



Pacific Fishery Management Council

7700 NE Ambassador Place, Suite 101 Portland, OR 97220-1384
Phone 503-820-2280 | Toll free 866-806-7204 | Fax 503-820-2299 | www.pcouncil.org
Herbert A. Pollard II, Chair | Charles A. Tracy, Executive Director

June 21, 2017

The Honorable Kimberly D. Bose
Secretary, Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Dear Madam Secretary:

The Pacific Fishery Management Council (Council) is submitting this letter in support of the September 2016 application filed by the Klamath River Renewal Corporation (KRRC) and PacifiCorp to transfer PacifiCorp's license to operate the four Klamath Hydroelectric Facilities dams in Oregon and California to the KRRC, and more importantly, in support of an additional application filed by the KRRC requesting the Federal Energy Regulatory Commission (FERC) to approve dam decommissioning and removal of the facilities from the Klamath River. Removal of the Klamath River dams would be a major step toward restoring essential fish habitat (EFH) for Klamath River fall Chinook salmon, the stock whose depleted status has resulted in the closing of substantial ocean and Klamath River fisheries during 2017.

The Council recommends management actions for Federal fisheries off of Washington, Oregon, and California. It is one of eight Regional Fishery Management Councils established by the Magnuson-Stevens Fishery Conservation and Management Act (MSA), which includes provisions to identify, conserve, and enhance EFH for fisheries managed under a Council's fishery management plan. Each Council is authorized under the MSA to comment on any Federal or state activity that may affect the habitat, including EFH, of a fishery resource under its authority. The MSA defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity."

The projection for Klamath River fall Chinook potential natural spawner abundance in 2017 is lower than all postseason values estimated from 1985-2016. The age-three ocean abundance forecast is the second lowest on record, while the age-four forecast is the lowest on record—less than half the previous lowest forecast. Due to the extremely low projection for Klamath fall Chinook in 2017, fisheries off the coast of California and Oregon have large closed areas, and those remaining open are at *de minimis* levels. Inriver sport fisheries for fall Chinook salmon in the Klamath River are closed during 2017, and tribal fisheries will be nearly non-existent, resulting in allocations that are far from meeting subsistence needs and providing for no economic opportunity. These closures will have severe economic and social consequences along the coasts of Oregon, California, and in the Klamath Basin. It is noteworthy that there have been several previous years when concerns regarding the status of Klamath fall Chinook salmon have resulted

Page 2

in severe curtailment of fisheries and disaster declarations along the coast of Oregon, California, and within the Klamath River Basin.

Multiple factors contributed to the decline of Klamath fall Chinook in 2017, such as high juvenile disease levels and poor ocean productivity. However, the Klamath dams are thought to be a primary contributing factor to the high juvenile disease levels in the Klamath. The dams create habitat conditions conducive to the proliferation of the parasitic disease *Ceratanova shasta*; a disease that was at extreme infection levels for the juveniles of the age-three and age-four broods that are driving the low projection for 2017.

The Council has followed with keen interest the Klamath Hydroelectric Project relicensing process, as well as the negotiations and eventual agreements that were reached to remove the lower four dams on the Klamath River, given the negative effect these dams have upon EFH and the associated abundance of salmon stocks in the Klamath River. The Council is on record from previously submitted comments to FERC (enclosed) regarding the effects the Klamath dams have upon EFH, the salmon fisheries we manage, and our desire to see the four dams removed to help address habitat and water quality problems of the Klamath River and restore access to several hundred miles of historic anadromous fish habitat.

We are encouraged to see that the Amended Klamath Hydroelectric Settlement Agreement is the impetus that puts us on a trajectory for dam removal in 2020. The agreement appears to have broad support, given that: 1) it is a business decision by PacifiCorp, the owner of the dams, 2) is in the rate-payers' interest, 3) it contributes to the restoration of salmon of the Klamath River, thereby benefiting salmon fisheries along the West Coast, and 4) has sufficient non-Federal funding for implementation. Therefore, we strongly recommend that FERC approve the application to transfer ownership of the Klamath Hydroelectric Project to the KRRC, as well as the application from the KRRC to decommission and remove the dams from the Klamath River.

