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Attorneys for Defendant-Intervenor Applicants

THE HONORABLE GARY S. AUSTIN

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF CALIFORNIA

SAN LUIS & DELTA-MENDOTA WATER AUTHORITY; WESTLANDS WATER DISTRICT,

Plaintiffs,

v.

SALLY JEWEL *et al.*,

Defendants.

PACIFIC COAST FEDERATION OF FISHERMENS' ASSOCIATIONS and INSTITUTE FOR FISHERIES RESOURCES, non-profit organizations,

Defendant-Intervenor Applicants.

Case No. 13-1232-LJO-GSA

DECLARATION OF GLEN H. SPAIN IN SUPPORT OF PACIFIC COAST FEDERATION OF FISHERMENS' ASSOCIATIONS AND INSTITUTE FOR FISHERIES RESOURCES MOTION TO INTERVENE AS A DEFENDANT

Courtroom: Courtroom 10, 6th Floor
Judge: Honorable Gary S. Austin
Hearing Date: Friday, Oct. 4, 2013
Time: 9:30am
Action Filed: August 9, 2013

I, GLEN H. SPAIN, declare as follows:

I. PCFFA and its Interests In This Matter

1. I am the Northwest Regional Director of the Pacific Coast Federation of Fishermen's Associations ("PCFFA"). I have served in that capacity with PCFFA since 1992. I direct all of PCFFA's program efforts in Oregon, Washington, and parts of northern California, including its many salmon habitat and salmon watershed protection programs.

2. PCFFA is by far the largest trade organization of commercial fishermen on the west coast. PCFFA is a federation of 15 smaller commercial fishermen's vessel owners' associations, trade associations, port associations, and marketing associations, with member associations in most U.S. ports on the west coast, including California, Oregon and Washington. PCFFA also has fishermen members "at-large" who are unaffiliated with any particular fishermen's association but who have become individual members of PCFFA. Collectively, PCFFA's port and member associations and at-large members represent nearly 1,200 commercial fishing families who are small and mid-sized commercial fishing boat owners and operators, most of whom derive all or part of their income from the harvesting of Pacific salmon.

3. PCFFA uses lobbying, public education, and litigation to advocate on behalf of both fishermen and the fishery resource itself in order to ensure the long-term survival of commercial fishing as a way of life. Much of this work involves efforts to protect and restore salmon habitat where it is threatened or degraded.

4. I am also the Conservation Program Director and Northwest Regional Director of the Institute for Fisheries Resources ("IFR"). I am IFR's incorporator and founder, and now serve as its Northwest Regional Director, and have been in that Executive Staff position since IFR was first organized by PCFFA in 1992. In these positions, I direct all of IFR's fisheries

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conservation programs, in particular its salmon conservation, education, and advocacy program, which is one of its primary activities.

5. IFR is a separate non-profit public interest marine resources protection and conservation organization closely affiliated with PCFFA and with overlapping Board members, general membership, and staff. IFR manages, directs, and helps fund most of PCFFA's salmon conservation and public education programs. IFR has approximately 850 supporting members coastwide, most of whom are commercial salmon fishermen or women, or individuals who have a personal interest in the restoration of west coast salmon fisheries.

6. Much of IFR's work revolves around efforts to restore and protect salmon resources within the coastal basins of northern California, Oregon, and Washington. For example, IFR has been encouraging the formation and funding of watershed councils and other cooperative stream restoration efforts within these areas for several years. Displaced and unemployed commercial fishermen frequently work on those projects. We work on projects related to salmon conservation in the California Central Valley, coastal watersheds in California (which includes the Trinity River sub-basin), and in areas in Oregon and Washington including the Klamath Basin, the Columbia Basin, and the Puget Sound area, including efforts to change land and water use policies so that they are more "fish-friendly." In northern California, Oregon, and Washington we are also working to improve forest and agricultural land use practices and other land use practices generally, on both private and public lands, to lessen their impacts on salmonid spawning and rearing habitat. Much of this effort and all the financial resources going into this effort would be wasted if salmon species continue to decline due to poor resource management decisions.

7. PCFFA has many active member associations along most of the west coast.

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Northern California ports in which PCFFA has active member associations include the Ports of Bodega Bay, Fort Bragg, and Eureka, California, all of which are influenced by Klamath fall-Chinook abundance levels. Oregon ports in which PCFFA has active member associations include the Ports of Astoria, with at-large members in other Oregon ports. Additionally, several of our member groups are themselves coastwide associations with their own membership in many Oregon, Washington, and northern California ports. These include the Small Boat Commercial Salmon Fishermen's Association, to which many small boat commercial fishermen from many states belong.

8. Commercial salmon harvesting is a valuable business enterprise for PCFFA and IFR members and for the west coast economy. As recently as 1988, according to independent economic studies based on federal fisheries data, Oregon's commercial salmon harvests alone supported an estimated 4,450 family wage jobs and generated approximately $89 million in personal income contributions to the Oregon economy. In that same year, commercial salmon fishing generated over $94 million to the northern California economy and supported 4,000 family wage jobs. Likewise, in Washington State in that year, commercial salmon fishing generated over $136 million to that state's economy and supported an estimated 6,800 family wage jobs. In addition, commercial fishing generates high quality food for the region's population and for export. Chinook salmon is particularly important to maintaining commercial fisheries and is the west coast's most abundant salmon run.

9. Today, due to many factors, many runs of once-commercially valuable salmon are either extinct or protected under federal laws as endangered species. Because many salmon runs are protected as threatened or endangered under the federal Endangered Species Act ("ESA"), commercial fishing that might indirectly affect ESA-listed fish has been and must continue to be

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either severely restricted or totally prohibited. More fundamentally, however, the declines of all these species in themselves (quite independent of any ESA listing constraints) result in reduced harvests throughout the west coast through two impacts: (1) direct declines in some stocks to the point where for conservation reasons no commercial fishery can or should be maintained; and (2) "weak stock management" conservation constraints (imposed both by law and by sound biological management needs) on whole fisheries to protect any weaker or declining stocks that may intermingle with otherwise abundant stocks that could be harvested but for the disproportionate impact that harvest might have on already weakened stocks. Both types of constraints cost the west coast salmon fishing industry untold hundreds of millions of dollars each year in lost harvest opportunities. The only hope for relief from these weak stock management constraints is to protect and ultimately recover these stocks to the point where sustainable commercial fisheries can be resumed. This gives our industry a strong economic incentive to bring these weak salmon stocks to full recovery as soon as possible.

10. The decline of Pacific salmon runs has severely harmed PCFFA members by limiting commercial harvest opportunities, by forcing many boat owners out of business, and by adversely affecting the potential for future income for the remainder. Economic losses to our industry over the past several decades have been severe. For instance, in California, the number of commercial salmon fishing vessel permits issued by the state Department of Fish and Game has shrunk from 7,744 (1980) to 1,263 (2009), a fleet decline of more than 84%. The number of commercial salmon stamp fishing permits issued by the Department underwent a similar decline of 82% in that same period, which has meant similar reductions in salmon stamp revenue devoted to salmon habitat restoration efforts in California. Comparable declines have also occurred in both Oregon and Washington during that same time period. Much of the salmon-

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dependent economic activity that our members rely on for their livelihoods is now either in jeopardy or has already disappeared from the economy as a direct result of the declining numbers of salmon, which is in turn, chiefly a product of their declining habitat.

