RECEIVED

1 2 3 4 5	TODD D. TRUE (WSB #12864) STEPHEN D. MASHUDA (MSB #4231) Earthjustice Legal Defense Fund 705 Second Avenue, Suite 203 Seattle, WA 98104 (206) 343-7340 (206) 343-1526 [FAX] ttrue@earthjustice.org smashuda@earthjustice.org	2001 MAY -3 P 2: 14 CLERK, U.S. DISTRICT COURT DISTRICT OF CAEGON PORTLAND, CREGON BY
6 7 8	DAN ROHLF (OSB #99006) AARON COURTNEY (OSB #93525) Pacific Environmental Advocacy Center 10015 S.W. Terwilliger Boulevard Portland, OR 97219	
9	(503) 768-6707 (503) 768-6642 [FAX]	
10	rohlf@lclark.edu aaron@lclark.edu	
11	Attorneys for Plaintiffs	
12	UNÍTED STATES DIST	
	DISTRICT OF OF	
14 15	NATIONAL WILDLIFE FEDERATION, IDAHO WILDLIFE FEDERATION, WASHINGTON WILDLIFE FEDERATION, SIERRA CLUB,	Civ. No. CV'01 - 640 - JE
16	TROUT UNLIMITED, PACIFIC COAST () FEDERATION OF FISHERMEN'S ()	COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF
17	ASSOCIATIONS, INSTITUTE FOR FISHERIES () RESOURCES, IDAHO RIVERS UNITED, IDAHO ()	
18	STEELHEAD AND SALMON UNITED, NORTHWEST SPORTFISHING INDUSTRY	
19	ASSOCIATION, FRIENDS OF THE EARTH, SALMON FOR ALL, and COLUMBIA)
20	RIVERKEEPER,	
21	Plaintiffs,	
22	v.) }
23	NATIONAL MARINE FISHERIES SERVICE,	
24	Defendant.)
25		Earthjustice Legal Defense Fund
26		705 Second Ave., Suite 203 Seattle, WA 98104 (206) 343-7340

PRELIMINARY STATEMENT

- 1. This action seeks review of a biological opinion issued by the National Marine Fisheries Service ("NMFS") on December 21, 2000, following reinitiation of consultation with the U.S. Army Corps of Engineers (the "Corps"), the Bonneville Power Administration ("BPA"), and the U.S. Bureau of Reclamation ("BOR") (collectively the "Action Agencies") under Section 7 of the Endangered Species Act ("ESA"), 16 U.S.C. § 1536, regarding the operation of the Federal Columbia River Power System ("FCRPS"), including a Juvenile Fish Transportation Program, and nineteen BOR projects in the Columbia River basin. A searchable CD-ROM copy of this opinion and the accompanying "Basinwide Salmon Recovery Strategy" ("BSRS"), is attached to this complaint as Exhibit A.
- 2. The opinion (hereinafter the "2000 FCRPS BiOp" or the "BiOp") addresses the effects of proposed FCRPS operations and other actions on salmon and steelhead that inhabit the Columbia River basin and that are listed as threatened or endangered under the ESA. The BiOp concludes that the actions proposed by the Corps, BPA, and BOR would jeopardize the continued existence of a number of these listed species and adversely modify their designated critical habitat. Accordingly, pursuant to the requirements of ESA section 7(b)(3)(A), 16 U.S.C. § 1536(b)(3)(A), and 50 C.F.R. § 402.14(h)(3), NMFS proposes in the BiOp a "reasonable and prudent alternative" course of action (the "RPA") that it concludes will avoid both jeopardy to these species and adverse modification of their critical habitat.
- 3. This action seeks review of the 2000 FCRPS BiOp and RPA for at least the following reasons:
 - NMFS' analysis of the current status of listed salmon and steelhead in the BiOp consistently and misleadingly understates the grave and immediate risk of extinction these species face, contrary to the best available scientific information

and the requirements of the ESA;

- NMFS' assessment of why the steps it proposes in the BiOp's RPA will avoid jeopardy and adverse modification of critical habitat: (1) relies extensively on speculative and voluntary actions by other federal agencies, as well as state and private entities, in areas unrelated to FCRPS operations and beyond the control or authority of the Action Agencies; and, (2) ignores the effects of sweeping emergency exemptions that make many key RPA measures optional, contrary to the requirements of the ESA and its implementing regulations;
- NMFS' analysis of why the RPA and voluntary and speculative actions by others
 will avoid jeopardy and adverse modification of critical habitat relies on a series
 of improbably optimistic assumptions, for which the agency offers no rational or
 credible explanation, and a qualitative assessment of the benefits of these
 measures that runs counter to the available evidence and is contrary to the best
 available scientific information and the ESA; and,
- NMFS' grant of an incidental take statement to accompany the RPA, as well as its approval of an ESA section 10(a)(1)(A) permit for the Juvenile Fish

 Transportation Program, are both contrary to the requirements of the ESA and its implementing regulations.
- 4. For at least these reasons, this action seeks a declaration that the no-jeopardy/no-adverse modification finding for the RPA, as set forth in the 2000 FCRPS BiOp, violates ESA section 7, 16 U.S.C. § 1536, and is arbitrary, capricious, an abuse of discretion, and not in accordance with law in violation of the Administrative Procedure Act ("APA"), 5 U.S.C. § 706(2)(A).

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF - 3 -

5. This action also seeks an injunction directing NMFS to withdraw the BiOp and RPA, rescind the incidental take statement that accompanies the RPA, and reinitiate consultation with the Action Agencies on a schedule set by the Court. This relief is necessary to preserve the status quo, to correct an illegal final agency action, and to prevent unlawful agency action that may cause irreparable harm to the environment and species listed for protection under the ESA.

PARTIES

- 6. The plaintiffs in this action are:
- A. National Wildlife Federation ("NWF"), the nation's largest conservation advocacy and education organization. Founded in 1936, NWF is a non-profit organization with its headquarters in Reston, Virginia. NWF has eleven regional offices, including the Northwestern Natural Resource Center in Seattle, Washington. NWF's mission is to educate, inspire, and assist individuals and organizations of diverse cultures to conserve wildlife and other natural resources and to protect the Earth's environment in order to achieve a peaceful, equitable, and sustainable future. As part of this mission, NWF and its over 4.5 million members and supporters are dedicated to protecting and restoring the Northwest's salmon runs, including those in the Columbia and Snake Rivers.
- B. Idaho Wildlife Federation, a nonprofit organization with its principle place of business in Boise, Idaho. Idaho Wildlife Federation and its 1,000 members and 24 affiliates (representing an additional 5,000 people) promote citizen support of the conservation of Idaho's wildlife and natural resources for fishing, hunting, and outdoor recreation benefiting future generations.
- C. Washington Wildlife Federation, a nonprofit conservation organization based in Olympia, Washington, with members throughout the State. Washington Wildlife Federation and its approximately 400 members are dedicated to the preservation, enhancement,

and perpetuation of Washington's wildlife and wildlife habitat through education and conservation.

- D. Sierra Club, a national environmental organization founded in 1892 and devoted to the study and protection of the earth's scenic and ecological resources mountains, wetlands, woodlands, wild shores and rivers, deserts, plains, and their wild flora and fauna. Sierra Club has some 60 chapters in the United States and Canada, including chapters in Washington, Oregon, and Idaho, and a principal place of business in San Francisco, California.
- E. Trout Unlimited ("TU"), a nonprofit coldwater fisheries conservation organization with national headquarters in Washington, D.C. and a regional office in Portland, Oregon. TU is dedicated to the protection of wild trout, salmon, and steelhead fishery resources. TU has approximately 85,000 members nationwide and 8,000 members in the states of Oregon, Washington, Idaho, and Montana. TU's members live and recreate in the Columbia River basin and TU has long participated in efforts to maintain and restore Snake River and Columbia River basin anadromous fish.
- F. Pacific Coast Federation of Fishermen's Associations ("PCFFA"), the largest organization of commercial fishermen on the west coast, with member organizations from San Diego to Alaska representing thousands of men and women in the Pacific fleet. Many of PCFFA's members are salmon fishermen whose livelihoods depend upon salmon as a natural resource and who, until recent fisheries closures, generated hundreds of millions of dollars in personal income within the region. PCFFA has its main office in Sausalito, California, and a Northwest regional office in Eugene, Oregon.
- G. Institute for Fisheries Resources ("IFR"), a nonprofit corporation that constitutes the conservation arm of PCFFA and shares PCFFA's offices in Sausalito, California

and Eugene, Oregon.

H. Idaho Rivers United ("IRU"), a nonprofit corporation organized under the laws of the State of Idaho with a principal place of business in Boise, Idaho. IRU and its approximately 2,400 members throughout the State of Idaho are dedicated to the protection and restoration of Idaho's rivers and river resources.

- I. Idaho Steelhead and Salmon United ("ISSU"), a registered Idaho nonprofit corporation with 2,300 members from 31 states and a board of directors from Idaho, Washington, and Montana. ISSU's members comprise a diverse group of business people, guides, conservationists, sportsfishers, and concerned citizens formed to protect, preserve, and restore Idaho's anadromous fish resources.
- J. The Northwest Sportfishing Industry Association ("NSIA"), dedicated to restoring and protecting the region's rivers, lakes, and streams, keeping them healthy and full of fish. NSIA is a trade association of several hundred sporting goods manufacturers, wholesalers, retailers, marinas, guides, and charter boat operators. About 60 percent of the member businesses are located in Washington, 30 percent in Oregon, and the remainder are national organizations. NSIA's principal place of business is Oregon City, Oregon.
- K. Friends of the Earth, a national environmental organization, with its headquarters in Washington, D.C., dedicated to preserving the health and diversity of the planet for future generations. The Northwest Office of Friends of the Earth, located in Seattle, Washington, is dedicated to improving environmental quality in Oregon, Idaho, Montana, and Washington through public education and citizen advocacy. The Northwest Office leads efforts to restore river ecosystems, protect and restore the region's wild salmon and steelhead runs, improve water quality, reduce and eliminate environmentally-destructive impacts of

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF - 6 -

hydroelectric dams, and cut government subsidies that harm the environment.

