

HABITAT COMMITTEE REPORT ON CURRENT HABITAT ISSUES

The Habitat Committee (HC) met online September 5 – 6, 2024 to discuss a range of issues for consideration by the Pacific Fishery Management Council (Council).

California Central Valley Water Operations & Habitat

At its April meeting, the Council asked the HC to provide an update on California Central Valley water and habitat issues. The HC has summarized the status of water management plans currently under review, comment opportunities and emerging water management issues and habitat restoration efforts. This information is provided in a separate report (D.1.a, Supplemental HC Report 2). As noted in that report, the HC will be working on a comment letter on the Bureau of Reclamation's Draft Environmental Impact Statement for the Central Valley Projects Long-term Operations Plan.

Lower Columbia River Dredge Materials Management Plan and Environmental Impact Statement (EIS)

The U.S. Army Corps of Engineers has released a Draft EIS of the Dredge Materials Management Plan, with a comment deadline of October 7. This plan would support continued operation and maintenance of the Lower Columbia River Federal Navigation Channel for the next 20 years. The Corps has determined that in-river disposal sites are nearing capacity and is proposing disposal sites they characterize as Beneficial Use in intertidal and floodplain habitats to create or enhance habitat for fish and wildlife. Some of the proposed in-water shallow placement sites overlap with existing shallow water habitats and will impact existing benthic habitats in these areas. Proposed sites also overlap with popular fishing sites and commercial drift right areas.

The plan proposes two alternatives (in addition to the No-action alternative) to manage dredge material: 1) maximizing placement or 2) minimizing dredge placement. The Habitat Committee is drafting a comment letter which will raise a number of concerns (see preliminary list attached) regarding placement of dredge material within the Lower Columbia River Estuary. In addition to a number of topics related to impacts to salmon, groundfish, and coastal pelagic species essential fish habitat, the HC expects to comment on the limited number of alternatives and lack of proposed monitoring to document baseline conditions prior to Beneficial Use of Dredge Material placement. The HC proposes a final draft for Council review via the Quick Response Process on October 1, providing sufficient time for comments to be submitted by October 7.

Columbia Basin Resiliency Initiative Cold Water Refuge

A collaboration is underway among Federal, state and Tribal governments to identify and seek funding to study and implement five projects that would begin in Fiscal Year 2024-2025 to enhance and protect or provide additional cold-water refuge (CWR) in the Columbia Basin in Oregon and Washington. Collaborators include the U.S. Government, Washington and Oregon States, the Nez Perce Tribe, the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Confederated Tribes of the Umatilla Indian Reservations (Six Sovereigns). This was one of the U.S. Government commitments as part of the historic memorandum of understanding with the Six Sovereigns in the Columbia Basin.

All five identified cold-water refuge projects are expected to benefit upper Columbia River, Snake River, and mid-Columbia River salmon and steelhead populations with adult migration timing that occurs June - September. The projects are also expected to benefit mid-Columbia and lower-Columbia salmon and steelhead populations indigenous to the above basins. Efforts to maintain and enhance CWRs in the Columbia River Basin will require funding in FY26 and beyond and increased coordination with other habitat protection and restoration efforts.

Klamath Dam Removals Completed

As of late August 2024, all four Klamath Dams slated for removal are now gone, marking the largest dam removal project in history. This caps a dam removal and salmon river restoration effort that first began in 1982 which was strongly supported by the Council through numerous comment letters over many years. An [interesting Story Map](#) of this landmark effort is available for viewing. The next seven years will be devoted to the largest salmon habitat restoration project in history; reconnecting and restoring nearly 420 stream miles of upper Klamath River above the dams so that salmon and other anadromous species will be able to reoccupy areas blocked for more than 100 years. However, there are still multiple struggles over lack of sufficient water for full salmon recovery in the face of competing water demands in the Klamath River and in the main salmon refuge tributaries, including the Trinity, Scott and Shasta River sub-basins.

