PACIFIC FISHERY MANAGEMENT COUNCIL

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Secretary Gale Norton
United States Department of the Interior
1849 C. Street N.W.
Washington, DC 20240

Secretary Donald Evans
United States Department of Commerce
14th and Constitution Avenue N.W.
Washington, D.C. 20230

Dear Secretary Norton and Secretary Evans:

The Pacific Fishery Management Council (Council) has grave concerns regarding the adverse effects of reduced flows on the anadromous salmonid fish populations of the Klamath River.

The May 31, 2002, National Marine Fisheries Service (NMFS) Final Biological Opinion (BO) on the effects of the U.S. Bureau of Reclamation (Bureau) Klamath Project on Southern Oregon/Northern California Coasts (SONCC) coho salmon contains a "reasonable and prudent alternative" (RPA) that prescribes flows are so low the Klamath River will be placed in a state of perpetual drought. Such low flows will jeopardize the continued existence of coho salmon in the Klamath Basin and will result in destruction or harm to its critical habitat. SONCC coho salmon are listed as threatened under the federal Endangered Species Act (ESA), and the California Fish and Game Commission recently determined that coho salmon from San Francisco Bay to the Oregon border are warranted for listing under the California Endangered Species Act. Furthermore, these extremely low flows will cause adverse impacts to the essential fish habitat (EFH) of coho and chinook salmon, which are managed by the Council. Therefore, *the Council urges the Bureau and NMFS to immediately reinitiate Section 7 ESA consultation regarding Klamath Project effects on SONCC coho salmon and its critical habitat, and to reinitiate consultation on Klamath Project effects on coho and chinook salmon EFH.*

Background

The Council was created by the Magnuson-Stevens Fishery Conservation and Management Act in 1976 with the primary role of developing, monitoring, and revising management plans for fisheries conducted within federal waters off Washington, Oregon and California. Subsequent congressional amendments added emphasis to the Council's role in fish habitat protection. Amendments in 1996 directed NMFS and the regional fishery management councils to develop

conservation recommendations for agency activities that may affect the EFH of the fish they manage. In 1999 the Council identified and described EFH for chinook and coho salmon under Amendment 14 to the Pacific Coast Salmon Fishery Management Plan.

The operational plans of the Klamath Project have a direct influence on the EFH of coho and chinook salmon. Such habitat includes the water quantity and quality conditions necessary for successful migration and holding, spawning, egg-to-fry survival, fry rearing, smolt migration, and estuarine rearing of juvenile coho and chinook salmon.

The BO covers Klamath Project operations for ten years (April 1, 2002 - March 31, 2012). Thus, the Project's negative impacts to anadromous fish will be both short-term and long-term in nature. The BO forms the basis for both the USBR 2002 Project Annual Operations Plan and a Long-Term (ten-year) Project Operations Plan that propose to divert, store and deliver irrigation water. Flow releases at Iron Gate Dam are not part of the action, but would result from the action. It is notable that *while full irrigation deliveries are planned for all water year types during the ten-year period, improvements to flows for fish will depend solely on small, incremental, and uncertain developments of new water*. The Council believes this approach to water management works against the numerous and expensive federal, state, and tribal efforts aimed at restoring anadromous fish habitat in the Klamath Basin, including regulatory efforts to minimize fishery impacts on weak salmon stocks.

Constraining Nature of Klamath Stocks

Since the early 1980s, the depleted status of Klamath River Basin natural coho and fall chinook stocks has constrained management of ocean fisheries from Northern Oregon to south of San Francisco. In order to protect these stocks, on many occasions the Council has had to reduce the harvest of all salmon in otherwise healthy mixed-stock fisheries where Klamath salmon occur. Despite complete closures to the harvest of Klamath Basin coho salmon in the Southern Oregon and California ocean commercial fisheries since 1993 and the ocean recreational fishery since 1994, the continued decline of this species resulted in the listing of SONCC coho salmon as threatened under the ESA in May, 1997.

Recent Fish Kill

An unprecedented and disastrous fish kill in the lower Klamath River in September, 2002, resulted in a conservatively estimated loss of more than 30,000 returning adult salmon, according to the U.S. Fish and Wildlife Service. Most of the mortalities were fall chinook salmon, although hundreds of coho salmon and steelhead trout were also killed. In 2002, ocean and inriver fisheries have been managed to allow a fall chinook spawning escapement to the Klamath basin of 57,000 adults, of which 35,000 were expected to spawn in natural areas and the rest at Iron Gate and Trinity River hatcheries. The fish kill will likely make it impossible to meet the escapement goal this year, and the loss of the reproductive potential of these fish will result in diminished returns three, four and five years into the future. In addition, given the variable run timing for Klamath Basin substocks, escapement to some subbasins may be severely impacted. The 2002 inriver fisheries have already been severely affected as evidenced by the Yurok Tribe's early closure of their fall chinook salmon fishery.