- L. Salmon for All, an organization representing a broad range of Columbia River interests including commercial fishermen and fish processors, consumers and lower river businesses, and salmon recovery advocates who support the viability of the lower Columbia commercial fishery. Based in Astoria Oregon, at the mouth of the Columbia, Salmon for All has been advocating for the responsible management of the salmon industry since 1958. Salmon for All represents about 300 active commercial fishermen, fish processors and salmon-supported businesses. Salmon for All is committed to providing ongoing education concerning the public harvest industry, taking active advocacy roles in legislative and agency fishery deliberations, and ensuring the health of the Columbia River and its responsible use by all user groups.
- M. Columbia Riverkeeper, a nonprofit public interest organization, organized under the laws of the State of Washington, has a principal place of business in White Salmon, Washington, and an office in Hood River, Oregon. Columbia Riverkeeper, and its approximately 2,400 members and supporters, works to restore and protect the water quality of the Columbia River and all life connected to it from its headwaters to the Pacific Ocean.
- 7. Plaintiffs and their members use the Columbia River and its tributaries throughout Idaho, Oregon, and Washington for recreational, scientific, aesthetic, and commercial purposes. Plaintiffs and their members derive or, but for the threatened and endangered status of salmon and steelhead in the Columbia River basin, would derive recreational, scientific, aesthetic, and commercial benefits from the existence of these species in the wild through wildlife observation, study and photography, and recreational and commercial fishing within the Columbia River basin and the Pacific Ocean. The past, present, and future enjoyment of these benefits by plaintiffs and their members has been, is being, and will continue to be irreparably harmed by

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF - 7 -

NMFS' disregard of its statutory duties, as described below, and by the unlawful injuries imposed on listed species by these actions.

- 8. The above-described aesthetic, conservation, recreational, commercial, scientific, and procedural interests of plaintiffs and their respective members have been, are being, and, unless the relief prayed for herein is granted, will continue to be adversely affected and irreparably injured by NMFS' failure to comply with the ESA as described below. Plaintiffs have no adequate remedy at law.
- 9. The defendant in this action is the National Marine Fisheries Service, an agency of the United States Department of Commerce responsible for administering the provisions of the Endangered Species Act with regard to threatened and endangered marine species, including the species of threatened and endangered salmon and steelhead that inhabit the Columbia River basin.

JURISDICTION AND VENUE

- 10. This Court has jurisdiction over this action under 5 U.S.C. §§ 701-706 (Administrative Procedure Act), 28 U.S.C. § 1331 (federal question), § 2201 (declaratory judgment), and § 2202 (injunctive relief).
- 11. Venue is properly vested in this Court under 28 U.S.C. § 1391(e) because members of the plaintiff organizations reside in this district and these members and organizations do business here. In addition, a substantial part of the events or omissions giving rise to the claims in this case occurred in this district, and the defendant maintains an office in the district.

STATUTORY FRAMEWORK

12. The Administrative Procedure Act ("APA") authorizes courts reviewing agency action to hold unlawful and set aside final agency action, findings, and conclusions that are arbitrary and capricious, an abuse of discretion, or otherwise not in accordance with law. 5

Earthjustice Legal Defense Fund 705 Second Ave., Suite 203 Seattle, WA 98104 (206) 343-7340

U.S.C. § 706(2)(A). Biological opinions issued pursuant to Section 7 of the ESA are reviewed under this provision of the APA. <u>See</u>, <u>e.g.</u>, <u>Bennett v. Spear</u>, 520 U.S. 154, 175 (1997).

13. Section 7 of the ESA prohibits agency actions that may jeopardize the survival and recovery of a listed species or adversely modify its critical habitat:

[e]ach federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary . . . to be critical

16 U.S.C. § 1536(a)(2).

- 14. Section 9 of the ESA prohibits "take" of listed species by anyone, including federal agencies. 16 U.S.C. § 1538. "Take" means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect." 16 U.S.C. § 1532(19). NMFS has defined "harm" to include "significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding or sheltering." 50 C.F.R. § 222.102. "Take" by federal agencies is permitted only if the agency receives an Incidental Take Statement ("ITS") pursuant to Section 7(b)(4), upon completion of formal consultation. 16 U.S.C. § 1536(b)(4).
- 15. Section 7 of the Act also establishes an interagency consultation process to assist federal agencies in complying with their duty to avoid jeopardy to listed species or destruction or adverse modification of critical habitat. Under this process, a federal agency proposing an action that "may affect" a listed species, including salmon and steelhead, must prepare and provide to the appropriate expert agency, here NMFS, a "biological assessment" of the effects of the proposed action. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a). For those actions that may adversely affect a species, NMFS must review all information provided by the action agency, as

well as any other relevant information, to determine whether the proposed action is likely to jeopardize a listed species or destroy or adversely modify its designated critical habitat. 50 C.F.R. § 402.14(h)(3). This determination is set forth in a biological opinion from NMFS. Id.; 16 U.S.C. § 1536(b)(3)(A).

- In formulating its biological opinion, NMFS must evaluate the "effects of the 16. action" together with "cumulative effects" on the listed species. 50 C.F.R. §§ 402.14(g)(3)-(4). This multi-step analysis requires NMFS to consider:
 - the direct, indirect, interrelated and interdependent effects of the proposed a. action, 50 C.F.R. § 402.02;
 - the "environmental baseline," to which the proposed action will be added. h. This baseline includes "all past and present impacts of all Federal, State, or private actions and other human activities in the action area; the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation; and the impact of State or private actions which are contemporaneous with the consultation in progress," 50 C.F.R. § 402.02; and,
 - any "future State or private activities, not involving Federal activities, that c. are reasonably certain to occur within the action area of the Federal action subject to consultation," 50 C.F.R. § 402.02.
- 17. The regulations do not, however, permit NMFS to consider the effects of future Federal actions when determining whether a proposed Federal action will jeopardize a listed species. Id.; see also 51 Fed. Reg. 19933 (June 3, 1986) (Interagency Cooperation – Endangered Species Act of 1973, as Amended; Final Rule) ("Since all future Federal actions will at some point be subject to the section 7 consultation process pursuant to these regulations, their effects

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF - 10 -

on a particular species will be considered at that time and will not be included in the cumulative effects analysis."). Such future Federal actions also are not properly a part of the environmental baseline since they have not yet occurred.

- 18. If, based upon an analysis of these factors, NMFS concludes that the proposed action is likely to jeopardize a listed species, or destroy or adversely modify its critical habitat, NMFS must identify and describe any reasonable and prudent alternative ("RPA") to the proposed action that it believes would avoid jeopardy and adverse modification. 16 U.S.C. § 1536(b)(3)(B). An RPA may only consist of measures that are within the scope of the action agency's legal authority and jurisdiction, that can be implemented consistent with the purpose of the proposed action, and that will avoid jeopardizing the continued existence of the listed species. 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.02. The effects of an RPA must be analyzed under the same section 7 framework (described above) as an action proposed by an action agency. Finally, if NMFS believes that there is no reasonable and prudent alternative to the proposed action, its biological opinion must so state. 50 C.F.R. § 402.14(h)(3).
- 19. If NMFS reaches a no-jeopardy/no-adverse modification finding for either a proposed action or a reasonable and prudent alternative course of action, it may also issue an incidental take statement for any take of a listed species that is likely to occur as a consequence of those actions that avoid jeopardy and adverse modification. 50 C.F.R. § 402.14(I). Take of listed species that is consistent with an incidental take statement is not subject to the prohibition against take in section 9 of the ESA. 16 U.S.C. § 1536(b)(4).

THE STATUS OF ANADROMOUS FISH IN THE COLUMBIA RIVER BASIN

20. Steelhead and salmon are anadromous fish. They are born and rear in fresh water, migrate downstream through tributaries of the Columbia River and the River itself to the Pacific Ocean where they grow and live as adults, returning to their natal streams and lakes to spawn and

25 COMPLAINT FOR DECLARATORY
26 AND INJUNCTIVE RELIEF - 11 -

die. The Columbia River, its tributaries, and estuary historically provided habitat for chinook, sockeye, chum, and coho salmon, as well as steelhead. A century ago, between 10 and 16 million salmon returned to the Columbia each year. As of 1991, 67 stocks of Columbia River salmonids were extinct and 76 stocks were at risk of extinction.¹

21. During the course of their juvenile and adult lives, the remaining Columbia River basin salmon and steelhead face numerous artificial obstacles to successful migration, reproduction, and rearing. Chief among these obstacles for many salmon and steelhead stocks is the series of hydroelectric dams and their associated reservoirs, facilities, and operations on the Columbia and Snake rivers that comprise the FCRPS. The FCRPS seriously and adversely affects ESA-listed salmon and steelhead in a variety of ways, including but not limited to the following: (1) operation of the FCRPS alters the hydrograph of the Snake and Columbia Rivers, reducing and shifting river flows in ways that directly and indirectly kill and injure juvenile and adult salmon; (2) juvenile salmon migrating down the Snake and Columbia Rivers are killed and injured in significant numbers at the dams themselves, regardless of the route they take to pass each dam, although some dam passage routes are more lethal than others; (3) even before juveniles reach each dam, passage through the reservoirs created by the dams and operated as part of the FCRPS takes a high toll on survival through mechanisms ranging from increased risks

¹ In order for an imperiled species to enjoy the ESA's protections, it must first be placed on the Act's "threatened" or "endangered" species lists. 16 U.S.C. § 1533(c). A "species" that may be listed for protection under the ESA includes "any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature." 16 U.S.C. § 1532(16). When deciding whether to list populations of Pacific salmon for protection as a "distinct population segment" under this definition, NMFS employs the concept of "evolutionarily significant unit" ("ESU"). A population of Pacific salmon is an ESU if it is "(1) . . . reproductively isolated from other population units of the same species, and (2) . . . an important component in the evolutionary legacy of the biological species." 64 Fed. Reg. 14,308 14,310 (Mar. 24, 1999).

