

Appendix G
Wells Habitat Conservation Plan (HCP)

**FERC Order Approving HCPs
June 21, 2004**

107 FERC ¶ 61,280
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
Nora Mead Brownell, and Joseph T. Kelliher.

Public Utility District No. 1 of
Chelan County, WA

Project Nos. 2145-057
943-083

Public Utility District No. 1 of
Douglas County, Washington

Project No. 2149-106

ORDER GRANTING INTERVENTIONS; APPROVING ANADROMOUS FISH
AGREEMENTS, SETTLEMENT AGREEMENT, AND APPLICATIONS TO AMEND
LICENSES; AND TERMINATING PROCEEDING

(Issued June 21, 2004)

1. This order grants the applications of Public Utility District No. 1 of Chelan County, Washington (Chelan) and Public Utility District No. 1 of Douglas County, Washington (Douglas) (together, the licensees) for approval of project-specific Anadromous Fish Agreement and Habitat Conservation Plans (HCPs)¹ regarding the operation of Chelan's Rocky Reach Project No. 2145 and Rock Island Project No. 943, and Douglas' Wells Project No. 2149. The Habitat Conservation Plans are intended to foster the recovery of endangered fish species in the Mid-Columbia River Basin. In companion orders issued today, we amend the licenses for the Rocky Reach, Rock Island, and Wells Projects to incorporate therein as special articles the respective project-specific Plans.² These orders

¹ Each Anadromous Fish Agreement and Habitat Conservation Plan is a single, project-specific document.

² Public Utility District No. 1 of Chelan County, WA, 107 FERC ¶ 61, 282 (Rock Island); Public Utility District No. 1 of Chelan County, WA, 107 FERC ¶ 61,281 (Rocky Reach); Public Utility District No. 1 of Douglas County, WA, 107 FERC ¶ 61,283 (Wells).

will serve the public interest by putting into place a long-term program to aid in the recovery of the endangered species and help to prevent other salmonids from becoming listed.

I. Background

A. The Columbia River Anadromous Fishery Issue

2. The Columbia River historically produced the world's largest runs of Chinook salmon and steelhead trout, major runs of coho and sockeye salmon, and small numbers of chum and pink salmon.³ In the 1930s, the U.S. Army Corps of Engineers and others began the construction of a series of major dams planned for the Columbia and Snake Rivers for the purposes of electric power,⁴ flood control, and irrigation.

3. Proceeding downstream from the Canadian-U.S. border, the first two dams on the Columbia River are Grand Coulee and Chief Joseph, both of which are federally owned and operated. The next five dams are the so-called Mid-Columbia Dams, all of which are under Commission license. Proceeding downstream, they are: the 774-megawatt (MW) Wells;⁵ the 1,213-MW Rocky Reach;⁶ the 623-MW Rock Island;⁷ and the two-dam, 1,620-MW Wanapum-Priest Rapids Project No. 2114 (Priest Rapids). Priest Rapids is licensed to Public Utility District No. 2 of Grant County, Washington (Grant). The Mid-

³ The Columbia River is 1,210 miles long, of which 460 miles are in Canada and 740 miles are in the United States. It drains an area of 259,000 square miles, including a great part of Washington and Oregon, substantially all of Idaho, the western portion of Montana, and smaller areas in Wyoming and Utah.

⁴ The Columbia River and its tributaries represent one-third of the hydroelectric potential of the United States.

⁵ The Wells Project was issued an original license in 1962. 28 FERC 128 (1962).

⁶ The Rocky Reach Project was issued an original license in 1957. 18 FPC 33 (1957).

⁷ The Rock Island Project was relicensed in 1989. 46 FERC ¶ 61,033 (1989).

Columbia reservoirs are used to create the necessary hydraulic head for power generation rather than for significant storage.

4. Downstream of the Mid-Columbia dams, the Columbia River is joined by the Snake and Walla Walla Rivers, and turns west toward the ocean. On this stretch of the river, which is called the main stem, are four federal dams: McNary, John Day, The Dalles, and Bonneville.⁸

5. Although most of the dams on the Columbia River were designed with fish passage devices to assist the upstream migration of adult fish returning to spawn, these dams are generally considered to have contributed to a significant decline in the numbers of migratory fish returning annually to the Columbia River drainage system to spawn. Moreover, originally no provisions were made to allow downstream migration of juvenile salmon (smolts) other than by passage over the dams in spills or through the generating turbines during power production. The Columbia River dams are believed to be cumulatively responsible for the mortality of a significant portion of the juvenile anadromous fish that annually migrate from the river system downstream to the ocean.⁹

B. The Commission's Mid-Columbia Proceeding

6. In 1978, the Washington Department of Fish and Wildlife (Washington DFW) filed a complaint against Grant, asserting that the minimum flows being released from Priest Rapids were insufficient to protect salmonid spawning and rearing areas downstream from Priest Rapids (Vernita Bar). Subsequently, various federal and state agencies and Indian tribes petitioned the Commission to require all of the Mid-Columbia projects to

⁸ The location of all of the Columbia River projects is shown on page S-5 of the Environmental Impact Statement (EIS) prepared in this proceeding.

⁹ The reservoirs decrease water velocity, which delays the migrants and may cause them to lose their migrating urge and become residents of the reservoirs. This means that they do not complete their anadromous life cycle, and also that they are exposed to increased predation. Downstream migrants also face hazards if they pass through the turbines, and if they pass downstream via spill they may suffer from elevated levels of oxygen in the blood (gas bubble disease).

provide increased minimum flows and spills at each dam to assist the migration of salmon and steelhead trout.

7. In 1979, the Commission consolidated these actions and set the matter for hearing, directing the presiding Administrative Law Judge (ALJ) to hold hearings on the matter of a long-term solution to the fish passage issues.¹⁰ This was expected to require years of studies and proceedings. For the near term, the Commission delegated to the ALJ authority to establish interim operating measures for all four projects. Grant sought rehearing. A settlement was later reached and approved regarding interim measures, and the Commission determined that any ALJ decision on a long-term solution for Priest Rapids would, if it was opposed, not go into effect without Commission approval.¹¹

8. The Commission approved a settlement agreement on the Vernita Bar phase of the Mid-Columbia proceeding and terminated that phase in 1988.¹² In 1992, the ALJ issued an initial decision requiring installation of physical bypass systems at Wanapum and Priest Rapids dams, and requiring interim spill requirements until the completion of physical bypass systems.¹³ Exceptions to the initial decision were filed. In 1994, the Commission ordered Grant to release interim spill flows from Priest Rapids to assist the downstream passage of spring and summer migrants.¹⁴ No action was taken on the initial decision, inasmuch as Endangered Species Act (ESA) proceedings soon eclipsed the ALJ proceeding.

9. Longer-term settlement agreements on anadromous fishery issues were approved in 1989 and 1991 with respect to Rock Island and Wells, respectively. Both the Rock Island Agreement and the Wells Agreement call for spill flows, hatchery programs, and other measures to protect and enhance the anadromous fishery. The order approving the Rock

¹⁰ 6 FERC ¶ 61,210.

¹¹ Public Utility District No. 2 of Grant County, WA, 16 FERC ¶ 61,043 (1981).

¹² 45 FERC ¶ 61,401.

¹³ 58 FERC ¶ 63,022.

¹⁴ Public Utility District No. 2 of Grant County, WA, 67 FERC ¶ 61,225.

Island Agreement incorporated that agreement into a new license for Rock Island, which expires in 2029.¹⁵ The order approving the Wells Agreement incorporated that agreement into the Wells license, which expires in 2012, and terminated the Mid-Columbia proceeding as to the Wells Project.¹⁶

10. With respect to Chelan's Rocky Reach Project, studies were continued to determine an appropriate downstream passage method, and the Mid-Columbia Proceeding is still open as it pertains to that project.¹⁷ The Rocky Reach license expires on June 30, 2006, with any new license applications due by June 30, 2004.

C. Proceedings at NOAA Fisheries

11. Section 10(a)(1)(B) of the ESA¹⁸ authorizes the ESA agencies to issue to non-federal entities an incidental take permit (take permit) for species listed as endangered under the ESA. The ESA agencies are the National Marine Fisheries Service (NOAA Fisheries) and the U.S. Fish and Wildlife Service (FWS). The take permit allows a non-federal landowner to conduct an activity that results in an incidental take of listed species. An HCP must accompany an application for a take permit. An HCP is a planning document developed under ESA section 10(a)(2)(A) to ensure that the effects of the permitted action on listed species are adequately minimized and mitigated.¹⁹ The take permit authorizes the take, but not the activity itself. The activity must comply with other applicable laws and regulations, such as holding a hydroelectric license.

¹⁵ Public Utility District No. 1 of Chelan County, WA, 46 FERC ¶ 61,033 (1989).

¹⁶ Public Utility District No. 1 of Douglas County, WA, 54 FERC ¶ 61,056 (1991).

¹⁷ The relevant subdocket is Project No. 2145-000.

¹⁸ 16 U.S.C. § 1539(a).

¹⁹ 16 U.S.C. § 1539(a)(2)(A).

12. The take permit exempts the permittee, when acting in compliance with the HCP, from the prohibition of ESA section 9 on the taking of listed species.²⁰

13. The holder of a take permit also benefits from the certainty provided by the HCP. This is because the ESA agencies have a “no surprises” policy, under which the ESA agencies will not require additional commitments from the permittee beyond those agreed to in the HCP, even if there are unforeseen circumstances. In order for the no-surprises policy to apply, the permittee must be implementing the terms of the HCP, the take permit, and any other associated authorizations in good faith. In the hydropower licensing context, it is desirable for the HCP to become a condition of any license in effect during the term of the take permit, so that the two documents can be integrated. The HCP can be a more efficient means of ESA compliance for license applicants and the Commission than the approach traditionally used in licensing-- Commission consultation with the ESA agencies pursuant to ESA section 7.²¹

14. In 1993, Chelan, Douglas, and Grant entered into discussions with NOAA Fisheries, FWS, and Washington DFW to develop a long-term comprehensive program for managing fish and wildlife that inhabit the Mid-Columbia River Basin. Other entities, including the Confederated Tribes of the Colville Reservation (Colville), Confederated Tribes and Bands of the Yakama Indian Nation (Yakama), Confederated Tribes of the Umatilla Indian Reservation (Umatilla), and American Rivers, subsequently joined the negotiations. The Commission also assigned separated staff to assist the

²⁰ 16 U.S.C. § 1538. Section 9 makes it unlawful to “take” (kill, harm, harass, capture, etc.) listed endangered species. ESA section 11, 16 U.S.C. § 1540, establishes penalties for knowing violations of the act or of permits issued thereunder.

²¹ 16 U.S.C. § 1536. Under the section 7 process, once a hydropower license application is filed, the Commission conducts consultation with the ESA agencies (often the license applicant is appointed as the Commission’s non-federal representative) and issues a Biological Assessment. Thereafter, the ESA agency issues a Biological Opinion with a Reasonable and Prudent Alternative, including Reasonable and Prudent Measures designed to be placed any license the Commission issues to the applicant.

negotiations.²² The scope of the negotiations was later narrowed to the development of an agreement for anadromous salmonids in light of the likelihood that certain species of salmon and steelhead would become listed species under the ESA.²³ Upper Columbia River steelhead and spring-run chinook salmon were subsequently listed under the ESA as endangered.²⁴

15. In July 1998, as amended in May 2002, Chelan and Douglas (together, the licensees) submitted to NOAA Fisheries unexecuted versions of three HCPs, along with applications for incidental take permits.

16. NOAA Fisheries, with the Commission participating as a cooperating agency, issued in November 2000 a Draft Environmental Impact Statement (EIS) on the HCPs. In April 2002, the HCPs were executed by the relevant licensee, NOAA Fisheries, FWS, Washington DFW, and Colville. In December 2002, NOAA Fisheries issued the Final EIS.

17. NOAA Fisheries' consideration of the take permit applications included preparation of project-specific Biological Opinions pursuant to section 7 of the ESA²⁵ for the operation of each project under the terms of the applicable HCP, and six separate Biological Opinions for the operation of Chelan's three and Douglas' three hatchery

²² See Public Utility District No. 2 of Grant County, WA, et al., letter order issued September 8, 1999, in Project No. 2145-000. Separated staff are staff members designated to assist the parties to a proceeding and are "non-decisional" for the purpose of the proceeding; that is, they are take no part in the Commission's consideration of any application filed in the proceeding.

²³ 16 U.S.C. §§ 1531-43.

²⁴ 62 Fed. Reg. 43,973 (August 18, 1997) (steelhead); 64 Fed. Reg. 41,835 (August 22, 1999) (spring-run Chinook). Critical habitat for both species was designated on February 16, 2000, 69 Fed. Reg. 7764.

²⁵ 16 U.S.C. § 1536.

facilities. NOAA Fisheries thereafter issued a take permit for the operation of each project²⁶ and for each hatchery facility.

D. License Amendment Applications

18. On November 24, 2003, the licensees filed separate applications for approval of the project-specific HCPs and for their incorporation as articles in the applicable licenses. The Rock Island and Wells applications request that those licenses be amended by replacing the Rock Island and Wells Agreements, respectively, with the project-specific HCPs. There is no Rocky Reach agreement on anadromous fisheries to be replaced.

19. On December 5, 2003, the Commission issued public notice of the applications and of its intent to adopt NOAA Fisheries' EIS for purposes of its environmental analysis of the amendment applications.²⁷ Timely motions to intervene in all three applications were filed by the Washington Department of Ecology (Ecology); Washington DFW; NOAA Fisheries; Yakama; the Columbia River Inter-Tribal Fish Commission and Umatilla (together, CRITFC);²⁸ U.S. Department of Agriculture (Agriculture); and American Rivers.²⁹ The motions to intervene of CRITFC, Yakama, and American Rivers were accompanied by protests.³⁰

²⁶ Permit Nos. 1391 (Wells), 1392 (Rocky Reach), and 1393 (Rock Island), all issued August 20, 2003.

²⁷ 68 Fed. Reg. 69,393-94 (Dec. 12, 2003). The deadline for interventions was January 9, 2004.

²⁸ CRITFC was created in 1977 by the Nez Perce Tribe, Umatilla, Yakama, and the Confederated Tribes of the Warm Springs Reservation of Oregon for the purpose of establishing a broad general fisheries program to promote the conservation practices of its members.

²⁹ Effective October 15, 2003, 18 C.F.R. § 385.214(a)(2) allows the U.S. Departments of Agriculture, Commerce, and the Interior; the Advisory Council on Historic Preservation; any state fish and wildlife, water quality certification, or water rights agency; and any Indian tribe with authority to issue a water quality certification to intervene in any proceeding by filing a timely notice of intervention instead of a motion to intervene.

20. The City of Entiat, Washington, and Entiat School District No. 127 (Entiat) filed a motion to intervene in the Rocky Reach proceeding. Entiat does not protest that application, but expresses concern about potential impacts to that community and questions the adequacy of the EIS.

21. A late motion to intervene was filed by the U.S. Department of the Interior. Pursuant to Rule 214(d)(1) of our Rules of Practice and Procedure,³¹ we will grant Interior's motion because its late intervention will not delay or disrupt the proceeding or prejudice other parties.

22. Comments supporting the applications were filed by U.S. Senator Patty Murray, U.S. Representatives Norm Dicks and Doc Hastings, and Washington State Governor Gary Locke.

23. Chelan timely filed a consolidated answer to the motions to intervene of CRITC, Umatilla, and Yakama, and separate answers to the motions to intervene of Entiat and American Rivers. Douglas filed an answer to the motions to intervene of CRITFC, Umatilla, Yakama, American Rivers, and Agriculture. With one exception discussed below, the licensees do not oppose intervention by any of these entities, but express disagreement with various statements made in the motions to intervene or protests.³²

³⁰ CRITFC, Umatilla, and Yakama submitted a combined protest, which is referred to as CRITFC protest.

³¹ 18 C.F.R. § 385.214(d)(1).

³² 18 C.F.R. § 385.213(a)(2) prohibits and answer to a protest unless otherwise ordered by the decisional authority. Because Chelan's and Douglas' answers will not delay or disrupt the proceeding and may assist in our consideration of the issues raised by the Indian tribes, American Rivers, and Entiat, we will accept their answers.

24. On February 11, 2004, the Commission held a public technical conference to allow the licensees to present the details of the HCPs to the Commission staff and interested parties.³³ On March 1, 2004, the licensees filed a joint response to certain statements made by CRITFC at the technical conference (Joint Response).

II. Discussion

25. The HCPs have been in development for over ten years. We commend all of the participants in the negotiations for their patience and dedication in developing a plan for operating the Rocky Reach, Rock Island, and Wells Projects in a manner that aids in the recovery of the endangered species and helps to prevent additional listing of Mid-Columbia salmonids. As discussed below, we find that the HCPs are appropriately designed to reach that goal and are in the public interest. We will therefore amend the project licenses to include the HCPs as terms thereof.

A. Agriculture Department's Motion to Intervene

26. Agriculture, of which the U.S. Forest Service is a part, moved to intervene in the Wells proceeding (Project No. 2149) on the basis that the Wells Project would, in the context of implementing the tributary conservation plan for Wells,³⁴ “utilize federal lands within the Okanogan-Wenatchee National Forest,” and could therefore affect “lands and resources of the National Forest System, including the Methow River System and its tributaries . . . administered by the Department.”³⁵

27. Douglas appears to oppose Agriculture's motion to intervene, stating that the Department has “no real property holdings” within the Wells Project boundary, and that were Douglas to undertake any activity on lands or waters administered by the Forest Service, it would first need the Forest Service's authorization.³⁶

³³ 69 Fed. Reg. 2,136 (Jan. 14, 2004).

³⁴ See Wells HCP section 7, and discussion below.

³⁵ Agriculture motion at 2.

³⁶ Douglas answer at 15.

28. Douglas appears to be correct that there are no National Forest lands within the project boundary. Nonetheless, we think the possibility that certain HCP implementation measures may be carried out on National Forest lands gives Agriculture a sufficient interest in the outcome of this proceeding to warrant the grant of its intervention motion.

B. Status of the Mid-Columbia Proceeding

29. On April 23, 2004, the Chief ALJ issued an order to show cause why, in light of the fact that several years had passed without any need for his assistance as ALJ, the Mid-Columbia proceedings before him should not be terminated. Grant responded that it would not object to termination of the proceeding with respect to Priest Rapids because the initial decision is before the Commission. Chelan, citing the HCP agreement and the status of related actions such as ESA consultation, agreed that the proceeding with respect to Rocky Reach should be terminated.

30. NOAA Fisheries responded that the Chief ALJ should retain jurisdiction, because fisheries issues have not been resolved at Priest Rapids, and because it believes the 1994 interim spill provisions are no longer adequate, particularly in light of the addition of affected stocks to the federal endangered species list. It states that the continuing jurisdiction of the Chief ALJ is beneficial to the efforts of Grant and the intervenors to reach a new, long-term settlement agreement. We leave this matter to the Chief ALJ's discretion as to Priest Rapids. Consistent with our decision to approve the Rocky Reach HCP, we will terminate the Mid-Columbia proceeding as to that project.

C. Summary of the HCPs

31. The HCPs are intended to be a comprehensive and long-term management plan for plan species affected by the projects, i.e., Chinook salmon, sockeye salmon, coho salmon, and steelhead.³⁷ The objective of the HCPs is to achieve and maintain for the duration of the HCPs "no net impact" for each plan species. This is to be accomplished by a combination of fish passage measures, hatchery programs, and fish habitat enhancement work along tributary rivers and streams. The HCPs are summarized below. Unless otherwise noted, the discussion pertains to all of the agreements.

³⁷ Sockeye and Coho are not listed. The provisions of the HCP are intended to help ensure that they do not become listed.

32. Section 1 provides for a 50-year HCP term. Section 2 defines circumstances under which parties may withdraw.

33. Section 3 provides for no net impact to be achieved on a specified schedule and maintained for the duration of the HCP Agreement for each plan species.³⁸ “No net impact” has two components: (1) a combined adult and juvenile project survival standard (project survival standard) of at least 91 percent,³⁹ and (2) up to 9 percent compensation for “unavoidable project mortality.”⁴⁰ Of the nine percent compensation, up to seven percent would be provided through the hatchery programs, and up to two percent through the tributary programs.

34. The licensees are responsible for achieving the 91-percent project survival standard through project-specific improvement measures. They will also be responsible for (1) funding the two-percent tributary conservation plan, (2) providing capacity and funding for the seven-percent hatchery compensation plan, and (3) making capacity and funding adjustments to the hatchery compensation plan to reflect and compensate for future increases in run size for each plan species.⁴¹ If the licensee is not able to achieve the

³⁸ No net impact is to be achieved at Rocky Reach and Rock Island by 2013 and at Wells by 2018.

³⁹ This means that 91 percent of each plan species (juvenile and adult combined) survive project effects when migrating through each project. It includes direct, indirect, and, where it can be measured, delayed mortality.

⁴⁰ “Unavoidable project mortality” refers to the assumed 9-percent project-related mortality rate for which compensation is provided. HCP section 13.30.

⁴¹ If the run size increases, the amount paid into the hatchery fund is reduced.

project survival standard at its project, it must consult with the signatories to the HCP through a coordinating committee established to jointly seek a solution, as discussed below.⁴²

35. HCP section 5 (Wells section 4) establishes the passage survival plan for achieving and maintaining the 91-percent project survival standard. Compliance will initially be measured based on juvenile passage survival (the adult survival rate is assumed to be 98-100 percent).⁴³ Because of technological limitations on the accuracy of passage measurements, the standard used for assessing juvenile passage survival will vary with the plan species.

36. The passage survival plan has three implementation phases.⁴⁴ In Phase I, each licensee will implement a juvenile and adult operating plan and criteria intended to meet the “no net impact” standard and a monitoring and evaluation program to determine compliance with the standards. If the coordinating committee determines that the project survival standard has not been achieved for each plan species following the completion of a three-year study, the licensee will proceed to Phase II for that species. Phase II requires a set of project-specific measures to be taken, which will then be evaluated against the project survival standard.⁴⁵ If the Phase II measures fail to achieve the project survival standard for a Plan species, additional measures are to be taken, which are to be selected

⁴² The coordinating committee will oversee all aspects of the standards, methodologies, and implementation of the HCPs by various means, including establishing methods to determine if survival standards are being achieved; determining if the signatories are carrying out their responsibilities; determining if no net impact is achieved; approving study plans and reviewing study results; making adjustments to the passage survival plan; resolving disputes; and adjusting schedules and dates for performance. See Rock Island and Rocky Reach HCP section 4; Wells HCP section 5.