Although disease was the ultimate cause of death for most of the fish killed, low flows in the lower Klamath River acted as a barrier to upstream migration, resulting in large concentrations of stressed fish that quickly became infected. Average flows in the lower Klamath River during September, 2002 were the fifth lowest on record since 1951[1/]. A significant portion of the September flows were released at Iron Gate Dam, which is controlled by the Bureau according to its annual Project operations plans. In 2001, 39.4% of the flow at the mouth of the Klamath River was due to Iron Gate Dam releases.

The 2002 Project Annual Operations Plan flow prescriptions at Iron Gate Dam are based on the NMFS BO's RPA, which purportedly avoids jeopardy to SONCC coho salmon by providing flow releases at Iron Gate Dam that approximate the *minimum monthly flows attained during the 1990-1999 period of Project operations* for each respective water year type (above average, average, dry and critically dry)[2/]. In 2001 (a critically dry water year type) the average flow at Iron Gate Dam was 1,026 cubic feet per second (cfs)[3/]. In September 2002, (a dry water year type), an average flow of 762 cfs was released at Iron Gate Dam before a pulsed flow was initiated on September 28 (USGS unpublished records). The 2002 flows were 34.6 per cent less than in 2001. Even though the total fall chinook run was much greater in 2001 than projected for 2002, and 2001 was a drier water year type, an adult fish kill did not occur. Thus, there is a strong correlation between the low flows prescribed by the BO and implemented by the 2002 Project Operations Plan and the September 2002 fish kill.

In the latter stages of the fish kill, additional water (the pulsed flow) was provided by PacifiCorp to the Klamath River for a two-week period from September 28 to October 10. The water came from hydro generating facilities at Copco and Iron Gate reservoirs, and increased the flows at Iron Gate Dam by approximately 71% to 1300 cfs. This pulsed flow appeared to facilitate the dispersal and upstream migration of surviving salmon and steelhead trout. However, flows have since been reduced by the Bureau to approximately 879 cfs, and are expected to stay at that level through Spring 2003 unless precipitation and runoff in the basin improve significantly (Klamath Project 2002 Operations Plan, USGS Records).

The fish kill will likely delay recovery of Klamath basin coho and chinook salmon to levels that can sustain full fishing, and will result in continued economic and social hardship to Klamath Basin and coastal communities that depend on commercial and recreational fishing. The depleted status of these fisheries will also cause severe economic, social, and cultural impacts on the Yurok, Hoopa Valley, and Karuk Tribes of the lower basin.

Need for Flow Management Advisory Committee

The Council is very concerned that existing and proposed low flows between now and April 2003 will harm chinook and coho salmon spawning, egg incubation, fry emergence, and fry rearing in the Klamath River mainstem. Our concern is heightened by the fact these impacts will occur on populations that are already severely affected by the fish kill. To adequately address these concerns and to explore immediate solutions to the Klamath River flow shortage problem, the Council recommends the Bureau of Reclamation form a flow management advisory committee, consisting of tribal, state, and federal representatives having co-manager responsibilities for Klamath River fishery resources, as soon as possible. Convening such a group by mid-September in below average and dry years is a part of the BO RPA (BO, p 69), but the Bureau of Reclamation does not plan to implement this committee until 2010.

1/ USGS Gage 11530500 Klamath R NR Klamath CA.

2/ BO, Table 5, p 33.

3/ USGS Gage 11516530 Klamath R BL Iron Gate Dam CA.

Need for Timely Completion of a Supplemental Environmental Impact Statement

Flows in the lower Klamath River are also influenced by accretions from the Trinity River, the Klamath River's largest tributary. Implementation of a recent Department of Interior Trinity River Record of Decision, which would have increased flows significantly, has been delayed by litigation. A court order has required the preparation of a Supplemental Environmental Impact Report (SEIS), the completion of which has been delayed by the Bureau of Reclamation. The Council urges the Bureau to complete the SEIS so that the higher Trinity River flows can be implemented in a timely fashion to benefit lower Klamath River flows.

