

CURRENT HABITAT ISSUES

The Habitat Committee (HC) will meet on Monday, April 3, 2006, to finalize a draft letter on Klamath issues, prepare comments on Agenda Item E.1 (Identification of Stocks Not Meeting Conservation Objectives) and to conduct a planning session on future HC priorities and tasks.

Council Action:

Consider comments and recommendations developed by the HC at its April meeting.

Reference Materials:

1. Agenda Item C.1, Supplemental Attachment 1: Draft letter on Klamath River hydroelectric projects (from March Council meeting).
3. Agenda Item C.1.a, Supplemental HC Report.

Agenda Order:

- a. Report of the HC
- b. Reports and Comments of Advisory Bodies
- c. Public Comment
- d. **Council Action:** Consider HC Recommendations

Stuart Ellis

PFMC
03/15/06

DRAFT

Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
888 First St., N.E., Room 1A
Washington, DC 20426

Dear Ms. Salas:

The Pacific Fishery Management Council (Council) is writing to comment on the relicensing of the five Pacific Power hydroelectric projects on the Klamath River. We understand that the previous license has expired, that the project is now operating under an annual license, and that any new license will be in effect for up to 50 years.

For the reasons explained below, the Council recommends that the Federal Energy Regulatory Commission (FERC) order the decommissioning of the four lower Klamath River dam structures (Copco 1, Copco 2, Iron Gate, and J.C. Boyle) and proceed with the development of a decommissioning plan in consultation with resource agencies, tribes, and other interested parties. Such a plan should include full restoration of habitat affected by the dams and reservoirs. We also recommend that any annual interim licenses include mitigation funds to restore future anadromous habitat. In addition to the four dams listed above, the project also includes the Keno and Link River dams.* It has not been determined whether Keno dam will be included in the relicensing package, but the impacts of Keno and Link dams should be addressed from a watershed management perspective.

The Council's recommendation is consistent with National Marine Fisheries Service's (NMFS) recommendation pursuant to Section 10(a) of the Federal Power Act: "The Licensees shall develop and implement a plan to remove the lower four Project dams (Iron Gate, Copco 2, Copco 1, and J.C. Boyle dams), restore the riverine corridor, and bring upstream and downstream fish passage facilities at Keno Dam into compliance with NMFS guidelines and criteria within 10 years of license issuance, expiration, or surrender."

The Link River dam is a BOR-owned facility and is not FERC licensed. The fish passage at Link River dam was recently improved.

* December 15, 2005, to U.S. Bureau of Reclamation (BOR) on management of Klamath water flows; April 21, 2005 to U.S. Department of the Interior (DOI) on flow management and essential fish habitat (EFH) in the Klamath basin; April 23, 2004 to FERC on EFH concerns related to PacifiCorp Klamath River Hydroelectric Project FERC-2082; July 7, 2003 to BOR on EFH concerns related to the Klamath project; April 23, 2003 letter to the DOI related to water flows in the 2003 Klamath operations plan; April 22, 2003 to FERC on relicensing rules; December 4, 2002 to the DOI and Secretary of Commerce on the adverse impacts of reduced flows to Klamath salmonids; May 13, 2002 to FERC on EFH conservation responsibilities; April 22, 1999 to BOR on the Klamath project environmental impact statement. Letters available at <http://www.pcouncil.org/habitat/habdocs.html>.

As you may know, ocean fisheries on the West Coast are frequently limited by the number of naturally-spawning salmon in the Klamath River. In 2005, fishing off Oregon and California was virtually halved to meet the Klamath fall Chinook spawning objective. This year, the low abundance of Klamath Chinook will once again severely restrict both commercial and recreational fisheries along the West Coast, as well as Tribal and recreational fisheries within the Klamath River Basin, and may result in a complete closure between Monterey, California and Tillamook, Oregon.

The regulations the Council will recommend to protect these sensitive Klamath stocks, by restricting fishing on otherwise healthy stocks with which these Klamath stocks mix, are expected to have enormous economic and social impacts on West Coast fishing communities and tribes. Although fish stocks fluctuate naturally, it is clear that anthropogenic factors associated with hydropower generation including fish passage, and water quality impacts have had a long-term and increasingly detrimental impact on Klamath River salmon (NMFS 2006).

Under the Magnuson-Stevens Fishery Conservation and Management Act §305(b)(3)(B), the Council is obligated to comment on activities that are likely to substantially affect essential fish habitat (EFH) for salmon. During the last few years, the Council has written repeatedly* to FERC, the U.S. Bureau of Reclamation, and the U.S. Department of the Interior regarding impacts of Klamath River management on salmon habitat.