11

12

13

14

15

16

17

18

19

20

21

22

23

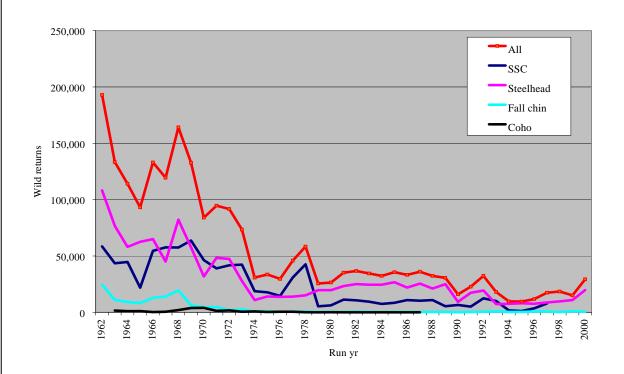
of disease, predation, and mortality, to trapping and stranding, disorientation, and stress; (4) once past the FCRPS, the toll the system imposes on juvenile salmon through reduced fitness and survival is still high even in the estuary and ocean, especially for juvenile fish captured and transported downstream around the FCRPS dams and reservoirs by truck or barge. Returning adult salmon and steelhead also must face upstream passage through the FCRPS risking injury, death, and reduced reproductive success through a variety of FCRPS-imposed mechanisms ranging from delays at upstream fishway facilities, to fallback (leading to repeated passage of the same dam), disorientation, trauma, and disease.

- 22. While some of the Columbia River basin salmon and steelhead listed under the ESA are affected to a lesser extent by FCRPS operations, those salmon and steelhead ESUs that must successfully pass the four FCRPS lower Snake River hydropower projects, as well as the four mainstem Columbia River projects, on their way to and from the ocean are particularly hard hit by FCRPS operations. These ESUs include Snake River spring/summer chinook, Snake River fall chinook, Snake River sockeye, and Snake River steelhead. The upper Columbia River spring chinook and steelhead also are hard hit by passage through hydropower projects because they must navigate both the four mainstem Columbia River projects and as many as six additional federally-licensed projects to reach the ocean or return to their spawning streams.
- 23. In addition, Columbia River basin salmon and steelhead face other obstacles to successful migration, reproduction, and rearing including, but not limited to: habitat loss and degradation due to human activities such as development, logging, grazing, farming, and mining; disease and adverse effects to the genetic pool of wild fish caused by hatchery fish, as well as competition from hatchery fish for food and shelter; and commercial and recreational harvest for human consumption.

- 24. As a consequence of these and other obstacles, populations of salmon and steelhead in the Columbia River basin have declined precipitously since the advent of European settlement. In fact, Snake River coho salmon have been considered extinct since 1986, the year that the last adult native coho passed Lower Granite Dam on the Snake River. Several sockeye populations also have become extinct.
- 25. Chinook salmon populations too have declined greatly. Snake River spring and summer chinook, whose return rates once exceeded 1.5 million adult fish per year, averaged only 9,674 wild fish per year from 1980 through 1990. In 1994, only 1,822 wild spring/summer chinook were estimated to have passed Lower Granite Dam, the last federal dam separating these fish from their spawning grounds. Between 1992 and 1996 the mean was only 3,820 naturally produced spawners, constituting less than 0.3% of the estimated historic abundance of wild spring and summer chinook. Despite a sharp rebound in returns in 2000 and 2001, the populations of these fish are expected to continue their downward spiral towards extinction. The population of Snake River fall chinook, once the most important fall chinook stock in the Columbia River basin with estimated annual returns of 72,000 fish earlier this century, declined to 78 wild fish in 1990 and 742 wild fish in 1993. Between 1992 and 1996, the estimated mean of adult spawners returning to Lower Granite Dam was 1,020 per year. The estimated number reaching Lower Granite Dam was 797 in 1997, 306 in 1998, 905 in 1999, and 567 in 2000.
- 26. Steelhead in the Columbia and Snake Rivers also have declined during this century. Although estimates of adult steelhead returning to the Snake River prior to 1962 are limited, the run of steelhead in the 1960's is estimated at several times the sportfish take, which ranged from 20,000 to 55,000 fish. The most recent 5-year geometric mean, between 1994 and 1999, for escapement below the Lower Granite Dam was approximately 8,900 wild adults. In

recent years average densities of wild juveniles have also decreased significantly.

27. The following graph reflects the returns of wild adult Snake River spring/summer chinook, fall chinook, steelhead, and sockeye from 1962 through 2000.



- 28. As a consequence of these dramatic population declines, NMFS has listed the following salmon and steelhead ESUs in the Columbia River basin as threatened or endangered and designated their migratory, spawning, and rearing habitat in the basin as critical habitat:
 - Snake River sockeye, 56 Fed. Reg. 58619 (Nov. 20, 1991) (listed as endangered);
 58 Fed. Reg. 68543, 68546 (Dec. 28, 1993) (designating critical habitat);
 - Snake River spring/summer chinook, 57 Fed. Reg. 14653 (April 22, 1992) (listed as threatened); 58 Fed. Reg. 68543, 68546 (Dec. 28, 1993) (designating critical habitat);
 - Snake River fall chinook, 57 Fed. Reg. 14653 (April 22, 1992) (listed as

threatened); 58 Fed. Reg. 68543, 68546 (Dec. 28, 1993) (designating critical habitat);

- Snake River steelhead, 62 Fed. Reg. 43937 (Aug. 18, 1997) (listed as threatened); 65 Fed. Reg. 7779 (Feb. 16, 2000) (designating critical habitat);
- Upper Columbia River steelhead, 62 Fed. Reg. 43937 (Aug. 18, 1997) (listed as endangered); 65 Fed. Reg. 7779 (Feb. 16, 2000) (designating critical habitat);
- Lower Columbia River steelhead, 63 Fed. Reg. 13347 (March 19, 1998) (listed as threatened); 65 Fed. Reg. 7779 (Feb. 16, 2000) (designating critical habitat);
- Upper Columbia River spring-run chinook, 64 Fed. Reg. 14308 (March 24, 1999) (listed as endangered); 65 Fed. Reg. 7778 (Feb. 16, 2000) (designating critical habitat);
- Lower Columbia River chinook, 64 Fed. Reg. 14308 (March 24, 1999) (listed as threatened); 65 Fed. Reg. 7778 (Feb. 16, 2000) (designating critical habitat).
- 29. On March 24 and 25, 1999, NMFS listed as threatened four additional anadromous fish populations affected by FCRPS operations, the mid-Columbia River steelhead, the upper Willamette River chinook, and the Columbia River chum salmon. 64 Fed. Reg. 14517 (March 25, 1999) (middle Columbia River steelhead); 64 Fed. Reg. 14517 (Mar. 25, 1999) (upper Willamette River steelhead); 64 Fed. Reg. 14308 (March. 24, 1999) (upper Willamette River chinook); 64 Fed. Reg. 14507 (March 25, 1999) (Columbia River chum). NMFS designated critical habitat for these species in February of 2000. 65 Fed. Reg. 7778 (Feb.16, 2000).
- 30. Many of these twelve listed stocks face a serious and immediate risk of extinction. For example, a total of only 31 wild Snake River sockeye returned to spawn from 1990 through

10

13

14

15

16 17

18

19

20

21

22

23 24

25

26

FCRPS BiOp at 4-21. Similarly, NMFS scientists have calculated that the probability that Snake River spring/summer chinook salmon populations will decline by a further 90 percent from their present extremely low levels within 24 years is 45 to 99 percent (depending on NMFS' assumptions about the reproductive effectiveness of hatchery fish in the wild). For Snake River fall chinook, the probability of a 90 percent population decline within 24 years is 39 to 96 percent (depending on the hatchery fish assumptions). For Snake River steelhead, the probability of such a decline is 100 percent within 24 years regardless of the assumptions.

31. Other Columbia River salmon and steelhead ESUs face similarly dismal prospects of further precipitous population declines. For example, NMFS scientists have calculated the probability of a further 90% population decline within 24 years for upper Columbia River spring chinook at 97 to 98 percent (depending on assumptions) and for upper Columbia steelhead at 100 percent regardless of the assumptions. These and similar dire population decline projections for species already listed under the ESA have led NMFS scientists to conclude that: "the probability [that] many [salmon and steelhead] stocks and ESUs will severely decline or go extinct in both the short and long-term [is] substantial." McClure, et al., A Large-Scale Multi-Species Risk Assessment at 2 (2001). Such further population declines would far surpass the legal threshold of jeopardy to a species which is defined as "reduc[ing] appreciably the likelihood of both the survival and recovery of a listed species in the wild." 50 C.F.R. § 402.02. (Emphasis added).³

² Citations to documents other than the 2000 FCRPS BiOp and the BSRS are to documents that should be a part of the administrative record. Because some of these documents are voluminous and will be submitted to the Court as part of the record, plaintiffs have not provided copies of the documents as exhibits to this complaint.