11. PCFFA and IFR have a particularly long-standing and strong interest in the protection and recovery of Klamath River salmon, and even more specifically, of Klamath fall-run Chinook. As adults, Klamath River fall-run Chinook salmon migrate from the Klamath River as far south as Monterey, CA and as far north as central Washington State. Along hundreds of miles of California and Oregon coastline, and well into central Washington State, Klamath fall-run Chinook are a dominant stock intermingling with many other stocks of salmon. *See* Ex. 1 (Dept. of Interior graph documenting percentage of Klamath fall-run Chinook salmon among total harvested salmon resources by area). For the reasons discussed above, this means that fishing for any salmon stock within this more than 700 mile long region is significantly affected by the health of Klamath fall-run Chinook salmon. Where Klamath numbers are poor, fishing for all salmon in this area of the coast -- *even very healthy runs* -- can be severely restricted and even totally closed.

12. Our west coast commercial salmon fisheries are also severely restricted by the low abundance of Klamath coho salmon, which are federally protected under the Endangered Species Act (ESA) as part of the Southern Oregon/Northern California Coho (SONCC) ESU ("evolutionarily significant unit") under the federal ESA. We are not allowed to harvest or target coho salmon, and at their current abundance level of between 1% to 2% of their historic abundance, coho in the Klamath Basin automatically become the "weakest stock" which limits all west coast fisheries into which they may intermingle. As an industry, we have been reorganized for many years to avoid fishery impacts on these "weak stock" SONCC coho runs at

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all costs, but any further loss of these ESA-listed coho stocks, particularly from the Klamath Basin (which historically supported them in their largest numbers) would likely mean even more restrictive fisheries restrictions on our already severely restricted ocean commercial salmon fishing industry.

13. PCFFA and IFR have been parties to several lawsuits intended to protect and recover depressed salmon runs in the Klamath Basin. For example, as lead plaintiff in *Pacific Coast Federation of Fishermen's Associations v. Bureau of Reclamation (USBR)*, 138 F. Supp. 2d 1228 (N.D. Cal. 2001), PCFFA requested and was granted an injunction on certain USBR water deliveries intended for agricultural use until it could ensure that such deliveries were not contributing to further declines of Klamath River salmon. In *Kandra v. United States*, 145 F. Supp. 2d 1192 (D. Or. 2001), PCFFA and IFR intervened as defendants to oppose claims by Klamath federal irrigation project (USBR) contract irrigators that reducing irrigation water availability for the protection of fish species violated the law. Relying in part on evidence submitted by PCFFA, the Court rejected the irrigator's request for injunctive relief, finding that the balance of hardships did not tip in the irrigators' favor, noting that commercial fishermen "rely on coho salmon to sustain economic viability and their way of life. The public interest weighs heavily on both sides of the dispute." PCFFA has brought or successfully intervened in many other cases involving conflicts over water, irrigation and salmon in the Klamath basin. *See, e.g., Pacific Coast Federation of Fishermen's Associations v. U.S. Bureau of Reclamation*, 226 Fed. App. 715 (9th Cir. 2007); *Klamath Irrigation District v. United States*, 635 F.3d 505 (Fed. Cl. 2011); *Klamath Water Users Assoc. v. Patterson*, 15 F. Supp. 2d 990 (D. Or. 1998); *Parravano v. Babbitt*, 861 F. Supp. 914 (N.D. Cal. 1994);

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14. It should also be noted that PCFFA and/or IFR, or both, have also been parties in a number of lawsuits currently still in litigation over water flows and fisheries protections in the California Central Valley. These include cases before this Court relied upon in finding that this case is "related" to other cases involving Central Valley water. *See, e.g., San Luis & Delta-Mendota Water Authority et al v. Locke*, No. 09-cv-01053 (E.D. Cal.). Plainly, PCFFA and IFR have a long-standing and clear interest in the subject matter of this case.

II The 2002 Fish Kill and Its Impacts on PCFFA and Its Members .

15. In September of 2002, an estimated 78,000 adult salmon returning to the Klamath River to spawn died in the lower part of the Klamath River. This event has since been characterized as the largest adult "fish kill" in United States history. These adult fish died all along the lower 30 miles of the river before they could get to their spawning grounds and lay their eggs. The dead spawners were predominately fall-run Chinook, but also included the much rarer spring-run Chinook and at least 344 ESA-listed coho salmon were counted, although this count was almost certainly only a fraction of the total ESA-listed coho lost that year. A photograph of conditions in the lower river during the time of the fish kill is included as Exhibit 2. The event was the subject of national, regional and local news coverage. *The loss of salmon productivity for that entire year-class of salmon was catastrophic.* The loss of that many spawners from a whole year-class has implications in terms of later reduced returns later, when the remaining adults from the few juveniles surviving such a disaster return to spawn in their turn within the life cycle of these species.

16. The California Department of Fish and Game (CDFG)[1] subsequently investigated

[1] The California Department of Fish and Game has very recently been renamed the "California Department of Fish and Wildlife," but for purposes of these historical references we will continue to use the agency's name at the time of the 2002 fish kill, and refer to it by "CDFG."

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the causes of the 2002 Fish Kill in a comprehensive scientific study.[2] In a cover letter to the USBR, CDFG placed the blame for the fish kill squarely on the shoulders of USBR, which that year (in contrast to prior years) had prioritized water deliveries for irrigators over instream flows for salmon. While the direct cause of salmon mortality was bacterial pathogens that are commonly present in the Klamath and elsewhere, albeit at low levels, the 2002 fish kill itself was triggered by low river flows which increased fish densities and created much poorer water quality conditions, which in turn created ideal conditions in which these fish pathogens could flourish and rapidly spread while simultaneously reducing the natural resistance of these fish due to greatly increased environmental stress. Ex. 3 at 2. As CDFG pointed out, "of the conditions that can cause or exacerbate a fish kill, flow is the only factor that can be controlled to any degree" and "[f]low is regulated by upstream reservoirs operated by the USBR on both the Klamath and Trinity Rivers." *Id*. A letter from the Pacific Fishery Management Council in December 2002 pointed out that flows in the lower Klamath during September 2002 were the fifth lowest on record since 1951. Ex. 4 at 3. CDFG's conclusion that low flow conditions contributed to the 2002 fish kill is consistent with reports issued by the U.S. Department of Fish and Wildlife and the Yurok Tribe, which also conducted comprehensive scientific investigations into the causes of the event.[3]

17. Many commenters and fish managers in 2002 predicted that the loss of so many adult salmon prior to spawning in 2002 would result in fewer juvenile salmon hatching in early 2003 to migrate out to sea, and thus severely diminished adult Klamath-origin returns from this salmon year-class starting in 2005, dipping lowest in 2006, and still diminished returns as late as

[2] The CDFG final 2002 fish kill Report available at: www.pcffa.org/KlamFishKillFactorsDFGReport.pdf.