Sincerely,



Charles A. Tracy
Executive Director

JDG:ael

Enclosure

Cc: Council Members
Habitat Committee
Mr. Barry Thom
Mr. Thomas O'Rourke
Mr. Ryan Jackson
Mr. Judson Feder
Ms. Jennifer Gilden
Mr. Mike Burner

PACIFIC FISHERY MANAGEMENT COUNCIL

7700 NE Ambassador Place, Suite 200
Portland, Oregon 97220-1384

CHAIRMAN
Donald K. Hansen

EXECUTIVE DIRECTOR
Donald O. McIsaac

Telephone: 503-820-2280
Toll Free: 866-806-7204
Fax: 503-820-2299
www.pcouncil.org

April 24, 2006

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

RE: Docket Number P-2082 (Pacific Fishery Management Council's Essential Fish Habitat [EFH] Recommendation for the Klamath Hydropower Project)

Dear Ms. Salas:

The Pacific Fishery Management Council (Council) hereby submits its EFH recommendations and formal comments on the relicensing of the PacifiCorp hydroelectric project on the Klamath River. The recommendations are the result of focused deliberation at the Council's March and April meetings, including extensive public testimony and expert advice from scientific and fishery-related advisory bodies. We understand that we may have missed a recent deadline for these comments, but due to the timing of the established public Council process, this is the earliest we are able to provide them. We ask that you give them your full consideration.

For the reasons below, the Council recommends that the Federal Energy Regulatory Commission (FERC) order the decommissioning and removal of Iron Gate, Copco 1, Copco 2, and J.C. Boyle dams on the Klamath River. We ask that you proceed with the development of a decommissioning plan, in consultation with resource agencies, tribes, and other interested parties, that provides full restoration of habitat in and below the project dams and reservoirs. FERC should also consider including mitigation funds to restore future anadromous habitat above the project.

This recommendation is consistent with National Marine Fisheries Service's (NMFS) recommendation pursuant to Section 10(a) of the Federal Power Act (FPA): "The Licensees shall develop and implement a plan to remove the lower four Project 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."^{1,2}

¹ National Marine Fisheries Service (March 24, 2006). Letter and Attachments from Rodney McInnis to Magalie Salas re: *Comments, Recommended Terms and Conditions and Preliminary Prescriptions for the Klamath Hydroelectric Project, FERC Project 2082*. Page C-4.

² We understand that the Keno and Link Dams are not currently being relicensed, and are limiting our recommendations at this time to the four lower dams. However, in the long term, the Council calls upon FERC to improve conditions for anadromous fish in the Klamath River by addressing the operations of Keno and Link Dams.

Background

During the last several years, the Council has written frequently 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.³ Although anadromous fish stocks fluctuate naturally, it is now clear that factors associated with hydropower generation, including lack of fish passage and water quality impacts, have had a consistent and increasingly detrimental impact on Klamath River salmon. The Council believes the operations of the full complex of dams in the Klamath River basin can be the limiting factor for anadromous salmonids abundance, and are likely the controlling anthropogenic factor during drought years. Therefore, we believe changes in the effects of these dams offer the greatest opportunity to increase population abundance.

The Council's concerns about dam operations have been heightened in recent years by the low abundance of naturally spawning fall Chinook salmon. As you may know, ocean salmon fisheries on the West Coast target a complex of stocks from various rivers that have consistently produced harvestable surpluses. Under the Council's salmon fishery management plan, fisheries in this ocean complex are managed to achieve the spawning objective of the weakest stock, which has frequently been Klamath River natural fall Chinook. In 2004 and 2005, abundance was so low that the spawning escapement fell below the 35,000 conservation objective in both years. Unfortunately, in 2006 it is expected that the Klamath natural fall Chinook stock abundance will fall even further, to a disastrously low level.