³ These pessimistic population decline projections do not appear to play any role in NMFS' assessment of jeopardy for either the Action Agencies' proposed actions or the RPA in the 2000 FCRPS BiOp. See infra at ¶¶ 43-63.

PRIOR PROCEEDINGS REGARDING FCRPS OPERATIONS AND THE ESA

32. In 1994, this Court concluded that the biological opinion for operation of the FCRPS during 1993, and the process NMFS and the Action Agencies had followed to produce it, was:

seriously, 'significantly,' flawed because it is too heavily geared towards a status quo that has allowed all forms of river activity to proceed in a deficit situation – that is, relatively small steps, minor improvements and adjustments – when the situation literally cries out for a major overhaul.

Idaho Dep't of Fish and Game v. National Marine Fisheries Service, 850 F. Supp. 886, 900 (D.

Or. 1994), vacated as moot, 56 F.3d 1071 (9th Cir. 1995) (hereinafter "IDFG"). The Court went on to say:

Instead of looking for what can be done to protect [ESA-listed salmon] from jeopardy, NMFS and the action agencies have narrowly focused their attention on what the establishment is capable of handling with minimal disruption.

Id. (emphasis in original). Accordingly, the Court found that the biological opinion was "arbitrary and capricious and otherwise not in accordance with law." Id.

33. Following the Court's ruling in IDFG, and pursuant to a Court supervised schedule, NMFS and the Action Agencies reinitiated consultation under ESA section 7(a)(2) on FCRPS operations. In March of 1995, NMFS released its revised "Biological Opinion on Reinitiation of Consultation on 1994-1998 Operation of the Federal Columbia River Power System and Juvenile Transportation Program in 1995 and Future Years" (the 1995 FCRPS BiOp). In this opinion, NMFS found that the Action Agencies' proposed actions would

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF - 17 -26

Earthjustice Legal Defense Fund 705 Second Ave., Suite 203 Seattle, WA 98104 (206) 343-7340

21

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

22

23

24

⁴ The Court's opinion in <u>IDFG</u> also provides a summary of the history of litigation over FCRPS operations and ESA-listed salmon prior to 1994. See IDFG, 850 F. Supp. at 888-91.

jed
op
the
Su
19
im
ag
со
im
ino
the
<u>A1</u>
Fo
so
19

jeopardize listed Snake River salmon⁵ and, therefore, set forth an RPA for interim system operations until it could make a long-term decision about the FCRPS that would both respond the Court's concerns regarding the need for a "major overhaul" of the system, <u>IDFG</u>, 850 F. Supp. at 900, and be informed by further scientific analysis. 1995 FCRPS BiOp at 91-135. The 1995 FCRPS BiOp thus described certain FCRPS operations which were intended to provide immediate and near-term improvements in salmon survival through the FCRPS while the agencies assessed and chose among several alternative courses of action for long-term configuration and operation of the system. 1995 FCRPS BiOp at 91-4, 94-116 (describing immediate actions), 116-135 (describing plans for study and evaluation of long-term actions).

34. In March 1996, a coalition of conservation and fishermen's organizations, including many of the plaintiffs in this action, sought judicial review under the APA and ESA of the 1995 FCRPS BiOp, as well as certain aspects of its implementation by the Action Agencies.

American Rivers v. NMFS, No. 96-384-MA (D. Or.) (complaint filed March 14, 1996).

Following a preliminary injunction motion that the parties resolved by stipulation, plaintiffs sought summary judgment on a number of their claims. In April 1997, the Court upheld the 1995 FCRPS BiOp against these challenges stating, "I find that NMFS' selection of an acceptable probable recovery range is largely a question of policy rather than science as it necessarily depends upon the agencies' comfort level for risk tolerance." American Rivers v. NMFS, No. 96-384-MA, Opinion and Order at 25 (D. Or. Apr. 3, 1997). The Court did, however, observe:

21

17

18

19

20

22

26

²³

⁵ In 1995, the only Columbia River basin salmon listed under the ESA were the Snake River spring/summer chinook, Snake River fall chinook, and Snake River sockeye. <u>See supra</u> at ¶ 28 (describing history of salmon and steelhead listings).

8

12

13

11

14

15 16

17

18

19

20

21 22

23

24

25

26

Given the dwindling numbers [of ESA-listed salmon], time is clearly running out. As a long time observer and examiner of this process, I cannot help but question the soundness of the selected level of risk acceptance

Id. at 26. Plaintiffs and the federal defendants then filed cross-motions for summary judgment on the remaining claims in the case; in October 1997, the Court granted the defendants' motion.

- 35. Plaintiffs appealed the Court's decisions to the U.S. Court of Appeals for the Ninth Circuit. In March 1999, the Court of Appeals affirmed this Court's decision, although it rejected the Court's "immunization [of NMFS' formulation of the probabilities of survival and recovery required by its jeopardy standard in the 1995 FCRPS BiOp] from judicial review under the rubric of a 'policy' decision " American Rivers v. NMFS, Ninth Cir. No. 97-36159, slip opinion at 8 (9th Cir. 1999) (memorandum disposition).
- 36. The 1995 FCRPS BiOp indicated that it would be replaced in 1999 by an opinion that made a long-term decision about configuration and operation of the FCRPS to ensure the survival and recovery of ESA-listed salmon and steelhead. 1995 FCRPS BiOp at 94-95. NMFS, however, did not issue a new draft biological opinion until July 2000 and did not complete a final opinion until December 21st of last year. In its new opinion, the 2000 FCRPS BiOp, NMFS acknowledged that, for seven of the twelve listed salmon stocks, including all four of the Snake River stocks, a continuation of the actions required by the 1995 FCRPS BiOp would violate the ESA. 2000 FCRPS BiOp at 8-3 (statement for Snake River spring/summer chinook) (statement repeated for six other ESUs at 8-5, 8-7, 8-13, 8-15, 8-17, 8-25). Accordingly, the 2000 FCRPS BiOp, the RPA it proposes for the Action Agencies, and the analysis it offers for why the RPA will avoid jeopardy and adverse modification will determine whether Columbia River basin salmon and steelhead continue to be a part of this region's future.

THE 2000 FCRPS BIOP

37. While the 2000 FCRPS BiOp shares many similarities with its predecessor

1 opinion from 1995, it departs from the structure and analysis of the earlier opinion in important 2 ways. The similarities between the two opinions include the fact that the 2000 FCRPS BiOp 3 "uses the five-step approach for applying ESA section 7(a)(2) [jeopardy] standards developed in the 1995 FCRPS Biological Opinion" 2000 FCRPS BiOp at 1-8 (describing steps). ⁶ The 4 5 new BiOp also adopts the narrative language of the 1995 FCRPS BiOp for determining whether 6 proposed or alternative actions meet the survival and recovery requirements of the ESA's 7 jeopardy standard. Id. at 1-9. This narrative language states: 8 At the species level, NMFS considers that the biological requirements for survival, with an adequate potential for recovery, are met when there is a high 9 likelihood that the species' population will remain above critical escapement thresholds over a sufficiently long period of time. Additionally, the species must 10 have a moderate to high likelihood that its population will achieve its recovery level within an adequate period of time. The particular thresholds, recovery 11 levels, and time periods must be selected depending upon the characteristics and circumstances of each salmon species under consideration. 12 Id. 13 38. Further, like the 1995 FCRPS BiOp, the new BiOp concludes that under this 14 standard, the Action Agencies' proposed actions, which are a continuation of the 1995 FCRPS 15 BiOp RPA, 2000 FCRPS BiOp at 3-1, would jeopardize ESA-listed salmon and steelhead and 16 destroy or adversely modify their critical habitat, 2000 FCRPS BiOp at 6-1 to 6-146. 17 18 ⁶ These steps require: (1) an assessment of the current population status and risks for each species; (2) consideration of the environmental baseline before the proposed action or RPA; (3) 19 an assessment of the effects of the proposed action; (4) a determination of whether the proposed action will avoid jeopardy and adverse modification; and, (5) development and evaluation of an 20 RPA if the proposed action is insufficient to meet the requirements of ESA section 7. 2000 FCRPS BiOp at 1-8. 21 ⁷ Specifically, the BiOp concludes that the proposed actions would jeopardize and adversely modify the critical habitat of Snake River spring/summer chinook, 2000 FCRPS BiOp at 8-3, 22 Snake River fall chinook, id. at 8-5, Snake River sockeye, id. at 8-25, Snake River steelhead, id. at 8-13, upper Columbia River spring chinook, id. at 8-7, upper Columbia River steelhead, id. at 23 8-15, and mid-Columbia River steelhead, id. at 8-17. 24

Consequently, the new BiOp, like the one it replaces, sets forth a reasonable and prudent alternative course of action for which it reaches a no-jeopardy/no-adverse modification finding. Id. at 9-181 to 9-287.