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2007. *See* Ex. 4 at 2. These concerns were validated in 2006, when record low returns of Klamath fall chinook prompted coast-wide commercial fishing closures, leading the U.S. Secretary of Commerce to formally declare a Commercial Fishery Failure due to a Fishery Resource Disaster. Ex. 5. The Secretary found that 2006 salmon catches had dropped 88% relative to recent years, causing "severe economic hardship this year in this significant part [a 700 mile stretch] of the west coast." Also as predicted, the ocean salmon seasons of years of 2005 and 2007 were also partially restricted for the same Klamath-driven reasons, although not as restricted as the disaster year of 2006.[4]

18. Governor Schwarzenegger of California found that the extremely low abundance of Klamath chinook would result in "severe economic losses throughout the state," and declared that "conditions of disaster or extreme peril to the safety of persons and property" existed in 10 California counties. Ex. 6. Similarly, Governor Kulongowski of Oregon responded to the "virtual elimination of a viable commercial salmon fishing season" in Oregon with a declaration of emergency in six Oregon coastal counties on April 24, 2006. The declaration noted that fishing restrictions triggered by historic low returns "will have profound consequences for many communities, including significant increases in unemployment, human suffering, financial losses, and other stark economic impacts along the Oregon coast." Ex. 7. at 1. That disaster Declaration was also amended on April 26, 2006, to include Clatsop County, the northernmost of Oregon's coastal counties.

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[3] See for instance *Belchik, M., Hillemeier, D., and Pierce, R.M. 2004. The Klamath River Fish Kill of 2002; Analysis of Contributing Factors. Yurok Tribal Fisheries Program,* available at: *www.yuroktribe.org/departments/fisheries/documents/FINAL2002FISHKILLREPORTYTFP.pdf*

[4] While Chinook salmon have an average life-span of 4 years from egg to spawning adult, some pre-mature adults (called "jacks") return to spawn early as 3-year olds, and some as post-mature 5-year olds. Returns from any one year-class are thus observed to occur on a bell curve, with the deepest dip in abundance from the damaged 2002 year-class returns thus occurring at 2006, but with some losses the year prior (2005) and the year following (2007)

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19. Economic damages to the west coast salmon fishing industry that resulted from the nearly full season closure in 2006, and partial closures in 2005 and 2007 have never been fully assessed, but have been estimated at between $100 million and $200 million dollars, including damages suffered by coastal communities in northern California, all of Oregon and some of Washington state. The United States Congress later allocated $60.4 million in direct coastal community disaster assistance, which only partially compensated for these economic damages. Many fishing families were forced to permanently leave the industry for lack of work in 2006, and much of our coastal fishing industry infrastructure (fish buyers, processors, distributors, ice houses, fueling stations, port facilities, etc.) was damaged or collapsed as a result of those Klamath-driven fishing season closures. Some of that infrastructure has never recovered.

20. It should be noted that the 2002 fish kill started in early September and went unabated until when, on September 28, 2002, an emergency "pulse flow" was provided by USBR from Iron Gate Dam seeking to halt the destruction of that salmon run. This emergency pulse flow was provided from September 28th until October 10, 2002, and increased the flows at Iron Gate Dam by about 71% to 1,300 cfs, and was successful in aiding dispersal and upstream migration of the surviving salmon and steelhead, abruptly ending the fish kill as soon as these higher flows hit the areas of the fish kill. Had this 2002 emergency pulse flow not been implemented, using draw-down water from the Iron Gate and Copco Reservoir, the fish kill would likely have continued and the damage to that year-class have been even greater. This was considered by fisheries biologists to have been a good scientific "field test" of emergency pulse flows and their efficacy in preventing such fish kills. The proposed 2013 Trinity River

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showing up in reduced and restricted fisheries, and consequent economic losses spread over three years, with the worst losses in 2006.

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emergency pulse flow is a very similar mitigation measure, except that it is proactive and preventive in nature, rather than merely responsive to an already ongoing fish kill as occurred in 2002.

21. In 2003, 2004, and 2012, predictions of unusually large runs of returning Chinook, combined with drier than normal hydrologic conditions, prompted USBR to augment flows in the Trinity River in its efforts to prevent yet another disastrous adult fish kill. *See* USBR Environmental Assessment ("EA") at 1. The purpose of this late summer flow augmentation is to increase water volumes and velocities in the lower Klamath River, and thereby decrease the risk of another epidemic of fish disease like the one that triggered the 2002 fish kill. In each of those years, higher late summer releases coincided with no notable outbreaks of disease or adult mortality in the lower Klamath. A 2013 letter from the Pacific Fishery Management Council to the Secretary of the Interior congratulated the Department on its 2012 flow augmentation program, noting that enhanced flows enabled successful spawning of a large run despite low flow conditions in the Klamath. Ex. 8 at 1.

22. Fisheries managers now anticipate a very high run of 271,000 fall Chinook in 2013, significantly higher (almost 1.7 times the size) than the estimated 2002 run. EA at 1. *See* also Ex. 8, at 2. At the same time, dry to critically dry hydrologic conditions prevail in the basin. In other words, September 2013 river conditions are currently anticipated to look very similar, if not worse, than the 2002 water year, when low flows and high returns triggered the disastrous disease outbreak that killed tens of thousands of salmon of multiple species and runs. For this reason, PCFFA and IFR strongly support the use of additional flow from the Trinity River to reduce the risk to the salmon on which they rely. On July 30, 2013, I signed a comment letter to USBR urging them to go forward with the proposed flow augmentation. Ex. 9. Similarly, the

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Pacific Fishery Management Council urged the Department of Interior to implement enhanced flows in 2013 if conditions were as dry as anticipated. *See* Ex. 8 at 2 ("The evidence is compelling that lower-than-average hydrology and greater-than-average fish densities may once again compromise the safe passage of adult fall Chinook in the Klamath River in 2013.")

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Executed this 9th day August 2013, at Eugene, Oregon.