Habitat and fish passage in the Klamath Basin are significantly affected by the presence of dams. Lack of fish passage at the Klamath Project facilities blocks access to more than 400 miles of migration, spawning, and rearing habitat for salmon, steelhead and Pacific lamprey.

Although prescriptions identified by NMFS and USFWS (2006) would address fish passage, they do not address the broader ecosystem impacts of the four lower dams. In addition to fish passage issues, NMFS identifies the following unaddressed dam-related problems within and below the project area:

- Loss of thermal refugia
- Loss of ecosystem function
- Alteration of the natural hydrologic regime
- Impacts of impoundment, both to habitat and water temperature, including changes to dissolved oxygen, nutrient loads, disease, and toxic algae blooms; gravel depletion, and reduced flood flows
- Effects of hydroelectric peaking operations (reduced flows in bypassed reaches, effects of large flow fluctuations in peaking reaches, abundance of macroinvertebrates, fish movement, water quality, and fish stranding)

For these reasons, the Council supports NMFS' recommendations for removal of the lower four dams. Until the dams are removed, FERC should protect, mitigate damages to, and enhance fish and wildlife resources with the dams in place. Some of the recommendations provided by NMFS pursuant to Section 10(j) of the Federal Power Act are appropriate; for example, some modifications of hatchery management and ramping rates can be applied in the interim.

We recognize that several other factors, including water withdrawal practices in the upper Basin, have detrimental effects on spring flows and flow regimes. In addition, timber harvest practices, road building, parasites, and other factors also harm Klamath River stocks (National Research Council 2004). While these are beyond FERC's jurisdiction, removing the dams is an essential step toward restoring Klamath salmon populations

Under the current license, the lower three project dams (Iron Gate, Copco 1 and 2) are not equipped with fish passage facilities, and the facilities at J.C. Boyle Dam do not conform to passage criteria. PacifiCorp's proposed license under FERC does not provide passage for anadromous fish, other than minor modifications to J.C. Boyle. Providing such passage would be a major endeavor costing at least \$36 million (G & G Associates, 2003). Further, the California Energy Commission (2004) indicates that, in terms of nominal power production (163 megawatts), decommissioning one or more of the dams is a viable alternative that should be examined during FERC's relicensing process.

In light of these facts, the Council makes the following observations:

- Wild Klamath River salmon and steelhead are an irreplaceable genetic resource that play a vital ecological role even at their currently depressed levels. If these runs are allowed to diminish further, the foundation of the Klamath River's ecosystems will be severely undermined.
- Reintroduction of anadromous fish above the current barrier of Iron Gate Dam could be a key component of Klamath River Basin and West Coast restoration goals. In fact, significant resources are being directed toward improving potential habitat in the Upper Klamath Basin above Upper Klamath Lake.
- Improvement of Klamath River stocks could result in significant increases in ocean and in-river fishing opportunities, contributing to a healthy and diverse regional economy.
- The Long Range Plan for the Klamath River Basin Conservation Area Fishery Restoration Program (Long Range Plan), developed by the Klamath Basin Fishery Restoration Task Force, clearly identifies the lack of passage through and beyond the project area as a significant impact to the Klamath River anadromous fishery. In contrast, NMFS (2006) indicates that the supplemental contribution of generating capacity provided through continued Project operations is nominal (annual net value of \$16.3 million (CEC 2004)) relative to the watershed level benefits (NMFS 2006). For example, the Council calculates that over the last five years (2001 through 2005), the average annual value of the recreational and commercial ocean salmon fishery in the area affected by the abundance of Klamath River Chinook was \$64 million. The constraints on the fishery in 2006 may reduce the value of this fishery to less than \$2 million.

The habitat within and above the project area was historically an important spring Chinook spawning and rearing area, and contained abundant fall Chinook and coho habitat. Removal of the dams is a necessary step in recovering this habitat. Although it is difficult to directly quantify the fishery benefit of removing the dams, populations are more likely to recover and support sustainable ocean fisheries if habitat is restored.

The Council believes the proposed relicensing of this project will have substantial adverse impacts on EFH in the Klamath River. The project causes harm to salmon habitat, to the health of fish stocks, to commercial and recreational fisheries, and to fishing communities along the Oregon and California coasts and the Klamath River. For these reasons, the Council recommends that FERC order the immediate decommissioning of the four lower Klamath River dam structures and full restoration of habitat affected by the dams and reservoirs.

Sincerely,

DRAFT

Pacific Fishery Management Council

PFMC
04/03/06

References

California Energy Commission (2004). California Energy Commission Staff Comments on PacifiCorp's Final License Application to the FERC for the Klamath Hydroelectric Project, FERC No. 82.