⁴³ It is difficult with available technology to differentiate between hydroelectric project-related adult mortality and natural mortality.

⁴⁴ Rock Island and Wells HCP section 5.3; Wells HCP section 4.2.

⁴⁵ E.g., Rock Island HCP section 5.3.2 (measures to be determined by the coordinating committee subject to specified criteria).

according to specified criteria, such as likelihood of success, timing, and cost-effectiveness. The licensee will continue to implement the Phase II measures until the project survival standard is achieved for each Plan species, unless the coordinating committee determines that the standards are impossible to achieve.

37. If the coordinating committee determines, at the end of either Phase I or Phase II, that the project survival standard has been achieved for a plan species, the parties will proceed to Phase III, during which the licensee maintains the project survival standard for that species, and juvenile survival continues to be periodically evaluated as determined by the coordinating committee.

38. Section 6 (Wells section 5) provides for the protection of reservoir habitat and water quality by requiring the licensees, when making land-use or related permit decisions, to consider the cumulative impact of those decisions in order to satisfy the conservation objectives of the HCP, the license, and any applicable law. The licensees also agree to notify and consider the comments of the parties regarding any land-use permit application on project lands.

39. Section 7 establishes the tributary conservation plan, under which each licensee will fund a plan species account for measures for the protection and restoration of plan species habitat.⁴⁶ Each licensee is responsible for funding an account applicable to a designated geographic area.⁴⁷ The projects will be selected by a tributary committee of

⁴⁶ Douglas will make an initial contribution to the plan species account of \$1,982,000 (\$1998) and have the option at the end of the fifth year to make annual payments thereafter of \$176,178 (\$1998) or a lump-sum payment. Wells HCP section 7.4. Chelan would make annual contributions of \$229,800 (Rocky Reach) and \$485,000 (Rock Island) (\$1998), but other signatories may elect to receive any of the annual payments for the first fifteen years in advance. Rocky Reach and Rock Island HCPs section 7.5.

⁴⁷ For instance, projects for which Douglas will provide funding are to be located between the Chief Joseph and Wells tailraces and in the Methow and Okanogan River watersheds. Wells HCP section 7.2. Projects for which Chelan will provide funding are to be located between Chief Joseph tailrace and Rock Island tailraces and the Methow, Okanogan, Entiat, and Wentachee River watersheds. Rock Island and Rocky Reach HCPs section 7.2.

representatives of the signatories in accordance with criteria and priorities set forth in the HCP.⁴⁸ Each licensee will separately fund a tributary assessment program to monitor and evaluate the performance of the chosen projects.

40. Section 8 establishes the hatchery compensation plan, under which the licensees will provide funding and hatchery capacity to compensate for unavoidable project mortality and to meet the seven-percent hatchery compensation level needed to achieve no net impact. The initial estimates of hatchery production capacity will be adjusted periodically, and hatchery production commitments for passage losses will be adjusted periodically based on the juvenile project survival estimates.

41. In section 9 of the HCP, the signatories provide various assurances with respect to regulatory approvals, project licensing, limitations on reopening the licenses, and other matters. These include:

42. If the licensee is in compliance with its incidental take permit, the HCP, and other license provisions relating to the plan species, the parties will not institute any action against the licensee under the ESA, FPA, or other relevant legislation.⁴⁹

43. If the licensee is in compliance with the HCP, the parties will support its new license application(s) with respect to plan species filed with the Commission during the term of the HCP.⁵⁰

⁴⁸ HCP section 7.3.

⁴⁹ Rock Island and Rocky Reach HCP section 9.1.2; Wells HCP section 9.4.2. These sections, which are identical, specify the Fish and Wildlife Coordination Act, 16 U.S.C. § 661 et seq.; Pacific Northwest Electric Power Planning and Conservation Act, 16 U.S.C. § 839 et seq.; and the Essential Fish Habitat provisions of the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. § 1801 et seq.

⁵⁰ Rock Island and Rocky Reach HCP section 9.2.1; Wells HCP section 9.5.1.

44. The HCPs will be NOAA Fisheries' and FWS' recommendations for plan species pursuant to FPA sections 10(a), 10(j), and 18, subject to a reservation of authority to prescribe fishways under section 18 if the HCP terminates.⁵¹

45. With certain exceptions, the parties will not invoke any reopener clauses in the project licenses for the purpose of obtaining additional measures for the plan species.⁵²

46. If the licensee is in compliance with the HCP, the parties will not during its term advocate for or support additional or different fish protection measures or changes in project structures or operations other than those set forth in the HCP.⁵³

47. Section 9 reflects the no-surprises policy of NOAA Fisheries and FWS; that is, non-federal landowners with an HCP and take permit are assured that if "unforeseen circumstances" arise, then as long as the permittee is implementing the terms and conditions of the HCP, permit, and any other associated documents in good faith, neither agency will unilaterally require the landowner to commit land, water, or financial resources, or restrict the use of land, water, or other natural resources, beyond the level otherwise agreed to in the HCP.⁵⁴

D. Tribal Issues

48. CRITFC and Yakama assert that numerous aspects of the HCPs and the EIS violate the Commission's trust responsibility to them. They refer to: (1) termination of the Mid-Columbia proceeding and the Wells and Rock Island Agreements; (2) the incorporation of NOAA Fisheries' and FWS' no-surprises policy into the HCPs; (3) lack of provision for recovery of stocks to sustainable, harvestable levels; (4) no guarantee that the

⁵¹ Rock Island and Rocky Reach HCP section 9.2.2; Wells HCP section 9.5.2.

⁵² Rock Island and Rocky Reach HCP section 9.3; Wells HCP section 9.6.

⁵³ Rock Island and Rocky Reach HCP section 9.7; Wells HCP section 9.10.

⁵⁴ See 50 C.F.R. § 222.303(g); and <http://endangered.fws.gov/hcp/nosurpr.htm>.

hatchery component will continue; (5) lack of provisions to protect sturgeon and lamprey; and (6) inadequate consideration in the EIS of alternatives to the HCPs. We consider the merits of these and other assertions below.

49. Also, Yakama states that its interest in this proceeding is to assure that its “Treaty reserved ‘Trust resources’” are protected.⁵⁵ The licensees acknowledge that pursuant to treaty the tribes are entitled to a “fair share” of off-reservation Columbia River basin fisheries in common with other citizens of the State,⁵⁶ but they dispute that this right is subject to any trust responsibility, and disagree that such off-reservation fish constitute “trust resources.”⁵⁷ They add that even if off-reservation fish and Pacific lamprey are trust resources, the tribes are entitled only to the protections afforded by license terms and conditions required by the Commission in fulfillment of its FPA responsibilities.⁵⁸

50. The Commission recognizes the unique relationship between the United States and Indian tribes as defined by treaties, statutes, and judicial decisions. We carry out our responsibilities towards Indian tribes in the context of the FPA and other statutes that establish Commission responsibilities. We recognize the cultural and economic significance to the Tribes of the plan species in these proceedings, and will carry out our responsibilities under the FPA with those considerations in mind.

⁵⁵ In addition to salmonids, Yakama states that its trust resources include Pacific lamprey and sturgeon. Motion to intervene at 4.

⁵⁶ Douglas answer at 5, citing Nez Perce Tribe v. Idaho Power Co., 847 F. Supp. 791 (D. Idaho), citing Washington Commercial Passenger Fishing Vessel Ass’n, 443 U.S. 658 (1979).

⁵⁷ Chelan claims that the term “Indian trust resources” is not defined in the Commission’s tribal consultation policy statement or in any other laws or regulations binding on the Commission in this proceeding. Chelan answer to CRITFC at 5 n. 7.

⁵⁸ Chelan answer to CRITFC at 4-5; Douglas answer at 4-5. They apply the same reasoning to Pacific lamprey.

E. Compliance with the Rock Island and Wells Licenses

51. Yakama states that the 1989 Rock Island and 1991 Wells Agreements⁵⁹ are contracts that require all of the parties thereto to jointly petition the Commission in order to remove those agreements as conditions of the Wells and Rock Island licenses. It characterizes Commission approval of the HCPs as unilateral terminations of these agreement, and asks that the HCPs be modified to ensure that they provide for Yakama's continued participation in management of the plan species.⁶⁰ The licensees respond that both agreements contain reopener provisions that may be invoked by any party after the expiration of a period specified in the project-specific agreement.⁶¹

52. The licensees are correct. The Rock Island Agreement establishes Chelan's obligations for the first thirteen years of the term of the agreement (i.e., 1987-2000). It provides that any party may thereafter initiate negotiations or file a petition to modify the agreement's terms and conditions or to replace the agreement in whole or in part.⁶² The Wells Agreement is similarly subject to modification following March 1, 2004.⁶³ In any event, both licenses contain a reservation of Commission authority at any time during the license term to require alterations to project facilities and operations that may be warranted by changed circumstances.⁶⁴

⁵⁹ These agreements are described above; see "The Commission's Mid-Columbia Proceeding."

⁶⁰ Yakama protest at 3, 7.

⁶¹ Chelan answer to CRITFC at 3-4; Douglas answer at 2-4.

⁶² See 46 FERC at 61,195.

⁶³ See 54 FERC at 61,208.

⁶⁴ See 46 FERC at 61,198 (Rock Island); 54 FERC at 61,210 (Wells).

F. Relationship of Rocky Reach HCP to Relicensing
(Project No. 2145)

53. CRITFC and American Rivers assert that approval of the Rocky Reach HCP will predetermine the terms and scope of the Rocky Reach relicense proceeding (applications for which are due June 30, 2004), because Chelan's application will be composed substantially of the HCP. They further assert that consideration of the HCP at this point would cause duplicative environmental review, ESA section 7 consultation, and Clean Water Act certification. American Rivers adds that this would strain the resources of interested stakeholders as well as agencies. They urge us to delay consideration of the Rocky Reach HCP until it is encompassed within Chelan's application for a new license.⁶⁵

54. Chelan replies that any entity that did not sign the Rocky Reach HCP will be free to make any argument in the relicense proceeding with respect to anadromous fish, since only the parties have agreed to support the HCP on relicensing, nor does the HCP bind the Commission at relicensing. Chelan adds that the timing of action on the relicense applications is uncertain, and that consolidation of the proceedings would delay implementation of the HCP's measures to comply with the ESA. In contrast, it states, going forward with the HCPs now should help expedite relicensing, since the agency parties have agreed that the HCPs will constitute their license recommendations and conditions under FPA sections 10(a), 10(j), and 18.⁶⁶ Finally, Chelan says there would be no duplication, because the standards for review of license amendment applications and new license applications are different.⁶⁷

⁶⁵ CRITFC protest at 8-9; American Rivers protest at 4-5.

⁶⁶ Chelan answer to American Rivers at 5, citing Rocky Reach HCP section 9.2.2 (Wells section 9.5.2).

⁶⁷ Chelan notes various additional factors the Commission must consider with respect to new license applications, as required by FPA section 15(a)(2), 16 U.S.C. § 808(a)(2). See order section F.4 (Technical Analysis) below.

55. The HCPs are designed to aid in the recovery of endangered species, and we find them to be in the public interest. Given that, and the uncertainty as to when the Rocky Reach relicense proceeding will be concluded, we think it appropriate to approve the HCP at this time. Nor does our decision here necessarily dictate the result of the Rocky Reach relicensing with respect to anadromous fish. In the Rocky Reach relicense proceeding, we will examine whether the HCPs should be included in any new license to Chelan (or any competing applicant). Our approval of the Rocky Reach HCP in this proceeding will undoubtedly influence our decision on that issue, but the FPA requires us to fully consider all evidence and arguments presented in the relicense proceeding on this and any other issues,⁶⁸ and we shall do so.

G. Environmental Impact Statement

1. Cooperating Agency Status

56. CRITFC argues that the Commission must recirculate or supplement the EIS, because the Commission was not actually a cooperating agency for NOAA Fisheries' EIS.⁶⁹ CRITFC states that section 1501.6 of the Council on Environmental Quality's (CEQ) regulations requires a cooperating agency to: (1) have jurisdiction over the federal action, (2) have special expertise in the relevant issues, or (3) be requested by the lead agency to serve as a cooperating agency.⁷⁰ CRITFC argues that none of these requirements has been satisfied.⁷¹

⁶⁸ The purpose of relicensing is to examine the public interest with respect to an existing project in light of currently applicable laws and policies. *Confederated Tribes and Bands of the Yakama Indian Nation v. FERC*, 746 F.2d 466, 470-71 (9th Cir. 1984), cert. denied, 471 U.S. 1116 (1985) (Yakama).

⁶⁹ See 40 C.F.R. § 1506.3(c), which provides:

A cooperating agency may adopt without recirculating the environmental impact statement of a lead agency when, after an independent review of the statement, the cooperating agency concludes that its comments and suggestions have been satisfied.

⁷⁰ 40 C.F.R. § 1501.6.

⁷¹ CRITFC protest at 8.

57. Section 1501.6 states, in relevant part:

Upon request of the lead agency, any other Federal agency which has jurisdiction by law shall be a cooperating agency. In addition, any other Federal agency which has special expertise with respect to any environmental issue which should be addressed in the [environmental impact] statement may be a cooperating agency upon request of the lead agency. Any agency may request the lead agency to designate it a cooperating agency.

58. The Commission has jurisdiction over the federal action because the licensees have filed applications to amend their licenses to include the HCPs as special articles. That the HCPs also require approval by NOAA Fisheries in the context of the incidental take permit applications does not affect this Commission's jurisdiction over the license application. The Commission was moreover identified as cooperating agency in the January 1999 EIS scoping brochure issued by NOAA Fisheries, and in the scoping summary attached to the September 1999 second post-scoping meeting notice. We think this suffices to establish compliance with section 1501.6. Commission staff also participated in the preparation of the EIS by co-facilitating the scoping meetings with NOAA Fisheries, reviewing comments received on the scoping documents and the Draft EIS, reviewing drafts of the Draft and Final EISs, and providing technical support for drafting the EIS and responses to comments on the Draft EIS.

59. Special expertise is a separate basis; the Commission has special expertise in analyzing fishery issues and writing enforceable license articles for the mitigation, protection, and enhancement of fishery resources. More specifically, this proceeding is just one of many in which we have analyzed a project's environmental impacts on, and developed measures benefitting, Pacific Ocean salmonids, including numerous NEPA documents pertaining to the fisheries impacts of license amendment applications for Mid-Columbia projects.⁷²

⁷² E.g., Public Utility District No. 2 of Grant County, WA, 95 FERC ¶ 61,338 (2001) (spill flow requirement variance); Public Utility District No. 1 of Chelan County, WA, 99 FERC ¶ 61,059 (2002) (juvenile fish bypass system), 99 FERC ¶ 61,279 (2002) (installation of new, small turbines); 98 FERC ¶ 61,090 (2001) (installation of piling to support juvenile bypass system); and 96 FERC ¶ 61,300 (2001) (pool raise).

2. Baseline for Environmental Analysis

60. Yakama states that the FPA and the National Environmental Policy Act of 1969 (NEPA)⁷³ require the environmental analysis of an application to be based on pre-project conditions. Yakama asserts that this is inherent in the requirement of section 10(a)(1) for the Commission to give equal consideration to developmental and non-developmental resource values in license proceedings, and in the requirement of section 10(j) that licenses include “adequate and equitable” fish and wildlife protection, mitigation, and enhancement measures. Absent a pre-project baseline, it indicates, NOAA Fisheries and FWS cannot fulfil their responsibilities under FPA sections 10(a), 10(j), and 18.⁷⁴ CRITFC agrees that a pre-project baseline should be used, and adds that NOAA Fisheries’ 2000 Federal Columbia River Power System Biological Opinion (2000 Biological Opinion)⁷⁵ used a “natural river” baseline to measure improvements in the condition of salmonids and to determine adult survival standards.⁷⁶

61. Neither NEPA nor the FPA requires environmental analysis of an application to be based on pre-project conditions. The Commission's practice of using current conditions as the baseline for environmental analysis has been judicially affirmed,⁷⁷ and the Commission recently declined to change its practice in this regard when it amended its

⁷³ 16 U.S.C. § 4321 et seq.

⁷⁴ Although none of the applications is for a new license, to which sections 10(a), 10(j), and 18 clearly apply, Yakama points out that the HCPs are intended to support future new license applications for Wells and Rocky Reach. Yakama protest at 6.

⁷⁵ The 2000 Biological Opinion addresses the operation of the FCRPS and 19 Bureau of Reclamation projects. It defines a Reasonable and Prudent Alternative for the operation of the system intended to improve survival and the likelihood of recovery for endangered Columbia River salmonids.

⁷⁶ CRITFC EIS comments at 9-10; protest at 5.

⁷⁷ *American Rivers v. FERC*, 187 F.3d 1007, reh'g denied, 201 F.3d 1186 (9th Cir. 1999).

license application processing rules.⁷⁸ That NOAA Fisheries may have used a different baseline for analysis in separate proceeding is not sufficient reason for the Commission to change its well-established and judicially affirmed practice.

3. Supplemental EIS

62. Section 102(2)(E) of the NEPA⁷⁹ requires action agencies to analyze proposed federal actions and reasonable alternatives. The range of reasonable alternatives that must be discussed is a matter within an agency's discretion,⁸⁰ and decreases as the environmental impact of the proposed action becomes less substantial.⁸¹ A discussion of environmental alternatives need not be exhaustive, and need only provide sufficient information to permit a reasoned choice of alternatives.⁸²

⁷⁸ See Order No. 2002, 68 Fed. Reg. 51,070 (August 25, 2003), III FERC Stats. & Regs., Regs. Preambles ¶ 31,149 at 51,097 (July 23, 2003).

⁷⁹ 16 U.S.C. § 4332(2)(E).

⁸⁰ See *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 551-52 (1976).

⁸¹ See *Olmstead Citizens for a Better Community v. U.S.*, 793 F.2d 201, 208 (8th Cir. 1986).

⁸² See *North Carolina v. FPC*, 533 F.2d 702 (D.C. Cir. 1976).

63. The EIS considered three alternatives: (1) no action, (2) anadromous fish conservation measures adopted pursuant to ESA section 7 consultation; and (3) the preferred alternative, HCPs.⁸³ Alternatives considered but eliminated from detailed study included dam removal, additional spill flows, and issuance of non-power licenses.⁸⁴

64. CRITFC also objects to the Commission adopting NOAA Fisheries' environmental analysis of the HCPs, because NOAA Fisheries' incidental take permits have a 50-year term, but the licenses to which the HCPs will be added have remaining terms of less than 50 years.⁸⁵ This distinction is of no significance. The EIS assumes that the HCPs not only will be in the existing licenses for the remainder of their terms, but also will be included as conditions of any new licenses issued for these projects. This is entirely appropriate, since the HCPs are designed for no net impact to be attained over a period of several years, and then maintained for the remainder of the take permits' 50-year terms. For instance, no net impact is to be achieved at Rocky Reach by 2013, which is likely to be within the term of any new license issued for that project. Therefore, even if the Commission were to conduct a completely separate analysis of the HCPs, it would still have to assume that the HCPs will be included in any new license. That is not to say that the Commission is bound to include the HCPs in any new licenses for these projects, but only that the analysis of the HCPs' environmental impacts can only be done if they are assumed to be in place.

65. CRITFC also argues that the Commission should conduct an ecosystem based EIS that includes an examination of the operations of all hydroelectric projects on the Mid-Columbia River, from the Grand Coulee Dam upstream of these licensees' projects to McNary Dam downstream, and should as well include the operations of the Federal

⁸³ Alternative 2, conservation measures, is based on the ESA section 7 process; that is, the Commission would provide NOAA Fisheries with a biological assessment describing project impacts and any proposed protection measures. NOAA Fisheries would then determine if the proposed action is likely to jeopardize the continued existence of the listed species or result in the destruction or modification of their critical habitat. Depending on its conclusions, NOAA Fisheries could recommend additional protection measures for the listed species.

⁸⁴ See EIS at pp. 2-69 to 2-73.

⁸⁵ CRITFC protest at 8.

Columbia River Power System.⁸⁶ We disagree. The proposed federal action that the EIS addresses is limited in scope: the implementation of the HCPs for Wells, Rocky Reach, and Rock Island. The licensees have no control over the upstream or downstream projects, and nothing done in the context of the HCPs will affect how those projects are operated. The HCPs will contribute to the rebuilding of tributary habitat production capacity and basic production and numerical abundance of the plan species, which can only contribute to the overall improvement of the Columbia River Anadromous Fishery.

66. CRITFC and Yakama contend that neither action alternative provides the protection necessary to meet the species recovery goal of the ESA or the tribes' own goal of sustainable, harvestable populations.⁸⁷ They state that NOAA Fisheries' findings in the Qualitative Analysis Review⁸⁸ show that the HCPs will fall short of what is needed for survival and recovery under the ESA, and that therefore it is unreasonable not to

⁸⁶ CRITFC protest at 4, 6.

⁸⁷ CRITFC EIS comments at 4-7, Yakama protest at 4. Yakama cites NOAA Fisheries' salmon recovery policy, which includes as goals the restoration of salmon populations to the point where they can be delisted and allow for the meaningful exercise of tribal fishing rights. Yakama protest at 4. CRITFC indicates that its objective is to have naturally-reproducing stocks supplemented by hatchery production until restoration measures result in a harvestable surplus of naturally-reproducing fish. In contrast, it states, NOAA Fisheries contemplates separate stocks of naturally-reproducing and hatchery fish, with tribal harvest directed to the hatchery stocks. CRITFC EIS comments at 4-5.