GLEN H. SPAIN

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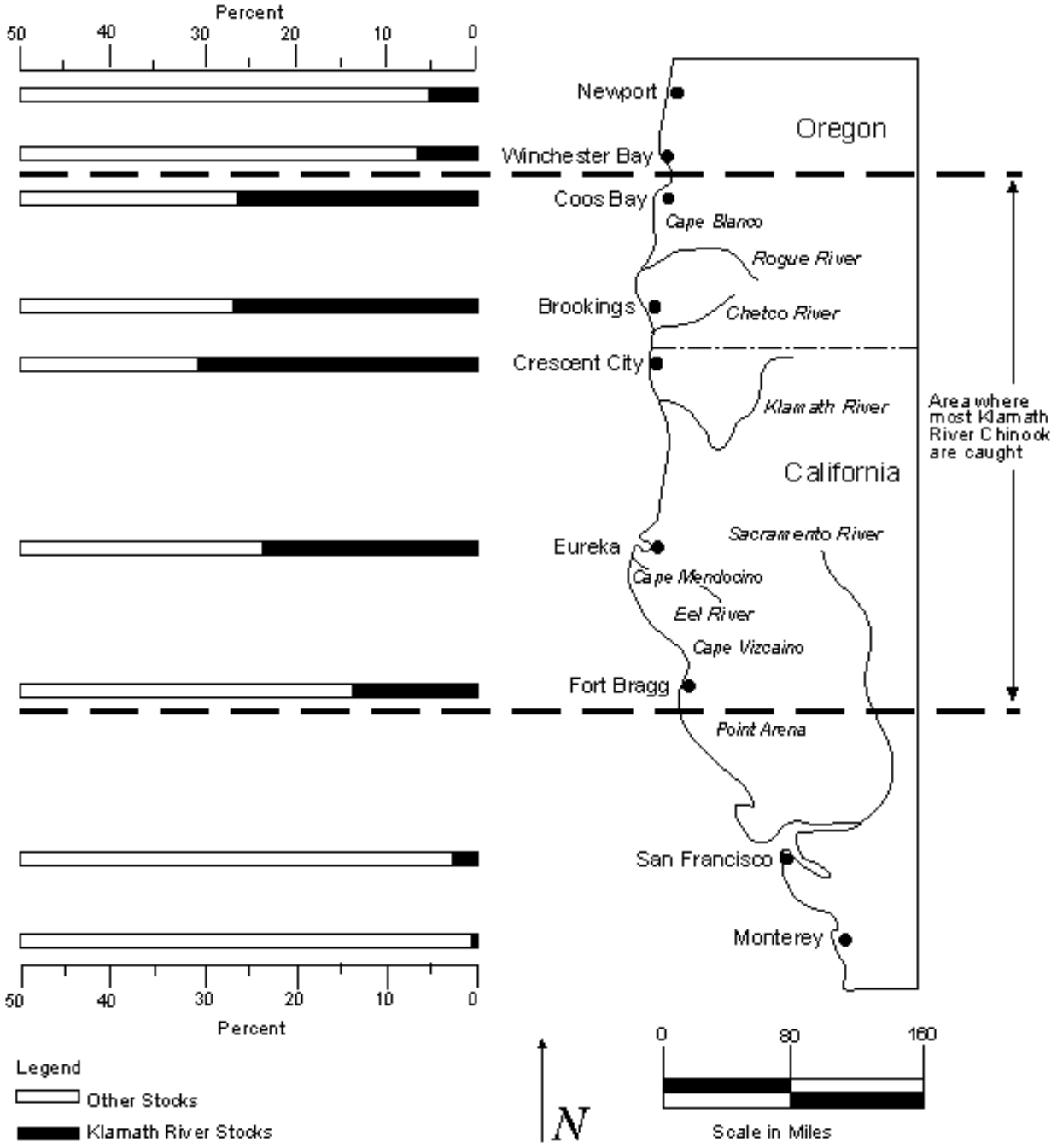
EXHIBIT 1

Table 1
Contribution of Coded Wire Tagged Klamath Fall Chinook by Port in the 1979–1982 Ocean Fisheries



Source: US Dept. of Interior (1985), "Klamath River Basin Fisheries Resources Plan," prepared by CH2M Hill (February, 1985).

EXHIBIT 2

EXHIBIT 3

STATE OF CALIFORNIA -- THE RESOURCES AGENCY GRAY DAVIS, *Governor*

DEPARTMENT OF FISH AND GAME
601 Locust Street
Redding, CA 96001
(530) 225-2300

January 3, 2003

Mr. Dave Sabo, Area Manager
Klamath Basin Area Office
U.S. Bureau of Reclamation
6600 Washburn Way
Klamath Falls, OR 97603

Dear Mr. Sabo:

Transmittal of Report "September 2002 Klamath River Fish Kill: Preliminary Analysis of Contributing Factors" and California Department of Fish and Game (DFG) Recommendations

This letter transmits the DFG subject report to the U.S. Bureau of Reclamation (USBR) and provides important recommendations for management of the Klamath Project (Project) with respect to fishery resources. This report provides a preliminary analysis of factors leading to the September 2002 fish kill and compares 2002 and other low-flow years in the Klamath River when major fish kills were not observed. Factors examined by the DFG include fall Chinook salmon run size and timing, ambient atmospheric conditions, and in-river environmental conditions.

During late September of 2002, a minimum of 33,000 adult salmon, steelhead trout, and other fish species were killed in the Lower Klamath River. This kill is considered highly significant because approximately 25 percent of the projected 2002 total in-river run of Klamath/Trinity River fall Chinook salmon were killed prior to spawning. Of the salmonids lost in the lower half (mouth of the Klamath to Blue Creek) of the fish kill area, DFG estimates that 95.2 percent were fall Chinook salmon, 0.5 percent were coho salmon and 4.3 percent were steelhead trout. These DFG estimates are similar to those developed by U.S Fish and Wildlife Service (USFWS) for the entire kill area (mouth of the Klamath to Coon Creek Falls). The preliminary estimates by the USFWS shows that out of the 33,000 anadromous fish killed, 96 percent were Chinook salmon, 1.5 percent were coho salmon and 2.0 percent were steelhead trout. The DFG estimates that 68 percent of the Chinook salmon killed were naturally spawned fish and 53 percent of the steelhead killed were naturally spawned fish.

The pathological cause of death for adult Chinook salmon, coho salmon, and steelhead during September 2002 was disease from the ciliated protozoan *Ichthyopthirius multifilis* (ICH) and the bacterial pathogen *Flavobacter columnare* (columnaris). Both pathogens occur naturally are common worldwide are found and in the Klamath River and other aquatic systems.

The DFG concludes that low flows restricted fish passage and increased fish density thereby causing the 2002 fish kill on the Lower Klamath River. Furthermore, of the conditions that can cause or exacerbate a fish kill, flow is the only factor that can be controlled to any degree. Flow is regulated by upstream reservoirs operated by the USBR on both the Klamath and Trinity rivers. There is a substantial risk for future fish kills on the Klamath River considering that pathogens are always present, temperatures are normally at levels that can cause disease and, under the 2002 biological opinion flow prescription, a moderate-sized run of salmon and steelhead can generate high enough densities in the Lower Klamath River to result in a major fish kill.

The DFG recommends:

1. An investigation is needed to determine flows necessary to allow unimpaired upstream passage of adult salmon and steelhead in the Klamath River at key locations such as Pecwan and Ah Pah riffles, Coon Creek Falls, and Ishi Pishi Falls on the Klamath River, and Grays Falls on the Trinity River. Such an investigation should also address the subject of delayed passage for adult fish that may occur during low flows;

2. The USBR and National Marine Fisheries Service (NMFS) should reinitiate an Endangered Species Act consultation for coho salmon on the operations of the Klamath Project. In reinitiating consultation, USBR and NMFS must also address the flows necessary for "Essential Fish Habitat" for Chinook salmon and steelhead in the Klamath and Trinity rivers under the Magnuson-Stevens Fishery Conservation and Management Act as amended in 1996 by the Sustainable Fisheries Act (Public Law 104-267);

3. The USBR should immediately finalize the Hardy Phase II Flow Study and implement its flow recommendations. If USBR does not choose to fund the finalization of this report, an alternative source of funding should be identified by other State and Federal agencies to complete this important document;

4. The USBR should expedite the completion of the "Supplemental Environmental Impact Statement/Report for the Trinity River Main Stem Fisheries" Restoration" and implement the "Record of Decision;" and

5. The USBR should model the Klamath River operations after the USBR's Central Valley Project on the Sacramento River in which the amount of agricultural water deliveries are based on water-year type and balanced with the needs of fishery and riparian resources. Fish and wildlife resource protection, restoration, mitigation, and enhancement should be made a part of the Klamath Project purpose. Under the Reclamation Projects Authorization and Adjustment Act of 1992 (Public Law 102-575), the Central Valley Project Improvement Act made fish and wildlife protection, restoration and mitigation a project purpose having equal priority with irrigation and domestic uses and fish and wildlife enhancement a project purpose equal to power generation.