G & G Associates (2003). Klamath River Dam Removal Investigation.

National Marine Fisheries Service. (2006). Comments, Recommended Terms and Conditions and Preliminary Prescriptions for the Klamath Hydroelectric Project, FERC Project 2082.

National Research Council (2004). Endangered and Threatened Fishes in the Klamath River Basin – Causes of Decline and Strategies for Recovery. Washington, D.C., U.S. Department of Interior and U.S. Department of Commerce: 1-334.

HABITAT COMMITTEE REPORT

Klamath River FERC Relicensing Process

At the March 2006 Council meeting, the Habitat Committee (HC) was asked to redraft a comment letter to Federal Energy Regulatory Commission (FERC) relating to relicensing the Klamath River hydroelectric project. The HC worked between March and April meetings to complete a second draft of that letter. Subsequent to completing the second draft, NMFS and U.S. Fish and Wildlife Service (USFWS) issued preliminary prescriptions and recommendations to FERC relating to the project. Wishing to cite NMFS' recommendations into the Council letter, and in order to respond to informal comments from Council members and others, the HC is providing a revised draft of the letter for Council consideration (Agenda Item C.1.a, Supplemental Attachment 1, April 2006); the edits are intended to clarify and provide proper literature citations, and do not make substantive changes to the recommendations in the previous draft.

The HC letter recommends decommissioning of the lower four Klamath River Dams and improvements to fish passage at the remaining system dams, and cites the NMFS report as additional justification for such action. NMFS notes (2006:A-6) that "the dam removal alternative is a superior alternative from a fish passage water quality and habitat restoration standpoint."

A map on page A-19 of the NMFS document shows the project area and dams. Removal of the lower four dams provides access to approximately 59 miles of anadromous fish habitat within the project area. Fish passage improvements to remaining dams provide an additional gain of approximately 360 miles of suitable habitat upstream of Keno dam.

The Council faces difficult decisions for 2006 in the aftermath of several years of constraints related to depressed Klamath salmon stocks. It is time to call for restoration of anadromous fish habitat in the Klamath River; this letter to FERC is the right step.

Removing the dams is just one step in the process to restore fish productivity in the Klamath; remaining are issues with water withdrawals and flows in upper Klamath. Restoring a natural hydrograph will require further action related to irrigation and flow management in the upper basin. Note that the Trinity River is being managed according to a Trinity Record of Decision, which is separate from the FERC process.

Background on Klamath Hydroelectric Project

When the **Copco 1 dam** was built in 1918, it permanently blocked access to more than 300 miles of salmon and steelhead habitat in the mainstem upper Klamath River and its tributaries. **Copco 2**, one-quarter mile downriver from Copco 1, also blocks migration. Together, these two dams significantly alter river flows within each 24-hour period. **Iron Gate Dam**, constructed in 1962 to re-regulate the varying flows caused by the Copco 1 and 2 dams, further blocked seven miles of spawning habitat and access to important tributaries. The **J.C. Boyle dam** diverts a large portion of the Klamath River for power generation along a four-mile stretch. This dam's

operation is predicated on energy demand under a process called power peaking and load following; as a result, downstream river flows and flow fluctuations are not adequately managed with regard to aquatic habitat.

In addition to hydroelectric impacts, water management in the Klamath basin has dramatically altered natural flow fluctuations, suppressing the high springtime flows that aid the outmigration of young salmon. This is a continuing issue for Bureau of Reclamation and state water resource department attention.