⁸⁸ NOAA Fisheries' Qualitative Analysis Review developed population models for Upper Columbia River spring-run Chinook salmon and steelhead. It modeled a range of alternative future survival improvements for Upper Columbia River stocks, including improvements that could be expected from implementing the HCP measures. The Qualitative Analysis Review is discussed in detail in EIS Chapter 5. See EIS at 5-7 to 5-20.

consider at least one alternative that will meet that standard.⁸⁹ They state that such an alternative could include survival improvements through changes to operation of the Federal Columbia River Power System, egg-to-smolt survival increases from habitat improvements, or increases in ocean survival.

67. The licensees respond that the Qualitative Analysis Review was a draft that was never finalized, and that used data ending in 1994. The updated model used for the EIS included 1995 and 1996 data, and the latter analysis shows that the HCP measures should ensure against extinction.⁹⁰

68. Such actions as improvements to the the Federal Columbia River Power System or unspecified actions to increase ocean survival are not reasonable alternatives to the HCPs. First, such broad-brush suggestions are too vague to allow credible analysis. Moreover, we have no authority over the operations of the Federal System, or control over human activities that might affect ocean survival, such as harvest. In any event, to the extent such actions are taken by other non-jurisdictional entities, we view them as complementary, rather than as alternatives to, the HCPs.

69. CRITFC and Yakama⁹¹ state that because neither action alternative includes full consideration of such measures as sluiceways, reservoir drawdown, or increased spill, they do not meet the requirement of ESA section 10(a)(2)(B)(ii) for HCPs “to the maximum extent practicable, minimize and mitigate the impacts of [a permitted] taking.”⁹² CRITFC states that the EIS explains that such measures are not included in the

⁸⁹ See CRITFC EIS comments at 10, citing the EIS at C-5 and C-39 to the effect that the HCPs alone will not recover the listed species. CRITFC evidently believes that HCP measures such as habitat improvements will be insufficient because the direct and delayed impacts of the entire Columbia River basin hydroelectric system explain the majority of impacts to salmon stocks. See CRITFC EIS comments at 7.

⁹⁰ Joint response at 2.

⁹¹ CRITFC EIS comments at 6-7; Yakama protest at 9-10.

⁹² 16 U.S.C. § 1539(a)(2)(B)(ii).

HCPs because none of them would alone lead to species recovery, and asserts that an alternative should have been developed using a combination of such actions.⁹³

70. The EIS explains that elements of these measures have been included in the two action alternatives where appropriate, and describes the negative aspects of these measures that make them less effective than the HCPs. For instance, spill is the primary measure to pass juvenile fish at Rock Island, currently and under the HCP, and is also a component of the Wells bypass system, but it has not been effective at Rocky Reach. Seasonal reservoir drawdown was not given full consideration, because although it has been found to correlate with increased migration rates for sockeye and steelhead, that correlation does not hold for chinook and coho salmon, and there is no consistent relationship between flows and survival for most species.⁹⁴

71. Yakama and CRITFC state that the EIS should also contain an alternative based on the assumption that no net impact is not achieved, in which case the Commission should require compensation for the resulting loss of fish and for fish losses between implementation of the HCPs and the scheduled achievement of no net impact in 2013.⁹⁵ CRITFC considers this a reasonable alternative, because failure of any of the three HCP components (dam-passage improvements, habitat improvements, and long-term hatchery production programs) will result in failure of the entire effort.⁹⁶

72. We think it unreasonable to develop a hypothetical alternative that assumes the HCPs will fail. Moreover, the possibility that no net impact will not be met on schedule is specifically provided for in HCP section 5, which contemplates additional measures to be undertaken if the survival standards are not met. Any alternative we developed along these lines would be redundant. Compensation for fish losses is addressed below.

⁹³ Citing the EIS at pp. 2-69 to 2-73.

⁹⁴ See EIS at pp. 2-69 to 2-72.

⁹⁵ Yakama protest at 5; CRITFC EIS comments at 14.

⁹⁶ CRITFC EIS comments at 7.

73. Finally, CRITFC and Yakama attack the no-action alternative on the ground that it fails to correctly represent the actions that may be taken to protect the plan species under the settlement agreements currently in place or the existing coordinating committees.⁹⁷ CRITFC states that the Rocky Reach permanent juvenile fish passage system, which was approved in 2002,⁹⁸ should be considered part of the existing baseline instead of part of the HCP alternative. Yakama contends that the no-action alternative should include discussion of the agency statutory authorities at relicensing, particularly relative to Rocky Reach, and more fully discuss the Mid-Columbia settlement agreements and the work of the existing coordinating committees.⁹⁹ Failure to include these elements in the no-action alternative, asserts Yakama, causes the EIS to inadequately consider Yakama's interests.¹⁰⁰

74. We conclude that the no-action alternative is appropriately described in the EIS.¹⁰¹ Although the Rocky Reach permanent juvenile fish bypass system was approved in April 2002 prior to issuance of the Final EIS in December 2002, construction was not completed until March 30, 2003, so its existence cannot reasonably be said to reflect existing conditions when the environmental analysis was prepared.

75. Nor do we agree that the future exercise of agency conditioning authorities at relicensing can be included in a description of existing environmental conditions. These authorities are not exercised until the relicense applications have been filed, accepted, and found ready for environmental analysis. We cannot say when that will occur, even for Rocky Reach, let alone predict how this Commission or NOAA Fisheries might exercise

⁹⁷ Yakama protest at 16; CRITFC protest at 16.

⁹⁸ 99 FERC ¶ 61,059, reh'g denied, 100 FERC ¶ 61,216 (2002).

⁹⁹ Yakama protest at 16-17.

¹⁰⁰ CRITFC EIS comments at 13.

¹⁰¹ See EIS at p. S-4 and pp. 2-31 to 2-38.

its authorities. Finally, the EIS describes in adequate detail the existing and planned measures for anadromous fish under the existing licenses, as amended in the context of the Mid-Columbia proceeding.¹⁰²

4. Technical Analysis

76. An EIS must contain “[a] reasonably thorough discussion of the significant aspects of the probable environmental consequences.”¹⁰³ This standard has been characterized as requiring the action agency to take a “hard look” at the proposed action and reasonable alternatives.”¹⁰⁴ CRITFC and Yakama assert that the EIS fails to meet this requirement in various respects.

77. In addition to a general coordinating committee, each HCP establishes committees for tributary conservation and hatchery compensation programs. Membership on these committees is limited to the parties. CRITFC asserts that additional environmental analysis is required, because the EIS was premised on the assumption that Umatilla and Yakama would be parties to the agreements and members of the committees. CRITFC contends that their absence from these committees will result in different environmental impacts than those identified in the EIS, because Umatilla and Yakama are co-resource managers who play a leading role in the recovery of the Columbia River anadromous fisheries.¹⁰⁵ Yakama similarly states that the EIS must analyze the effects of terminating the Mid-Columbia proceeding and thereby excluding Yakama for the next 50 years from the role it currently plays in resolving anadromous fishery issues.¹⁰⁶

¹⁰² See EIS at pp. 2-31 to 2-38.

¹⁰³ PP&L Montana, LLP, 97 FERC ¶ 61,060 (2001), citing Columbia Land Basin Protection Assn. v. Schlesinger, 643 F.2d 585, 592 (9th Cir. 1981), quoting Trout Unlimited v. Morton, 509 F.2d 1276, 1283 (9th Cir. 1974).

¹⁰⁴ See Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1990).

¹⁰⁵ CRITFC EIS comments at 4, 13.

¹⁰⁶ Yakama protest at 8.

78. It is possible that the details of specific actions taken to meet the no-net-impact goal would be different if Umatilla and Yakama were on the various committees, but the numerical standards would remain the same. More important, an alternative must be reasonably well articulated in order for it to be analyzed. CRITFC and Yakama cannot explain how the HCPs would be differently administered or how management of the Columbia River's anadromous fishery would change, were they represented on the various committees, since they cannot speak to what differently-constituted committees might decide.¹⁰⁷

79. CRITFC argues that the EIS lacks sufficient quantitative detail on how listed species would be affected by the HCPs or other alternatives. It notes that the EIS mentions the Qualitative Analysis Review but does not incorporate the Review's analysis into the comparison of alternatives, making it impossible to tell how each of the alternatives compares with the others in terms of survival and rebuilding.¹⁰⁸

80. We think it is unreasonable to expect the EIS to include predictive quantitative data at the level of detail CRITFC appears to expect. The HCPs are based on the premise that a combination of measures, some of which are yet to be determined, will be taken in order to meet the applicable standards, and that their effectiveness will be measured. If the measures initially selected do not cause the standards to be met, other measures as yet undetermined will be taken until the standards are met or are determined to be impossible to meet. Under these circumstances, the appropriate focus is not on producing detailed future population estimates, but on whether the approach to the problem is sound. We think the HCP approach is likely to be successful, because it does not depend on a single component, all the components are likely to have beneficial effects, and it requires the parties to meet the numerical standards unless it is determined that they are impossible to meet.

¹⁰⁷ The decision of CRITFC and Yakama not to participate in the HCPs for these three projects has no bearing on their participation in fisheries management efforts at Priest Rapids or for the Federal System.

¹⁰⁸ CRITFC EIS comments at 5-6.

81. CRITFC contends that the EIS is too focused on whether the HCPs meet ESA standards, and includes no clear analysis of whether they satisfy other applicable legal standards.¹⁰⁹ CRITFC mentions in general tribal treaty fishing rights, no net impacts, the relicensing standards of the FPA, the Fish and Wildlife Coordination Act,¹¹⁰ Pacific Northwest Electric Power Planning and Conservation Act,¹¹¹ Magnuson-Stevens Act,¹¹² and Title 77 of the Regulatory Code of Washington.¹¹³

82. Although an environmental analysis includes identification of laws and policies that apply to the proposed action and alternatives,¹¹⁴ its purpose is not to determine if applicable legal requirements have been satisfied, but to compare the environmental impacts of a recommended action with reasonable alternatives. The EIS does that.

¹⁰⁹ CRITFC EIS comments at 6, 9, 10, 11-13. CRITFC also suggests that the Commission should determine if the HCP satisfies NOAA Fisheries' "obligations under sections 18, 10(a), 10(j) of the [FPA]." CRITFC EIS comments at 9. We see no inconsistency between the HCPs and these sections of the FPA.

¹¹⁰ 16 U.S.C. § 661 et seq.

¹¹¹ 16 U.S.C. § 839 et seq.

¹¹² 16 U.S.C. §§ 1801-1883.

¹¹³ Revised Code of Washington, Title 77.

¹¹⁴ See EIS section 4.13.

Whether the HCPs satisfy applicable legal requirements is a matter for NOAA Fisheries and the Commission to determine in the context of orders acting on the applications before them. We consider these matters at appropriate places in this order.¹¹⁵

83. American Rivers asserts that because the HCPs have 50-year terms and are intended to address substantially all of the anadromous fish issues at the projects, and because the parties assert that the agreements will meet the legal obligations of the signatory agencies for purposes of future relicensing proceedings,¹¹⁶ the Commission must evaluate the license amendment applications pursuant to the same standards that would apply to an application for a new license, i.e., must consider all aspects of the public interest affected by the applications and give equal consideration to power development and non-power resources. American Rivers states that the EIS fails in this regard because it addresses only those aspects of the public interest related to anadromous fish.¹¹⁷

84. Chelan responds that the standard for Commission review of these applications is different from the standard applicable to relicensing, because a license amendment application is subject only to the public interest standard of FPA section 10(a)(1), while a

¹¹⁵ See, e.g., section VII (Magnuson-Stevens Act). CRITFC does not explain what provisions of the Northwest Power Act it believes apply to the HCPs, or what role the Commission might have in that regard.

Title 77 RCW includes broad-ranging provisions in 24 chapters pertaining to all aspects of fish and game regulation in Washington State. Rocky Reach and Rock Island HCP section 9.5 (Wells 9.8) provides that if the licensee is in compliance with the HCP, ITP, and its license, Washington DFW will not request additional measures under Title 77 RCW. Because the FPA preempts state laws with respect to licensed projects other than state regulations enacted pursuant to federal legislation such as the Clean Water Act, a licensee may voluntarily comply with state laws only so long as such compliance does not interfere with its compliance with the federal license. See *California v. FERC*, 495 U.S. 490 (1990).

¹¹⁶ Citing Rocky Reach and Rock Island HCP section 9.2.2; Wells HCP section 9.5.2.

¹¹⁷ American Rivers protest at 3.

relicense application is subject, in addition to section 10(a)(1), to FPA section 15¹¹⁸ and to potential agency recommendations pursuant to FPA section 10(j) and mandatory conditions pursuant to FPA sections 4(e)¹¹⁹ and 18.¹²⁰

85. Although every change to a license is an amendment, not all amendments trigger the full panoply of rights and procedures applicable to a license application proceeding, such as sections 10(j), 18, and 4(e). Amendments that do trigger these sections are called “licensing amendments.” A licensing amendment authorizes a significant new project work, such as a new turbine/generator, an increase in the height of the project dam, or the like.¹²¹ Non-licensing amendments make minor modifications to project lands, waters, or operations that implicate only limited aspects of the overall public interest with respect to the project.¹²²

¹¹⁸ 16 U.S.C. § 808.

¹¹⁹ 16 U.S.C. § 797(e).

¹²⁰ 16 U.S.C. § 811.

¹²¹ See e.g., PUD No. 1 of Chelan County, 55 FPC 2050, 2053 (1976) (increase in installed capacity); Fieldcrest Mills, Inc., 37 FERC ¶ 61,264 at 61,762 n.6 (1986) (installed capacity quintupled; new forebay, powerhouse and tailrace); Adirondack Hydro Development Corp., 50 FERC ¶ 61,100 at 61,318-20 (1990) (substantial capacity increase, dam raised, reservoir surface increased, new powerhouse, twelve turbines small turbines replaced by one large turbine). See also Allegheny Hydro No. 8, L.P., 49 FERC ¶ 61,277 (1989); Nevada Irrigation District, 46 FERC ¶ 61,146 at 61,467 (1987); Cordova Electric Cooperative, Inc., 91 FERC 61,243 (2000) (all adding a new transmission line).

¹²² See, e.g., Virginia Electric and Power Co., 72 FERC ¶ 61,075 (1995), reh’g denied, 72 FERC ¶ 61,283 (1995) (diversion of small portion of river flow from project reservoir to municipal water supply pipeline); Carolina Power & Light Co., 94 FERC ¶ 61,203 (2001) (replacement of existing water intake and pumping station to increase withdrawal capacity for municipal and industrial water supply).

86. The HCP applications are not licensing amendments. They are clearly limited in scope, and have negligible impact on other aspects of the projects that may be part of the relicensing analysis, such as irrigation, flood control, water supply, and recreation. Chelan is also correct that the HCPs have negligible or tangential bearing on various subjects required to be considered on relicensing by FPA section 15(a)(2), such as project safety, need for power, and existing and planned transmission services.

87. CRITFC also states that the EIS is deficient because it does not recognize that the wealth of the river has been transferred from tribal to non-tribal citizens, and that Indian tribes have higher rates of poverty and mortality from the loss of salmon than do non-tribal citizens.¹²³ The history of the river system's use and development over the last century is far too broad a topic for the limited purposes of analyzing applications to add an HCP to each of three project licenses, nor does the Commission have the authority to cure the adverse effects cited by CRITFC. However, since we conclude that the HCPs are likely to be an important element in the recovery of listed Columbia River salmonids, the grant of the amendment applications can only be beneficial for Native Americans and others.

88. CRITFC also believes that the cumulative impacts analysis is inadequate because it does not treat the HCPs as precedent for future Columbia River hydropower management at other dams, such as Wanapum and Priest Rapids, and examine the effects on salmon if the HCPs were applied to the operation of those dams.¹²⁴ We cannot assume that an HCP will be developed for Priest Rapids, much less speculate about what specific provisions such an agreement would contain. If a Priest Rapids HCP is developed, it will be subject to the same legal and policy requirements that apply to the HCPs under consideration here.

89. Cumulative impacts are the environmental consequences resulting from the incremental effects of the action alternative when added to other past, present, and reasonably foreseeable future actions, regardless of the entity that undertakes or undertook those actions.¹²⁵ Yakama asserts that the EIS cumulative impacts analysis is

¹²³ CRITFC protest at 7.

¹²⁴ CRITFC EIS comments at 8.

¹²⁵ See 40 C.F.R. § 1508.7.

deficient because it does not consider factors contributing to the decline of the listed species throughout the entire life history of each species, including effects beyond the geographic scope of the analysis. It adds that the EIS should have considered the impacts of the Federal Columbia River Power System operations and all five of the Mid-Columbia dams, and that NOAA Fisheries' Qualitative Analysis Review model appears to assume that operational requirements at the federal dams are unenforceable, which would undercut the effectiveness of the HCP measures.¹²⁶

90. There is no dispute that the Columbia River salmonid fishery has been negatively affected by federal and non-federal dams and a host of other factors, but there is no need in this proceeding to revisit that entire history. The EIS includes a discussion of other federal, regional, state, and tribal programs for salmonid recovery that address the factors which have contributed to the existing state of the fishery.¹²⁷ We conclude that the EIS appropriately addresses this issue.

91. CRITFC objects to the fact that the HCPs do not provide for compensation for losses to listed species if the projects fail to meet the no-net-impact standard on schedule, and states that this is an "exemption" not contemplated by the ESA or FPA, the environmental impacts of which must be examined.¹²⁸ It is of course possible that one or more of the projects will fail to achieve no net impact for any listed species on schedule. It is not possible, however, to analyze the environmental impacts of such an event without making many assumptions about the degree of non-compliance and the specific implementation measures to be determined by the committees in order to achieve no net impact. Any such assumptions on our part would amount to no more than speculation.

92. Finally, CRITFC states that the EIS does not analyze the effect of the HCP alternative on tribal water rights. In this connection, it appears to assert that the tribes have a right to spill water in order to provide fish passage.¹²⁹ Chelan replies that the

¹²⁶ Yakama protest at 15.

¹²⁷ See EIS section 5.

¹²⁸ CRITFC EIS comments at 9.

¹²⁹ CRITFC protest at 7.

Tribes have treaty rights to take fish at their usual and accustomed fishing places, but no right to spill at any of the projects by treaty or otherwise.¹³⁰ Although the 1855 Treaty with the Yakama¹³¹ and court cases cited by CRITFC establish that the treaty tribes have the right to continue traditional fishing practices¹³² and to an equitable share of the Columbia River fish,¹³³ CRITFC has not shown that there is a tribal right to spills, or to any other specific measure to ensure the continued existence of a harvestable fishery.

H. Merits of the HCPs

1. Term of the HCPs

93. Yakama contends that the 50-year term of the HCPs is too long and is not contemplated by ESA section 10. If long-term permits are lawful, Yakama contends that the incidental take permits should have project-specific time frames for achieving no net impact, and ESA protection for several generations of salmon thereafter.¹³⁴

94. ESA section 10 places no limit on the term of a take permit or HCP, and Yakama does not explain why the project-specific no-net-impact schedules are not appropriate.¹³⁵ Nor do we understand Yakama's argument that the take permits should provide ESA protection for several generations of salmon. As discussed above, the HCPs require the

¹³⁰ Chelan answer to CRITFC at 8.

¹³¹ 12 Stat. 951, Art. 3 (June 9, 1855).

¹³² *Tulee v. Washington*, 315 U.S. 681, 684-85 (1942).

¹³³ *Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 674-89 (1973).

¹³⁴ Yakama protest at 3.

¹³⁵ As noted above, Rocky Reach and Rock Island are to achieve no net impact by 2013, and Wells by 2018.

licensees, once they have achieved no net impact, to maintain that status for the remaining term of the ICPs, which is another 40 years or so. This clearly includes several generations of salmon.

2. Scope of the Plans

95. CRITFC states that the HCPs should be disapproved because they do not address anadromous fish survival and recovery from an ecosystem and life-history perspective, but merely measure juvenile fish survival from one point to another point. They add that the HCPs should holistically address water quality standards, fish passage, and restoration of critical habitat.¹³⁶

96. The licensees respond that an ecosystem approach was deemed by the HCP negotiators to be too complex; the HCPs meet the criteria of the ESA regulations for take permits by conserving fish habitat; and the HCPs are intended to help meet the goals of recovery and a self-sustaining harvestable population by meeting the no-net-impact standard.¹³⁷ They state that the HCPs acknowledge the importance of water quality objectives and provide that the parties will work together to address water quality problems.¹³⁸

97. We do not find the HCPs deficient in this regard. The passage-survival standards, tributary enhancement and hatchery compensation plans, and reservoir habitat and water quality provisions will be implemented under the guidance of the committees, which will have representation from each party. We are confident that these parties, working together, will implement the HCPs in a manner that makes a significant contribution to the recovery of the listed species and to keeping the non-listed species from becoming listed.

¹³⁶ CRITFC protest at 4-5.

¹³⁷ Chelan answer to CRITFC at 9; Douglas answer at 9.

¹³⁸ Chelan answer to CRITFC at 9, citing Rocky Reach HCP section 6.3; Douglas answer at 9-10, citing Wells HCP section 5.3. Chelan adds that when it constructed the permanent juvenile bypass facility at Rocky Reach, it obtained water quality certification from Ecology. Chelan answer to CRITFC at 9-10.

3. Delayed Mortality

98. CRITFC also complains that the HCPs fail to address project-related mortality that occurs beyond the project boundaries (delayed mortality).¹³⁹ Chelan disputes this, stating that the survival standards in each HCP include measurement of delayed mortality.¹⁴⁰ The licensees add that survival studies conducted at the projects from 1998-2003 in connection with the HCPs rely on recapture information at federal dams hundreds of miles downstream, and that the HCP parties agree that the survival standards include any delayed mortality resulting from passage at the projects.¹⁴¹ We find no deficiency in this regard.

4. Water Quality

99. CRITFC also faults the HCPs for not addressing elevated levels of dissolved oxygen and resulting delayed mortality from gas-bubble disease caused by spillage from turbine shutdowns or uncontrolled high flows, and increased predation on downstream migrants due to the loss of natural turbidity. It adds that the HCPs should include structural remedies, such as the introduction into fishways of cooler water from lower reservoir depths, to address elevated water temperatures compared to historical (*i.e.*, pre-project) levels.¹⁴² Chelan responds that temperature and dissolved gas issues are being addressed elsewhere, and that because these projects operate in a run-of-river mode they do not have the temperature stratification that would make a structural resolution of temperature issues possible.¹⁴³

¹³⁹ CRITFC protest at 4.