If you have any questions regarding our report and recommendations, please contact Habitat Conservation Program Manager Mark Stopher. He can be reached at the letterhead address or by telephone at (530) 225-2275.

Sincerely,

Donald Koch

DONALD B. KOCH
Regional Manager

cc: See page four

cc: Ms. Irma Lagomarsino, Supervisor
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The Honorable Doug LaMalfa
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cc: Mr. Michael R. Valentine, Chief Counsel
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Mr. Robert Treanor, Executive Director
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The Honorable LaVada Erickson
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The Honorable Sam Aanestad
Senator, Fourth District
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The Honorable Bonnie Neely
Chairperson
Humboldt County Board of Supervisors
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Eureka, CA 95501

The Honorable Chuck Blackburn
Chairperson
Del Norte County Board of
Supervisors
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Crescent City, CA 95531

The Honorable Chris Erickson
Chairperson
Trinity County Board of Supervisors
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Weaverville, CA 96093-1258

EXHIBIT 4

PACIFIC FISHERY MANAGEMENT COUNCIL

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

CHAIRMAN
Hans Radtke

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Donald O. McIsaac

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December 4, 2002

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

EXHIBIT 5

THE SECRETARY OF COMMERCE
Washington, D.C. 20230

Declaration Concerning the Klamath River Fall Chinook Salmon Fishery

Klamath River fall Chinook (KRFC) is a key stock used by NOAA's National Marine Fisheries Service (NMFS) to manage the mixed stock ocean fishery off the Pacific Coast, in which salmon from different rivers of origin co-mingle in ocean waters and are harvested together. Fisheries disaster relief is covered by Section 312(a) of the Magnuson-Stevens Fishery Conservation and Management Act, which specifies that the Secretary, at the discretion of the Secretary or at the request of the Governor of an affected State or a fishing community, shall determine whether there is a Commercial Fishery Failure due to a Fishery Resource Disaster as a result of natural causes, man-made causes beyond the control of fisheries managers to mitigate, or undetermined causes. At the request of the Governors of Oregon and California in April 2006, I began an evaluation of the Klamath River fall Chinook. On July 6, 2006, I declared a Fishery Resource Disaster under section 308(b) of the Interjurisdictional Fisheries Act of 1986.

The conservation objective for KRFC established under the Pacific Coast Salmon Fishery Management Plan (Salmon FMP) requires a return of 33-34 percent of potential adult natural spawners, but no fewer than 35,000 naturally spawning adults, each year. In compliance with the Salmon FMP, a "conservation alert" is triggered when a stock is projected to fall below its conservation objective. Under such circumstances, the Pacific Fishery Management Council (Council) is required to recommend the closure of salmon fisheries within Council jurisdiction that impact the stock.

From 2001 through 2005, drought conditions in the upper Klamath Basin resulted in flow conditions in the mainstem Klamath River and tributaries representative of dry water years. As a result of the protracted drought and low flows in the mainstem Klamath River, in-river conditions allowed for the proliferation of endemic diseases, and both juvenile and adult Chinook salmon populations have experienced substantial mortality as a result of these epizootic events. The escapement of KRFC then fell below the 35,000 spawner escapement floor in 2004 and 2005.

A recent decline in ocean conditions, prolonged drought, and subsequent poor in-river conditions in 2002 and 2003, resulted in low numbers of age-3 and age-4 KRFC recruiting to the 2006 fishery. The 2006 preseason forecast of approximately 25,000 naturally spawning KRFC was close to the record low, and less than the minimum escapement of 35,000 required to allow fishing between Cape Falcon, Oregon, and Point Sur, California, (the Klamath impact area) under the Salmon FMP. A complete closure of the 2006 salmon fishery, in the Klamath impact area, was avoided through a collaborative effort by NMFS, Council, state, and tribal representatives to identify a limited fishery that would manage risks and address the conservation concerns for KRFC. NMFS issued a Temporary Rule for Emergency Action to implement very restrictive 2006 annual management measures for the west coast ocean salmon fisheries. These regulations close a majority of the commercial fisheries from Cape Falcon, Oregon, to Point Sur, California, from May 1 to August 31, 2006. As a result of the factors described above, the commercial salmon fishery and the shore-based support sector are enduring severe economic hardship this year in this significant part of the west coast (see Table 1 below). Accordingly, the scope of the Fishery Resource Disaster consideration includes this entire 700 mile stretch of coastline from Cape Falcon to Point Sur.

Table 1. Season Revenue (Ex-vessel) Compared to Historical Information from State Data

Management Area	2006	2001-2005 Average	High	Low
Oregon (South of Cape Falcon)	$1,240,000	$7,393,000	$10,090,000 (2004)	$5,116,000 (2001)
California	$1,696,000	$11,519,000	$18,383,000 (2004)	$5,225,000 (2001)
Total	*$2,936,000*	*$18,912,000*	*$28,473,000 (2004)*	*$10,341,000 (2001)*

The season restrictions reduced the fishing opportunity in the Klamath impact area by 71% from recent years. Due to weather and other factors, the actual number of fishing days by vessels has been even lower than expected. Based on information obtained from the States of Oregon and California, catch of salmon in this area will decrease by 88% this season from the recent years' average. Although the price per pound has been higher due to the limited supply, the resulting ex-vessel revenue this season will still drop by roughly 84% compared to the recent years' average.

In light of the foregoing facts, I find the economic losses in the commercial salmon fishery off Oregon and California caused by the low abundance of KRFC between Cape Falcon, Oregon, and Point Sur, California, in 2006 constitute a Commercial Fishery Failure due to a Fishery Resource Disaster. I find further this Fishery Resource Disaster is due primarily to natural causes, including drought, disease, and poor ocean conditions.

Therefore, I hereby declare that a Commercial Fishery Failure due to a Fishery Resource Disaster exists under section 312(a) of the Magnuson-Stevens Fishery Conservation and Management Act of 1976, as amended.

Carlos M. Gutierrez
August 10, 2006

EXHIBIT 6

A PROCLAMATION

BY THE GOVERNOR OF THE STATE OF CALIFORNIA

WHEREAS California's salmon runs are a vital component of our great State's resources that provide significant environmental, recreational, commercial, and economic benefits to the people; and

WHEREAS Klamath River Basin Chinook Salmon have been significantly impacted by poor ocean conditions, drought, water management, water quality, water flows, disease, and the elimination of access to historical spawning habitat; and

WHEREAS the Klamath Basin Chinook Salmon that commingle with other runs of salmon in ocean waters off of California and Oregon have been declining in abundance to a point where California's and Oregon's recreational, commercial, and tribal fisheries are being significantly constrained to conserve Klamath River Chinook Salmon; and

WHEREAS Klamath River Basin Chinook Salmon are predicted to have extremely low ocean abundance for 2006 in waters from Cape Falcon in Oregon to Point Sur in Monterey County, California, and in the Klamath River Basin; and

WHEREAS restoration of habitat and improved water quality and flows are critical to restoring an environment suitable to the long-term sustainability of the Klamath River Basin Chinook Salmon and other anadromous fish species; and

WHEREAS appropriate management of the Klamath River Basin Chinook Salmon population is critical to California's businesses, and local communities that provide goods and services in support of California's salmon fisheries; and