In 2005, fishing off most of Oregon and California was virtually halved to meet the Klamath River fall Chinook natural spawning objective. This year, ocean salmon fishing in this area will be cut back a further 75% to protect these fish. The inriver recreational fishery on adult fall Chinook will be closed in 2006. Inriver tribal fisheries will also be severely affected. The cutbacks and closures adopted by the Council to protect these Klamath River fish will have enormous economic and social impacts on West Coast fishing communities. The effects are so severe that the Governors of the States of Oregon and California have formally called for the Secretary of Commerce to declare a fishery disaster, as provided for under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) §312(a).

Basis for Council Recommendation

There is both a legal basis for the Council's recommendation and a strong rationale to justify it. Legal standing for the Council's recommendation is provided by the MSA. Under §305(b)(3)(B), the Council is obligated to comment on activities that are likely to substantially affect EFH for salmon.⁴ In turn, the Federal government is obligated to consider the Council's recommendations and to reply

³ 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>.

⁴ "[Each Council] shall comment on and make recommendations to the Secretary and any Federal or State agency concerning any such activity that, in the view of the Council, is likely to substantially affect the habitat, including essential fish habitat, of an anadromous fishery resource under its authority." MSA§305(b)(3)(B)

in writing within 30 days.⁵ The rationale for the Council's recommendation includes the Council letters and background considerations referred to above and the information provided below.

We understand that the Klamath hydropower project is now operating under an annual license, and that any new long-term license may be in effect for up to 50 years. The Council does not make recommendations for interim annual licenses in this letter, though we believe that until a long-term license is granted, FERC should protect and fully mitigate damages to anadromous salmonids and their habitat with the dams in place. Some recommendations from others, such as those provided by NMFS and U.S. Fish and Wildlife Service pursuant to Section 10(j) of the Federal Power Act for interim modifications to hatchery management and ramping rates, may be appropriate. However, the Council will address recommendations for interim licenses in a separate letter following further public process and discussion.

The Council's recommendation for dam removal is made with the recognition that several factors beyond FERC's jurisdiction can harm Klamath River anadromous stocks.⁶ Water withdrawal practices reduce water availability downstream, and timber harvest practices, road building, parasites, and other factors impact stocks. We further recognize that some recommend fish passage at the project dams instead of their removal.

The Long Range Plan for the Klamath River Basin Conservation Area Fishery Restoration Program clearly identifies the lack of passage through and beyond the project area as a significant limitation on the Klamath River anadromous fish resource⁷. Under the current license, the lower three project dams (Iron Gate, Copco 1 and Copco 2) are not equipped with fish passage facilities, and the facilities at J.C. Boyle Dam do not conform to accepted passage criteria. PacifiCorp's proposed license under FERC does not provide passage for anadromous fish.

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, including access to channel areas inundated by the project, access to tributary habitat within the project area, and access to currently-blocked habitat in the upper watershed⁸. The habitat within and above the project area was historically an important producer of spring Chinook, fall Chinook and coho. Reintroducing anadromous fish above the current barrier of Iron Gate Dam is a key component of Klamath River Basin restoration. We understand significant resources are now being directed toward improving potential habitat in the Upper Klamath Basin above Upper Klamath Lake.

Even with fish passage at each of the projects, the following dam-related problems within and below the project area would remain unaddressed:

⁵"Within 30 days after receiving a recommendation under subparagraph (A), a Federal agency shall provide a detailed response in writing to any Council commenting under paragraph (3) and the Secretary regarding the matter. The response shall include a description of measures proposed by the agency for avoiding, mitigating, or offsetting the impact of the activity on such habitat..." MSA§305(b)(4)(B)

⁶ 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.

⁷ Klamath River Basin Fisheries Task Force and William M. Kier Associates, 1991. *Long Range Plan for the Klamath River Basin Conservation Area Fishery Restoration Program*.

⁸ We recognize that Keno dam, upstream of the project area, now blocks most upper watershed habitat for anadromous salmonids.