¹⁴⁰ Citing HCP section 13. See, e.g., Wells HCP section 13.14.

¹⁴¹ Joint response at 4-5.

¹⁴² CRITFC protest at 5.

¹⁴³ Chelan answer to CRITFC at 12.

will be used to adjust the Plan Species Account contribution and Juvenile Project Survival estimates will be used to adjust hatchery based compensation programs (See Section 7: Example 1 and See Section 8: Example 2).

However, should adult survival rates fall below 98%, but the Combined Adult and Juvenile survival rate be maintained above 91%, additional hatchery compensation for that portion of adult losses that exceeds 2%, toward a maximum contribution of 7% hatchery funding and 2% tributary funding, would be utilized to satisfy the NNI compensation requirements for each Plan Species. Hatchery compensation shall not exceed 7% and tributary funding shall not exceed 2% unless agreed to by the Coordinating Committee.

3.3 The District shall be responsible for achieving the pertinent survival standard as provided in Section 3 (Survival Standards and Allocation of Responsibility for No Net Impact) and 4 (Passage Survival Plan) for each Plan Species affected by the Project through project improvement Measures (including adult, juvenile, and reservoir Measures). The District shall also be responsible for (1) funding the Tributary Conservation Plan as provided in Section 7; (2) providing the capacity and funding for the 7% Hatchery Compensation Plan as provided in Section 8; and (3) making capacity and funding adjustments to the Hatchery Compensation Plan to reflect and fully compensate for future increases in the run size of each Plan Species as provided in sub-Section 8.4.5 (Adjustment of Hatchery Compensation - Population Dynamics) and further adjustments to the Hatchery Compensation Plan to reflect the results of survival studies as provided in Section 8.4.4 (Adjustment of Hatchery Compensation - Survival Studies). If the District is unable to achieve the pertinent survival standard, then the District shall consult with the Parties through the Coordinating Committee to jointly seek a solution. If a solution cannot be identified to achieve the survival standards identified herein, any Party may take action under sub-Section 2.2.4 (Impossibility), or other provisions of this Agreement.

3.4 The Tributary Committee and Hatchery Committee shall develop plans and programs, which must include evaluation procedures, necessary to implement the Tributary Conservation Plan and the Hatchery Compensation Plan, respectively to compensate for Unavoidable Project Mortality. If Unavoidable Project Mortality is not compensated for through the Hatchery Compensation Plan, the Hatchery Committee may examine additional hatchery improvements to meet the Unavoidable Project Mortality hatchery obligation. If the Hatchery and Tributary Committees are unable to develop plans and programs to fully implement the Hatchery Compensation Plan and Tributary Conservation Plan, respectively, to meet compensation levels necessary to meet

100. It is not necessary to provide specific measures in the HCPs for water quality. The licensees are voluntarily complying with the Washington state water quality standards for temperature and dissolved oxygen¹⁴⁴ in the context of the federal fish passage programs for the Columbia River. The projects are located reaches of the river that Ecology has determined are water-quality impaired in that DO and water temperature sometimes exceed the state standards. Ecology has however granted approval to spill, thereby allowing slight exceedances of the dissolved oxygen standard, and is developing total maximum daily loads for the specific water-quality parameters that exceed the standards.¹⁴⁵ The EIS also finds that the Mid-Columbia projects have very rapid flushing rates that limit the potential warming that can occur due to their operation, and that water temperatures are not significantly warmed by the projects.¹⁴⁶

5. No Net Impact

101. CRITFC and Yakama state that the no-net-impact concept is flawed because the measurement and protection measures provided in the HCPs require the protection of only 95 percent of the run for each plan species, instead of the 100 percent assumed in the Draft EIS.¹⁴⁷ They assert that failure to provide full protection for the beginning and end portions of each run could select against important genetic diversity and fitness necessary for species recovery.¹⁴⁸ CRITFC adds that there is no provision for replacement of fish lost during the portion of the run to which the standard does not apply,¹⁴⁹ or for fish lost between now and when it is determined if the Rocky Reach permanent juvenile bypass

¹⁴⁴ Washington Administrative Code Chapter 173-201A.

¹⁴⁵ EIS section 3.3.2, in particular discussion at pp. 3-113 to 3-115.

¹⁴⁶ EIS at p. 3-116.

¹⁴⁷ This means that the standard will only apply 95 percent of the time that the run is occurring. In essence, the standard does not apply during the first and last several days of the run.

¹⁴⁸ CRITFC protest at 7.

¹⁴⁹ Yakama protest at 4; CRITFC EIS comments at 10.

system will enable that project to attain the survival standards. Douglas responds that the HCP negotiators agreed that it was impractical to try to encompass 100 percent of the run.¹⁵⁰

102. We agree that it is impractical to try to encompass 100 percent of the run, because that would require spill to occur throughout the year, as salmonids are in the system year-round. Since 95 percent of the run of all downstream migrants can be encompassed in the April-through-September period, it makes sense to concentrate efforts during this period. It should be noted as well that the vast majority of the remaining five percent of fish are not lost, but rather navigate over the dams or through the turbines without the safety measures provided for in the HCPs. The mortality rate for such fish is about eight percent.

103. CRITFC adds that there is no evidence that the tributary compensation plan will result in a two-percent increase in smolt production to compensate for project-related mortality. It states that two percent is a negotiated figure intended to cover the gap between the seven-percent hatchery mitigation figure and the 91-percent survival standard.¹⁵¹ The licensees respond that it was understood by all parties to the negotiations that a two-percent increase in smolt production cannot be measured, and that the habitat improvement projects funded with the assistance of the tributary committee will also benefit other species, such as bull trout and Pacific lamprey.¹⁵²

104. The fact that the two-percent figure was negotiated does not make it unreasonable. Smolt production in the tributaries is not something that can be measured with precision. It is however logical to assume that improving the tributary habitat will have a beneficial effect on salmonid production. In any event, the habitat enhancements are being relied upon to compensate for the loss of only two percent of the plan species, so the ultimate success of the HCP will depend only slightly on the effectiveness of this measure.

¹⁵⁰ Douglas answer at 12.

¹⁵¹ CRITFC EIS comments at 10.

¹⁵² Joint answer at 6-7.

105. Yakama and CRITFC state that the seven-percent hatchery mitigation component is uncertain, because NOAA Fisheries is not prohibited from closing the hatchery program;¹⁵³ hatchery fish used for testing may have a higher mortality rate than other hatchery fish; and there is no provision for compensation for fish lost between the beginning of additional hatchery production under the HCP and the ultimate determination of whether this measure is having the intended effect, or that other measures will be as effective as hatcheries.¹⁵⁴

106. The HCPs do not provide for discontinuation of the hatchery program. Rather, they include a monitoring and evaluation plan for the hatchery program that is updated every five years and includes a program review.¹⁵⁵ This could result in changes to hatchery production levels every ten years, based on specific indicia.¹⁵⁶ Any such changes evidently must comply with the 7-percent hatchery compensation requirement, unless NOAA Fisheries proposes hatchery policy changes that would preclude the 7-percent level from being achieved. Any proposed changes that would have that effect must be submitted to the Hatchery Committee, be subject to the dispute resolution provisions, and be consistent with the principle of no net impact.¹⁵⁷ Under these conditions, we see no need to modify the HCPs to guarantee that the hatchery program will never be modified or discontinued. Finally, ESA section 10 does not require compensation for every fish lost as a result of project operations. So long as the projects are operated under the terms of the HCPs as approved in the take permits, incidental mortality is a permissible take.

¹⁵³ The hatchery programs are subject to periodic review and modification beginning in 2013. HCP section 8.

¹⁵⁴ Yakama protest at 4, 10; CRITFC EIS comments at 13.

¹⁵⁵ See, e.g., Rocky Reach HCP sections 8.5 and 8.6.

¹⁵⁶ See, e.g., Rocky Reach HCP section 8.4.3, which provides for adjustments based on changes in average adult returns, adult-to-smolt survival rates, and smolt-to-adult survival rates from hatchery production facilities.

¹⁵⁷ See, e.g., Rocky Reach HCP section 8.8.

107. The HCP nine-percent mitigation component assumes a two-percent loss of adult fish due to project operations. Yakama and CRITFC state that this figure is speculative, because there are no quantitative measurements of actual adult losses, the 2000 Biological Opinion indicates that adult passage mortality may be as high as four percent, and the HCPs have no passage standards (e.g., for passage time,¹⁵⁸ fallback rates,¹⁵⁹ and downstream kelt¹⁶⁰ passage).¹⁶¹ Yakama states that these unmeasured and unknowable losses may skew the no-net-impact calculation, and that therefore the EIS should discuss, and the HCPs include, measures and passage standards to increase adult passage survival.

108. The licensees reply that the two-percent standard applies only to hydroelectric project effects, and that there is natural mortality unrelated to project effects, for which the licensees are not, and should not be, held responsible. They state that adult passage standards are not needed, since the HCP has survival standards.¹⁶²

109. It is possible that the adult mortality rates, whether project-induced or natural, exceed the assumed two percent. However, the weight of the available data appears to favor that figure.¹⁶³ What is important is that meeting the no-net-impact standard should ensure recovery of the plan species, and if the standard is not timely met, Phase II of the implementation plans provides for the licensees to undertake additional measures in order to meet that standard.

¹⁵⁸ Passage time refers to the time required for fish to migrate either upstream or downstream.

¹⁵⁹ Fallback occurs when adult fish migrating upstream fall back through the project instead of continuing upstream past the dam.

¹⁶⁰ A “kelt” is an adult steelhead that has survived spawning and is actively migrating downstream in order to return to the ocean.

¹⁶¹ Yakama protest at 11; Yakama July 29 letter at 12; CRITFC protest at 6; CRITFC EIS comments at 8.

¹⁶² Chelan answer to CRITFC at 11; Douglas answer at 11.

¹⁶³ EIS at p. 2-51.

6. Committee Membership

110. CRITFC also appears to object to the inclusion of the licensees on the tributary and habitat committees, on the ground they the licensees' interests are not those of the tribes. CRITFC also asserts that NOAA Fisheries cannot represent the tribes' interests, because it has not adopted the tribal goal of a sustainable, harvestable fishery.¹⁶⁴ We understand that the interests and goals of the licensees and the federal and state agencies are not necessarily those of the tribes. If the tribes choose to sign the HCPs, they can be assured of a voice on the committees that will implement the HCPs.

7. Dispute Resolution

111. HCP section 11 establishes a two-stage dispute resolution regime. In the first stage, disputes are referred to the tributary or hatchery committee or, if neither is applicable, the coordinating committee. If a dispute is not resolved by the coordinating committee, it is referred to the policy committee. Unresolved disputes originating with the tributary or hatchery committee must be referred to the coordinating committee before they may be referred to the policy committee. The tributary, hatchery, and coordinating committees are to act within 20 days. The policy committee must act by unanimous vote, and does not appear to have a clear time limit for final action on the dispute. Section 11 provides that if a dispute is not resolved, then "any Party may pursue and other right they might otherwise have."¹⁶⁵

112. Yakama asserts that the dispute resolution mechanism is not workable or enforceable, because it relies entirely on consensus and provides no avenue for judicial relief where consensus is not achievable. It states that this will lead to decision by paralysis, or the use of inaction during critical periods as a means of forcing concessions from unwilling participants.¹⁶⁶ CRITFC adds that the delays built into section 11 will

¹⁶⁴ CRITFC EIS comments at 4-5.

¹⁶⁵ HCP section 11.1.3.

¹⁶⁶ Yakama protest at 4-5.

prevent NOAA Fisheries from timely exercising its authorities and the Commission from using reopener clauses as oversight.¹⁶⁷

113. We interpret the statement in section 11.1.3 that “any Party may pursue any other right they might otherwise have” in the event of an unresolved dispute to include resort to the standard fish and wildlife reopener clause in each license.¹⁶⁸ In this regard, the HCPs state¹⁶⁹ that the parties may not invoke the reopener provisions “for the purposes of obtaining additional measures or changes in project structures or operations for Plan Species. . .,” except under limited circumstances specified in the HCPs.¹⁷⁰ We interpret this to mean that the reopener provisions may be invoked for the purpose of resolving disputes pertaining to implementation of measures provided for in the HCPs, as opposed to measures not contemplated by these agreements.¹⁷¹

114. Also, the Commission may on its own motion use its reserved authority to reopen a license to address concerns about the implementation of the HCPs. Moreover, the agreement in HCP section 9 not to institute any action under the ESA, FPA, or other

¹⁶⁷ CRITFC EIS comments at 9. CRITFC also states that the EIS should have examined the environmental impacts of delays caused by section 11’s mechanisms. Id. We are not able to determine the environmental impacts of hypothetical future disputes.

¹⁶⁸ Standard-form fish and wildlife reopener articles are incorporated by reference in all the licenses. See Rock Island license, ordering paragraph (E), 46 FERC ¶ 61,033 at 61,208; Rocky Reach license, ordering paragraph (B), 18 FPC 33, 35; and Wells license, Article 41, 28 FPC 128, 134.

¹⁶⁹ Rocky Reach and Rock Island HCPs section 9.3; Wells HCP section 9.6.

¹⁷⁰ The HCPs reserve the rights of NOAA Fisheries and FWS to use section 18 if an HCP is terminated, or to request the inclusion in the license of plan species protection measures contained in a competing license application. Rocky Reach and Rock Island HCPs section 9.3; Wells HCP sections 9.5.2 and 9.5.3.

¹⁷¹ See Rocky Reach and Rock Island HCP section 9.7; Wells HCP section 9.10. We express no opinion on how these provisions might affect the exercise by NOAA Fisheries of its authorities under the ESA.

legislation applies only so long as the licensee is in compliance with the take permit, HCP, and Commission license.¹⁷² No party is restrained from making an allegation of non-compliance. Finally, these provisions are binding only on the parties, and so will have no effect on Yakama and Umatilla if they decline to execute the HCPs.

115. Finally, we think Yakama and CRITFC are unduly concerned that the HCPs will continue in place unchanged even if they fail to achieve their purpose. The HCPs provide that any party may withdraw if no net impact is not achieved on schedule; is achieved but not maintained; or is achieved and maintained, but the plan species are not rebuilding, and the project is a significant factor in the failure to rebuild.¹⁷³ A party that withdraws from the HCP is free to invoke any applicable reopener clause.

8. No-Surprises Policy

116. In a related vein, CRITFC and Yakama object to the no-surprises concept incorporated into the section 9 of the HCPs, on the ground that they rob the Commission of its ability to use reopener provisions to ensure compliance with the license.¹⁷⁴ As noted above, the Commission is not precluded from exercising its authority under any reopener clause.

9. Sturgeon and Pacific Lamprey

117. CRITFC states that the HCPs violate the Commission's trust responsibility because they do not cover sturgeon or lamprey,¹⁷⁵ and that passage facilities provided for

¹⁷² Rocky Reach and Rock Island HCPs section 9.1.2; Wells HCP section 9.4.2.

¹⁷³ HCP section 2.1.

¹⁷⁴. CRITFC EIS comments at 9; Yakama protest at 7.

¹⁷⁵ CRITFC protest at 5. A petition to have Pacific lamprey listed as threatened or endangered was filed with the FWS by numerous environmental organizations on January 28, 2003. FWS has not yet acted on the petition.

under the HCPs, such as turbine intake screens, may select against sturgeon or lamprey.¹⁷⁶

118. As noted, the licensees dispute CRITFC's assertion that off-reservation sturgeon and lamprey are trust resources. They add that the Mid-Columbia proceeding is in any event not concerned with those species, and that the appropriate forum for issues pertaining to those species is future relicense proceedings.¹⁷⁷

119. Whether or not sturgeon or Pacific lamprey are "trust resources," the purpose of the HCPs is to ensure compliance with the ESA regarding federally-listed salmonids and to prevent other Mid-Columbia salmonids with similar habitat and passage characteristics from becoming listed. The only indication that project operations may affect either sturgeon or Pacific lamprey is a non-specific citation to a single study which CRITFC states shows evidence of lamprey impingement on turbine screens.¹⁷⁸ The licensees respond that project impacts to lamprey are minimal, because the juvenile bypass system at Wells does not use turbine intake screens and cannot impinge lamprey; there are no intake screens at Rock Island; and test results at Rocky Reach indicate that lamprey travel at extreme depths, while the turbine screens (which are currently placed on only two of the eleven turbines) have a short depth designed to guide fish using the upper section of the turbine intakes.¹⁷⁹ Moreover, the EIS acknowledges that turbine intake screens may impinge juvenile lamprey, but notes that the tributary habitat projects are expected to benefit lamprey spawning and rearing.¹⁸⁰ Under these circumstances, we see no need for the HCPs to address these species. CRITFC may raise issues pertaining to lamprey and sturgeon in relicense proceedings.

¹⁷⁶ Yakama motion to intervene at 4; CRITFC motion to intervene at 5..

¹⁷⁷ Chelan answer to CRITFC at 8; Douglas answer at 8-9.

¹⁷⁸ CRITFC motion to intervene at 5 n.3.

¹⁷⁹ Joint response at 6.

¹⁸⁰ EIS at 4-49.

10. Mid-Columbia Coordinating Committee

120. The Mid-Columbia Coordinating Committee (MCCC) was formed in the Commission's Mid-Columbia proceeding (discussed above) to manage studies and interim protection for all the Mid-Columbia projects. Yakama charges that approval of the HCP would constitute a refusal to let Yakama participate in the MCCC, and alleges that NOAA Fisheries and FWS have refused to allow Yakama to participate in that body for almost a year. Yakama also objects to termination of the Mid-Columbia proceeding with respect to Rocky Reach, on the ground that its participation in the MCCC is necessary for protection of its treaty rights.¹⁸¹

121. The licensees dispute that they have precluded Yakama from participating in the MCCC. They add that since the Wells and Rock Island Agreements were approved and those projects were excluded from the Mid-Columbia proceeding, the requirements of those agreements have been administered by the Wells and Rock Island coordinating committees. Yakama, they state, is a party to both agreements, and accordingly is a member of both committees.¹⁸²

122. Chelan states that the HCP Coordinating Committee (HCPCC) decided in early 2003 that issues related to early implementation of the HCPs (i.e., voluntary implementation prior to receipt of all necessary approvals) and spill at its projects would be handled by the HCPCC, and that any decisions by the HCPCC would be taken to the MCCC and Rock Island committees for discussion. It states that CRITFC has participated in such meetings. Douglas adds that Yakama has not been excluded from,

¹⁸¹ Yakama protest at 7-8. Yakama also alleges that its exclusion from the HCP Committees unless it executes the HCPs violates Secretarial Order No. 3206, "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act." This order, which was issued jointly by the Secretaries of Commerce and the Interior on June 5, 1997, as amended, clarifies the responsibilities of the component agencies, bureaus, and offices when they take action that affects tribal interests. Section 2 states that the order is "for guidance within the Departments only." Because Order No. 3206 does not apply to this agency, we express no opinion regarding Yakama's allegations.

¹⁸² Chelan answer to CRITFC at 6-7; Douglas answer at 5-7.

and has been attending, meetings of the Wells coordinating committee.¹⁸³ Douglas adds that Yakama is not entitled to attend HCPCC meetings, because it has not signed the HCP, and that in any event the Wells HCP provides that it will only be implemented upon approval by the Commission. Until then, all decisions concerning the fishery and Wells will continue to be made under the auspices of the Wells committee.¹⁸⁴

123. We conclude from the licensees' responses that they have not attempted to exclude CRITFC or Yakama from participating in the various Mid-Columbia River fisheries committees established pursuant to Commission license requirements. As to the MCCC, we note that the Mid-Columbia proceeding has already been terminated with respect to Wells and Rock Island, but that the MCCC has continued to exist and to meet with participation of these licensees. With the approval of the Rocky Reach HCP, we will also terminate the Mid-Columbia proceeding as to that license. Thus, the Mid-Columbia proceeding will remain open only for Grant's Priest Rapids Project. We nevertheless expect the MCCC to continue to function as a forum for coordination and discussion among the interested entities of issues common to the Mid-Columbia River Basin.

124. CRITFC states that the trust responsibility requires tribal input into the management of trust resources, and that the HCPs violate that responsibility by preventing the tribes from co-managing the plan species unless they sign the HCPs.¹⁸⁵ As noted above, the Commission carries out its responsibilities under the FPA and other statutes with full recognition of tribal treaty and statutory rights. We agree that tribal participation in the management of the Columbia River fishery is consistent with those rights, but we also conclude that it would not be in the public interest to allow the tribes to participate in the HCPs unless they are bound by the same rules of participation as all other signatories.

¹⁸³ Douglas states that during the past two years Yakama has attended twelve, and CRITFC three, Wells coordinating committee meetings.

¹⁸⁴ Douglas answer at 5-7.

¹⁸⁵ CRITFC EIS comments at 13.

11. Release from Claims

125. Finally, HCP section 9 provides that the parties release the licensees from all claims concerning project impacts on the plan species, except for the obligations with respect to fish hatcheries.¹⁸⁶ Yakama urges us to strike this provision on the ground that it is inappropriate in the context of the ESA or FPA, or not permitted by NEPA, the ESA, and the FPA.¹⁸⁷

126. Nothing in the FPA or, to our knowledge, NEPA or the ESA bars a settling party from agreeing to release any claims it may have, in consideration for another party's acceptance of a settlement agreement's terms. Such provisions are quite common, because they enable the parties to a settlement agreement to resolve the matters in dispute with a high degree of certainty. An entity that is not willing to provide such a release need not execute the settlement agreement and may pursue its interests in any other forums available to it.

12. City of Entiat's Concerns

127. When Rocky Reach was constructed in the 1950s, the filling reservoir inundated the downtown core of the Entiat and surrounding waterfront areas, forcing relocation to upland areas of that city's commercial and industrial sector and causing the loss of local agricultural lands. In addition, Chelan obtained waterfront land in the immediate vicinity of the city. Entiat states that these actions resulted in the loss of taxable property, and that the city has never fully recovered from these and other effects of the original flooding and town relocation.