WHEREAS on April 5, 2006, I requested Secretary of Commerce Carlos Gutierrez to use his authority under the Magnusen-Stevens Fishery Conservation and Management Act to determine that there has been a commercial fishery failure due to a fishery resource disaster; and

WHEREAS on April 28, 2006, the National Marine Fisheries Service adopted an emergency rule to implement the recommendations of the Pacific Fisheries Management Council that resulted in severe restrictions on the commercial ocean salmon and Klamath Basin tribal and recreational fisheries and included restrictions on the recreational ocean salmon fishery; and

WHEREAS these restrictions will have significant impacts to California's commercial ocean salmon and in-river salmon fisheries and will result in severe economic losses throughout the State; and

WHEREAS the Department of Finance has determined that approximately $778,000 is continuously appropriated and available in the Small Business Expansion Fund (Fund 918) for disaster purposes under the Corporations Code section 14030 et seq.; and

WHEREAS the Small Business Expansion Fund's available monies can be leveraged to guarantee up to approximately $9.2 million in loans for disasters, including guaranteeing loans to prevent business insolvencies and loss of employment in an area affected by a state of emergency within the state; and

WHEREAS Governor Ted Kulongoski of Oregon and I signed The Klamath River Watershed Coordination Agreement along with the responsible federal agencies in order to address the impacts to the fisheries in the region and to develop a long-term management approach, common vision, and integrated planning associated with the Klamath Basin; and

WHEREAS the serious circumstances of the Klamath River Chinook Salmon run put at risk the livelihoods of families and businesses dependent upon them.

NOW, THEREFORE, I, ARNOLD SCHWARZENEGGER, Governor of the State of California, find that conditions of disaster or of extreme peril to the safety of persons and property exist within the California counties of Monterey, Santa Cruz, San Mateo, San Francisco, Marin, Sonoma, Mendocino, Humboldt, Del Norte, and Siskiyou due to the poor ocean conditions, drought, water management, water quality, water flows, disease, and the elimination of access to historical spawning habitat and resulting from the significant restrictions that have been imposed on the State's salmon fisheries. Because the magnitude of this disaster will likely exceed the capabilities of the services, personnel, and facilities of these counties, I find these counties to be in a state of emergency, and under the authority of the California Emergency Services Act, I hereby proclaim that a State of Emergency exists in these counties.

Pursuant to this Proclamation, I hereby direct the Director of the California Department of Fish and Game and the Secretary of the Resources Agency to: (1) report to me immediately upon final action of the Department of Commerce and the California Fish and Game Commission on any further actions necessary to ensure the protection of the resource and of the economic livelihood of the fishery participants, tribes, and local communities; and (2) continue discussions for long-term restoration and management of the Klamath Basin with the State of Oregon, federal agencies (including the Secretaries of Commerce, the Interior, and Agriculture), tribal governments, and representatives from conservation, fishing, and agricultural organizations.

I FURTHER DIRECT the Secretary of the Business, Housing and Transportation Agency, with the cooperation of the Department of Finance, to activate the Small Business Disaster Assistance Loan Guarantee Program to guarantee loans to prevent business insolvencies and loss of employment in the counties of Monterey, Santa Cruz, San Mateo, San Francisco, Marin, Sonoma, Mendocino, Humboldt, Del Norte, and Siskiyou as a result of this State of Emergency.

I FURTHER DIRECT that as soon as hereafter possible, this proclamation be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this proclamation.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 6th Day of June 2006.

_____
ARNOLD SCHWARZENEGGER
Governor of California

ATTEST:

_____
BRUCE McPHERSON
Secretary of State

EXHIBIT 7

Office of the Governor
State of Oregon

EXECUTIVE ORDER NO. 06-06

DETERMINATION OF A STATE OF EMERGENCY IN TILLAMOOK, LINCOLN, COOS AND CURRY COUNTIES AND COASTAL PORTIONS OF LANE AND DOUGLAS COUNTIES DUE TO KLAMATH RIVER BASIN CONDITIONS AND LIMITATIONS ON OCEAN COMMERCIAL AND SPORT SALMON FISHING

Pursuant to ORS 401.055, I find that unexpected changing ocean conditions, prior drought years and poor water quality and parasites within the Klamath River Basin have caused a dramatic decline in Klamath River Basin Chinook Salmon available for harvest by the ocean fishing industry, resulting in the virtual elimination of a viable commercial salmon fishing season, and severe restrictions on the sport salmon fishing season, along the Oregon coast south of Cape Falcon. These conditions have resulted in an imminent emergency.

The commercial salmon fishery has been closed for six weeks and is not expected to reopen this year in Oregon coastal waters south of Florence. North of Florence to Cape Falcon, the season is expected to reopen in June, but will be of an extremely limited scope. On Oregon's southern coast, the recreational fishery is expected to be open only from mid-May until July 4, whereas a typical season would last into early September. These fishing limits will have profound consequences on many communities, including significant increases in unemployment, human suffering, financial losses and other stark economic impacts along the Oregon coast.

The affected areas are Tillamook, Lincoln, Coos and Curry Counties and the coastal portions of Douglas and Lane Counties that are west of Range 8 West, Willamette Meridian. I therefore declare a **State of Emergency** in the abovementioned counties and portions of counties.

NOW THEREFORE, IT IS HEREBY ORDERED AND DIRECTED:

1. All state agencies shall work in a cooperative and coordinated manner in order to mitigate the impacts of this emergency, provide expedited service and resources to persons and business adversely affected by the emergency, and focus state efforts in a manner most likely to relieve the unemployment, human suffering, financial loss and other economic impacts of this emergency. In addition to the specific measures discussed in this Executive

Office of the Governor
State of Oregon

Order, all state agencies are encouraged to think broadly and creatively about actions that agencies can take to address this emergency and shall communicate such ideas to the Office of the Governor. Response to the emergency shall be directed and coordinated by the Office of the Governor.

2. The Oregon Department of Fish and Wildlife, which operates under the direction of the State Fish and Wildlife Commission, is strongly encouraged to develop recreational and commercial fishing seasons, consistent with the federal framework, that help mitigate the effects of this emergency on coastal economies, and to consider establishment of additional commercial salmon fishing opportunities in state waters, as appropriate.

3. The Department of Community Colleges and Workforce Development shall pursue all available retraining opportunities for ocean fishing industry workers wishing to pursue alternative employment and shall coordinate the timely delivery of state workforce services and other human and community services to affected workers and families.

4. The Employment Department shall offer re-employment assistance programs to affected ocean fishing industry workers and shall work with the appropriate state and federal agencies to help affected individuals obtain unemployment insurance to the fullest extent available.

5. The Department of Housing and Community Services shall work with the Oregon Food Bank to provide additional food and nutritional support for affected Oregonians. Where possible, the Department is directed to work with housing partners to provide additional assistance for emergency shelter, rental housing, and permanent housing for affected households in need. The Department is further directed to work with local community based organizations to provide additional energy assistance and weatherization services to affected Oregonians as appropriate.

6. The Oregon Economic and Community Development Department shall investigate retraining opportunities for workers in the ocean fishing industry wishing to pursue alternative employment and provide technical assistance to public ports and businesses that experience adverse effects on their operations or revenues due to this emergency.

