## HABITAT COMMITTEE REPORT ON CURRENT HABITAT ISSUES

## Lower Columbia River Thermal Refugia

The Habitat Committee (HC) heard a report from Chris Collins of the Lower Columbia River Estuary Partnership (LCREP) about efforts to restore cold water refugia. The spring and summer of 2015 highlighted extreme temperatures encountered by migrating juvenile fall Chinook and adult sockeye, Chinook, and steelhead. For example, the large adult sockeye return was impacted by extreme mortality, largely related to upstream migration temperatures. LCREP's thermal refugia work is downstream of Bonneville Dam, and focuses on identifying and prioritizing restoration projects that maximize cold water refugia in off-channel areas and along-shore of the lower Columbia River. These strategies will continue to be pursued, but they are only partial measures, as mainstem temperature reduction is the priority need. Other management strategies for mitigating mainstem temperature issues upstream must be implemented (e.g., reservoir management, coldwater utilization for fish ladders).

### West Coast Ocean Acidification and Hypoxia Science Panel Findings

Dr. Waldo Wakefield discussed West Coast Ocean Acidification and Hypoxia Science Panel findings. The panel recently released a report (<u>http://westcoastoah.org/executivesummary/</u>) that found that ocean acidification and hypoxia will have severe environmental, ecological, and economic impacts for the West Coast, and require a concerted regional focus to build and enhance resiliency. Ocean acidification and hypoxia are two important facets of global ocean changes, and the California Current Ecosystem is especially vulnerable to the issue because of its circulation and upwelling patterns. The HC recommends that the Council receive an overview of these issues from representatives of the panel and that the relevant advisory bodies receive a full presentation.

#### EFH Summit 2016

An essential fish habitat (EFH) summit will be held in Annapolis, Maryland May 17-20, and is being planned by the Council Coordinating Committee and NOAA. Each Council is asked to highlight EFH priorities; Council staff are not attending, but Council members Michele Culver and Frank Lockhart and three HC members will attend.

#### Sacramento Letter

Since the drafting of the letter to the Bureau of Reclamation (BOR) in the briefing book (Agenda Item G.1, Attachment 1), National Marine Fisheries Service has reached concurrence with the BOR regarding revised water management operations. Following recommendations from California Department of Fish and Wildlife, the HC offers a modification to Bullet 6.

Modify Bullet 6 to read:

Use the Temperature Criteria Adjustments and Suggested Model Inputs provided by NOAA Fisheries in attachment 4 of the CVP and SWP 2016 Drought Contingency Plan

for Water Project Operations February - November 2016, February Update. These parameters provide the types and magnitudes of buffers to the operations intended to conserve winter-run Chinook salmon recommended above.

On page 2, last paragraph, "Temperature Monitoring Plan" should be changed to "Temperature Management Plan."

With these modifications, we urge the Council to send the letter.

# Klamath Hydroelectric Settlement Agreement Amendment

The HC received a brief update on an amendment to the Klamath Hydroelectric Settlement Agreement (KHSA) that was signed on April 6 by PacifiCorp, the Federal government, the states of California and Oregon, the Yurok and Karuk Tribes, and other interests. The Klamath River is currently designated as EFH for coho and Chinook salmon to Keno Dam, slightly downstream from Upper Klamath Lake.

The agreement sets the course for removal of four dams from the Klamath River in 2020, if approvals are received via the Federal Energy Regulatory Commission (FERC) process. Decommissioning through the FERC process differs from what was envisioned by the previous KHSA agreement, as it does not require Federal legislation and is not linked to companion agreements that address water allocation issues and landscape scale restoration efforts within the Klamath basin. Signatories to the KHSA amendment will attempt to resolve these ancillary issues over the next year.

The previous KHSA agreement lapsed due to inaction by Congress. However, benefits that have resulted from the initial settlement efforts include development of relationships from diverse interests of the basin (which led to the creation of this amended agreement) and the attainment of funding through PacifiCorp ratepayer surcharges and a California water bond to cover the costs associated with dam removal. Removal of these dams will provide access to more than 300 miles of historic anadromous habitat, ameliorate substantial water quality problems caused by the dams, and help to address fish disease issues within the Klamath River.

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