- 39. Both the RPA in the 2000 FCRPS BiOp and the assessment of its effects on ESA-listed salmon and steelhead in the Columbia River basin are markedly different from anything in the 1995 FCRPS BiOp. The RPA itself lists some 199 measures. 2000 FCRPS BiOp at 9-23 to 9-180. Many of these measures discuss FCRPS operations, the Juvenile Fish Transportation Program, certain BOR projects, and further studies and analyses in these areas. Id. at 9-53 to 9-132. Others describe a complex process for planning, monitoring and evaluation, production of reports, and procedural steps NMFS and the Action Agencies may take that extend well beyond FCRPS operations. Id. at 9-1 to 9-51, 9-161 to 9-180. Still others generally describe behaviors affecting salmon habitat, hatchery operations, and salmon harvest management for which the Action Agencies have only limited responsibility. Id. at 9-133 to 9-141 (habitat discussion), 9-143 to 9-150 (harvest discussion), 9-151 to 9-160 (hatchery discussion).
- 40. The 2000 FCRPS BiOp then sets forth NMFS' assessment of whether this wide-ranging suite of RPA "measures" together with "activities expected of other Federal and non-Federal entities[,]" see, e.g., 2000 FCRPS BiOp at 9-203 (statement for Snake River spring/summer chinook), will be sufficient to avoid jeopardy to ESA-listed salmon and steelhead or adverse modification of their critical habitat. See generally 2000 FCRPS BiOp at 9-181 to 9-287. For each listed species for which NMFS concluded that the Action Agencies' proposed actions would cause jeopardy or adverse modification, see supra note 7, this assessment of the RPA and other "expected" actions reaches the opposite conclusion: that the RPA and these actions, "taken together," will avoid jeopardy and adverse modification. Id. at 9-203, 9-207 to

208, 9-212, 9-283 (conclusions for Snake River spring/summer chinook, Snake River fall chinook, upper Columbia River spring chinook); 9-239 to 240, 9-287 (conclusions for Snake River sockeye); 9-222-23, 9-284 (conclusions for Snake River steelhead); 9-226 to 227, 9-230 to 231, 9-285 (conclusions for upper and middle Columbia River steelhead). The structure and content of this analysis forms the heart of the 2000 FCRPS BiOp.

- 41. There are a number of serious, substantial, and fundamental defects in this analysis that render the no-jeopardy/no-adverse modification conclusions of the BiOp for the RPA arbitrary, capricious, and otherwise not in accordance with law. These defects, especially as they relate to ESA-listed Snake River salmon and steelhead, are described below.
 - A. NMFS' Analysis of Current Salmon and Steelhead Population Status and Risks Is Misleadingly Optimistic, Arbitrary, and Contrary to Law.
- 42. The first of these flaws affects NMFS' assessment of the "starting point," 2000 FCRPS BiOp, App. A at A-2, or analysis of the population status and risks for each of the listed Columbia basin salmon and steelhead ESUs, see id. at 4-1 to 4-21 (summarizing results); App. A (describing and summarizing analysis). This initial assessment of each species' status and risks is critical to the remaining analysis in the 2000 FCRPS BiOp because it defines, in quantitative terms, the baseline population condition against which NMFS analyzes the magnitude, timing, and feasibility of the population improvements necessary to ensure the survival and recovery of these species.
- 43. In the 2000 FCRPS BiOp, NMFS calculates this baseline in terms of the median population change rate and the probability that a species will "survive" for both 24 and 100 years. For purposes of this analysis, NMFS further defines "survive" as the probability that at least one adult fish of the species will return once over an entire multi-year salmon generation. 2000 FCRPS BiOp at 1-13. NMFS' analysis based on this one-fish threshold sharply,

significantly, and misleadingly <u>underestimates</u> the magnitude of the risk that these species will <u>not</u> survive for another 24 years, let alone 100 years.

- 44. NMFS' selection of this one-fish survival threshold fails to make use of the best available scientific evidence, inexplicably ignores or fails to address relevant factors, and is contrary to law for at least the following reasons:
 - By defining a species' "survival" as the return of one adult fish over an entire salmon generation, NMFS' initial population status and risk analysis is at odds with widely accepted scientific principles for identifying a population threshold that would be adequate to avoid extinction, principles developed to express a precautionary and conservative approach to extinction risk analysis.⁸
 - NMFS' adoption of a one-fish salmon survival threshold also leads it to ignore
 available and credible scientific data for at least the Snake River ESUs that
 identifies specific population numbers for risk analysis that are significantly
 higher than one returning adult fish in an entire generation.
 - NMFS' attempt to justify ignoring these higher population thresholds because, "[a]n extinction threshold of one fish is the only extinction threshold that has the same biological meaning regardless of which index stock or population is

⁸ This threshold also is inconsistent with other population risk standards NMFS' scientists have used for Columbia basin salmon and steelhead ESUs elsewhere, such as the probability of a 90 percent population decline from current levels in 24 or 100 years, see supra at ¶¶ 30-31 (summarizing probabilities of a 90 percent population decline for listed salmon and steelhead), a standard that NMFS scientists have concluded is "the best measure of risk," McClure, M., et al., Cumulative Risk Initiative, Draft Report at 15 (Apr. 7, 2000), and a standard that, if applied, leads to a far more urgent and dire prediction of the risks facing these species. Yet this population decline standard does not appear to have played any role in NMFS' analysis of jeopardy.

- 45. There is at least one additional serious flaw in the initial population status and risk analysis that forms the foundation of the 2000 FCRPS BiOp: the analytic tools NMFS uses for this analysis necessarily assume that salmon and steelhead populations have been declining at a constant rate over the period of analysis and will continue to decline at this constant rate into the future absent intervention or changed conditions. In fact, the available scientific evidence demonstrates that several of the ESA-listed Snake and Columbia River salmon and steelhead populations have been declining at an <u>accelerating</u> not a constant rate.
- 46. The effect of ignoring an accelerating population decline, using a one-fish population threshold, and other similar and inexplicable errors or decisions is to consistently and irrationally <u>underestimate</u> both the magnitude and the immediacy of the extinction risks facing these species in ways that combine and compound to present an analysis that is both misleadingly optimistic and contrary to law.

⁹ NMFS itself recognizes as much in the BiOp. Its narrative definition of what would constitute jeopardy for each of the listed salmon and steelhead ESUs concludes with the statement:

<u>The particular thresholds</u>, recovery levels, and time periods <u>must be selected</u> <u>depending upon the characteristics and circumstances of each salmon species</u> under consideration.

²⁰⁰⁰ FCRPS BiOp at 1-9 (quoting and adopting the 1995 FCRPS BiOp) (emphasis added). Yet the agency has ignored precisely this point by selecting a one-size-fits-all, one-fish extinction threshold for all of the Snake River and other Columbia River basin salmon and steelhead ESUs.

10 11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF - 25 -

B. NMFS' Analysis of Why the Measures of the RPA Will Avoid Jeopardy and Adverse Modification Improperly Depends on Speculative, Voluntary Actions and Is Arbitrary and Contrary to Law.

- Despite its arbitrary and legally defective initial assessment of the population 47. status and risks facing Columbia River basin salmon and steelhead ESUs, NMFS correctly concludes that the Action Agencies' proposed actions would jeopardize all of the listed Snake River salmon and steelhead ESUs and four of the Columbia River ESUs because these actions would not improve the probability of the species' survival and recovery enough to avoid jeopardy. See supra at note 7 (citing jeopardy findings of 2000 FCRPS BiOp for proposed actions). In light of its conclusion, NMFS develops and presents in chapter 9 of the 2000 FCRPS BiOp a collection of actions and other measures it asserts offer a "reasonable and prudent alternative" to the proposed actions, together with its analysis for why this RPA will avoid jeopardy and adverse modification of critical habitat for all of the basin's 12 ESUs.
- 48. NMFS' analysis and explanation of why the measures of the RPA in the 2000 FCRPS BiOp will avoid jeopardy and adverse modification is markedly different from the analysis of the RPA in the 1995 FCRPS BiOp in at least one important respect: the 1995 FCRPS BiOp and its analysis focused primarily on the effects of measures identified in the RPA to improve salmon and steelhead survival and recovery through the FCRPS dams and reservoirs and concluded that these hydrosystem management measures would avoid jeopardy and adverse modification. 1995 FCRPS BiOp at 91-135 (describing RPA). In the 2000 FCRPS BiOp, by contrast, NMFS recognizes that even the measures of the new RPA it proposes for operation of the FCRPS – which includes any related changes in harvest measures for those ESUs affected by harvest, see, e.g., 2000 FCRPS BiOp, App. A at A-38 (table A-10) (Snake River fall chinook harvest assumptions) – will not avoid jeopardy and adverse modification for the Snake River ESUs and some Columbia River ESUs.

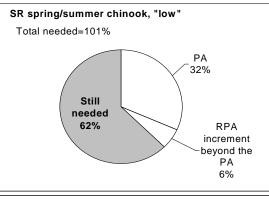
	1
	2
	3
	4
	5
	6
	7
	8
	9
	0
1	1
1	2
1	3
1	4
1	5
1	6
1	7
1	8
1	9
2	0
2	1
2	2
2	3
2	4

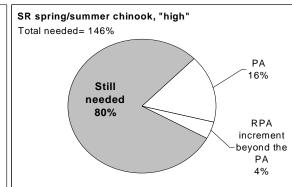
49. This conclusion compels NMFS to rely on measures unrelated to operation of the FCRPS, such as salmon habitat and hatchery measures by other Federal or state agencies and private parties, in order to reach a no-jeopardy/no-adverse modification finding for the RPA in the 2000 FCRPS BiOp. In fact, the degree to which the no-jeopardy/no-adverse modification finding for the new RPA depends on actions unrelated to operation of the FCRPS, the Juvenile Fish Transportation Program, and the management of BOR projects is remarkable. As the pie charts on the following pages show, for all of the Snake River salmon and steelhead ESUs for which NMFS performed an analysis, under all sets of assumptions NMFS applies except one (the optimistic assumptions for Snake River fall chinook), substantially more than one-third, and in many cases two-thirds or more, of the survival improvements needed to avoid jeopardy and adverse modification for the RPA come from non-hydrosystem/non-harvest measures, most of which are to be carried out by entities other than the Action Agencies. Similarly, for three of the Columbia River ESUs, NMFS' analysis discloses that as much or more of the survival improvements necessary to avoid jeopardy are predicted to come from such non-<u>hydrosystem/non-harvest</u> measures. Moreover, under all of the assumptions NMFS uses in the 2000 FCRPS BiOp analysis, the measures of the RPA that do address FCRPS operations only provide a small faction of the necessary survival improvements beyond the improvements that would be provided by the proposed actions – a suite of actions for which NMFS reached a jeopardy/adverse modification conclusion.