Office of the Governor
State of Oregon

EXECUTIVE ORDER NO. 06-06
PAGE THREE

7. The Oregon Department of Agriculture shall work with Oregon Sea Grant, a marine research and education program based at Oregon State University, and their Extension programs, to encourage dialogue between Klamath Basin farmers and the coastal fishing industry regarding management of resources within the Klamath River Basin.

8. The Oregon Department of Revenue shall investigate and pursue options for affected Oregonians to obtain income tax credits and refunds and other financial assistance.

9. The Oregon Tourism Commission is directed to actively inform the public of continued recreational fishing opportunities and other tourism activities along the Oregon Coast and to highlight travel to Oregon's coast, as appropriate within their overall marketing strategies.

10. The Department of Human Services shall continue to provide mental health and treatment services, alcohol and drug treatment services, nutrition programs, domestic violence assistance, and medical assistance to Oregonians in coastal communities with particular attention to the increased needs in coastal communities caused by this emergency.

11. The Oregon Watershed Enhancement board shall provide financial resources to support fish habitat enhancement along critical salmon streams in Oregon, for the purpose of accelerating the rebuilding of fish populations and creating new and meaningful work opportunities for displaced workers.

12. The Office of Emergency Management shall pursue any and all available federal funding or resources to additionally assist in the mitigation of the effects of this emergency.

13. All other state agencies are directed to provide appropriate state resources and to seek any available private and federal dollars to provide emergency assistance to affected individuals, families, businesses and communities and to deliver such assistance in the most expeditious manner.

Office of the Governor
State of Oregon

EXECUTIVE ORDER NO. 06-06
PAGE FOUR

14. All state agencies specifically referenced in this Executive Order shall report to me within 60 days of the date of this Executive Order about progress made under this Executive Order and every 60 days thereafter until conclusion of the emergency.

Done at Salem, Oregon this 24th day of April, 2006.

GOVERNOR

ATTEST:

SECRETARY OF STATE

EXHIBIT 8

PACIFIC COAST FEDERATION of FISHERMEN'S ASSOCIATIONS

Please Respond to:

☐ **California Office**
P.O. Box 29370
San Francisco, CA 94129-0370
Tel: (415) 561-5080
Fax: (415) 561-5464

www.pcffa.org

[X] **Northwest Office**
P.O. Box 11170
Eugene, OR 97440-3370
Tel: (541) 689-2000
Fax: (541) 689-2500
Email: fish1ifr@aol.com

30 July 2013

Mr. Don Reck
U.S. Bureau of Reclamation
Northern California Area Office
16349 Shasta Dam Blvd.
Shasta Lake, CA 96019

Sent via Email to:
sha-slo-klamathflows@usbr.gov

RE: Comments in Support of Draft EA/FONSI on proposed Trinity River Flow Augmentation to Reduce Risks of a 2013 Klamath River Fish Kill

Dear BOR Colleagues:

As the largest organization of commercial fishing families on the West Coast, we strongly support, and urge the BOR to go forward with its proposed flow augmentation proposal to put up to 62,000 acre-feet of additional Trinity-origin water back into the Trinity River from August 15th through September 21st (as described in the Project EA and FONSI documents), in order to reduce the risk of another major Klamath River adult spawner fish kill like we suffered through in 2002.

Another Klamath adult spawner fish kill like 2002 would be economically and biologically disastrous for the West Coast's slowly recovering ocean commercial salmon fisheries. But unfortunately, the same kinds of conditions as caused the 2002 fish kill – i.e., a very high spawner escapement run due to good ocean conditions, coming into a badly compromised river with too little water, and thus a greatly reduced biological "carrying capacity" – is fast shaping up to reoccur once again this year. If anything, conditions this year are likely to be worse for the returning fall-run Chinook salmon than in 2002.

That 2002 adult fish kill – said to be the worst adult fish kill in U.S. history – contributed greatly to a very low 2006 Klamath River returning fall-run Chinook adult year-class that in turn

triggered the nearly coast-wide, Klamath-driven "weak stock management" ocean salmon fisheries closures of the 2006.

Those 2006 Klamath weak stock-driven emergency conservation closures economically devastated coastal fishing-dependent communities from Monterey, CA, to well up into the State of Washington – at a total cost to these regional coastal fishing-dependent economies of an estimated $200 million in economic losses. In fact, that 2006 California-to-Washington ocean salmon fishery closure was so bad that it was formally declared a "fisheries disaster" by the U.S. Secretary of Commerce, and required Congressional disaster assistance of $60.4 million just to keep the coastal commercial fishing infrastructure from utterly collapsing.

In a 24 April 2013 letter (see ATTACHMENT A) from the Pacific Fishery Management Council (PFMC), the PFMC also strongly recommended such an emergency pulse flow, also pointing out that this year's conditions are, in some respects, even worse than those that triggered the 2002 fish kill. PCFFA fully supports the BOR's proposed pulse flow, for the same reasons provided in the attached PFMC letter, which we offer for the record.

Please feel to contact me at the contact address, phone or email above if there are any questions.

Sincerely,

Glen H. Spain

GHS/lt

Glen H. Spain
NW Regional Director
Pacific Coast Federation of
Fishermen's Associations (PCFFA)

Attachment A: PFMC Letter 24 April 2013

EXHIBIT 9

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
Dan Wolford, Chairman | Donald O. McIsaac, Executive Director

April 24, 2013

Ms. Sally Jewell
Secretary of the Interior
U.S. Department of the Interior
1849 C Street, NW
Washington, DC 20240

RE: Action Requested to Prevent Klamath River Fish Kill

Dear Secretary Jewell:

The Pacific Fishery Management Council (Pacific Council) would like thank all those in the Department of the Interior (DOI) involved in the water management decision-making designed to protect against a fish kill in the Klamath River during the record high run of fall Chinook salmon that returned in 2012. We view the 2012 experience to be a very successful example of proactive conservation, and are asking that similar protection occur for another exceptionally large return of salmon this fall.

In 201, the Pacific Council forecasted a new record high return of fall Chinook to the Klamath and Trinity Rivers; the actual return was the largest adult natural spawning escapement in the Klamath River Basin (122,000) since comprehensive records were initiated in 1978, along with record tribal and non-tribal in-river fishery catches. Excellent cooperation of Federal and state water managers provided enhanced river flows that enabled this record salmon run to successfully return to its spawning areas in the Klamath and Trinity rivers. The lack of any observed fish kill in spite of very low fall season flow conditions demonstrated the value and importance of real-time flow management for the Klamath River fall Chinook resource. We hope that similar cooperation in 2013 will again allow a large salmon run to spawn successfully.

This year, the Pacific Council is concerned that projected low flows in the Klamath River will substantially affect salmon essential fish habitat (EFH) and could create conditions leading to a fish kill in the Klamath River during the fall Chinook migration in 2013, such as occurred in 2002.

The purpose of this letter is to recommend, as we did last year, that the Bureau of Reclamation (BOR) proactively take action to minimize the potential for another fish kill by augmenting flow releases to alleviate stressful conditions for the 2013 fall Chinook run as these fish migrate through the Lower Klamath River. In particular, we recommend that BOR reserve an adequate

block of water for real-time flow management during the fall season to ameliorate expected low flow conditions in the Lower Klamath River, if needed, as was done successfully in 2012.