128. Entiat is concerned that the HCP Agreement could cause further erosion of the city's and school district's tax revenues. This could occur because of the acquisition of riparian lands located in the Entiat River Valley¹⁸⁸ or along the Rocky Reach reservoir,

¹⁸⁶ Rocky Reach and Rock Island HCPs section 9.1; Wells HCP section 9.4.1.

¹⁸⁷ Yakama protest at 8-9.

¹⁸⁸ The Entiat River flows southeast from the Cascade Mountains to its confluence with the Rocky Reach reservoir a few miles above the project dam.

which lands would either be removed from the local tax base or would have their taxing status changed as a result of their use for wildlife habitat. Entiat also fears that unspecified measures in the HCP could create an influx of jobs and population in local communities, placing additional demands on local government and the school district.¹⁸⁹ Entiat states that the EIS inadequately analyzed the potential impacts of the HCP Agreements on local governments and communities, and on Entiat in particular. It requests that the Commission supplement the EIS to address these asserted deficiencies.

129. Chelan replies that Entiat's concerns about additional erosion to its tax base or demands on municipal services are highly speculative. It notes that the tributary conservation plan covers a very large area, from Chief Joseph Dam to the Rock Island tailrace, of which the area within Entiat is a very small portion. It adds that although the plan contemplates the purchase of interests in lands, it also contemplates many other measures that are likely to have no impact on property rights or tax base.¹⁹⁰ Chelan also asserts that the measures under consideration, including in-stream structures and revegetation, noxious weed control, and restoration of stream channel geomorphology, are not large-scale and are unlikely to cause any appreciable influx of jobs or people.

130. The Commission's consideration under FPA section 10(a)(1) of all public interest uses of a waterway encompass the socio-economic consequences of a project. It is possible that at these projects some land could be removed from the local tax base, for instance if title to the land were transferred to a governmental agency. However, whether that will ever happen, and if so, to what extent, is purely speculative at this point. We therefore do not find socio-economic mitigation measures warranted at this time.

III. Commission Consultation Under ESA Section 7(a)

131. Section 7(a) of the ESA requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally-listed threatened and endangered species, or result in the destruction or adverse modification of designated critical habitat.

¹⁸⁹ Entiat comments at 1-3.

¹⁹⁰ These could include in-stream structures and revegetation, noxious weed control, and restoration of stream channel geomorphology.

132. Federally-listed aquatic species that inhabit the Mid-Columbia River Basin include the endangered evolutionarily significant units of Upper Columbia River steelhead and spring-run chinook salmon.¹⁹¹ By letter to NOAA Fisheries of December 9, 2003, the Commission requested formal consultation pursuant to ESA section 7 regarding all three amendment applications. NOAA Fisheries' final Biological Opinions for the Wells, Rocky Reach, and Rock Island applications were filed on March 8, 2004. The Biological Opinions find that incorporating the HCPs into the licenses is not likely to jeopardize the continued existence of the federally endangered salmonids or their critical habitat.¹⁹²

133. Federally listed species under the jurisdiction of the FWS that inhabit the Mid-Columbia River Basin include the threatened bull trout, bald eagle, and grizzly bear, and the endangered Ute ladies'-tresses. By letter to FWS of December 9, 2003, the Commission requested formal consultation pursuant to ESA section 7 regarding all three projects. On January 16, 2004, the Commission amended its request to include formal conferencing¹⁹³ on the effects of the proposed actions on areas of proposed critical habitat for bull trout.¹⁹⁴ FWS' final Biological Opinion for the Wells, Rocky Reach, and Rock Island applications was filed on May 13, 2004. It concurs with the Commission that incorporating the HCPs into the licenses is not likely to jeopardize the continued existence or critical habitat of the bull trout or of the federally-listed terrestrial species.

¹⁹¹ See n. 24, above.

¹⁹² Yakama asserts that ESA section 7 and NOAA Fisheries' HCP Handbook bar a federally-licensed project from receiving a take permit pursuant to ESA section 10, and that NOAA Fisheries must instead prepare an incidental take statement for such projects. Yakama protest at 17. Whether NOAA Fisheries' issuance of the take permits complies with the ESA is a matter for a reviewing court rather than this Commission.

¹⁹³ Conferencing is similar to consultation, except that it applies to the effects of a proposal on critical habitat.

¹⁹⁴ FWS designated proposed critical habitat for bull trout in 2002. 67 Fed. Reg. 71,277 (November 29, 2002).

134. Its non-jeopardy opinion notwithstanding, FWS' Biological Opinion finds that operation of the Projects' turbines, juvenile bypass facilities, adult fishways, and spillways results in incidental take of bull trout. Its Biological Opinion thus contains an Incidental Take Statement for each of the Projects, setting forth Reasonable and Prudent Measures (RPMs) and associated Terms and Conditions for the implementation of the RPMs.¹⁹⁵ The RPMs and Terms and Conditions are attached to each of the project-specific orders, and appropriate license articles are also added.¹⁹⁶

135. ESA section 7(a)(1)¹⁹⁷ directs federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. USFWS' Biological Opinion includes three conservation recommendations regarding bull trout, which are the same for all three Projects. These are discussed below.

¹⁹⁵ USFWS also finds that whether there is incidental take from the implementation of the tributary habitat and hatchery compensation plans cannot be determined until the specific measures are developed, and that separate ESA section 7 consultation will be required when those measures are developed. See, e.g., Biological Opinion, at 95.

¹⁹⁶ See Rocky Reach Article 411, Rock Island Article 414, and Wells Article 61. The Incidental Take Statement also purports to require the Commission to prepare and submit to FWS detailed annual reports on the implementation of the RPMs and Terms and Conditions, including the impact of implementing these measures on bull trout. See, e.g., FWS Biological Opinion at 90. As the RPMs and Terms and Conditions become terms of the license, which governs only the actions of the licensee, we think FWS has exceeded its authority. In any event, we have included in each of the licenses an article requiring the licensee's plans to implement the RPMs and Terms and Conditions to include a provision for the requested annual reports. See, e.g., new Rocky Reach Article 412.

¹⁹⁷ 16 U.S.C. § 1536(a)(1).

1. Develop the monitoring plans called for in the Terms and Conditions through a collaborative process with the FWS, NOAA Fisheries, Washington Department of Fish and Wildlife, relevant Indian tribes, or any other entities these entities deem appropriate.

The new articles requiring the licensee to comply with the RPMs and Terms and Conditions is consistent with this recommendation.

2. Continued participation by the licensee in the development and implementation (when completed) of a bull trout recovery plan.

We have not adopted this recommendation in the form recommended by FWS. Although we believe the licensees should participate in the development and implementation of a bull trout recovery plan, the recommendation as framed by FWS is unduly vague. We are therefore reserving authority to require the licensees to participate in the development and implementation of such a plan and will exercise that authority by imposing specific requirements in order to resolve and disputes between FWS and the licensees regarding specific measures the licensees are requested to take.

3. Continued monitoring by the Licensee of total dissolved gas (TDG) and investment in facility improvements to keep TDG levels at or below 110%, or other applicable state water quality standards.

As noted above, the licensees are voluntarily monitoring and complying with the Washington State Water Quality Standards for temperature and dissolved oxygen in the context of the federal fish passage programs for the Columbia River. This recommendation is therefore superfluous and will not be adopted.

IV. Essential Fish Habitat

136. Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act¹⁹⁸ requires federal agencies to consult with the Secretary of Commerce (Secretary) regarding any action or proposed action authorized, funded, or undertaken by the agency that may adversely affect Essential Fish Habitat identified under that act. The Secretary may recommend measures for the protection of Essential Fish Habitat. Section 305(b)(4)(B)¹⁹⁹ of that act requires an agency, within 30 days after receiving recommended measures from NOAA Fisheries or a Regional Fishery Management Council, to describe the measures proposed by the agency for avoiding, mitigating, or offsetting the effects of the agency's action on the Essential Fish Habitat. If the agency does not agree with the Secretary's recommended measures, it must explain its reasons for not following the recommendations.

137. In the same March 8, 2004 letters in which it provided its final Biological Opinions on the license amendment applications, NOAA Fisheries also determined that the Essential Fish Habitat consultation and requirements in its Biological Opinions on the take permit applications apply to the license amendment application proceedings.

V. FPA Section 18 Fishway Prescriptions

138. Section 18 of the FPA²⁰⁰ states that the Commission shall require construction, maintenance, and operation by a licensee of "such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce, as appropriate." The HCPs state that NOAA Fisheries and FWS reserve authority to prescribe fishways pursuant to section 18 if an HCP is terminated.²⁰¹

¹⁹⁸ 16 U.S.C. § 1855(b)(2).

¹⁹⁹ 16 U.S.C. § 1855(b)(4)(B).

²⁰⁰ 16 U.S.C. § 811.

²⁰¹ Rocky Reach and Rock Island HCP section 9.2.2; Wells HCP section 9.5.2.

139. Yakama asserts that the EIS is deficient because it does not discuss whether the HCPs fulfill “the obligations of [NOAA Fisheries] under its FPA [section 18] conditioning authority.”²⁰² As discussed above, the purpose of an EIS is to analyze proposed actions and reasonable alternatives, not to determine whether the action agency has complied with its statutory mandates. In any event, NOAA Fisheries’ decision not to prescribe fishways is not a matter reviewable by this Commission.

VI. Water Quality Certification

140. Under section 401(a)(1) of the Clean Water Act (CWA),²⁰³ a state or tribal water quality certification agency must issue or waive certification of any proposed action requiring a federal agency license or permit that “may result in any discharge into . . . navigable waters.” American Rivers asserts that the instant license amendment applications trigger the requirement that the licensees obtain water quality certification. Douglas and Chelan respond that no certification is required, because the HCPs do not involve any activities that would result in a “discharge” within the meaning of CWA section 401(a)(1), and that discussion of water quality certification is premature, since no specific measures have been established that Ecology could review for compliance with state standards.²⁰⁴

141. The licensees are not required to apply for water quality certification for these amendments. The only identified component of the HCPs that results in any change in discharge is the installation of the Rocky Reach permanent fish bypass facility, for which Chelan has already obtained certification and Commission authorization.²⁰⁵ We note as well that Ecology was a participant in the HCP negotiations, has intervened in this proceeding, and has not suggested that certification is required in order to implement the HCPs.

²⁰² July 29 letter at 7.

²⁰³ 33 U.S.C. § 1341(a)(1).

²⁰⁴ Chelan answer to American Rivers at 8; Douglas answer at 14-15.

²⁰⁵ See Public Utility District No. 1 of Chelan County, WA, 99 FERC ¶ 61,059, reh’g denied, 100 FERC ¶ 61,216 (2002).

142. It is possible that measures could be developed for Phase II implementation which would involve modifications to project operations and could cause discharges not currently authorized under the licenses. Should such modifications be needed, a license amendment application would be required, and the issue of certification would be revisited at that time.

VII. Cultural Resources

143. Section 106 of the National Historic Preservation Act (NHPA)²⁰⁶ requires the Commission to take into account the effects of its actions on historic properties and to afford the Advisory Council on Historic Preservation (Advisory Council) a reasonable opportunity to comment.

144. By letter to the Washington State Historic Preservation Officer (SHPO) and Colville, Umatilla, and Yakama dated March 4, 2004, the Commission staff determined that the Area of Potential Effect for the HCPs includes all lands from 1,000 feet downstream of the Rock Island project tailrace upstream to the tailrace of Chief Joseph Dam. The letter concludes that any modifications to project structures and operations under the HCPs will have no effect on any properties listed on the National Register of Historic Places or eligible therefore.

145. Concerning the tributary habitat enhancement program, the March 4 letter concludes that existing license articles will require consultation with the SHPO before any tributary enhancement work is done within the project boundaries of the Rocky Reach and Rock Island Projects.²⁰⁷ The Wells license has no comparable articles, but

²⁰⁶ 16 U.S.C. § 470f.

²⁰⁷ Article 409 of the Rock Island license requires Chelan to develop a Cultural Resources Management Plan (CRMP) in consultation with the SHPO, Advisory Council, and Colville. 46 FERC ¶ 61,033 at 61,210. The CRMP was approved in 1990. 53 FERC ¶ 62,255.

Article 410 of the Rock Island license requires Chelan to stop work if it discovers any previously unidentified sites during land-disturbing activities and, if any are found, to file for approval a CRMP with respect to the sites. 46 FERC at 61,210.

(continued)

staff recommends that any order approving the Wells HCP should require inclusion of a license article similar to those in Rock Island and Rocky Reach and requiring consultation with Colville, because there are reservation lands located within the project boundary. The March 4 letter also states that any HCP-related work outside of the project boundaries would not be subject to the Commission's jurisdiction.

146. Responses to the March 4 letter were due by April 4, 2004. Colville concurred with the no-effect finding, subject to the stipulation that the Cultural Resource Management Plans²⁰⁸ are reviewed and updated in consultation with the Colville Tribal Historic Preservation Officer, and are administered consistent with applicable laws and regulations. The SHPO stated that it concurred, subject to the understanding that consideration of cultural resources during habitat enhancement activities outside the project boundaries will be addressed by the responsible federal agency or agencies, and requested that a map be prepared showing the Areas of Potential Effect for the three projects. In light of the following discussion concerning the relationship between potential effects of the tributary enhancement program, we will require the licensees to provide Area of Potential Effect maps that delineate the potential extent of tributary enhancement measures that could affect cultural resources.

147. The March 4 letter suggests that consultation is not required for actions in the tributary enhancement program outside of existing project boundaries. However, an order issued recently in another proceeding²⁰⁹ clarifies the relationship between a licensee's responsibilities and the project boundary. The project boundary indicates that the lands within are used for project purposes. This helps to reduce ambiguity for purposes of license administration and compliance by clarifying the geographical scope of the licensee's responsibilities under its license (and the Commission's regulatory

Article 49 of the Rocky Reach license requires Chelan to consult with the SHPO before any construction at the project to determine the need for cultural resources surveys. 22 FERC ¶ 62,348 at 63,510.

²⁰⁸ A CRMP has been approved for Rock Island. The licensees have voluntarily executed memoranda of agreement with the SHPO for Rocky Reach and Wells, but these have not been incorporated into the existing licenses.

²⁰⁹ Power Authority of the State of New York, 107 FERC ¶ 61,259 (2004).

responsibilities), but it does not define those responsibilities and does not always fully indicate the geographic extent of those responsibilities. Small areas outside of the project boundary needed for project purposes and requirements to carry out one-time actions outside of the project boundary may not require the locations where the acts are to be performed to be included within the existing project boundary.

148. The activities to be carried out under the tributary enhancement programs outside of the project boundaries are requirements of the licenses, and therefore are subject to the consultation requirements of NHPA section 106. These sites may not, however, need to be included within the project boundary, because they may involve small areas or one-time actions.

149. We conclude that the Rock Island and Rocky Reach licenses require only minor changes to ensure that any actions outside of the project boundaries and on non-federal lands pursuant to the tributary enhancement programs are in compliance with the NHPA. The Wells license should also be modified to include a requirement to consult with respect to any ground-disturbing activities that may occur within the project boundary or outside of the project boundary on non-federal lands pursuant to the tributary enhancement program. For any such activities that occur on lands administered by another federal agency, it is appropriate for that agency to conduct any necessary consultation under the NHPA. We are also requiring the licensees to develop maps of the Areas of Potential Effect which indicate the off-site areas in which tributary enhancements may be located. The companion orders issued today make the necessary changes.

VIII. License Articles

150. Finally, we note that the parties' applications include draft license articles approving their applications.²¹⁰ We have used these recommended articles as a model, but have made one noteworthy change. The HCP Agreements provide in Phase II for unspecified "additional tools" to be employed if the standards are not being met. General criteria for the selection of such additional tools are set forth, but there are no apparent limits on what these tools might be.²¹¹ Such additional tools may include changes to

²¹⁰ See, e.g., Rocky Reach application, section V, p. 26.

²¹¹ See, e.g., Rocky Reach HCP Agreement, section 5.3.2.

project facilities and operations that are not currently authorized, and we do not intend, by approving the HCP Agreements, to give the licensees a general authorization to make any changes to project facilities or operations not specifically identified in those agreements. We have therefore included in each companion order a requirement to apply for an amendment to the project license for any such changes in facilities or operations.

151. In conclusion, we find that the HCPs are in the public interest, because they will put into place a program likely to assist in the recovery of the endangered salmonids and to help prevent other salmonids from becoming listed. We will therefore include them in the Wells, Rocky Reach, and Rock Island licenses as special articles.

The Commission orders:

(A) The U.S. Department of the Interior's late motion to intervene, filed January 16, 2004, in Project Nos. 2145-57, 943-083, and 2149-106, is granted.

(B) The U.S. Department of Agriculture's January 9, 2004 motion to intervene in Project No. 2149 is granted.

(C) The Application for Approval of the Wells Anadromous Fish Agreement and Habitat Conservation Plan and Adoption as an Amendment of License, filed on November 24, 2003, by Public Utility District No. 1 of Douglas County, Washington, in Project No. 2149-106, is approved, as discussed in this order and as implemented in the companion order issued today in Public Utility District No. 1 of Douglas County, WA, 107 FERC ¶ 21,283.

(D) The Application for Approval of the Rock Island Anadromous Fish Agreement and Habitat Conservation Plan and Adoption as an Amendment of License, filed on November 24, 2003, by Public Utility District No. 1 of Chelan County, Washington, in Project No. 943-083, is approved, as discussed in this order and implemented in the companion order issued in Public Utility District No. 1 of Chelan County, WA, 107 FERC ¶ 61,282.

(E) The "Application for Approval of the Rocky Reach Anadromous Fish Agreement and Habitat Conservation Plan as an Offer of Settlement and Adoption as an Amendment of License," filed on November 24, 2003, by Public Utility District No. 1 of Chelan County, Washington, in Project No. 2145-057 is approved, as discussed in this order and implemented in the companion order issued in Public Utility District No. 1 of Douglas County, WA, 107 FERC ¶ 61,281.

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(F) The Mid-Columbia Proceeding is terminated insofar as it pertains to Rocky Reach Project No. 2145.

By the Commission. Commissioner Kelly not participating.

(S E A L)

Linda Mitry,
Acting Secretary.

**U.S. FISH AND WILDLIFE SERVICE
REASONABLE AND PRUDENT MEASURES
AND IMPLEMENTING TERMS AND CONDITIONS
REGARDING BULL TROUT**

Reasonable and Prudent Measures

RPM 1. The Licensee to develop and implement, in coordination with the U.S. Fish and Wildlife Service (Service), appropriate measures to reduce impediments to up and downstream passage of adult and juvenile bull trout at Rocky Reach Dam and its associated reservoir system. Should measures to reduce impediments to up- and downstream passage of bull trout warrant consideration of additional modifications to facilities or operations, as determined by the Service in consultation with the Commission and the Licensee, the Service will work with the Commission and the Licensee to insure that these measures are implemented, as appropriate, or recommend that the Commission reinitiate consultation if necessary.

RPM 2. The Licensee shall design a monitoring program to (1) detect adverse effects resulting from the proposed action, (2) assess the actual level of incidental take in comparison with the anticipated incidental take level documented in the biological opinion, (3) detect when the level of anticipated incidental take is exceeded, and (4) determine the effectiveness of reasonable and prudent measures and their implementing terms and conditions. Specifically, the program shall be designed to monitor the abundance, distribution, and timing of adult and juvenile bull trout utilizing Rocky Reach Dam and its associated reservoir system. Implementation of this monitoring program shall begin no later than May 1, 2005. If information from the monitoring efforts warrants consideration of additional modifications to facilities or operations for the minimization of project effects on bull trout, as determined by the Service in consultation with the Commission and the Licensee, the Service will work with the Commission and the Licensee to insure these measures are implemented, as appropriate, or recommend that the Commission reinitiate consultation if necessary.

Terms and Conditions

1. To implement RPM 1, the Licensee shall develop, in coordination with the Service, a prioritized list of monitoring efforts necessary to evaluate the effects of the Project on the up- and downstream passage needs of bull trout at Rocky Reach Dam by February 28, 2005. Based on that prioritized list, the Licensee shall initiate studies to evaluate the up- and downstream passage needs for bull trout at Rocky Reach Dam and to assess the Project impacts on those passage needs. If the information from these studies warrants consideration of modifications to facilities or operations to reduce the take of bull trout, as determined by the Service in consultation with the Commission and the Licensee, then

the Service will work with the Commission and the Licensee to ensure that these measures are implemented, as appropriate, or recommend that the Commission reinstate consultation if necessary.

2. To implement RPM 1, the Licensee shall, in coordination with the Service, develop a prioritized list of monitoring efforts necessary to determine the extent of bull trout entrainment through the turbines at Rocky Reach Dam by February 28, 2005. If the studies contained in the prioritized list are determined by the Service, in consultation with the Commission and the Licensee, to be feasible, the Licensee shall be required to assess the extent of bull trout entrainment through the turbines at Rocky Reach Dam. If entrainment is determined to be significant, the Licensee will be required to explore techniques to minimize bull trout entrainment through the turbines.

3. To implement RPM 2, the Licensee shall, in coordination with the Service, develop and implement a comprehensive bull trout monitoring program, that includes the presence of a sufficient number of radio-tagged (or other appropriate tracking technology) bull trout, to enable monitoring of bull trout utilizing Rocky Reach Dam and its associated reservoir system and tracking of the incidental take exemptions stated above.

4. During the interim period between the Commission's issuance of an order amending the Project license to include these RPMs and Terms and Conditions and the implementation of the monitoring plan called for in RPM 2, the Licensee shall implement the following action items; specifically:

1. Continue assessment of the Rocky Reach juvenile bypass system on migratory bull trout and juvenile bull trout where feasible.
2. Extend fish ladder monitoring period to assess adult bull trout utilization of existing fishways outside the traditional migratory timeframes.
3. Continue coordinated telemetry monitoring of radio-tagged bull trout.
4. Compile project operational data linked to timeframes when adult migratory bull trout pass project powerhouses and/or spill gates.
5. Cost share funding with the Service for analysis of genetic samples from fluvial bull trout sampled during the first year of the Mid-Columbia Bull Trout Study.

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6. Participate in a coordinated effort with the Service to increase the informational database for adult bull trout that utilize the Methow/Twisp river system.