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04/04/06

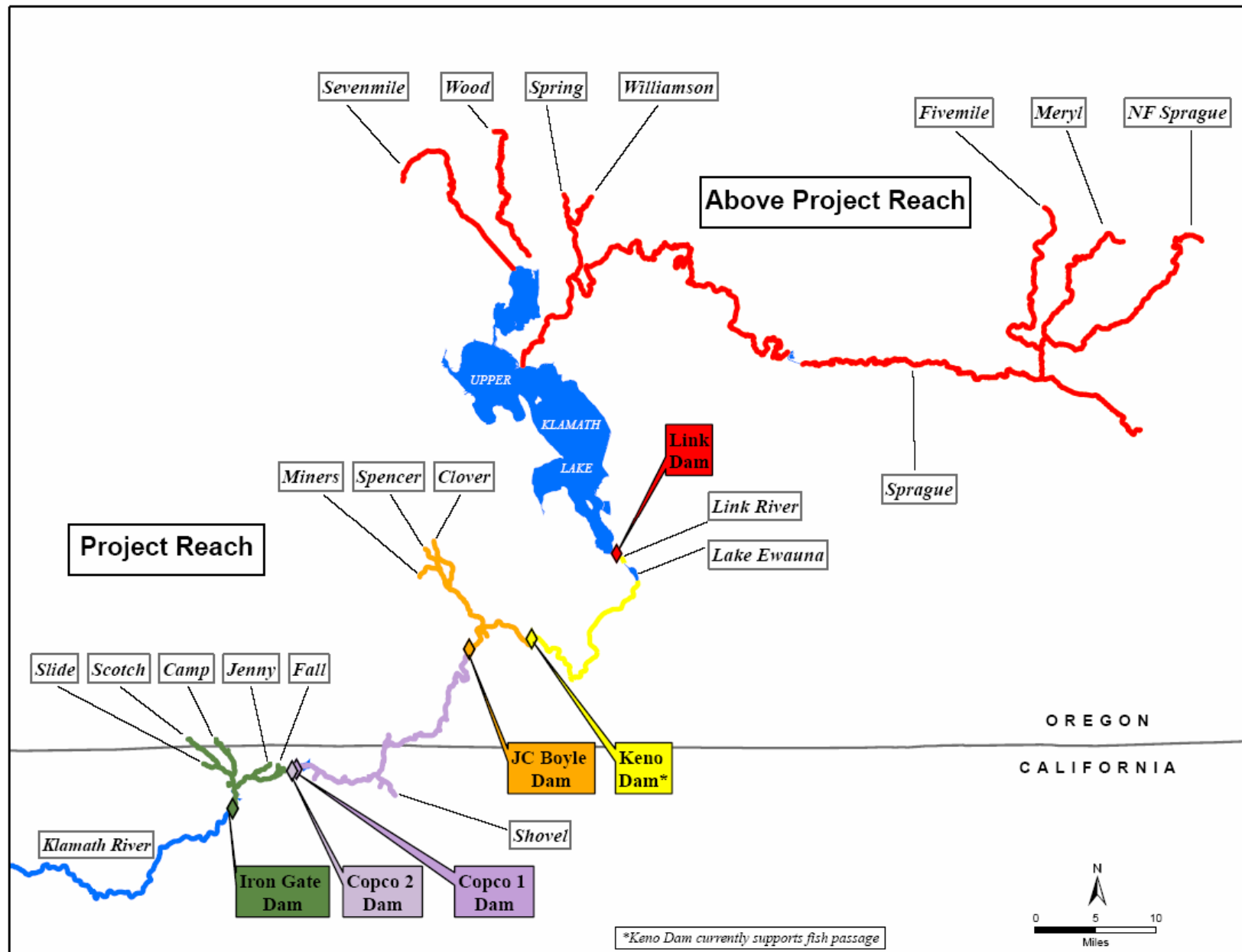


Figure 1. Project Reach and Above Project Reach (in red) designations for the Klamath River above Iron Gate Dam).

SALMON ADVISORY SUBPANEL REPORT ON CURRENT HABITAT ISSUES

The Salmon Advisory Subpanel (SAS) concurs with the findings and direction of the Habitat Committee with regard to the request for relicensing of four dams on the Klamath River: Copco 1, Copco 2, Iron Gate and J.C. Boyle.

The salmon resource gains and resultant revitalization of salmon related economic, cultural, and recreational activities in the region and beyond, far outweigh the power production from this hydroelectric project.

Therefore, the SAS advises the Council to request the Federal Energy Regulatory Commission require decommissioning the above mentioned dams.

FISH LADDERS/SCREENS MAIN STEM KLAMATH DAMS

If the recent recommendation from U.S. Fish and Wildlife Service and NOAA Fisheries is adopted by the Federal Energy Regulatory Commission for installing fish ladders and screens on the four PacifiCorp dams on the Klamath River, hatchery managers, and other agencies involved in this restoration project need to be ready to "jumpstart" the areas that will be made available for anadromous fish by this project.

Reintroduction of juvenile Fall Chinook, Spring Chinook, Coho, and Steelhead in appropriate numbers at appropriate locations above these proposed ladders prior to the installation of the ladders would aid in the repopulation of these areas in a shorter timespan. Proper timing of the juvenile seeding is important, and must be coordinated with the construction of the fish ladders to provide adult returns the year that the ladders are completed.

If the installation of fish ladders becomes a condition for the re-issuing of a new operating license for the PacifiCorp Hydroelectric Project, please consider this proposal as an important step in the restoration of anadromous fish presence in the upper Klamath Basin.

Thank you;

A handwritten signature in cursive script, reading "Paul Merz".

Paul Merz
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Charleston, Or. 97420