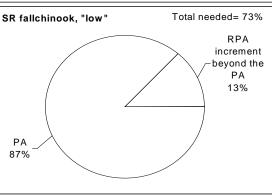
25

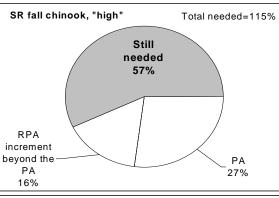
COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF - 27 -

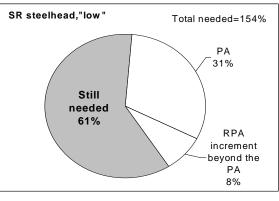
These charts, which are taken from information in tables in the 2000 FCRPS BiOp and its appendices, show for Snake River and upstream Columbia River ESUs the fraction of the survival increase beyond the baseline needed to avoid jeopardy that would be provided by the proposed action ("PA") and the RPA. The shaded component in the charts labeled "still needed" is the fraction of the required survival increase that must come from nonhydrosystem/non-harvest measures. For example, the most optimistic analysis for Snake River spring/summer chinook concludes that a total survival increase of 101% from baseline survival is necessary to avoid jeopardy and adverse modification. According to NMFS' analysis, 62% of that improvement must come from some nonhydrosystem/non-harvest actions.

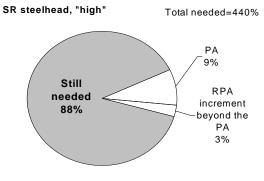












18

19

20

21

22

23

24

25

26

UCR steelhead,"low"

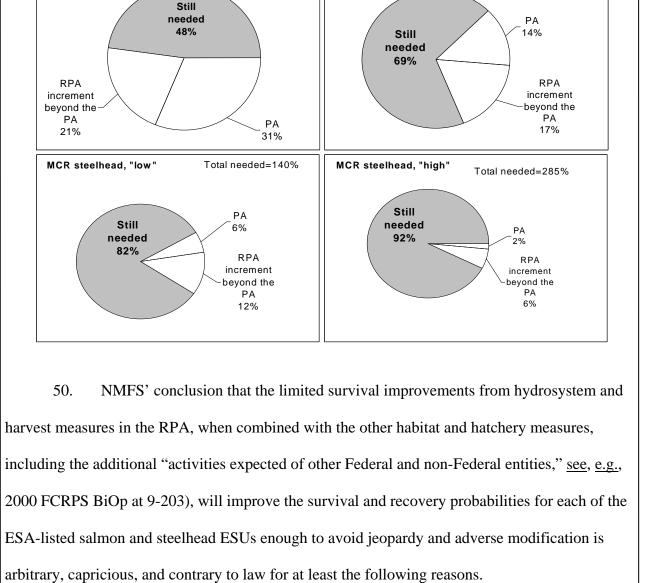
RPA

increment

beyond the

23%

UCR spring chinook, "low"



First, as described above, NMFS concludes that for many of the listed ESUs, most

UCR steelhead, "high"

Still

needed

87%

UCR spring chinook, "high"

Total needed=307%

РΑ

6%

increment

beyond the

РΑ

7%

Total needed=115%

Total needed=100%

PΑ

36%

Total needed=103%

Still needed

41%

51.

of the survival improvements it believes are necessary to avoid jeopardy and adverse modification will be achieved through "the activities expected of other Federal and non-Federal entities." See, e.g., 2000 FCRPS BiOp at 9-203 (statement for Snake River spring/summer chinook). These steps are apparently to be taken, in part, with support from the Action Agencies, but also to a significant but unspecified degree, they are to be taken by other Federal agencies whose management activities affect the habitat of listed salmon, and by unidentified non-federal state and private parties throughout the Columbia and Snake River basin.

- 52. NMFS' inclusion of these speculative, voluntary, and largely unidentified future actions by other Federal and non-federal entities in its RPA, and the analysis of whether the measures of the RPA will avoid jeopardy, is contrary to law. The measures of an RPA are defined by regulation to include only those "that can be taken by the Federal agency or applicant in implementing the agency action." 16 U.S.C. § 1536(b)(3)(A). Furthermore, the regulations governing consultation prohibit consideration of future Federal actions by other agencies, as well as unidentified and uncertain future actions by non-federal state and private entities. See 50 C.F.R. § 402.14(g) (NMFS must consider the "effects of the action" and "cumulative effects" in formulating its biological opinion); 50 C.F.R. § 402.02 (defining these terms to exclude all future federal activities and all state and private activities that are not "reasonably certain to occur.").
- 53. To the extent NMFS relies on these other unspecified Federal and non-federal actions because, in its view, they "have a reasonable chance of being implemented," BSRS, vol. 1 at 23-24; but see 2000 FCRPS BiOp at 9-282 (asserting that the RPA only makes these measures more likely to occur), NMFS has failed to offer a rational account of the bases for its conclusion, or to identify to which measures the conclusion applies. Indeed, NMFS appears to take contradictory positions with respect to implementation of these measures because it also

admits in the BiOp that:

despite full use of the best scientific evidence available, substantial uncertainty remains about the effectiveness of measures available to meet the biological requirements of listed ESUs.... In habitat, critical uncertainties are associated with the feasibility of implementing protective measures in light of the existing institutional frameworks (e.g., addressing in-stream flow needs in overappropriated streams).

2000 FCRPS BiOp at 9-4.¹⁰

- 54. Second, not only does NMFS rely in large part on the survival improvements from these "activities expected of other Federal and non-Federal entities," which it acknowledges cannot be quantified and are uncertain to occur for a variety of reasons, but NMFS' analyses of risks and effects also assume that the benefits to salmon and steelhead populations of these activities (and indeed all other activities described in the RPA) will accrue immediately. See, e.g., 2000 FCRPS BiOp at 9-202-03 (acknowledging the effects of this assumption for Snake River spring/summer chinook). Throughout the BiOp and BSRS, NMFS repeatedly recognizes, as it must, that many of theses unspecified "activities" would not even be implemented for ten years or more. See, e.g., 2000 FCRPS BiOp at 9-202 ("To the extent that improvements are implemented gradually, the analysis underestimates the survival change that will ultimately be required.") (discussing assumptions for survival improvements needed for Snake River spring/summer chinook); BSRS, vol. 2 at 6, 10 (habitat actions); 72 (hydrosystem actions).
- 55. NMFS attempts to deflect criticism of its unwarranted assumption of immediate benefits from actions that will not even be defined in many cases, let alone implemented, for

 $^{^{10}}$ Nonetheless, NMFS includes in the measures of the RPA on which it relies to reach a nojeopardy/no-adverse modification finding precisely the categories of actions it acknowledges are plagued by institutional uncertainties – <u>e.g.</u>, addressing in-stream flows. <u>See</u>, <u>e.g.</u>, 2000 FCRPS BiOp at 9-55 to 9-73 (describing "actions" 14-36).

21

22

23

24

25 COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF - 31 -26

years, or effective for years after that, by asserting that "NMFS considers [the effects of this assumption] qualitatively in making a jeopardy determination." Id. at 9-203. NMFS, however, fails to identify how, where, or to what extent such "qualitative" consideration occurred and informed its conclusions. Moreover, it is apparent that the optimistic effects of this assumption of immediate benefits are quite large: NMFS' sensitivity analyses show that the inevitable and actual delay in implementing improvement measures, and the corresponding delay in their effects, will greatly increase the magnitude of population change required to avoid jeopardy and adverse modification while also allowing the species to decline even further before any benefits accrue. See, e.g., 2000 FCRPS BiOp, App. A at A-67 to A-70. As NMFS scientists have calculated elsewhere, the probability of a further 90% decline in the population of many Snake and Columbia ESUs within 24 years is nearly 100%. See supra at ¶¶ 30-31 (describing probability of declines by ESU). The combination of these anticipated population declines and the inevitable implementation delays NMFS acknowledges will occur will mean reducing entire ESUs that already are listed under the ESA to a few dozen or hundred spawners before mitigation measures are even identified or implemented, let alone have any of the hypothesized beneficial effects.

56. Third, even assuming that NMFS may rely on the actions of other Federal and non-federal entities to supply the bulk of the survival and recovery improvements it believes are necessary to avoid jeopardy and adverse modification for many of the listed ESUs, NMFS has failed to provide any credible scientific basis or analysis to support its "qualitative" conclusion that these benefits will, in fact, accrue to the degree (and within a timeframe) that will ensure compliance with the requirements of ESA section 7(a)(2). See, e.g., 2000 FCRPS BiOp at 9-203 (qualitative "analysis" for Snake River spring/summer chinook), 9-208 (same for Snake River

13

14

20

21

22

23

24

25 COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF - 32 -26

fall chinook), 9-222 to 223 (same for Snake River steelhead); 9-212 (same for upper Columbia River chinook). Although this "qualitative" analysis of the benefits of an array of unspecified non-hydrosystem/non-harvest measures is the linchpin to NMFS no-jeopardy/no-adverse modification finding for the entire RPA, it is cursory, unsupported, and runs counter to the evidence before the agency.

