

HABITAT COMMITTEE REPORT

Morro Bay Wind Energy Area

The Draft Environmental Assessment for the Morro Bay Wind Energy Area (WEA) was just released for public comment by the Bureau of Ocean Energy Management. The deadline for comments is May 6th. The Council previously authorized a letter for the Morro Bay Call Area, and the Habitat Committee (HC) intends to work with the Marine Planning Committee to prepare a quick response letter, modeled generally after the Humboldt WEA letter.

Klamath Dam Removal Environmental Impact Statement (EIS)

The HC produced a comment letter on the Klamath Dam Removal Environmental Impact Statement for Council consideration (Agenda Item C.1, Supplemental Attachment 1), as directed by the Council at its March 2022 meeting. The letter is ready for Council review and submittal by the April 18th comment deadline. The HC notes that there are four attachments referenced in the letter. These are all prior Council letters related to Klamath Dam removal:

[PFMC letter to FERC](#) re: Klamath Dam Removal (June 21, 2017)

[PFMC letter to BOR](#) re: Klamath Dam Removal (December 13, 2011)

[PFMC letter to FERC](#) re: Klamath Dam Removal (December 8, 2006)

[PFMC letter to FERC](#) re: Klamath Dam Removal (April 24, 2006)

Status of Sacramento River Chinook Salmon

The HC heard a presentation from Stephen Maurano, National Marine Fisheries Service (NMFS) California Central Valley Office, on the status of Central Valley (CV) Chinook salmon. California remains in a third year of hot and dry drought conditions with only two large storm systems in the 2021/2022 water year. Shasta Reservoir is currently at about 50 percent capacity and as of April 1, 2022, the snowpack in California is at 39 percent of average which will limit surface water runoff and will restrain stream temperature management. All four Chinook salmon runs are highly susceptible to climate change and drought conditions. Despite decent returns last year, there continues to be poor juvenile productivity, preventing the stock from capitalizing on good ocean conditions. Loss of access for CV Chinook to high elevation streams has resulted in both loss of spatial and temporal diversity. Historically winter run Chinook had access to 190 miles of stream for rearing habitat and are now constrained to roughly five miles. This makes stocks particularly vulnerable to drought conditions and other events such as fire, oil spills, and a closely located superfund site.

Management of in-stream temperature during drought conditions is difficult. NMFS has identified 53.5 degrees Fahrenheit as the ideal maximum temperature for in-stream management and is currently advocating for this change. For multiple years 56 degrees Fahrenheit has been the temperature identified as the maximum temperature management standard. Due to low reservoir levels in 2021, the 56-degree threshold was exceeded on several occasions. The Department of Water Resources has developed a Drought Toolkit that includes options such as water transfers, water releases, and trucking; all of which have varying levels of success. Starting February of 2022, the Bureau of Reclamation will re-establish habitat as a priority in its management operations.

Multiple habitat-related emerging issues are on the horizon that may impact CV Chinook and will be consulted on by NMFS simultaneously. The HC may consider these issues on their June agenda. These three issues are: the combined essential fish habitat (EFH) effects of the Delta Conveyance Plan, the Sites Reservoir, and the Reinitiation of Consultation on the Long-term Operation of the CV Project/State Water Project (CVP-SWP). The Delta Conveyance (formerly Cal WaterFix) is a proposed water bypass project underneath the Sacramento Delta. Probable effects of the action include temporary construction effects, bank armoring, changes in flow and potential fish screen interactions. Sites Reservoir is an off-stream storage project off of the Sacramento River, that would result in changes to flow and water quality, and fish screen interactions. The CVP-SWP operations could impact Pacific salmon EFH for spawning, rearing, and migration, resulting from stressors related to water quality, water temps, habitat, entrainment, and increased predation.

The HC will continue to follow the processes going on in the CV that may impact CV Chinook and habitat and will identify opportunities for the Council to engage and comment. The HC **recommends** that the Council consider supporting the 53.5-degree Fahrenheit threshold identified by NMFS and submitting comments in support to the CVP-SWP when a comment period is identified.