If the level of incidental take on which these RMPs and Terms and Conditions is exceeded, such incidental take represents new information requiring reinitiation of consultation and review of the reasonable and prudent measures provided.

**FERC Order Amending Wells Project License
June 21, 2004**

107 FERC ¶ 61,283
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
Nora Mead Brownell, and Joseph T. Kelliher.

Public Utility District No. 1 of
Douglas County, Washington

Project No. 2149-106

ORDER AMENDING LICENSE

(Issued June 21, 2004)

1. This order approves the application of Public Utility District No. 1 of Douglas County, Washington (Douglas), to amend the license for the Wells Project No. 2149 in order to implement the terms of an Anadromous Fish Settlement and Habitat Conservation Plan (HCP) designed to protect Mid-Columbia River Basin salmonids, in particular threatened and endangered species. The Wells HCP and HCPs for two other Mid-Columbia River licensed projects licensed to P.U.D. No. 1 Chelan County, Washington (Chelan) were approved in a companion order issued today (Master Order).¹ These orders will serve the public interest by putting into place a long-term program to aid in the recovery of the endangered species and help to prevent other salmonids from becoming listed.

Background

2. The long history of the Columbia River anadromous fishery problem and the efforts of many actors to resolve issues specific to the Mid-Columbia River Basin are summarized in the Master Order and need not be repeated here. It suffices to say that there are four major hydroelectric projects comprising five dams on the Mid-Columbia River, all of which are under Commission license. In order from upstream to downstream they are Wells, Chelan's Rocky Reach and Rock Island Projects, and Public

¹ Public Utility District No. 1 of Chelan County, WA, et al., 107 FERC ¶ 61,280 . Separate orders amending the licenses for Chelan's Rocky Reach Project No. 2145 and Rock Island Project No. 943 to implement project-specific HCPs are also being issued today. Public Utility District No. 1 of Chelan County, WA, 107 FERC ¶ 61,281 (Rocky Reach) and ¶ 61,282 (Rock Island).

Utility District No. 2 of Grant County Washington's (Grant) Wanapum-Priest Rapids Project No. 2114 (consisting of Wanapum and Priest Rapids Dams). In the late 1980's, the Commission commenced what has become known as the Mid-Columbia proceeding, in an effort to resolve anadromous fish issues for the licensed Mid-Columbia projects. Project-specific agreements were negotiated for Rock Island and Wells, which are conditions of those licenses. The Rocky Reach license has been amended to authorize installation of permanent downstream fish passage facilities. Grant is currently required to release interim spill flows from Wanapum-Priest Rapids to assist downstream migration.

3. As these events were unfolding, two species of Columbia River salmonids were federally listed as threatened under the Endangered Species Act (ESA).² In the early 1990s, discussion commenced among the licensees, National Marine Fisheries Service within the U.S. Department of Commerce (NOAA Fisheries), U.S. Fish and Wildlife Service (FWS), Indian tribes, and others, with the intention of developing long-term plans for the recovery of the listed salmonids and to prevent further listings (HCPs). HCP Agreements were reached for Wells, Rocky Reach, and Rock Island. Applications for approval of the HCPs and for incidental take permits³ pursuant to ESA section 10 were filed by Chelan with respect to Rocky Reach and Rock Island, and by Douglas with respect to Wells. NOAA Fisheries granted the requested approvals and permits.

4. Chelan and Douglas also filed separate applications with the Commission for approval of the project-specific HCPs and for amendment of the Rocky Reach, Rock Island, and Wells licenses to incorporate those documents into the appropriate licenses as special articles. The applications are opposed by the Confederated Tribes and Bands of the Yakama Indian Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Columbia River Intertribal Fish Commission, and American Rivers.

5. The Master Order addresses the objections of these parties and concludes that the HCPs are in the public interest and should be approved. We incorporate that discussion here by reference. Consistent with the Master Order, this order amends the Wells license to incorporate the HCPs.

6. Also, the FWS issued a Biological Opinion pursuant to ESA section 7 regarding the effects of the projects with respect to various federally-listed threatened and

² 42 U.S.C. § 4321 et seq.

³ An incidental take permit exempts the permittee from the prohibition on taking of threatened or endangered species of section 9 of the ESA (16 U.S.C. § 1538).

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endangered species. FWS found that incorporating the HCPs into the licenses is not likely to jeopardize the continued existence of the endangered bull trout, but did find that the operation of the three projects under the HCPs would result in incidental take of bull trout. Its Biological Opinion thus includes an incidental take statement with respect to each project, including Reasonable and Prudent Measures (RPMs) and associated Terms and Conditions for implementing the RPMs. The RPMs and Terms and Conditions for Rocky Reach are attached to this order, which also adds new license articles requiring them to be implemented.

7. Finally, a minor modification is made to require the licensee to prepare a map indicating the areas which might be affected by implementation of the HCP.

The Commission orders:

(A) The application of Public Utility District No. 1 of Douglas County, Washington, for approval of the Wells Project No. 2149 Anadromous Fish Agreement and Habitat Conservation Plan, and for its adoption as an amendment to the project license, is granted.

(B) The following new article is added to the project license:

Article 59. (a) The licensee shall carry out its obligations as set forth in the Anadromous Fish Agreement and Habitat Conservation Plan (HCP Agreement) for the Wells Hydroelectric Project No. 2149 filed with the Commission on November 24, 2003, and as approved by the Commission at 107 FERC ¶ 61,280 and ¶ 61,283. Further, the licensee shall file with the Commission (1) the final annual and comprehensive progress reports developed pursuant to the HCP Agreement; and (2) the final results of all studies and testing pursuant to the HCP Agreement.

(b) Prior to taking any action pursuant to the HCP Agreement that requires a change in the authorized project facilities or operations not specifically identified in the HCP Agreement, the licensee shall file a license amendment application.

(c) The licensee shall file design drawings prior to the implementation of any modification or addition to project works that is necessary to implement the HCP Agreement. The licensee shall file such design drawings for Commission approval at least 90 days prior to the start of construction or modification. The licensee will file as-built drawings with the Commission within 6 months after completion of construction or modification.

(C) Article 60 is added to the project license, to read as follows:

Article 60. The licensee, prior to the commencement of any ground-disturbing activity at the Project site or on non-federal lands pursuant to the Tributary Conservation Plan provisions of the Habitat Conservation Plan Agreement approved by the Commission at 107 FERC ¶ 61,280 and ¶ 61,283, shall consult with the Washington State Historical Preservation Officer (SHPO) and potentially affected Indian tribes about the need for a cultural resources survey. For this purpose, the licensee shall within 90 days prepare and provide to the SHPO and potentially affected Indian tribes a map delineating the Area of Potential Effect as defined in 36 C.F.R. § 800.16(d), and the map shall include potential geographical scope of actions under the Tributary Conservation Plan. If any previously unrecorded archeological or historical sites are discovered during the course of such survey or activity, ground-disturbing activity in the vicinity shall be halted, a qualified archeologist shall be consulted to determine the significance of the sites, and the licensee shall consult with the SHPO and tribes to develop a mitigation plan for the protection of significant archeological or historical resources. The Commission reserves authority to resolve any disputes between the licensee and the consulted entities.

(D) New Article 61 is added to the Project license, to read as follows:

Article 61. Bull Trout – Reasonable and Prudent Measures and Terms and Conditions. (a) Within six months of the issuance of the order amending license issued at 107 FERC ¶ 61,283 (2004), the licensee shall file for Commission approval a plan to implement the Reasonable and Prudent Measures and associated Terms and Conditions said order. The plan shall include provision for the annual report required by Article 412. The plan shall be prepared in consultation with the U.S. Fish and Wildlife Service, NOAA Fisheries, Washington Department of Fish and Wildlife, and interested Indian tribes.

(b) The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the consulted entities, and specific descriptions of how the entities' comments and recommendations are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reason's based on project-specific information.

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(c) The Commission reserves the right to require changes to the plan. The plan shall not be implemented until the licensee is notified by the Commission that the plan is approved. Upon approval of the plan, the licensee shall implement the plan, including any changes required by the Commission.

(E) New Article 62 is added to the project license, to read as follows:

Article 62. Annual Reports -- Implementation of Reasonable and Prudent Measures. (a) The licensee shall prepare and file with the Commission an annual report describing the impacts of the Reasonable and Prudent Measures and associated Terms and Conditions prescribed by the U.S. Fish and Wildlife Service for the protection of bull trout. The report shall also be submitted to the Central Washington Field Office of the U.S. Fish and Wildlife Service and shall list and describe any adverse effects resulting from project activities on bull trout, including the number and life stages of individuals affected.

(b) Upon locating a dead, injured, or sick endangered or threatened species specimen, the licensee shall initially notify the Central Washington Field Office (Wenatchee, Washington; telephone 509-664-0658) within 48 hours. The licensee shall take care in handling sick or injured specimens to ensure effective treatment and care or the handling of dead specimens to preserve biological material in the best possible state for later analysis of cause of death. In conjunction with the care of sick or injured endangered species or preservation of biological materials from a dead animal, the licensee shall carry out instructions provided by the Service to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed.

(F) New Article 63 is added to the project license, to read as follows:

Article 63. Reservation of Authority – Bull Trout Recovery Plan. Authority is reserved to the Commission to require the licensee to carry out specified measures for the purpose of participating in the development and implementation of a bull trout recovery plan.

By the Commission. Commissioner Kelly not participating.

(S E A L)

Linda Mitry,
Acting Secretary.

APPENDIX

U.S. FISH AND WILDLIFE SERVICE REASONABLE AND PRUDENT MEASURES AND IMPLEMENTING TERMS AND CONDITIONS REGARDING BULL TROUT

Reasonable and Prudent Measures

RPM 1. The Licensee to develop and implement, in coordination with the U.S. Fish and Wildlife Service (Service), appropriate measures to reduce impediments to up and downstream passage of adult and juvenile bull trout at Wells Dam and its associated reservoir system. Should measures to reduce impediments to up- and downstream passage of bull trout warrant consideration of additional modifications to facilities or operations, as determined by the Service in consultation with the Commission and the Licensee, the Service will work with the Commission and the Licensee to insure that these measures are implemented, as appropriate, or recommend that the Commission reinitiate consultation if necessary.

RPM 2. The Licensee shall design a monitoring program to (1) detect adverse effects resulting from the proposed action, (2) assess the actual level of incidental take in comparison with the anticipated incidental take level documented in the biological opinion, (3) detect when the level of anticipated incidental take is exceeded, and (4) determine the effectiveness of reasonable and prudent measures and their implementing terms and conditions. Specifically, the program shall be designed to monitor the abundance, distribution, and timing of adult and juvenile bull trout utilizing Rocky Reach Dam and its associated reservoir system. Implementation of this monitoring program shall begin no later than May 1, 2005. If information from the monitoring efforts warrants consideration of additional modifications to facilities or operations for the minimization of project effects on bull trout, as determined by the Service in consultation with the Commission and the Licensee, the Service will work with the Commission and the Licensee to insure these measures are implemented, as appropriate, or recommend that the Commission reinitiate consultation if necessary.

Terms and Conditions

1. To implement RPM 1, the Licensee shall develop, in coordination with the Service, a prioritized list of monitoring efforts necessary to evaluate the effects of the Project on the up- and downstream passage needs of bull trout at Wells Dam by February 28, 2005. Based on that prioritized list, the Licensee shall initiate studies to evaluate the up- and downstream passage needs for bull trout at Rocky Reach Dam and to assess the Project

impacts on those passage needs. If the information from these studies warrants consideration of modifications to facilities or operations to reduce the take of bull trout, as determined by the Service in consultation with the Commission and the Licensee, then the Service will work with the Commission and the Licensee to ensure that these measures are implemented, as appropriate, or recommend that the Commission reinstitute consultation if necessary.

2. To implement RPM 1, the Licensee shall, in coordination with the Service, develop a prioritized list of monitoring efforts necessary to determine the extent of bull trout entrainment through the turbines at Rocky Reach Dam by February 28, 2005. If the studies contained in the prioritized list are determined by the Service, in consultation with the Commission and the Licensee, to be feasible, the Licensee shall be required to assess the extent of bull trout entrainment through the turbines at Rocky Reach Dam. If entrainment is determined to be significant, the Licensee will be required to explore techniques to minimize bull trout entrainment through the turbines.

3. To implement RPM 2, the Licensee shall, in coordination with the Service, develop and implement a comprehensive bull trout monitoring program, that includes the presence of a sufficient number of radio-tagged (or other appropriate tracking technology) bull trout, to enable monitoring of bull trout utilizing Rocky Reach Dam and its associated reservoir system and tracking of the incidental take exemptions stated above.

4. During the interim period between the Commission's issuance of an order amending the Project license to include these RPMs and Terms and Conditions and the implementation of the monitoring plan called for in RPM 2, the Licensee shall implement the following action items; specifically:

1. Extend the fish ladder monitoring period to assess adult bull trout use of existing fishways outside of the traditional migratory timeframes.
2. Continue coordinated telemetry monitoring of radio-tagged bull trout.
3. Compile project operational data linked to timeframes when adult migratory bull trout pass project powerhouses and/or spill gates.
4. Cost share funding with the Service for analysis of genetic samples from fluvial bull trout sampled during the first year of the Mid-Columbia Bull Trout Study.

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5. Participate in a coordinated effort with the Service to increase the informational database for adult bull trout that utilize the Methow/Twisp river system.

If the level of incidental take on which these RMPs and Terms and Conditions is exceeded, such incidental take represents new information requiring reinitiation of consultation and review of the reasonable and prudent measures provided.

**FERC Order on Rehearing
November 23, 2004**

109 FERC ¶ 61,208

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
Nora Mead Brownell, Joseph T. Kelliher,
and Suedeene G. Kelly.

Public Utility District No. 1 of
Chelan County, Washington

Project Nos. 2145-062
and 943-089

Public Utility District No. 1 of
Douglas County, Washington

Project No. 2149-113

ORDER ON REHEARING

(Issued November 23, 2004)

1. On June 21, 2004, the Commission issued a master order and three project-specific companion orders in this proceeding. The orders approve project-specific Anadromous Fish Agreement and Habitat Conservation Plans (HCPs) regarding the operation of the Rocky Reach Project No. 2145 and the Rock Island Project No. 943, which are licensed to Public Utility District No. 1 of Chelan County, Washington (Chelan) and the Wells Project No. 2149, which is licensed to Public Utility District No. 1 of Douglas County, Washington (Douglas).¹

2. A joint request for rehearing was filed by the Columbia River Inter-Tribal Fish Commission, the Confederated Tribes and Bands of the Yakama Nation (Yakama) and the Confederated Tribes of the Umatilla Indian Reservation (together, CRITFC). A joint request for rehearing and clarification was filed by Chelan, Douglas, the National Marine Fisheries Service (NOAA Fisheries), the Washington Department of Fish and Wildlife

¹ *P.U.D. No. 1 of Chelan County, WA*, 107 FERC ¶ 61,280 (master order); *P.U.D. No. 1 of Chelan County, WA*, 107 FERC ¶ 61,281 (Rocky Reach); *P.U.D. No. 1 of Chelan County, WA*, 107 FERC ¶ 61,282 (Rock Island); *P.U.D. of Douglas County, WA*, 107 FERC ¶ 61,283 (Wells).

(WDFW), and the Confederated Tribes of the Colville Reservation (together, the HCP Parties). In this order, we grant in part and deny in part CRITFC's request for rehearing and grant the HCP Parties' request for clarification and rehearing. This order is in the public interest because it clarifies the role of Indian tribes that declined to execute the HCPs, but have an interest in the management of the HCP plan species and their habitats.

Background

3. The lengthy and complex background to this order is set forth in detail in the master order.² We summarize that order here in order to provide context for the following discussion.

4. The Mid-Columbia River is home to various species of salmon and steelhead trout. Some of these anadromous fish are federally listed as threatened or endangered. These listings are the result in part of the presence of many large hydropower projects on the Columbia River, including the four Mid-Columbia River projects. From upstream to downstream these are the Wells Project No. 2149, the Rocky Reach Project No. 2145; the Rock Island Project No. 943, and the Wanapum-Priest Rapids Project No. 2114.³

5. In 1978, various federal and state agencies and Indian tribes petitioned the Commission to require all of the Mid-Columbia projects to provide increased minimum flows and spills at each dam to assist the migration of salmon and steelhead trout. These actions were consolidated and set for hearing before an administrative law judge. The proceeding became known as the Mid-Columbia proceeding. In due course, interim and longer-term settlement agreements were filed with respect to some of the Mid-Columbia projects. In that context, the Mid-Columbia Coordinating Committee (MCCC) was established to coordinate the activities of all participants in the proceeding.⁴

² Master order, 107 FERC at 62,310-313.

³ Wanapum-Priest Rapids is licensed to Public Utility District No. 2 of Grant County, Washington.

⁴ The MCCC was established in a limited-term settlement agreement that expired in 1985, but continued to function at the direction of the presiding judge. *See P.U.D. No. 1 of Chelan County, WA*, 34 FERC ¶ 63,044 at 65,164 (1986)

6. Other, longer-term settlement agreements were approved in 1987 and 1990 with respect to Rock Island and Wells, respectively. The Rock Island Agreement was incorporated into a new license for that project. The Wells Agreement was incorporated into the Wells license, and the Mid-Columbia proceeding was terminated as to the Wells Project. Various studies related to downstream passage at Rocky Reach Project continued, and the Mid-Columbia Proceeding remained open as it pertains to that project.

7. The Endangered Species Act (ESA)⁵ authorizes NOAA Fisheries and the U.S. Fish and Wildlife Service (FWS) to issue an incidental take permit for listed species, which allows the permittee to conduct an activity that results in an incidental take of listed species. An incidental take permit may be issued in association with an HCP, which is a long-term planning document for minimizing and mitigating impacts of the permitted action.

8. In the mid-1990s, the licensees, NOAA Fisheries, FWS, WDFW, the above-mentioned tribes, and American Rivers entered into negotiations to develop HCPs for the Mid-Columbia projects.

9. In April 2002, project-specific HCPs were executed for Rocky Reach, Rock Island, and Wells.⁶ NOAA Fisheries subsequently issued an Environmental Impact Statement in connection with the HCPs, as well as project-specific Biological Opinions pursuant to section 7 of the ESA. It thereafter issued an incidental take permit for the operation of each project.

10. In 2003, the Chelan and Douglas filed separate applications for approval of the project-specific HCPs and for their incorporation as articles in the applicable licenses. The Rock Island and Wells applications requested that those licenses be amended by replacing the 1987 Rock Island and 1990 Wells Agreements, respectively, with the project-specific HCPs. There was no pre-existing Rocky Reach agreement on anadromous fisheries to be replaced.

⁵ 16 U.S.C. §§ 1531-1543.

⁶ No HCP has been executed for Wanapum-Priest Rapids.

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11. The Commission commenced license amendment proceedings, in which it adopted NOAA Fisheries' EIS. In the master order, we approved the HCPs and incorporated them into the relevant licenses. As noted, timely requests for rehearing were filed by CRITFC and the HCP Parties.

12. On October 4, 2004, NOAA Fisheries filed a letter responding to CRITFC's arguments regarding participation by CRITFC in decision-making pursuant to the HCPs.

Discussion

A. NOAA Fisheries' Filing

13. Under Rule 213(a)(2) of the Commission's Rules of Practice and Procedure,⁷ an answer may not be made to a request for rehearing unless otherwise ordered by the decisional authority. We have allowed such answers where the party seeking rehearing makes new arguments or the answer will assist the Commission in addressing the issues.⁸

14. Here, NOAA Fisheries' response includes a new proposal to provide for consultation with the non-signatory Indian tribes, said to be supported by all of the HCP Parties. This proposal will assist us in addressing issues pertaining to the continuing role of the non-signatory Indian tribes in management of the anadromous fishery. We will therefore accept NOAA Fisheries' filing.

B. CRITFC Concerns

15. The 1987 Rock Island and 1990 Wells Agreements which were replaced by the Rock Island and Wells HCPs provided for certain flows, hatchery programs, and other measures to assist the anadromous fishery. In its protest, Yakama argued that these agreements are contracts and that the consent of all signatories is required in order to remove them from the Rock Island and Wells licenses. It characterized the

⁷ 18 C.F.R. § 385.213(a)(2)(2004).

⁸ See, e.g., *Central Nebraska Public Power and Irrigation District*, 52 FERC ¶ 61,339 at 62,344 (1990); *Southern California Edison Co. and San Diego Gas and Electric Co.*, 49 FERC ¶ 61,091 at 61,357 (1989).

Commission's approval of the HCPs as unilateral termination of the prior agreements, and asked that the HCPs be either rejected or modified to ensure that they provide for Yakama's continued participation in management of the species covered by those plans.

16. We denied both requests. The 1987 Rock Island Agreement provided that any party could, after the year 2000, initiate negotiations or file a petition to modify that agreement's terms and conditions, or to replace it in whole or part. We found that the 1990 Wells Agreement contained a similar provision and, in any event, both licenses contain a reservation of Commission authority at any time during the license term to require alterations to project facilities and operations if warranted by changed circumstances.⁹

17. On rehearing, CRITFC essentially reiterates Yakama's previously-rejected contract arguments. It does not dispute that the agreements and license article provisions permit modification or replacement of the 1987 Rock Island and 1990 Wells agreements, but states that the signatories never contemplated replacement of those agreements with agreements that deny the CRITFC tribes a continuing role in management of Mid-Columbia fisheries.¹⁰

18. The 1987 Rock Island and 1990 Wells Agreements say nothing about the terms of any future modifications or replacement agreements, and CRITFC's position on the signatories' intentions is not shared by the signatories other than Yakama. In any event, when these agreements were incorporated into the licenses as articles, they became subject to this Commission's jurisdiction, and are to be construed in the context of the entire license, including the Commission's reserved authority. We exercise that reserved authority by determining what is in the public interest in light of all relevant considerations. CRITFC's arguments in that regard are considered below.¹¹

⁹ Master order, 107 FERC at 62,316.

¹⁰ CRITFC rehearing request at 6-9.