57. NMFS also seeks to substitute for the required identification of specific survival and recovery actions and an analysis of why such actions will avoid jeopardy and adverse modification, a planning and evaluation framework that could be used to develop and assess actions that might provide some benefits to listed salmon and steelhead at some (likely distant) future date, if they are implemented. But NMFS cannot properly substitute this framework for identification of actions that will ensure against jeopardy and adverse modification. Indeed, the implementation schedules for the planning steps themselves indicate that, for example, planning is only required for 16 priority subbasins out of 61 subbasins in the Columbia River basin within the next five years. Moreover, most of the RPA "actions" identified for the next 5 to 10 years consist of planning activities such as setting up a "foundation" to design pilot projects, and determining how the Action Agencies can work with other federal agencies and non-federal entities to actually identify what needs to be done to avoid jeopardy and where, who, and how it will be paid for and done. These are not actions that themselves will avoid or even mitigate for jeopardy, they are planning exercises to be carried out while salmon and steelhead continue to decline and FCRPS operations continue to take their toll.¹¹

¹¹ Remarkably, even many of the FCRPS actions identified in the RPA need not actually be implemented until 2010, a delay of 10 years. See 2000 FCRPS BiOp at 9-2, 9-3, 9-6, 9-53

(discussing attainment of hydrosystem performance standards by 2010 but setting no schedule

for implementing actions).

58. Fourth, apparently because NMFS recognizes that the survival and recovery improvements that must accrue to the Snake and Columbia River ESUs in order to avoid jeopardy are large, the actions necessary to achieve those benefits across the range of actors who must take them highly uncertain to occur, and the benefits that will accrue from the various actions even if they occur as planned also are uncertain (even speculative) and unquantifiable, the agency sets forth an extensive monitoring and evaluation program for these ESUs and actions as a part of the RPA. See, e.g., 2000 FCRPS BiOp at 9-1 to 9-52, 9-161 to 9-180. While this monitoring and evaluation effort may provide some interesting and even some useful information, one thing it cannot provide is a basis for a scientifically credible analysis of whether any change in the population status and trends for any of the listed salmon and steelhead ESUs has occurred within the short five and eight-year timeframes allowed by the provisions of the RPA. Accordingly, this monitoring and evaluation program fails to provide any additional, let alone rational, basis for NMFS' conclusion that the RPA will avoid jeopardy and adverse modification.

59. While NMFS apparently recognizes this shortcoming of its monitoring and evaluation program, it asserts that it will develop analytic tools to allow it to make meaningful evaluations of population change at five and eight years. 2000 FCRPS BiOp at 9-46. This assertion lacks any rational or scientific support. In substance, it is an acknowledgement that NMFS does not know whether the measures of the RPA will avoid jeopardy and adverse modification and does not even have the tools to make such an evaluation within the timeframes set in the RPA. Nonetheless, NMFS asserts that the RPA will avoid jeopardy and adverse modification because it will invent the missing tools in time to both detect and correct any problem. This sweeping assertion of confidence in unknown and uncertain future actions is

COMPLAINT FOR DECLARATORY
AND INJUNCTIVE RELIEF - 34 -

arbitrary, at odds with the best available scientific information, and contrary to law.

60. Fifth, even with respect to its limited hydrosystem measures, the RPA includes broad emergency exemptions that allow the Action Agencies to eliminate, in whole or in part, river management requirements that NMFS has concluded are necessary to avoid jeopardy and adverse modification. See 2000 FCRPS BiOp at 9-62 (emergency exemption from increased river flow and water spill requirements), 9-88 (same). NMFS' no-jeopardy/no-adverse modification findings for the RPA, however, are based on the very FCRPS operation requirements (e.g., flow and spill) that the emergency provisions make optional. Furthermore, the RPA does not include any requirement to adjust its measures for the protection of listed salmon and steelhead if the Action Agencies invoke these broad emergency exemptions, or any analysis of the effect of these exemptions on listed salmon and steelhead.

RPA is arbitrary and contrary to law for at least the following reasons: (1) inclusion of an emergency exemption of unspecified scope that can be invoked at any time, and as often as the Action Agencies may choose to invoke it, prevents any rational determination that the RPA's hydrosystem measures are sufficiently certain to be implemented to contribute to avoiding jeopardy; (2) NMFS' assessment of whether the RPA will avoid jeopardy and adverse modification unaccountably fails to address, analyze, or discuss the biological effects of these emergency exemptions on listed salmon and steelhead, nor does it disclose how actions permitted by these exemptions are likely to affect the prospects of survival and recovery of the listed species; and, (3) inclusion of these emergency exemptions in the RPA without any corresponding mechanism to compensate for the impacts to salmon and steelhead when the exemptions are invoked, or any requirement to re-initiate consultation under these circumstances,

fails to comply with the requirements of ESA section 7(a)(2) to insure against jeopardy and adverse modification.

62. Finally, NMFS' conclusion that the RPA will avoid jeopardy and adverse modification rests on NMFS' arbitrary and illegal initial analysis of the current population status and risk each of the salmon and steelhead ESUs faces. See supra ¶¶ 42-46 (describing flaws in this analysis). Because NMFS bases its jeopardy analysis on population status and risk estimates that substantially, consistently, and improperly understate the risk these species face, its conclusions about what is required of the RPA to avoid jeopardy necessarily also understate the magnitude and urgency of improving population survival and are arbitrary and contrary to law. Moreover, even assuming NMFS has rationally assessed the current status and magnitude of the risk these species face (which it has not), its assessment of the measures needed to avoid this risk and hence jeopardy begins by assuming, contrary to the available data and the best available scientific analysis of the data, that the rate at which a number of the listed ESUs are surviving today already has begun to improve significantly and that this improvement will continue into the future. See, e.g., 2000 FCRPS BiOp at 6-80 (Snake River spring/summer chinook), 6-91 (Snake River fall chinook), 6-97 (upper Columbia River chinook) (each assuming that changes to FCRPS operations since 1980 have produced salmon survival improvements). In fact, this assumption of current population survival improvements and an improving survival trend is without credible factual support or analysis even though NMFS' error in making such an assumption has previously been called to its attention by a number of credible scientific critics. See, e.g., U.S. Fish & Wildlife Service, Comments on NMFS CRI Document: A standardized Quantitative Analysis of Risks Faced by Salmonids in the Columbia Basin at 7-9 (2000); U.S. Fish & Wildlife Service, Analysis of CRI population growth rate prediction method: Additional

26

The Incidental Take Statement and the ESA Section 10(a)(1)(A) Juvenile Fish Transportation Permit That Are Part of the 2000 FCRPS BiOp Are Arbitrary and

C.

Contrary to Law.

63. In addition to the above-described shortcomings of the no-jeopardy/no-adverse modification findings in the 2000 FCRPS BiOp for the RPA, the Incidental Take Statement ("ITS") that NMFS has issued for the RPA is arbitrary, capricious, and otherwise not in accordance with law because NMFS has issued the ITS without analyzing the additive and combined effects of the incidental take authorized by the ITS for the 2000 FCRPS BiOp and incidental take for these same salmon and steelhead ESUs authorized in other incidental take statements and permits for other actions.

- 64. Despite NMFS' failure to track the number of biological opinions, incidental take statements, incidental take permits, and incidental take the agency has authorized for Columbia River basin salmon and steelhead, NMFS has approved substantial additional incidental take of these species in the ITS for the 2000 FCRPS BiOp, and continues to issue other biological opinions authorizing even more incidental take within the Columbia River basin. For example, the ITS for the 2000 FCRPS BiOp authorizes incidental take of up to 88 percent of Snake River fall chinook juveniles and up to 43 percent of Snake River spring/summer chinook juveniles as a result of implementing the RPA. 2000 FCRPS BiOp at 10-3.
- 65. NMFS' failure to track or otherwise evaluate the amount of incidental take it has authorized in incidental take statements and permits for Columbia River basin salmon and steelhead prevents the agency from making a rational or legal determination that the actions approved in the 2000 FCRPS BiOp and RPA, when combined with other previously approved and concurrent actions, will avoid jeopardy to the listed species and the destruction or adverse modification of their critical habitat. See 50 C.F.R. §§ 402.14(g); 402.02; see also Defenders of

Wildlife v. Babbitt, 130 F. Supp.2d 121 (D.D.C. 2001) (setting aside as arbitrary a biological opinion for Sonoran pronghorn where agency failed to assess the effects on the species of incidental take authorized in the opinion when combined with incidental take authorized in other opinions).

