

HABITAT COMMITTEE REPORT ON CURRENT HABITAT ISSUES

Sacramento River Winter-run Chinook Salmon

The Habitat Committee (HC) received a presentation from Garwin Yip (National Oceanic and Atmospheric Administration (NOAA) Water Operations and Delta Consultations Branch) and Jason Roberts (California Department of Fish and Wildlife (CDFW), Basin Monitoring Program) on water management operations and conditions in the Sacramento Bay-Delta system and the status of the 2015 brood year of Sacramento River winter-run Chinook salmon.

The presentation explained the 2015 timeline of temperature and flow conditions that led to the extreme mortality of winter-run Chinook salmon at critical life stages, and management responses and challenges.

Aside from the complexities of temperature and flow issues, the techniques used by Bureau of Reclamation (BOR) to measure and monitor temperature data in Shasta reservoir were and still are problematic, and continue to hamper modeling of cold water volumes in the reservoir. The NOAA Southwest Fisheries Science Center has since deployed a near-real-time, precise, depth-specific temperature monitor to improve information on the availability of cool water within Shasta reservoir, but BOR is not using it. In addition, National Marine Fisheries Service (NMFS) is examining alternative temperature criteria and monitoring points to better reflect temperature impacts on eggs and emerging fry.

NMFS estimates juvenile passage (fry/pre-smolt) through Red Bluff Diversion Dam in 2015 was nearly 20 percent less than 2014. The estimated egg-to-fry survival was 5.6 percent in 2014, and 4.2 percent in 2015. The 20 year average is 23.6 percent.

Communication and coordination between NMFS, the State Water Resource Control Board, CDFW, United States Fish and Wildlife Service (USFWS), and BOR managers and field personnel about implementing contingency actions needs to be improved. In addition, the USFWS Biological Opinion on temperature compliance stipulates a 56-degree F daily average temperature at a temperature compliance point within the 40-mile stretch from Red Bluff to Clear Creek. Temperature management at this scale does not provide controls necessary to support egg, smolt, and juvenile survival, since spawning tends to occur above the temperature compliance point.

NMFS suggests that the Environmental Protection Agency (EPA) temperature recommendations are the appropriate limits within which the Reasonable and Prudent Alternatives are to be implemented.

NMFS and CDFW are also monitoring emerging disease mortality from C Shasta and ich.

Finally, BOR may not be responsive to additional sampling with more accurate, scientific equipment in real time.

The HC suggests the Council charge the HC with drafting a letter to BOR for April, to reiterate concerns expressed in 2015 and to address new concerns for the 2016 brood.

Recommendations could include developing a water temperature stratification model for Shasta reservoir, improved specifications of critical temperature thresholds, and adopting EPA region 10 temperature recommendations for redd incubation.

Trident/Morro Bay Offshore Wind Project

The HC received a presentation on the proposed Morro Bay Offshore wind project from Trident Winds principals Alla Weinstein and Brian Walshe. Trident proposes to install a 650- to 1000-megawatt facility approximately 30 miles offshore of Morro Bay, California, using floating platforms. The company submitted an unsolicited lease request to Bureau of Ocean Energy Management (BOEM) on January 14, 2016. BOEM is expected to publish a Request for Interest (from other potential wind energy developers) with a 60-day comment period in the *Federal Register* at the end of March 2016. The presentation from Trident included information on market readiness in California for offshore wind energy; technology readiness for floating wind platforms; the permitting regime; site selection for the Morro Bay Offshore project; and environmental assessments and analyses needed prior to construction of the proposed project. The HC will continue to monitor this project, which is still in its early stages. Trident aims to install the wind farm by 2025.

Aquaculture

The HC was briefed by NOAA's Diane Windham on plans for offshore aquaculture in the Gulf of Mexico and off of the West Coast. NOAA issued a final rule in January 2016 to implement the nation's first aquaculture fishery management plan by the Gulf of Mexico Fishery Management Council. The plan covers the culture of federally-managed species of fishes in Federal waters of the Gulf. The rule authorizes NOAA Fisheries to issue up to 20 Gulf Aquaculture Permits to produce up to 64 million pounds annually, limiting the production of individual permit holders to 20 percent of that total, or 12.8 million pounds annually, and addressing overarching concerns and requirements (e.g. for native, non-genetically-modified species, cage systems, monitoring, dealing with storm events). Each applicant must develop site-specific information and apply for permits from EPA and/or Corps of Engineers.

On the West Coast, Rose Canyon Fisheries is planning to raise non-federally managed fish (white sea bass, striped bass, and yellowtail) six to eight miles off San Diego. Because these species are not federally managed, NOAA has no authority to regulate them. Therefore, NOAA is providing their expertise and assistance to the National Environmental Protection Act (NEPA) lead entity, the EPA. NEPA scoping is complete; all comments have been reviewed and shared with the applicant. A full Environmental Impact Statement will be prepared through a third party contracting agreement.

Catalina Sea Ranch/KZO Sea Farms, an offshore aquaculture project in California farming mussels, continues to work on a monitoring plan which has yet to be approved by the reviewing

agencies. The National Ocean Service has provided technical recommendations for improving the draft plan, which to date have not resulted in a revised or acceptable plan. However, Catalina Sea Ranch has received approval to start gathering data for baseline monitoring.

In Humboldt Bay, Coast Seafoods has been working with NMFS to better identify the growing areas to minimize impacts on eelgrass and improve mitigation for their proposed shellfish aquaculture project. Coast Seafoods has been revising their California Environmental Quality Act document and re-working their data analysis. A revised draft Environmental Impact Report may be released after the end of March.

Klamath Dam Removal

The HC heard good news related to removal of the four lower Klamath dams. Following the expiration of the Klamath Basin Restoration Agreement, the States of Oregon and California, PacifiCorp, and the Federal government recently announced an agreement-in-principle. Under the agreement, PacifiCorp and the other parties will move forward with amending the Klamath Hydroelectric Settlement Agreement (KHSA) with the focus on removing four dams from the Klamath River. The parties to the KHSA will pursue implementation through the administrative process governed by the Federal Energy Regulatory Commission (FERC), using existing funding and following the same timeline that was in the original KHSA. The agreement-in-principle states the four parties intend to work with each other and the more than 40 signatories to the KHSA to implement its key provisions, including dam removal. The KHSA as amended would then be submitted for consideration through FERC's established processes, which involve public comment. If approved, PacifiCorp would transfer title of the Klamath River dams to a non-federal entity that would assume liability and take the appropriate steps to decommission and remove the dams in 2020.

PFMC
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