follows:

Impact 4.4-1: The project may adversely affect species identified as rare, threatened, endangered, candidate, sensitive, or other special status by the California Department of Fish and Game, or U.S. Fish and Wildlife Service, or National Marine Fisheries Service.

F\_NOAA-9 Based on the comment, Mitigation Measure 4.4-1 has been modified as follows:

The Project proponent shall carry out the following measures (either directly or through provisions incorporated into contract specifications for the Project), for those facilities and pipeline reaches identified as potentially supporting special-status species. In the specific measures which follow, the term “qualified biologist” for surveys is defined as an individual who shall possess, at a minimum, a bachelor’s degree in biology, ecology, wildlife biology or closely related field and has demonstrated prior field experience using accepted resource agency techniques for the survey prescribed, and who possesses all appropriate USFWS, NMFS, and CDFG permits. The term “biological monitor” or “qualified biological monitor” is defined as holding similar educational credentials to those of a qualified biologist and who has functioned as an environmental inspector or monitor on at least two construction projects within the preceding two years.

F\_NOAA-10 Commenter requests the NMFS be added as an approving authority for the riparian restoration plan described on EIR p. 4.4-75. Based on the comment, Mitigation Measure 4.4-2a has been revised as follows:

**Mitigation Measure 4.4-2a: Avoid Construction Impacts on Riparian Habitat.** Sensitive riparian habitat includes the areas mapped as “Riparian Woodland and Scrub” in Figure 4.4-2 and has been identified at the following Project locations:

- Moss Landing Desalination Plant Site
- Transmission Main North

The project shall be designed in a manner that avoids and/or minimizes impacts on riparian habitats to the maximum extent feasible. Temporary disturbance and/or permanent loss of riparian habitat requires a Streambed

Alteration Agreement from the California Department of Fish and Game (CDFG) and ESA Section 7 or 10 consultation with USFWS and NMFS if there is a potential impacts to listed species or critical habitat.

Unavoidable impacts on riparian habitat shall be formally assessed to satisfy the requirements of the California Department of Fish and Game (CDFG) 1601 Streambed Alteration Agreement) and federal consultation, which typically include compensatory mitigation. Acceptable riparian mitigation ratios shall be based on habitat quality characteristics, such as vegetation structure and complexity, that correspond to fish and wildlife habitat value. Impact ratios of 3:1, 2:1, and 1:1 shall be applied for impacts on high-, medium-, and low-quality habitats, respectively:

- (1) *High-Quality Habitat* – Native overstory with continuous understory or occurring in dense thickets; dense native overstory with sparse, non-native, or no understory; and native willow thicket.
- (2) *Medium Quality Habitat* – Sparse native overstory with sparse, non-native, or no understory; non-native overstory with native understory; and dense non-native overstory with sparse, non-native, or no understory.
- (3) *Low Quality* – Sparse non-native overstory with sparse, non-native, or no understory; and any areas not included in the medium- or high-quality habitats that will be covered with riprap, gabions, etc. (e.g., ruderal habitat and bare ground).

Furthermore, impacts from encroachment into riparian buffer zones may be considered significant. Appropriate riparian setbacks can be as great as 100 feet and are assessed on a case-by-case basis.

A Riparian Restoration Plan shall be required, to be prepared by the Applicant and approved by the CPUC, USFWS, NMFS, and the CDFG as appropriate. It shall be structured similarly to the Site Restoration Plan described in Mitigation Measure 4.4-1d.

F\_NOAA-11 The comment requests clarification on CalAm's intended use of its legal rights to divert 3,376 afy from the Carmel River, as recognized by SWRCB Order 95-10. The commenter recommends that CalAm maximize its use of desalinated water and recovered groundwater (ASR) during the summer while limiting its use of Carmel River diversions to the winter months when excess flows are available and few impacts from withdrawals occur.

CalAm's legal entitlement of 3,376 afy is a composite right made up of its pre-1914 appropriative right of 1,137 afy, its riparian right of 60 afy, and its post-1914 appropriative right at Los Padres Dam of 2,179 afy (License 11866). In Order 95-10, CalAm's pre-1914 direct diversion right is treated as a year-round right, with a season of diversion from January 1 through December 31. In contrast, CalAm's right to divert water to storage behind

Los Padres Dam is limited to the season of October 1 through May 31. Thus, of the total entitlement of 3,376 afy, only 1,197 afy (pre-1914 and riparian rights) are currently not subject to seasonal restrictions. While we support the commenter's recommendation, CalAm's existing water rights are not part of the proposed project and thus are not analyzed in this Final EIR. However, implementation of the CWP and ASR programs is expected to provide CalAm with the operational flexibility to minimize its summer diversions to the greatest extent feasible. Please refer to response to comment G-CalAm-4 for more detail on CalAm's existing and pending water rights.

F\_NOAA-12 The comment requests a graphic depiction of the average length of dryback, in stream miles, for the unimpaired, baseline, and proposed project scenarios.

As described in section 4.4.4.2 of the EIR, the analysis of streamflow effects on the Carmel River is based on the results of previously completed CVSIM modeling efforts as presented in the environmental review documents prepared for MPWMD's *Water Supply Project* and *Aquifer Storage and Recovery Project*. Depictions such as those requested by the comment were not prepared for these prior efforts and are thus not available for this Final EIR.

F\_NOAA-13 The comment requests a graphic depiction of the average date on which the river connects to the lagoon in the fall for the unimpaired, baseline, and proposed project scenarios.

Please refer to response to comment F\_NOAA-12.

F\_NOAA-14 The comment requests a graphic depiction of the average date on which the river becomes disconnected from the lagoon in the spring/summer for the unimpaired, baseline, and proposed project scenarios.

Please refer to response to comment F\_NOAA-12.

F\_NOAA-15 The comment notes that during preparation of the Salinas Valley Water Project (SVWP) Biological Opinion, the National Marine Fisheries Service did not envision water diversions at the Salinas River Diversion Facility (SRDF) during the months of November through March, and did not consult on the effects of diversions on adult steelhead migration during March. Please refer to Master Response 13.5, Salinas River Water Supply and the Salinas River Diversion Facility in this Final EIR.

F\_NOAA-16 The comment notes that the Regional Project proponent will need to initiate new consultation with NMFS and that they felt downstream passage criterion used in the SVWP Biological Opinion cannot be used as an interim mitigation measure for adult upstream passage. Please refer to Master Response 13.5, Salinas River Water Supply and the Salinas River Diversion Facility in this Final EIR.

F\_NOAA-17 The comment notes that impacts to upstream migrating adults need to be analyzed before determining whether impacts will be significant or insignificant. Please refer to Master Response 13.5, Salinas River Water Supply and the Salinas River Diversion Facility in this Final EIR.

## References

Silberstein, Mark, Elkhorn Slough Foundation, personal email communication on July 8, 2009.