¹¹ CRITFC also asserts that Douglas violated the 1990 Wells Agreement by discussing with NOAA Fisheries and others the possibility of developing HCPs in the mid-1990s and submitting its application to amend the Wells license in November 2003. That agreement provides that a party may request the other parties to begin negotiations to modify the terms of that agreement "any time after March 1, 2004." CRITFC

(continued...)

19. In the master order we found that it would not be in the public interest to allow the non-signatory tribes to participate in HCP processes unless they are bound by the same rules of participation as the signatories.¹² We did however recognize that these tribes have an important interest in the recovery of the Columbia River fishery, and stated our expectation that, although the Mid-Columbia proceeding was no longer be open as to any of the three projects, the MCCC would continue to function as a forum for coordination and discussion among the interested entities of issues common to the Mid-Columbia River Basin.¹³

20. CRITFC renews its request that the HCPs be modified to provide for the participation by the non-signatory tribes in HCP committee activities and decision-making. First, it reiterates previously-rejected¹⁴ arguments that the government's trust responsibility to the tribes requires the Commission to ensure that the non-signatory tribes have a decision-making role in management of the Columbia River fishery and, further, requires the Commission to reject the HCPs because they do not go far enough toward these tribes' goals of a sustainable, harvestable fishery.¹⁵ CRITFC's rehearing request includes no new facts or argument that would cause us to change our conclusion that our responsibility to fully consider the concerns of Indian tribes, as we have done

rehearing request at 9, *citing* Wells Agreement at 3. Any objections CRITFC might have had to the HCP negotiations were effectively waived by CRITFC's active participation in those negotiations. *See* CRITFC rehearing request at 4 ("The Tribes. . . participated in these discussions since their inception.").

¹² Master order, 107 FERC at 62,327.

¹³ *Id.* Subsequently, on August 18, 2004, the Commission's Chief Administrative Law Judge returned the Mid-Columbia proceeding from the presiding judge to the Commission. 108 FERC ¶ 63,024. That action did not terminate the proceeding. Because, however, the Commission has already terminated the proceeding with regard to Rocky Reach, Rock Island, and Wells, the proceeding is alive only as it pertains to Wanapum-Priest Rapids.

¹⁴ *See* master order, 107 FERC at 62,319-20 and 62,323-25.

¹⁵ CRITFC rehearing request at 14-18.

here, does not require us to reach a specific result. Thus, we are not required to treat the non-signatory tribes as though they are signatories, over the objections of and to the detriment of the signatories, including other Indian tribes. We also see no facts or arguments that cause us to question our conclusions regarding the sufficiency of the HCPs.

21. CRITFC also contends that a decision-making role in implementation of the HCPs for the non-signatory tribes is needed in order to prevent the compromise of their interests in other Columbia River Basin fishery fora. More specifically, it states that the HCPs provide for a reduction in subyearling salmon production in favor of yearling salmon production, and that that is inconsistent with agreements made in the context of the United States-Canada Pacific Salmon Treaty,¹⁶ and *U.S. v. Oregon* processes¹⁷ to provide for production of non-hatchery subyearling summer Chinook salmon in tributary habitat and mitigation for the loss of summer Chinook resulting from the operation of Wells, Rocky Reach, and Rock Island.¹⁸ CRITFC also states that the HCPs do not provide mitigation for the loss of coho salmon resulting from project operations, in contrast to efforts by the Yakama Nation to rebuild that stock. CRITFC adds that reduced production of spring Chinook under the HCPs will undermine the CRITFC tribes' goal of

¹⁶ Treaty Between the Government of the United States and the Government of Canada Concerning Pacific Salmon, entered into force January 28, 1985, amended by exchange of notes and entered into force on June 30, 1999. This treaty was adopted to promote rational management of Pacific salmon stocks through international cooperation.

¹⁷ CRITFC evidently refers here to procedures and processes developed in the context of the Columbia River Fish Management Plan (CRFMP), which was accepted as a partial settlement of the consolidated cases in *U.S. v. Oregon*, Civ. No. 68-513 and *U.S. v. Washington*, Civ. No. 9213. The CRFMP provides a framework for protecting, rebuilding, and enhancing salmon runs and for allocating and planning in-river harvest activities. *See generally*, *U.S. v. Oregon*, 699 F. Supp. 1456, 1458-60 (D. Or.1988), *aff'd*, 913 F.2d 576 (9th Cir. 1990), *cert. denied*, 501 U.S. 1250 (1991) and *U.S. v. Oregon*, Civ. No. 68-513-MA, Opinion of Feb. 29, 1992, 1991 WL 613238.

¹⁸ CRITFC rehearing request at 12. CRITFC provides no citations or other documentary evidence of the purported agreements.

sustainable, harvestable levels of anadromous fish.¹⁹ Finally, CRITFC contends that the public interest is served by the tribes having a decision-making role on the HCP committees because tribal representatives have technical expertise lacking in federal and state agencies because of their work on salmonid issues throughout the Pacific Northwest and Canada and because they have a unique cultural perspective.²⁰

22. NOAA Fisheries states that the HCP Parties remain opposed to participation by non-signatory parties in the HCP Coordinating Committees, even in a non-voting capacity, but have agreed to invite them to participate in HCP implementation as non-voting members of the Tributary and Hatchery Committees, in the hope that they will gain confidence in the HCP processes and ultimately become signatories. NOAA Fisheries adds that it is an active participant in *U.S. v. Oregon* and Pacific Salmon Treaty proceedings and is mindful of the need for decisions made in the HCP context to be consistent with the management goals of those other fora and the commitments made therein.²¹

23. We remain convinced that the public interest is best served by approving the HCPs and by requiring any entity wishing to have a decisional role in their implementation to be bound by the same rules that apply to entities that have signed them. To decide

¹⁹ *Id.* at 12-13.

²⁰ *Id.* at 13-14.

²¹ NOAA Fisheries response at 2. We infer that this proposal supersedes the HCP Parties' proposal in their rehearing request that, if consultation with non-signatories is needed, the Commission should permit the HCP Parties to provide quarterly briefings on the status of HCP implementation to any interested entities, and that such briefing also be used as a forum for discussion, albeit not decision-making. *See* HCP Parties' rehearing request at 15-16.

The HCP Parties also indicate that NOAA Fisheries is committed to further consultation and coordination with the non-signatory tribes. HCP Parties' rehearing request at 16. We commend NOAA Fisheries for this commitment, which we hope will lead to better understanding and to substantive agreements between the HCP Parties and the non-signatory tribes.

otherwise would unduly favor the non-signatory tribes, who would then have the benefits of participation in the implementation process without accepting the concomitant responsibilities.

24. The Coordinating Committees are the primary means of consultation and coordination between the licensees and the other signatories in connection with the conduct of studies and implementation of the measures set forth in the HCPs to benefit the fishery. They have the authority to oversee all aspects of standards, methodologies, and implementation of these measures. They are also responsible for preparing annual progress reports, ensuring timely circulation of studies and reports prepared pursuant to the agreements, and approval and implementation of the survival standards established in the Passage Survival Plans for each project.²² The Coordinating Committees are also responsible for dispute resolution when the other committees are unable to agree.

25. The Tributary Committees are charged with implementing the Tributary Conservation Plans of the project-specific HCPs by selecting tributary habitat improvement projects and approving project budgets.²³ The Hatchery Committees are responsible for overseeing development of recommendations for implementing the hatchery elements of the HCPs, including improvements, monitoring, and evaluation, as identified in the Hatchery Compensation Plans.²⁴ If the members of either of these committees are unable to agree, the matter is referred to the Coordination Committee.

26. The HCPs are not likely to achieve their goals if some voting participants are bound by the goals, implementation processes and measures, and dispute resolution provisions, while others may prevent action or dispute resolution by opting out whenever they are dissatisfied. For that reason, we will not modify the licenses to require that non-signatories be offered committee memberships. We conclude, however, the HCP Parties' offer of non-voting membership on the Tributary and Hatchery Committees is a reasonable means of ensuring that the views of the CRITFC tribes are heard on these committees and that their expertise and experience continue to be a factor in the decision-

²² *E.g.*, Rocky Reach HCP section 4.

²³ *E.g.*, *id.*, section 7.

²⁴ *E.g.*, *id.*, section 8.

making processes of the various committees. Given the CRITFC tribes' decision not to become party to the settlement, we do not believe that requiring the HCP Parties to extend the tribes additional authority would be in the public interest.

C. Pre-HCP Coordinating Committees

27. In the master order we stated that, although the Mid-Columbia proceeding was terminated with respect to the three projects with HCPs, the MCCC continued to exist and that we expected it to continue to function as a forum for coordination and discussion among interested entities of issues common to the Mid-Columbia River basin.²⁵ The HCP Parties state on rehearing that it is time to abolish the Wells and Rock Island Coordinating Committees and the MCCC, which served as the decision-making forum for Rocky Reach prior to the Rocky Reach HCP.²⁶ They state that the HCP Coordinating Committees have superseded all of these pre-HCP committees for collaborative decision-making for Wells, Rocky Reach, and Rock Island, and that using these pre-HCP committees for coordination and consultation now is likely to create misunderstandings and disputes about applicable processes and decisional authority, and thereby interfere with the workings of the HCP Coordinating Committees.²⁷ We agree. For that reason, and because we are requiring Chelan and Douglas to offer the non-signatory tribes non-voting membership on the Tributary and Hatchery Committees, we will terminate the obligations of Chelan and Douglas to participate in the MCCC, to the extent it may still be functioning, with respect to these three projects. *See* Ordering Paragraph (C).

D. Clarification and Corrections

28. CRITFC and the HCP Parties note that neither the master order nor the companion orders explicitly remove the 1987 Rock Island and 1990 Wells Settlement Agreements from those licenses.²⁸ It was our intention to do so, and we give explicit effect to that intention in Ordering Paragraphs (A) and (B), respectively.

²⁵ Master order, 107 FERC at 62,327.

²⁶ HCP Parties' rehearing request at 11-16.

²⁷ *See P.U.D. No. 1 of Chelan County, WA*, 34 FERC ¶ 63,044 at 65,164 (1986).

²⁸ CRITFC rehearing request at 9; HCP Parties at 3-8.

29. The HCP Parties also request that we remove from the Rock Island license Articles 401 and 402, which were added in order to implement the 1987 Rock Island Settlement Agreement. Ordering paragraph (B) does so.

30. Finally, the U.S. Fish and Wildlife Service's Reasonable and Prudent Measures (RPMs) and associated Terms and Conditions regarding bull trout, which were appended to the project-specific orders, were also inadvertently appended to the master order. Ordering Paragraph (D) below deletes the appendix.²⁹

The Commission orders:

(A) Ordering Paragraph (A) of the order at 54 FERC ¶ 61,056 at 61,210 (1991) approving and making part of the license for the Wells Project No. 2149 the 1990 Wells Settlement Agreement, is hereby removed from the Wells Project license.

(B) Ordering Paragraph (F) of the order at 46 FERC ¶ 61,033 at 61,208 (1989) approving and making part of the license for the Rock Island Project No. 943 the 1987 Rock Island Settlement Agreement, and license articles 401 and 402 implementing said settlement agreement (46 FERC at 61,208), are hereby removed from the Rock Island Project license.

(C) Public Utility District No. 1 of Chelan County, Washington, and Public Utility District No. 1 of Douglas County, Washington, are no longer required to participate in processes of the Mid-Columbia Coordinating Committee as those processes pertain to the Rocky Reach Project No. 2145, Rock Island Project No. 943, and Wells Project No. 2149.

(D) The order issued June 21, 2004 in this proceeding, 107 FERC ¶ 61,280, is amended by deletion of the appendix thereto.

²⁹ The Wells and Rock Island orders attach the RPMs and Terms and Conditions applicable to those projects, but incorrectly state in the text that the Rocky Reach RPMs and Terms and Conditions are attached. The text should be read to refer to the appropriate Wells and Rock Island RPMs and Terms and Conditions, respectively.

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(E) The request for rehearing of CRITFC and the request for rehearing and clarification filed by the HCP Parties, both filed on July, 21, 2004, are hereby granted or denied to the extent discussed herein, and are otherwise denied.

By the Commission.

(S E A L)

Linda Mitry,
Deputy Secretary.

Wells HCP Agreement

EXHIBIT NO. 1

**Anadromous Fish Agreement and
Habitat Conservation Plan
The Wells Hydroelectric Project
FERC License No. 2149**

March 26, 2002

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Supporting Document A : Aquatic Species and Habitat Assessment:
Wenatchee, Entiat, Methow, and Okanogan Watersheds (1998).

Supporting Document B : Biological Assessment and Management Plan
(BAMP): Mid-Columbia Hatchery Program (1998).

Supporting Document C : Briefing Paper: Estimating Survival of Anadromous
Fish through the Mid-Columbia PUD Hydropower Projects (2002).

Supporting Document D : Tributary Plan, Project Selection, Implementation
and Evaluation (1998).

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**Anadromous Fish Agreement and Habitat Conservation Plan
Wells Hydroelectric Project, FERC License No. 2149**

THIS AGREEMENT for the Wells Hydroelectric Project (Project) is entered into between the Public Utility District No. 1 of Douglas County, Washington, (District) a Washington municipal corporation; the United States Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS), the Washington Department of Fish and Wildlife (WDFW), the Confederated Tribes of the Colville Reservation (Colville), the Confederated Tribes and Bands of the Yakama Indian Nation (Yakama), the Confederated Tribes of the Umatilla Indian Reservation (Umatilla) (collectively, the Joint Fisheries Parties or the JFP); and American Rivers, Inc., (American Rivers) a Washington D.C., nonprofit corporation (the JFP and American Rivers, are referred to as the Fisheries Parties (FP); and the Power Purchasers which shall be represented through a single non-voting representative whom they will designate from time to time. All entities, who have executed this agreement, are collectively referred to as the Parties.

INTRODUCTION

A. The site of the Project is habitat for Plan Species. Prior to this Agreement the needs of the Plan Species and their habitat have been addressed through litigation and agreement. This Agreement is intended to constitute a comprehensive and long-term adaptive management plan for Plan Species and their habitat as affected by the Project.

B. The objective of this Agreement is to achieve No Net Impact (NNI) for each Plan Species affected by the Project on the schedule set out herein and to maintain the same for the duration of the Agreement. NNI consists of two components: (1) 91% Combined Adult and Juvenile Project Survival achieved by project improvement Measures implemented within the geographic area of the Project (2) 9% compensation for Unavoidable Project Mortality provided through hatchery and tributary programs, with 7% compensation provided through hatchery programs and 2% compensation provided through tributary programs. The Parties intend these actions to contribute to the rebuilding of tributary habitat production capacity and basic productivity and numerical abundance of Plan Species.

C. The District will receive a Permit for Permit Species upon this Agreement becoming effective. If the District carries out its responsibilities for fish protection and mitigation Measures set out in this Agreement, and provide the necessary monitoring and evaluation, all according to the time

frames set out for each Measure, the Permit shall continue for the full term of this Agreement subject to Section 2 (Termination) and Section 10 (Endangered Species Act Compliance). The Parties shall take the actions set out in this Agreement in support of the District before the Federal Energy Regulatory Commission (FERC) and in other forums.

D. Capitalized terms used in this Agreement are defined in Section 13 (Definitions).

NOW, THEREFORE, IN CONSIDERATION of the mutual promises and conditions set forth herein, the Parties agree as follows:

SECTION 1 TERM OF AGREEMENT

1.1 Term. Unless terminated early according to Section 2 (Termination), this Agreement shall become effective on the date this Agreement is approved by FERC and shall remain in full force and effect for a period of fifty (50) years from that date. From the date this Agreement becomes effective, it shall prospectively supersede the Wells Settlement Agreement dated October 1, 1990.

SECTION 2 TERMINATION

2.1 Automatic Termination Events. This Agreement shall terminate automatically: (1) at the end of the term of the Agreement as set forth in Section 1 (Term of Agreement), (2) in the event the FERC issues the District a non-power license for the Project, (3) in the event the FERC orders removal of the Project, (4) in the event the FERC orders drawdown of the Project or (5) the District withdraws from this Agreement based on sub-Section 2.2 (Elective Withdrawal Events). The District's obligations under this Agreement shall terminate in the event its FERC license is terminated or transferred to another entity. The Parties agree that the terms of this Agreement shall be binding on their respective successors and assigns.

2.2 Elective Withdrawal Events.

2.2.1 Enough Already.

2.2.1.1 A Party may withdraw from this Agreement when at least twenty (20) years has elapsed from March 1, 1998, subject to the following conditions: (1) No Net Impact (NNI) has not been achieved or has been achieved but has not been maintained, or (2) the Project has achieved and maintained NNI but the Plan Species are not rebuilding and the Project is a significant factor in the failure to rebuild.

2.2.1.2 If NMFS and the District are in agreement as to specific Measures to remedy the District's failure to achieve or maintain NNI and the District promptly implements agreed Measures that are applicable to the District, NMFS will refrain from suspending or revoking the Permit. In the event that NNI has not been achieved or has been achieved but has not been maintained by March 1, 2018, but the District is otherwise performing all obligations assigned to it in the Permit, and is otherwise in full compliance with all terms and conditions of this Agreement and the Permit, NMFS and USFWS will not exercise their right to withdraw from this Agreement or revoke the Permit unless such withdrawal is explicitly to seek drawdown, dam removal, and/or non-power operations, or actions for achievement of NNI. Should the District, NMFS, and USFWS agree under these circumstances, such actions may be pursued without withdrawing from the Agreement or suspension or revocation of the Permit.

2.2.2 Non-Compliance. A Party may elect at any time to withdraw from the Agreement based on non-compliance of another Party with the provisions of the Agreement, but only subject to the following procedures: (1) a Party asserts that another Party is not complying with the terms of the Agreement, (2) the Party documents and presents evidence supporting assertion of non-compliance in writing (3) the issue of non-compliance is taken to Dispute Resolution, Section 11 (Dispute Resolution), unless waived. Following Dispute Resolution, a Party choosing to withdraw, shall provide all other Parties with notice of withdrawal. The notice shall be in writing and either served in person or provided by U. S. Mail return receipt requested. The right to withdraw shall be waived if not exercised within 60 Days of Dispute Resolution being completed. Sub-Section 2.2.6 (Withdrawal of Another Party) applies to a Party's receipt of notice provided for in this sub-Section.

2.2.3 Governmental Action. A Party may elect to withdraw from this Agreement, pursuant to 9.3.2, in the event that an entity with regulatory authority takes action that (1) is detrimental to the achievement of the obligations set forth in this Agreement and (2) that materially alters or is contrary to one or more terms set forth in this Agreement.

2.2.4 Impossibility. A Party may elect to withdraw from the Agreement in the event the Parties agree in writing that the obligations imposed by this Agreement are impossible to achieve.

2.2.5 Revocation of Permit. A Party may elect to withdraw from the Agreement if the NMFS revokes the Permit.

2.2.6 Withdrawal of Another Party. Upon receipt of a Party's notice of intent to withdraw, any other Party shall have 120 Days from the date of such notice to provide notice to all Parties of its intent to withdraw from this Agreement, or this right to withdraw shall be waived.

2.3 Conditions Precedent to Withdrawal. Two conditions must be satisfied before a Party can withdraw from the Agreement pursuant to sub-Section 2.2.3 (Governmental Action), 2.2.4 (Impossibility), sub-Section 2.2.5 (Revocation of Permit) or sub-Section 2.2.6 (Withdrawal of Another Party). First, the Party desiring to withdraw from the Agreement shall provide written notice to all other Parties of its intent to withdraw. The notice shall be in writing and either served in person or provided by U. S. Mail return receipt requested. The notice shall state the date upon which the Party's withdrawal shall become effective. The date upon which the Party's withdrawal becomes effective shall be no less than sixty (60) Days from the date the notice was provided to all other Parties. Second, prior to the date upon which the Party's withdrawal becomes effective the withdrawing Party (Parties) must make itself (themselves) available for at least one policy meeting to allow remaining Parties to attempt to persuade the withdrawing Party (Parties) not to withdraw. The policy meeting must take place within the sixty (60) Day period or it is waived.

2.4 Effect of Withdrawal. Except as set forth in sub-Section 2.5 (Effect of Termination), sub-Sections 9.4.1 and 9.4.3, and sub-Sections 10.5 (Permit Suspension, Revocation and Re-Instatement) and 10.6 (Early Termination Mitigation), in the event a Party withdraws from this Agreement, this Agreement places no constraints on the withdrawing Party, shall not thereafter be binding on the withdrawing Party, and the withdrawing Party may exercise all rights and remedies that the Party would otherwise have.

2.5 Effect of Termination. Except as set forth in sub-Section 7.3.7.6 (Account Status upon Termination), sub-Sections 9.4.1 and 9.4.3 and sub-Sections 10.5 (Permit Suspension, Revocation and Re-Instatement) and 10.6 (Early Termination Mitigation), upon expiration of this Agreement, or in the event this Agreement is terminated, voided or determined for any reason to be unenforceable before the end of its term, then: (1) the District shall continue to implement the last agreed to Measures until the FERC orders otherwise, and (2) the Parties are not restrained in any manner from advocating to the FERC Measures to replace the Agreement.

SECTION 3
SURVIVAL STANDARDS AND ALLOCATION
OF RESPONSIBILITY FOR NO NET IMPACT

3.1 No Net Impact (NNI) shall be achieved on the schedule set out herein, and maintained for the duration of the Agreement for each Plan Species affected by the Project. NNI consists of two components: (1) 91% Combined Adult and Juvenile Project Survival achieved by project improvement Measures implemented within the geographic area of the Project, (2) 9% compensation for Unavoidable Project Mortality provided through hatchery and tributary programs, with 7% compensation provided through hatchery programs and 2% compensation provided through tributary programs. Measures and Survival Standards, as provided in Section 4 (Passage Survival Plan), Section 7 (Tributary Conservation Plan) and Section 8 (Hatchery Compensation Plan), shall be evaluated as provided in sub-Sections 6.9 (Progress Reports) and achieved no later than March 2013). The inability to measure a standard due to limitations of technology shall not be construed as a success or a failure to achieve NNI as further explained in sub-Section 4.1.1. (91% Combined Adult and Juvenile Survival) and sub-Section 4.1.2 (93% Juvenile Project Survival and 95% Juvenile Dam Passage Survival).