As you know, the Pacific Council is one of eight Regional Fishery Management Councils established by the Magnuson-Stevens Fishery Conservation and Management Act (MSA) of 1976, and recommends management actions for Federal fisheries off Washington, Oregon, and California. The MSA includes provisions to identify, conserve, and enhance EFH for species regulated under a Pacific Council fisheries management plan. Each Council is authorized under MSA to comment on any Federal or state activity that may affect the habitat, including EFH, of a fishery resource under its authority. Furthermore, for activities that the Pacific Council believes are likely to substantially affect the habitat of an anadromous fishery resource under its authority, the Pacific Council is obligated to provide comments and recommendations (MSA §305(b)(3)).

Forecasted Flows

Available data indicate that the 2013 water supply in the Klamath Basin will be below normal.[1] Precipitation has been substantially lower than average since January of this year. Air temperatures throughout the Basin have been above normal. Late winter or early spring precipitation events are not expected to change water supply conditions overall.

Forecasted Run Size

At the same time, the 2013 fall Chinook escapement is projected to be the second largest return on record. Alternatives for marine fisheries and river return in 2013 have been modeled by the Pacific Council's Salmon Technical Team. Ocean fishery modeling, including projections of the number of fish returning to the Klamath Basin, currently forecast a return of over 271,000 adult fall Chinook to the Klamath River mouth, second only in magnitude to the in-river population of 2012 (see figure below). This is nearly 1.7 times the 2002 adult run size associated with the 2002 fish kill and only 10 percent less than the observed record run of 302,100 adult fish in 2012. The positive performance of the 2009 brood year, as evidenced by the age-three returns last year, speaks to a high abundance of large, age-four Chinook contributing to the 2013 run. Hence, with respect to biomass, the 2013 river run may be comparable to that seen in 2012.

Analysis

The low flows, combined with such a large run, could result in conditions similar to those that led to the September 2002 fish kill, when more than 33,000 adult salmon died in the Lower Klamath River. Several analyses, including one produced by the USFWS,[2] concluded that low river flow and high densities of fish contributed to the outbreak of two diseases (*Ich* and *columnaris*) that caused the 2002 fish kill. The evidence is compelling that lower-than-average hydrology and greater-than-average fish densities may once again compromise the safe passage of adult fall Chinook in Klamath River in 2013.

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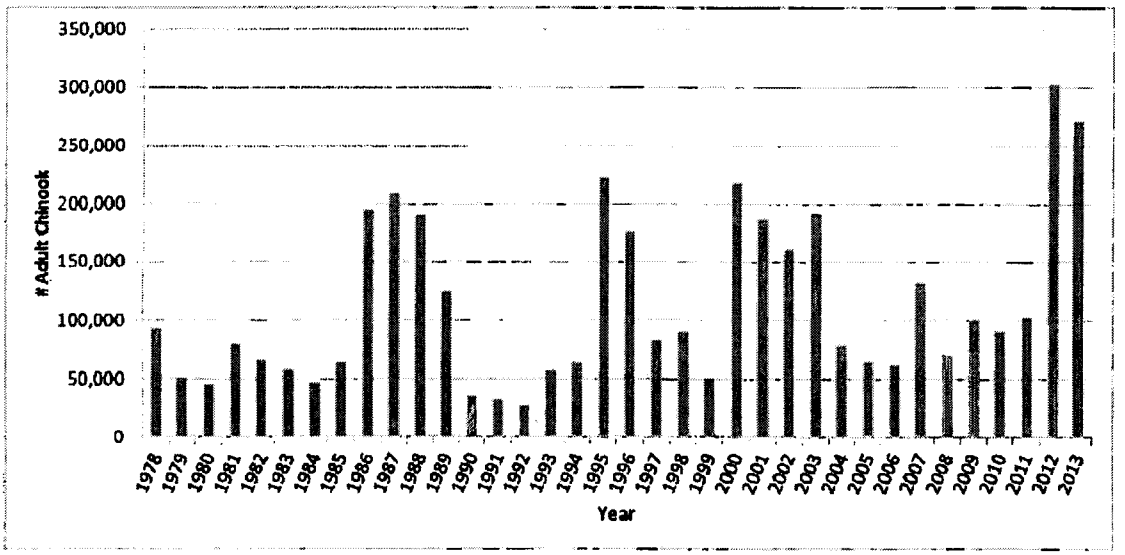
[1] Natural Resources Conservation Service, http://www.wcc.nrcs.usda.gov/wsf/west_fcst.html

[2] Guillen, G. 2003. Klamath River Fish Die-Off, 2002, Causative Factors of Mortality. http://www.krisweb.com/biblio/klamath_usfws_guillen_2003_killcause.pdf

Therefore, we recommend you pursue measures to provide additional flow during the fall Chinook migration period, if necessary, to maintain the quality of EFH for salmon and to minimize the likelihood of another fish kill. We recommend that the BOR work with the Klamath Basin's biologists and scientists, such as the Trinity River Restoration Program's Flow Group, to determine the best manner for using this water to minimize the potential for another fish kill. This was successfully done in the fall of 2012 when 3,000 acre feet of supplemental flows were provided specifically to improve upstream migration conditions and reduce the fish health risk for the record fall Chinook return; and no fish kill, in fact, was observed. The Klamath Basin technical team infrastructure to monitor river flows, water temperatures, and the progression of the fall season returns remains in place, and is the appropriate technical forum to help guide BOR's real-time flow management actions to protect these fish.

The figure below contains the post-season estimated Klamath River adult fall Chinook estimated run sizes for 1978 – 2012 and the projected abundance for 2013.



Recommendation

As noted above, anticipated water supply and fish abundance for 2013 suggests a need to provide supplemental flow releases comparable to the safe thresholds identified in BOR's Environmental Assessment for late-summer flow augmentation in 2012[3]. This conclusion is additionally informed by the interagency federal trust responsibility for the tribal fishery in the Klamath and Trinity Rivers and prudent management considerations.

Accordingly, the Pacific Council recommends that the Department of the Interior initiate planning now and take all necessary steps in the coming months to ensure sufficient water is

[3] Online at http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=10731

available to minimize the potential for another fish kill if conditions in the Klamath River prove to be dangerous to migrating Chinook salmon in the late summer and fall of 2013.

We recommend that you do what is necessary to ensure an adequate amount of supplemental water for release from the Trinity and/or Upper Klamath basins during the peak migration and holding timeframe for the fall Chinook return. Such flow augmentation should be designed to maintain the quality of salmon EFH and minimize the likelihood of another fish kill, taking into consideration the river flow patterns and salmon abundance that resulted in the 2002 fish kill. To that end, we recommend that the Department of Interior work with the Klamath Basin's tribal, state, and non-DOI Federal biologists and scientists to determine the best manner for using this water to minimize the potential for another fish kill.

In closing, it may be that this 2012-2013 situation reoccurs more frequently in the future than in the past few decades. Towards that possibility we recommend that the Department consider developing a permanent and comprehensive plan to address the needs of lower Klamath fish passage. The Pacific Council is prepared to assist with this effort in any way possible.

Thank you for your attention to this important matter.

Sincerely,

D. O. McIsaac, Ph.D.
Executive Director

JDG:rdd

C: Pacific Council Members
Habitat Committee
Mr. Ken Salazar, Former Secretary of Interior
Humboldt County Board of Supervisors