- Loss of spawning and rearing area in the Klamath River between Iron Gate and J.C. Boyle dams
- Effects of hydroelectric peaking operations, including reduced flows in bypassed reaches; effects of large flow fluctuations in peaking reaches; reduced abundance of macroinvertebrates; restricted fish movement; decreased water quality; and fish stranding
- Impacts of water impoundment, including changes to water temperature, dissolved oxygen, and nutrient loads; gravel depletion; altered flood flows; and enhanced conditions for toxic algae blooms and parasitic disease vectors
- Alteration of the natural hydrologic regime, including loss of thermal refugia and ecosystem function

In summary, the Council believes removal of the dams is a necessary step in recovering currently unsuitable habitat in the project reach, in providing access to suitable habitat upstream of the project, and in normalizing water conditions below Iron Gate Dam.

Costs and Benefits

The value of ocean fisheries is high when Klamath natural Chinook are abundant, but can be much lower when Klamath fish constrain the catch of other healthy stocks. The Council estimates that between 1970 and 2004, the average annual personal income impacts of the recreational and commercial ocean salmon fishery in the area where Klamath fish are found amounted to \$92 million. The constraints on the fishery in 2006 caused by the need to protect Klamath River natural fall Chinook are expected to reduce the value of this fishery to less than \$33 million. In contrast, the Klamath hydropower project produces 163 megawatts with an annual net economic value of \$16.3 million.⁹ NMFS notes that the “generating capacity provided through continued Project operations is nominal...relative to the watershed level of benefits to aquatic resources and regional and national priorities for restoring anadromous salmonids.”¹⁰ The California Energy Commission reviewed the effects of full or partial decommissioning and concluded that “because of the small capacity of Klamath hydro units... removal of these units will not have a significant reliability impact on a larger regional scale.”¹¹

Providing fish passage would be a major endeavor, with cost estimates ranging up to \$200 million.¹² The cost of dam removal has been estimated at \$35.8 million.¹³ Based on these estimates, it is not clear that providing fish passage is a superior economic alternative to dam removal.

It may not be appropriate to directly compare the loss of \$59 million in the ocean salmon fishery in one year, due to the low abundance of Klamath River Chinook, with the \$16.3 million in power generated annually at the four project dams and the \$35.8 million cost of dam removal. However, it may well be that the annual value of the portion of the fishery affected by Klamath River Chinook compares favorably to the annual value of the electrical power. It may also compare favorably with the cost of dam removal, given the number of years that fishery benefits will accrue after the dams

⁹ 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.

¹⁰ National Marine Fisheries Service (March 24, 2006), op. cit.

¹¹ California Energy Commission, op. cit.

¹² PacifiCorp spokesman Dave Kvamme in “A Good Week for Klamath Salmon.” *Sacramento Bee*, March 30, 2006, page A3.

¹³ G&G Associates (2003). *Klamath River Dam Removal Investigation*. Seattle, Washington: G & G Associates.

Magalie R. Salas, Secretary
April 24, 2006
Page 5

are removed. Further, it must be noted that a comprehensive economic analysis of the benefits of dam removal needs to include the benefits of habitat improvement to all Klamath River fish populations, not merely one stock (naturally spawning fall Chinook) in one fishery (the ocean salmon fishery).

Conclusion

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, recreational, and tribal fisheries; and to fishing communities along the Oregon and California coasts and in the Klamath River basin. Consequently, the Council recommends that FERC order the immediate decommissioning and removal of the four lower Klamath River dam structures and full restoration of habitat affected by the dams and reservoirs.

Sincerely,



Donald O. McIsaac
Executive Director

JDG:rd

c: Council Members
Habitat Committee
FERC Required Service List Distribution
Salmon Advisory Subpanel
Salmon Technical Team
Scientific and Statistical Committee
Dr. Donald McIsaac
Dr. John Coon
Council Staff Officers
Ms. Eileen Cooney
Ms. Jane Hannuksela
Ms. Mariam McCall
Mr. Judson Feder
Ms. Corinne Pinkerton
Mr. Phil Dietrich