Need for Reinitiation of Endangered Species Act Consultation

The Council believes by revealing how Klamath Project operations may have adversely affected threatened SONCC coho salmon and its critical habitat, the fish kill represents important new information not considered in the BO. Further, the fish kill may have resulted in incidental take that exceeds the amount or extent of take anticipated by the BO's Incidental Take Statement. Both of these concerns warrant reinitiation of consultation under 50 CFR §402.16 (BO, p. 74). The Council strongly recommends the Bureau of Reclamation and NMFS reinitiate consultation as soon as possible regarding the effects of Klamath Project operations on SONCC coho salmon and its critical habitat.

The Council is also deeply concerned the BO covers project operations for a ten-year period, between April 1, 2002 and March 31, 2012. The Bureau is presently developing an Environmental Impact Statement (EIS) that would support preparation of a Long-Term Project Operations Plan that would incorporate the 2002 BO as its basis for forming Project operations. We believe that long-term commitments, once made, are difficult to change. Thus, it would be prudent for the Bureau and NMFS to reinitiate Section 7, ESA consultation prior to finalizing the EIS and Project Operations Plan. The Council would like to be kept fully informed and provided the opportunity to comment if the Bureau decides to continue with development of these plans.

Need for Essential Fish Habitat Consultation

EFH conservation measures for coho and chinook salmon were included in the BO by NMFS, based on information in the BO and from other sources. However, the Council strongly feels the recommendations prepared by NMFS do not adequately protect either coho or chinook salmon habitat. This is demonstrated by the recent fish kill and by the minimal proposed flows, which do not reflect the best available science and information. In addition, the EFH regulations require the Bureau of Reclamation, as the action agency operating the Klamath Project, to consult on EFH, to provide NMFS with a written assessment of the effects of their action on EFH, and to provide a detailed written response to NMFS within 30 days upon receipt of NMFS EFH conservation measures, detailing how the Bureau intends to avoid, mitigate or offset the impacts of their activity (50 CFR § 600.920). To our knowledge, the Bureau has not done any of this. The Council strongly urges the Bureau to initiate consultation on EFH, and to consider all life history phases of coho and chinook salmon that may be affected by Project impacts on mainstem Klamath River habitat.

Need for Finalization of Hardy Phase II Report

The Council notes the Department of Interior (DOI) commissioned Dr. Thomas Hardy of Utah State University to conduct a flow study in the Klamath River, starting in June, 1998. The purpose of this study was to develop monthly instream flow recommendations for the Klamath River from Iron Gate Dam to the estuary for five water year types.

The recommended flows in the Hardy Phase II study were considered necessary to support salmon and steelhead populations in the Klamath River. They were also necessary to meet the DOI's trust responsibility to protect tribal rights and resources, and to meet other statutory responsibilities such as the Endangered Species Act and the Magnuson-Stevens Act. A draft Final Phase II Report was released for public comment on November 21, 2001, but has not been finalized. NMFS used some of the information contained in this report to develop the BO, but decided not to use the Phase II flow recommendations.

To date, the Hardy Phase II effort has cost DOI $890,000. In addition, cooperating agencies and colleagues have contributed more than $1 million in services and studies to the effort. The Council believes the flow recommendations in this study represent the best available science regarding Klamath River anadromous salmonid flow needs. *We urge you incorporate this information in your ESA and EFH consultations*. We also encourage the Bureau of Reclamation to finalize this report so that it can be reviewed and fully accepted by the scientific community and then used by Klamath River resource managers.

The attached tables show the flows that the Bureau plans to operate under for the next ten years (from Table 5, BO p. 33) compared to the Hardy Phase II recommended flows at Iron Gate Dam (Table 51). The Hardy 70% exceedence flows are for the same water year type as the Bureau's dry water year flows (70% exceedence means that during 70% of the years in the period of record, annual inflows to upper Klamath Lake have exceeded the value indicated for a dry water year type). The Hardy flow recommendations for a dry water year type are more than twice as great as the flows which the Bureau provided at Iron Gate Dam in 2002 and plans to provide in the future. Unimpaired monthly flows (not affected by the Klamath Project) are provided in Table 52. When compared to these flows, the Bureau's proposed flows for *all* water year types and *all* months would put the Klamath River in a perpetual state of drought.