- 66. Finally, NMFS' conclusion that the RPA in the 2000 FCRPS BiOp avoids jeopardy and adverse modification of salmon and steelhead critical habitat in the mainstem Columbia and Snake Rivers is arbitrary and contrary to law because this conclusion improperly depends on a Juvenile Fish Transportation Program permitted under section 10(a)(1)(A) of the ESA, 16 U.S.C. § 1539(a)(1)(A), a program that for the duration of the RPA removes the majority of salmon and steelhead smolts from their designated critical habitat the Snake and Columbia Rivers each year during an important life stage in order to reach the conclusion that the measures of the RPA meet the requirements of section 7(a)(2) and its implementing regulations. These regulations, however, state that a federal action avoids jeopardy and adverse modification of critical habitat only if the action does not appreciably reduce the prospects of a species' survival and recovery in the wild. 50 C.F.R. § 402.02. The need to remove a majority of the species from their designated critical habitat for an entire life stage demonstrates adverse modification of that habitat by FCRPS operations under the RPA, and long-term fish transportation cannot be a valid part of the RPA.
- 67. Moreover, the ESA section 10(a)(1)(A) juvenile fish transportation permit itself is arbitrary and contrary to the ESA and its implementing regulations because the law and regulations allow capture and removal of a listed species from the wild only on a temporary basis and only for reasons not applicable here. The effect of the improper section 10(a)(1)(A) permit is to mask the adverse modification of designated salmon and steelhead critical habitat and the

1 jeop 2 bypa 3 obvi 4 FCR 5 that 6 statu 7 NMI

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

jeopardizing effects to these species caused by the measures of the RPA. NMFS cannot simply bypass the requirements of either section 7(a)(2) or section 10(a)(1)(A) in order to avoid an obvious and unavoidable conclusion: the FCRPS operations required by the RPA for the 2000 FCRPS BiOp so alter the designated critical habitat of Columbia and Snake River salmon ESUs that the habitat is lethal and uninhabitable for these species, a situation that readily meets the statutory and regulatory definition of adverse modification and a situation the law requires NMFS to identify and correct, not circumvent.

ACTIONS SINCE NMFS ISSUED THE 2000 FCRPS BIOP

- 68. A series of events since NMFS issued the 2000 FCRPS BiOp highlights many of its defects. First, low precipitation has resulted in one of the driest year on record in the Columbia River basin. This is not, however, an unpredictable event. Indeed, as early as November 2000 before the 2000 FCRPS BiOp was even released the federal agencies responsible for the operation of the FCRPS recognized that below-average precipitation conditions existed in the basin and would affect salmon migration this year. Federal Agencies' 2001 Operations Proposal at 4. (Draft, Apr. 13, 2001) (summarizing prior assessments).
- 69. Rather than purchase power on the open market to replace the power that FCRPS agencies knew as early as November 2000 would be lost due to low water conditions at FCRPS dams, the federal agencies began declaring short-term "power emergencies" in January and February. See, e.g., Columbia River Regional Forum Technical Management Team Meeting Notes January 18, 2001 http://www.nwd-wc.usace.army.mil/TMT/2001/minutes/tmt0118.htm (visited Apr. 25, 2001). The agencies declared these initial emergencies not because the Bonneville Power Administration was unable to purchase the replacement power on the open market, but because it deemed such purchases harmful to the agency's overall financial health. According to the Action Agencies and NMFS, these declarations of "emergency" are permitted

under, and are consistent with, the "emergency clause" in the 2000 FCRPS BiOp and RPA. <u>See</u> supra ¶¶ 60-61 (discussing these provisions of the 2000 FCRPS BiOp).

70. The consequences of these repeated declarations of an "emergency" have been to allow the Action Agencies to curtail or halt measures otherwise prescribed in the 2000 FCRPS BiOp to avoid jeopardy, including, but not limited to augmentation of river flows to benefit salmon survival and spill of water at the FCRPS dams to aid juvenile salmon passage. For example, on April 3, 2001, citing these same financial concerns, the Action Agencies, with NMFS approval, again declared an "emergency" and announced that they would not release water to assist juvenile salmon in their spring migration for at least two weeks. See http://www.bpa.gov/Corporate/KCC/nr/01nr/nr040301x.shtml (visited Apr. 25, 2001) (BPA) press release). On April 13, 2001, these agencies also released a draft "Federal Agencies' 2001 FCRPS Operations Plan Proposal" in which they announced their intention to continue the emergency declaration indefinitely unless water levels drastically improved. http://www.salmonrecovery.gov/draft%5Ffcrps%5Foperations%5Fplan.pdf (visited May 1, 2001) at 12. In addition, the Action Agencies and NMFS announced that all Snake River juvenile fish will be transported by truck or barge to below Bonneville dam this migration season, id. at 16, meaning that the agencies expect migration conditions in the river will be lethal to these listed species.

71. In addition, it has become increasingly clear that many of the measures NMFS has discussed for the Action Agencies, as well as for other federal and non-federal entities, in order to improve salmon and steelhead survival (and hence relied on in reaching its no-jeopardy/no-adverse modification finding for the RPA in the 2000 FCRPS BiOp), are likely to see little or no action. For example, NMFS predicts that significant habitat protection will result from the

24

25

26

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

implementation of other federal programs like the Interior Columbia Basin Ecosystem

Management Plan ("ICBEMP"). BSRS, vol. 2 at 18-20; see also, e.g., 2000 FCRPS BiOp at 9203 (referring generally to such actions). ICBEMP has been in development for over seven
years and although the Basinwide Salmon Recovery Strategy anticipates that the "final ICBEMP
record of decision, [is] expected in early 2001," BSRS, vol. 2 at 19, it has not been signed.

Similarly, biological opinions for related federal actions which are relied on in the 2000 FCRPS
BiOp have not been issued. See, e.g., 2000 FCRPS BiOp at 1-1 & n.1 (referring to biological
opinion for certain BOR projects in the upper Snake River basin).

- 72. Further, on March 8 and 9, 2001, NMFS and the U.S. Fish and Wildlife Service withdrew supplemental biological opinions that evaluated the existing interim federal salmon habitat management guidelines for the basin, the so-called PACFISH and INFISH documents. Without these biological opinions in place, the adequacy, status and benefits of even these federal actions is in serious doubt.
- 73. Moreover, recent budget proposals from NMFS and the Action Agencies do not contain enough funding to implement many of the measures discussed in the RPA. For example, Oregon has estimated that funding only NMFS' share of the measures in the RPA would require increasing its salmon budget by \$183 million, but NMFS' current budget proposal for the next fiscal year actually cuts the agency's salmon funding. U.S. Dept of Commerce, National Oceanic and Atmospheric Admin., FY 2002 Budget Summary, April 9, 2001 (proposing \$900,000 in cuts to NMFS' Pacific salmon recovery budget). Similarly, the U.S. Army Corps of Engineers has requested only \$81 million of the estimated \$110 million necessary to implement its share of the RPA.

CLAIMS FOR RELIEF

VIOLATIONS OF THE ESA AND APA

- 74. Plaintiffs incorporate by reference all preceding paragraphs.
- 75. NMFS has violated the requirements of ESA section 7 and its implementing regulations by arbitrarily, capriciously and without any rational basis concluding in the 2000 FCRPS BiOp that the actions set forth in the RPA are not likely to jeopardize any listed species or destroy or adversely modify their critical habitat and by issuing a biological opinion that is otherwise not in accordance with law. The defects in the 2000 FCRPS BiOp include, but are not limited to, the following:
 - NMFS' analysis of the current status of listed salmon and steelhead in the BiOp
 consistently and misleadingly understates the grave and immediate risk of
 extinction these species face, contrary to the best available scientific information
 and the requirements of the ESA;
 - NMFS' assessment of why the steps it proposes in the BiOp's RPA will avoid jeopardy and adverse modification of critical habitat: (1) relies extensively on speculative and voluntary actions by other federal agencies, as well as state and private entities, in areas unrelated to FCRPS operations and beyond the control or authority of the Action Agencies; and, (2) ignores the effects of sweeping emergency exemptions that make many key RPA measures optional, contrary to the requirements of the ESA and its implementing regulations;
 - NMFS' analysis of why the RPA and voluntary and speculative actions by others will avoid jeopardy and adverse modification of critical habitat relies on a series of improbably optimistic assumptions, for which the agency offers no rational or credible explanation, and a qualitative assessment of the benefits of these

measures that runs counter to the available evidence and is contrary to the best available scientific information and the ESA; and,

- NMFS' grant of an incidental take statement to accompany the RPA, as well as its approval of an ESA section 10(a)(1)(A) permit for the Juvenile Fish Transportation Program, are both contrary to the requirements of the ESA and its implementing regulations.
- 76. NMFS' actions and omissions are arbitrary, capricious, an abuse of discretion, and otherwise not in accordance with law and are reviewable under the APA, 5 U.S.C. §§ 701-706.

PRAYER FOR RELIEF

WHEREFORE, plaintiffs respectfully request that the Court:

- 1. Adjudge and declare that NMFS has violated ESA section 7 and its implementing regulations by making a no-jeopardy/no-adverse modification finding in the 2000 FCRPS BiOp for the RPA and issuing an incidental take statement that are arbitrary, capricious, an abuse of discretion and otherwise not in accordance with law;
- 2. Enjoin NMFS to withdraw the 2000 FCRPS BiOp, the RPA, and the accompanying incidental take statement, notify the Action Agencies of these withdrawals, and reinitiate consultation with the Action Agencies in order to prepare a biological opinion for FCRPS operations and any related actions that complies with the requirements of the ESA, on a schedule to be set by the Court;
- 3. Award plaintiffs their reasonable fees, costs, expenses, and disbursements, including attorneys fees, associated with this litigation; and,
 - 4. Grant plaintiffs such further and additional relief as the Court may deem just and

1	proper.
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	COMP

Dated this 2nd day of May, 2001.

stall

Respectfully submitted,

TEPHEN D. MASHUDA (MSB #4231)
Earthjustice Legal Defense Fund
705 Second Avenue, Suite 203
Seattle, WA 98104
(206) 343-7340
(206) 343-1526 [FAX]
ttrue@earthjustice.org
smashuda@earthjustice.org

DAN ROHLF (OSB #99006)
AARON COURTNEY (OSB #93525)
Pacific Environmental Advocacy Center
10015 S.W. Terwilliger Boulevard
Portland, OR 97219
(503) 768-6707
(503) 768-6642 [FAX]
rohlf@lclark.edu
aaron@lclark.edu

Attorneys for Plaintiffs