National Oceanic and Atmospheric Administration (NOAA) Deep Sea Coral Research and Technology Program (DSCRTP)

The Habitat Committee heard a presentation on the Deep Sea Coral Research and Technology Program (DSCRTP) focused on deep-sea coral and sponge exploration on the U.S. West Coast for 2018 - 2021. The DSCRTP and their associated West Coast researchers have a history of presenting periodic briefings to the HC of their ongoing research efforts and discoveries. The presentation was provided by Tom Laidig (Southwest Fisheries Science Center), Elizabeth Clarke (Northwest Fisheries Science Center), Chris Caldwell (Channel Islands National Marine Sanctuary (CINMS)), Abigail Powell (NWFSC), and Heather Coleman (NOAA DSCRTP).

The team described their 2018 and 2019 Expanding Pacific Research and Exploration of Submerged Systems (EXPRESS) research program that compared habitat types, and fish, deep sea coral and sponge densities in areas that were designated to be reopened to bottom trawling in 2020. One unique observation during the EXPRESS effort was the discovery of an extensive and diverse deep-sea “coral garden” in the Mendocino Ridge EFH Conservation Area (EFHCA), in about 400 meters water depth. A coral garden is defined by a specific high density of corals, and the Mendocino garden had an order of magnitude higher densities than that threshold. This portion of the presentation highlighted the application of environmental DNA techniques to augment visual surveys.

The next section of the presentation focused on areas being considered for wind energy development, summarizing and comparing historical and new observations of habitat, and fish, deep sea coral and sponge densities from autonomous underwater vehicle and remotely operated vehicle (ROV) dives. A highlight of this research effort was the discovery of another coral garden in deep water off Morro Bay and a petrale sole spawning area on Santa Lucia Bank.

The presenters described a new discovery of a potential glass sponge reef in the vicinity of Anacapa Island in the CINMS. Previously, glass sponge reefs have only been observed in the eastern North

Pacific in British Columbia and Alaska. The discovery was in an area of soft bottom at a water depth of ~500m. In addition to the discovery in the CINMS, the team discussed a 35-year time series of observations of glass sponges in the Catalina Basin. Over that time period, the sponges showed massive deterioration and collapse.

Nehalem Bank EFHCA Long-Term Monitoring Study

The Oregon Department of Fish and Wildlife initiated a long-term study of seafloor habitats associated with the shrimp trawl fishery in the vicinity of Nehalem Bank in 2007. ROV video transects were conducted inside and outside the boundary of the Nehalem Bank EFHCA, focusing primarily on the abundance and height of invertebrates (sea whips/sea pens) found in the soft sediments east of the rocky bank. Further sampling was conducted in 2013, providing a before/after control/impact comparison for examining changes in invertebrate abundance between the protected EFHCA and the areas open to shrimp trawling. Another sampling iteration is planned for spring 2022, with the goal of returning to the same sampled areas and extending the time series to examine how the seafloor habitats may have been affected by 16 years of trawling exclusion. The HC will provide a summary of this year's observations in a future Habitat Committee report.

Potter Valley Project (Eel River)

The Eel River used to be California's third largest salmon producing system. It currently has state and Federal listed Chinook, coho, and steelhead. The Eel River has two dams with no fish passage and with licenses expiring this year. No new entity has come forward to relicense the project, so it will likely go to license surrender and decommissioning. It is unclear what will happen in the interim before decommissioning; but since the Federal Energy Regulatory Commission (FERC) can extend the license on a yearly basis, NMFS has weighed in and asked for conditions to be added during this extension period to prevent jeopardy to Endangered Species Act-listed fish. The Project is now enmeshed in the massive Pacific Gas and Electric bankruptcy proceeding and its fate is uncertain. Depending on how FERC deals with this orphaned project, the Council may want to comment in support of Project dam removals in the near future.

Rogue River Basin

There are two public comment letters in the briefing book (Agenda Item C.1.c, Public Comment) that highlight habitat issues related to Southern Oregon/Northern California Coast coho in the Rogue Basin. One relates to the importance of releasing cooler water from the bottom of dams to benefit salmon survival. The other relates to the diversion of Rogue Basin water for illegal cannabis grow operations. This has been elevated as an official complaint to the NOAA Office of Law Enforcement.

Recommendations for Council Action

The HC recommends that the Council submit the Klamath Dam Removal letter by April 18, 2022 and submit a Morro Bay Wind Energy Area quick response letter by May 6, 2022, consistent with Council guidance from its March 2022 meeting.

PFMC
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