Summary of Council Recommendations

To summarize, the Council recommends the following:

1. Reinitiate ESA, Section 7 consultation as soon as possible (DOI and DOC).
2. Reinitiate coho and chinook salmon EFH consultation (DOI and DOC).
3. Establish a flow management advisory committee as soon as possible (DOI).
4. Complete the SEIS and implement the Trinity River ROD in a timely fashion (DOI).
5. Provide the Council opportunity to comment on the EIS for the Long-Term Operations Plan (DOI).
6. Finalize the Hardy Phase II Report and incorporate its flow recommendations in future consultations and Klamath Project operations plans (DOI).

The crisis flow management exhibited on the Klamath River during drier water years is not conducive to the maintenance, much less restoration, of anadromous salmonid populations. In addition, it contributes to economic uncertainty for communities that depend on sustainable fishery resources. The Council urges you to implement our recommendations in order to reverse this dire situation.

Sincerely,

Hans Radtke, Ph.D.
Chairman

JDG:dsh

Enclosures

c: U.S. Senator Dianne Feinstein
U.S. Senator Barbara Boxer
U.S. Senator Ron Wyden
U.S. Senator Gordon Smith
U.S. Rep. Mike Thompson
U.S. Rep. Greg Walden
California Governor Gray Davis
Oregon Governor John Kitzhaber
California Secretary for Resources Mary Nichols
CDFG Director Robert Hight
ODFW Director Lindsey Ball
U.S. Fish and Wildlife Service Director Steve Williams
Assistant Administrator for NMFS William Hogarth

From NMFS May 31, 2002 Biological Opinion

Table 5. Iron Gate Dam flows, by time step, (values in CFS) Reclamation predicted to result from the proposed action by water year type (from Table 5.9, Reclamation 2002)

Time Step	Above Average Water Years	Below Average Water Years	Dry Water Years	Critically Dry Water Years
Oct	1345	1345	879	920
Nov	1337	1324	873	912
Dec	1387	1621	889	929
Jan	1300	1334	888	1011
Feb	1300	1806	747	637
Mar 1-15	1953	2190	849	607
Mar 16-31	2553	1896	993	547
Apr 1-15	1863	1742	969	874
Apr 16-30	2791	1347	922	773
May 1-15	2204	1021	761	633
May 16-31	1466	1043	979	608
Jun 1-15	827	959	741	591
Jun 16-30	934	746	612	619
Jul 1-15	710	736	547	501
Jul 16-31	710	724	542	501
Aug	1039	1000	647	517
Sep	1300	1300	749	722

From Hardy Draft Final Phase II Flow Study Report

Table 51. Monthly flow recommendations for the Iron Gate to Shasta River Reach for the 10 to 90 percent exceedence flow levels.

Exceedence	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
10	4200	5000	5400	5200	4500	3800	2300	1800	1840	1900	2200	3500
20	3585	4250	4850	4650	4100	3350	2135	1635	1705	1780	2085	2950
30	2970	3500	4300	4100	3700	2900	1970	1470	1570	1660	1970	2400
40	2685	3110	3850	3700	3400	2600	1750	1360	1460	1565	1840	2215
50	2400	2720	3400	3300	3100	2300	1530	1250	1350	1470	1710	2030
60	2200	2460	2900	2750	2600	2050	1390	1125	1225	1335	1555	1815
70	2000	2200	2400	2200	2100	1800	1250	1000	1100	1200	1400	1600
80	1750	1900	2000	1900	1850	1575	1125	1000	1050	1150	1300	1450
90	1500	1600	1600	1600	1600	1350	1000	1000	1000	1100	1200	1300

From Hardy Draft Final Phase II Flow Study Report

Table 52. Simulated unimpaired monthly flows for the Iron Gate to Shasta River Reach for the 10 to 90 percent exceedence flow levels.

Exceedence	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
10	5282	6439	6302	6430	5259	4163	2829	2131	2076	2169	2664	4522
20	3792	5416	5463	5391	4613	3690	2528	1935	1843	1991	2284	3541
30	3666	4245	5045	4869	4313	3473	2129	1639	1813	1885	2081	2910
40	2990	3724	4394	4541	3785	2870	1986	1490	1754	1700	2020	2460
50	2738	3072	3913	3841	3568	2689	1854	1425	1503	1589	1897	2282
60	2541	2914	3389	3078	2848	2216	1739	1300	1377	1492	1717	2100
70	2299	2559	2838	2637	2361	2033	1462	1158	1296	1450	1613	1903
80	2037	2249	2390	2342	2218	1797	1325	1141	1174	1394	1584	1762
90	1871	1922	1909	1908	1962	1533	1148	1004	1021	1163	1434	1643