Salmon Habitat Indicator Development

The Northwest Fisheries Science Center (NWFSC) has been working on refining indicators in order to provide a smaller suite that provides information on current habitat conditions, and which are useful for forecasting or risk tables. The goal is to do this with all three Chinook stocks by the end of this year, but as a starting point we are focusing on Sacramento fall run Chinook. Preliminarily, we have found that of the 22 indicators summarized, four consistently demonstrate predictive power in predicting returns. While this suite performs slightly worse in predicting the Sacramento fall return than the standard year-ahead forecasting metric using jacks, it provides a prediction two years in advance. Therefore, the smaller suite of indicators has the potential to increase the temporal window in which forecasting methods could be used, in addition to the standard one-year advance jack-based forecast. The NWFSC hopes to provide this refined list of indicators and forecasting descriptions for the March Ecosystem Status review.

Chumash Heritage National Marine Sanctuary

On Sept. 6, 2024, the National Oceanic and Atmospheric Administration (NOAA) announced the release of the final environmental impact statement for designation of the proposed Chumash Heritage National Marine Sanctuary. The Final Preferred Alternative boundary covers 4,543 square miles of coastal and ocean waters offshore Central California stretching out to nearly 60 miles from shore and down to a maximum depth of 11,580 feet. The sanctuary would allow for the protection of nationally significant natural, ecological, historical, and cultural resources along 116 miles of coastline from just south of Diablo Canyon Power Plant in San Luis Obispo County to the Gaviota Coast in Santa Barbara County. The record of decision, final management plan, and final rule will publish approximately 30 days after. Please see the [website](#) for details.

Effects of Fishing Gear on Marine Habitats Database

The HC heard an update on the status of a National Effects of Fishing Gear on Marine Habitats Database by Tori Kentner (Mid-Atlantic Fishery Management Council (MAFMC)). The database

is being developed by Dr. David Stevenson (NOAA Fisheries, retired), and an associated interactive online application (app) is being developed by Ms. Kentner. The database and app are being developed to compile and share literature on the impacts of fishing gear on marine fish habitats across the United States and U.S. Territories. The database builds upon the foundational work of the North Pacific Fishery Management Council and New England Fishery Management Council, which developed a Fishing Effects Model. This model utilizes literature reviews and vulnerability assessments to estimate the effects of fishing gear on essential fish habitat. The model and associated data have been instrumental in understanding gear-specific impacts and habitat recovery rates in both the Northeast and North Pacific Regions. Supported by the NOAA Office of Habitat Conservation and the MAFMC, with input from regional fishery management councils and NOAA staff, the database aims to serve as a comprehensive and accessible resource for fishery managers, researchers, and stakeholders. Once the database and app are released, relevant Council committees will be encouraged to try the app, provide feedback, and submit relevant publications for inclusion. Dr. Stevenson also expressed a willingness to present to the HC or Council once the database and app are publicly available, potentially in November. This database will be a useful resource for essential fish habitat reviews and other Council management actions.

PFMC
09/12/24

ATTACHMENT

Preliminary List of Council Concerns for Lower Columbia River Dredge Material Management Plan

- *Entrainment of listed species as juveniles and prey resources (benthic invertebrates, smelt etc.)*
- *Loss of habitat (shallow water) for juveniles*
- *Smothering of juvenile salmonid and prey resources (benthic invertebrates, smelt, etc.)*
- *Lack of studies monitoring shallow-water dredge placement and benthic insect recovery, piscine/avian predation, and beneficial use*
- *Stress of juveniles and adults due to dredge and pile dike construction, leading to more energy use*
- *Turbidity impacts*
- *Increased opportunities for predator (piscine and avian)*
- *Native eelgrass*
- *Beneficial Use of Dredged Material (BUDM) – a lack of certainty around “beneficial”*
- *Cumulative impacts*
- *Physical alteration of habitat features*
- *Increased opportunities for wake stranding*
- *Contaminated Sediment*
- *Climate change*

Recommendations to the US Army Corps of Engineers

- *Ensure adequate funding for researching and monitoring of BUDM and wake stranding across the Area of Activity*
- *Broader range of alternatives*
- *Prioritizing areas of lowest environmental impact first - where there are areas of concern, allow baseline information*
- *Ensure alignment with Columbia Estuary Ecosystem Restoration Program*