Based upon the best available information the District will achieve NNI within a few years time, well before the 2013 date. The District has achieved the 93% Juvenile Project Survival goal for yearling chinook and steelhead (See sub-Section 4.2.1 Phase I (1998-2002)) and Parties believe that the calculated Juvenile Dam Passage Survival for sockeye and sub-yearling chinook is probably greater than 95%. Adult survival cannot be conclusively measured at this time, as indicated in sub-Section 4.1.1 (91% Combined Adult and Juvenile Survival) and 4.1.3 (Adult Survival Assumptions). The Plan Species Account will be established upon FERC approval and will be used to fully compensate for adult mortality until an adult survival study can be conducted. The District has provided or is in the process of providing the 7% hatchery commitments or equivalent (in the case of sockeye). Achievement of the NNI goal by 2013 does not affect or diminish the provisions of sub-Section 2.2.1 (Enough Already) and sub-Section 9.5 (Re-Licensing).

3.2 To ensure NNI is achieved and maintained, the Coordinating Committee shall: (1) oversee monitoring and evaluation, and (2) periodically adjust the Measures to address actual project survival and Unavoidable Project Mortality as provided herein; provided that no more than 9% Unavoidable Project Mortality shall be made up through hatchery and tributary compensation without concurrence of the Coordinating Committee. Initially, adult survival estimates

NNI, then the respective committees may consult with the Coordinating Committee to jointly seek a solution.

3.5 Implementation of Measures to meet NNI shall follow the time frames set out in the Passage Survival Plan, the Tributary Conservation Plan and the Hatchery Compensation Plan. Where a deadline is not specified, implementation of Measures shall occur as soon as is reasonably possible.

SECTION 4 PASSAGE SURVIVAL PLAN

4.1 Survival Standards.

4.1.1 91% Combined Adult and Juvenile Survival. The District shall achieve and maintain 91% Combined Adult and Juvenile Project Survival, as required in sub-Section 3.3, which means that 91% of each Plan Species, juvenile and adult combined, survive Project effects. As of 2002, the Parties agree that adult fish survival cannot be conclusively measured for each Plan Species. Until technology is available to accurately determine Project effects, the District will implement the adult Measures as identified in sub-Section 4.4 (Adult Passage Plan). Given the present inability to differentiate between the sources of adult mortality, initial compliance with the Combined Adult and Juvenile Survival standard will be based upon the measurement of juvenile survival as provided in Section 4.1.2, (93% Juvenile Project Survival and 95% Juvenile Dam Passage Survival) below. It is anticipated that the District shall implement the measurement of adult survival at some time in the future should adult survival study methodologies and study plans be agreed to by the Coordinating Committee. Mitigation Measures will be adjusted at that time, if necessary, to address the new information.

4.1.2 93% Juvenile Project Survival and 95% Juvenile Dam Passage Survival. Limitations associated with the best available technology have required the development of three standards for assessing juvenile fish survival at the project. In order of priority they are: 1) Measured Juvenile Project Survival; 2) Measured Juvenile Dam Passage Survival; and 3) Calculated Juvenile Dam Passage Survival. The survival of each Plan Species shall be determined by using one of these standards, with subsequent evaluations implemented as appropriate, per the following guidelines. If the Combined Adult and Juvenile Project Survival cannot be measured, then Juvenile Project Survival shall be measured as the next best alternative until measurement is possible (See Section 13, "Juvenile Project Survival").

If Juvenile Project Survival for each Plan Species is measured to be greater than or equal to 93%, then the District will be assigned to Phase III (Standards Achieved). If Juvenile Project Survival is measured at less than 93% but greater than or equal to 91%, then the District will be assigned to Phase III (Provisional Review). If Juvenile Project Survival is measured at less than 91%, then the District will be assigned to Phase II (Interim Tools) (See Section 14, Figure 1. Wells HCP Survival Standard Decision Matrix).

Wells HCP Survival Standard Decision Matrix. The decision making process for implementation of the survival standards explained in Sections 4.1 (Survival Standards) and 4.2 (Phased Implementation Plans) is graphically depicted in Figure 1 below and Section 14 (Figures).

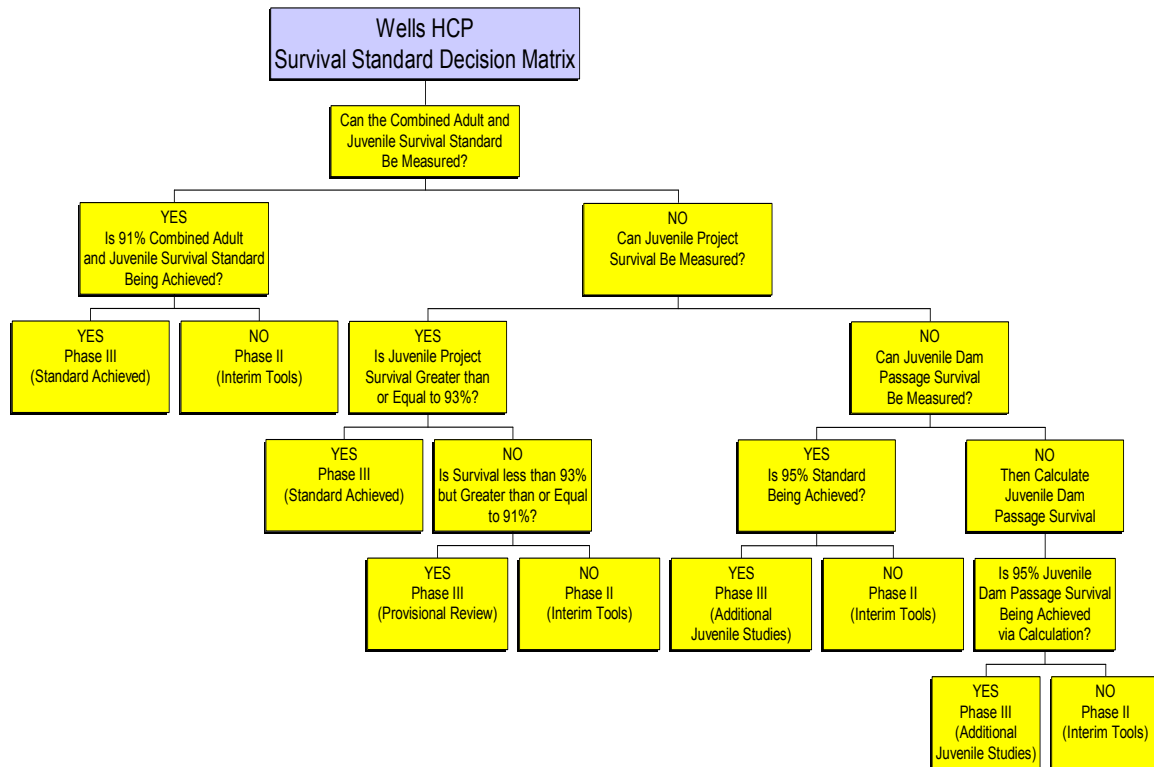


Figure 1. Wells HCP Survival Standard Decision Matrix

If Juvenile Project Survival cannot be measured, then Juvenile Dam Passage Survival shall be measured as the next best alternative until project measurement is possible (See Section 13, "Juvenile Dam Passage Survival"). The Juvenile Dam Passage Survival Standard is 95%.

For some Plan Species such as sockeye and subyearling chinook where measurement of Juvenile Project Survival and Juvenile Dam Passage Survival is not yet possible, the Juvenile Dam Passage Survival Standard will be calculated based on the best available information (including the proportion of fish utilizing specific passage routes and the use of off-site information), as determined by the Coordinating Committee. This calculation will consider the same elements as measured Juvenile Dam Passage Survival, except that off-site information may be used where site-specific information is lacking.

4.1.3 Adult Survival Assumptions. As of 2002, the Parties agree that adult fish survival cannot be conclusively measured for each Plan Species. Based on regional information, the survival of adult Plan Species is estimated to be 98-100%. Until, the Coordinating Committee approves and the District implements adult survival studies, the District will implement the adult passage Measures identified in sub-Section 4.4 (Adult Passage Plan) and provide the Tributary Conservation Plan account specified in Section 7 (Tributary Conservation Plan).

4.1.4 Methodologies. The survival standards contained within Section 4 (Passage Survival Plan) will be measured using the best available technology and study designs approved by the Coordinating Committee. Current methodologies are summarized in Supporting Document C. These methodologies are not exclusive, and may be updated based on new information or techniques. Juvenile Plan Species survival shall be measured at a ninety-five percent (95%) confidence level, with a standard error of the estimate that shall be not more than plus or minus 2.5% (i.e. 5% error). Results from a study meeting this precision level will automatically be included in the three-year average, unless the study has violated critical model assumptions or has been determined to be invalid by the Coordinating Committee. If a study meet all of the testing protocol and model assumptions and provided that the standard error around the point estimate does not exceed plus or minus 3.5%, then the Coordinating Committee, following unanimous approval, may utilize this information in the calculation of the three-year average. Point estimates of survival measured from the three years of valid studies shall be averaged (arithmetic) to compare against the pertinent Plan Species Survival Standard. The use of survival studies with standard errors between 2.5% and 3.5% shall not be subject to Dispute Resolution. If the average of the 3 years of survival measurements is no more than 0.5 percent below the survival standard, the Coordinating Committee may

decide whether an additional year of study is appropriate. If an additional year of study is undertaken, the study result (if valid) will be included in the calculation of the arithmetic mean.

The testing shall reflect Representative Environmental Conditions and Representative Operational Conditions for each test, for each Plan Species and life history. Studies conducted during years where flow conditions, during the study, fall between the 10% and 90% points on the Flow Duration Curve (See Section 14, Figure 2a and 2b) shall be considered to have satisfied Representative Environmental Conditions (See Section 13, "Representative Environmental Conditions"). Should flow conditions fall outside the 10% and 90% points on the Flow Duration Curve but be between the 5% and 95% points on the Flow Duration Curve, then the Coordinating Committee, following unanimous approval, may utilize this information in the calculation of the three-year average. The use of survival studies that fall outside the 10% and 90% points on the Flow Duration Curves shall not be subject to Dispute Resolution. The Flow Duration Curves shall be subject to periodic review based upon new information.

The testing shall consider direct, indirect and delayed mortality wherever it may occur and can be measured (as it relates to the Project) given the available mark-recapture technology. The Coordinating Committee shall facilitate the availability of test fish for studies that may include rearing of additional fish beyond that required to meet NNI.

4.2 Phased Implementation Plans.

4.2.1 Phase I (1998 - 2002).

This Agreement shall be implemented in three phases. Under Phase I, the District shall implement 1) juvenile and adult operating plans and criteria to meet the Survival Standards set forth in sub-Section 4.1 (Survival Standards) and 2) a monitoring and evaluation program to determine compliance with the standards. Following the completion of the three-year monitoring and evaluation program in Phase I, the Coordinating Committee will determine whether the pertinent survival standards have been achieved. Depending on the results of this determination, the District will either proceed to Phase II (if the applicable survival standard has not been achieved) or Phase III (if the applicable survival standards has been achieved). In addition, three separate sub-phases were established within Phase III. The three sub-Phase designations are referred to as Phase III (Standards Achieved), Phase III (Provisional Review) and Phase III (Additional Juvenile Studies). The Parties to this Agreement established separate sub-phases within Phase III as a way to address existing limitations in the

measurement of adult survival and Juvenile Project Survival for sockeye and subyearling chinook (See Section 14, Figure 1).

The Parties recognize that Douglas PUD has completed the three years of valid Juvenile Project Survival studies as documented in Section 15, Appendix B. The Parties further recognize that the District has achieved the 93% Juvenile Project Survival goal for yearling chinook and steelhead and that once this Agreement is implemented the District will move into Phase III (Standard Achieved) for these Plan Species. The District also recognizes that project survival information is currently limited for yearling chinook and steelhead originating from the Okanogan Basin. As a result, future Project Survival Studies (e.g. 10 year standards verification studies) shall consider and attempt to quantify the effect of the Wells reservoir on Okanogan origin yearling chinook and steelhead.

Measurement and evaluation of 91% Combined Adult and Juvenile Project Survival or 93% Juvenile Project Survival or the measurement or calculation of 95% Juvenile Dam Passage Survival will be assessed by the Coordinating Committee by 2002. Measurement of Juvenile Project Survival or Juvenile Dam Passage Survival during Phase I is expected to take three years to complete, unless additional years of study are agreed to by the Coordinating Committee.

Juvenile survival studies conducted during Phase I (See Section 15, Appendix B) may result in different phase designations for each of the Plan Species. For example, the District will move to Phase II (Interim Tools) or (Additional Tools), or to Phase III (Standard Achieved, Provisional Review or Additional Juvenile Studies) as described in Figure 1, depending on the survival results for individual Plan Species. At the conclusion of Phase I, the Coordinating Committee will determine the appropriate phase designation for each Plan Species. If the Coordinating Committee cannot agree, the Coordinating Committee may agree to require an additional year of study to resolve the disagreement, or a Party may institute Section 11 (Dispute Resolution) to address the need for additional Measures during the period of measurement and evaluation.

4.2.2 Phase II.

If the Coordinating Committee has determined, based upon Phase I monitoring and evaluation or Phase III periodic monitoring, that Juvenile Project Survival is less than 91% or Juvenile Dam Passage Survival (measured or calculated) is less than 95%, the District shall move to Phase II for that Plan Species.

4.2.3 Phase II -- (Interim Tools). If measurement and evaluation of Phase I concludes that the applicable survival standard has not been achieved, then the Wells bypass flow will be increased to 4.4 kcfs per bypass at night (1 hour before sunset to sunrise) for the period during which 80% of the Plan Species not meeting the Juvenile Dam Passage Survival Standard pass the Wells Project or for 40 days, whichever is less. The effect of increased bypass flows will be evaluated to determine if either 95% Juvenile Dam Passage Survival or the 93% Juvenile Project Survival or the 91% Combined Adult and Juvenile Project Survival levels are being attained. The Coordinating Committee will determine the number of valid studies (not to exceed three years of study) necessary to make a Phase determination following the implementation of Interim Tools. If the Combined Adult and Juvenile Survival or the Juvenile Project Survival goals are being achieved, as measured by the re-assessment studies, the District will advance to Phase III (Standards Achieved). If Juvenile Project Survival is re-evaluated and determined to be less than 93% and greater than or equal to 91%, then the Parties shall proceed to Phase III (Provisional Review). If Juvenile Dam Passage is re-evaluated and determined to be greater than or equal to 95%, then the Parties shall proceed to Phase III (Additional Juvenile Studies). If Juvenile Dam Passage Survival continues to be less than 95% and Juvenile Project Survival continues to be less than 91%, then the District shall proceed to Phase II (Additional Tools).

4.2.4 Phase II -- (Additional Tools). The Coordinating Committee shall jointly decide on additional Tools, for the District to implement in order to achieve the pertinent survival standard(s) using the following criteria:

1. Likelihood of biological success;
2. Time required to implement; and
3. Cost-effectiveness of solutions, but only where two or more alternatives are comparable in their biological effectiveness.

Until the pertinent survival standard is achieved, the Parties shall continue to implement Phase II (Additional Tools) for the standard and for each Plan Species that is not meeting the pertinent survival standard, except as set forth in sub-Section 2.2.1 (Enough Already) and sub-Section 2.2.4 (Impossibility). The Coordinating Committee will determine the number of valid studies (not to exceed three years of study) necessary to make a Phase determination following the implementation of Additional Tools.

4.2.5 Phase III (Standard Achieved or Provisional Review or Additional Juvenile Studies).

The District proceeds to Phase III upon a determination by the Coordinating Committee that the District has 1) verified compliance with the Combined Adult and Juvenile Survival or measured Juvenile Project Survival (Standard Achieved), 2) has evaluated Juvenile Project Survival at less than 93% but greater than or equal to 91% (Provisional Review), or 3) has measured or calculated 95% Juvenile Dam Passage Survival (Additional Juvenile Studies). In short, Phase III indicates that the appropriate standard has either been achieved or is likely to have been achieved and provides additional or periodic monitoring to ensure that survival of the Plan Species remains in compliance with the survival standards set forth in Section 4 (Passage Survival Plan) for the term of the Agreement.

4.2.5.1 Phase III (Standard Achieved). The District shall proceed to Phase III (Standard Achieved) following measurement and evaluation that indicate that either the 91% Combined Adult and Juvenile Survival Standard or 93% Juvenile Project Survival is being achieved. In this case, the District shall re-evaluate performance under the applicable standards every 10 years. The Coordinating Committee shall pick representative species for all Plan Species. However, only one species will be utilized to represent spring migrants and one species for summer migrants. This re-evaluation will occur over one year and be included in the pertinent average for that particular species. If the survival standard is met, then Phase III (Standards Achieved) status will remain in effect. If the survival standard is not achieved, then an additional year of testing will occur. If the survival standard remains un-achieved over three years of re-evaluation, then Phase II (Interim or Additional Tools) will take affect for the species evaluated. The Coordinating Committee shall then consider re-evaluating the passage survival of other Plan Species. If the survival standards are exceeded then passage Measures at the Dam shall remain in effect, however supplementation rates may be adjusted from the 7% level based on actual project survival as described in sub-Section 8.4.4. (Adjustment of Hatchery Compensation – Survival Studies).

4.2.5.2 Phase III (Provisional Review). The District shall proceed to Phase III (Provisional Review) when Juvenile Project Survival is measured at less than 93% but greater than or equal to 91%. Provisional Review allows the District a one time (Plan Species specific) five year period to implement additional Measures or conduct additional Juvenile Dam Passage Survival Studies or Juvenile Project Survival Studies or Combined Adult and Juvenile Survival Studies. The results of the

Provisional Review Studies will be evaluated by the Coordinating Committee to more accurately determine whether the pertinent survival standard is being achieved. The Coordinating Committee will determine the number of valid studies (not to exceed three years of study) necessary to make a Phase determination following the completion of the Provisional Review survival studies. The Parties will then proceed based upon the results of these new studies. During Phase III (Provisional Review), supplementation levels shall be maximized at 7% for the affected Plan Species and 2% compensation shall be provided by the District to the Plan Species Account.

When the Provisional Review studies indicate that the Combined Adult and Juvenile Survival estimates are greater than or equal to 91% or when the Juvenile Project Survival studies indicate that survival is greater than or equal to 93% then the District shall proceed to Phase III (Standard Achieved).

If the Provisional Review studies indicate that the 95% Juvenile Dam Passage Survival standard has been achieved through direct measurement or calculation, then the District shall proceed to Phase III (Additional Juvenile Studies).

If after the one time, five-year Provisional Review period, Juvenile Project Survival is still less than 93% and greater than or equal to 91% and the Combined Adult and Juvenile Survival studies are inconclusive, then the District will revert back to Phase II (Interim Tools). If the increased bypass flows implemented under Phase II (Interim Tools) do not achieve either 95% Juvenile Dam Passage Survival or 93% Juvenile Project Survival, the District shall proceed to Phase II (Additional Tools).

4.2.5.3 Phase III (Additional Juvenile Studies). The District shall proceed to Phase III (Additional Juvenile Studies) when Juvenile Dam Passage Survival studies or Juvenile Dam Passage calculations indicate that Juvenile Dam Passage Survival is greater than or equal to 95%. Because measurement or calculation of Juvenile Dam Passage Survival does not address juvenile mortality in the pool or the indirect effects of juvenile project passage, the District will evaluate either the 91% Combined Adult and Juvenile Project Survival or the 93% Juvenile Project survival as determined appropriate by the Coordinating Committee. If at any time during Phase III (Additional Juvenile Studies), the Coordinating Committee approves the use of new survival methodologies, the District will have five years to conduct the appropriate evaluation(s). The Coordinating Committee will determine the number of valid studies (not to exceed three years of study) necessary to make a Phase determination under Additional Juvenile Studies. The Parties will then proceed based upon the results of these new studies. During Phase III (Additional

Juvenile Studies), supplementation levels shall be maximized at 7% for the affected Plan Species and 2% compensation shall be provided by the District to the Plan Species Account.

4.3 Wells Dam Juvenile Dam Passage Survival Plan.

4.3.1 The District will continue to implement a bypass program of controlled Spill using five (5) bypass baffles at the Wells Project to meet the criteria set out below.

(a) No turbine will be operated during the juvenile migration period unless the adjacent bypass system is operating according to the following criteria.

(b) The five (5) bypass system bays will be Nos. 2, 4, 6, 8, and 10. Operation of the turbines will be in pairs with the associated bypass system bays as follows:

<u>Turbines Operated</u>	<u>Bypass Bays Operated</u>
1 and/or 2	2
3 and/or 4	4
5 and/or 6	6
7 and/or 8	8
9 and/or 10	10

(For example, if turbines 1, 5, and 6 are operating, bypass systems 2 and 6 will be operating.)

(c) At least one bypass will be operating continuously throughout the juvenile migration period, even if no turbines are operating.

(d) The bypass systems and spillgates will be operated in configuration K of the 1987 bypass system report (bottom Spill, 1 foot spill gate opening, 2,200 cfs, vertical baffle opening) for all bypass system bays.

(e) Top Spill has been shown to be as effective as bottom Spill in bypass bays 2 and 10, therefore, top Spill will be allowed in these bays.

(f) If the Chief Joseph Dam Uncoordinated Discharge Estimate is 140,000 cubic feet per second (140 Kcfs) or greater for the following day, all five bypass systems will be operated continuously for 24 hours regardless of turbine unit operation.

(g) If the Chief Joseph Dam Uncoordinated Discharge Estimate is less than 140 Kcfs, bypass system operation will be as follows:

<u>Number Turbines Operating</u>	<u>Minimum Number Bypass Systems Operating</u>
10	5
9	5
8	4
7	4
6	3
5	3
4	2
3	2
2	1
1	1
0	1

4.3.2 The District shall operate the bypass system continuously between April 10 and August 15. Initiation of the bypass system may occur between April 1 and April 10 when it can be demonstrated that greater than 5% of the spring migration takes place prior to April 10. The basis for making this determination shall be the historical hydro-acoustic index, verified by historical species composition information. Termination of the bypass system between August 15 and August 31 will occur when it can be demonstrated that 95% of the summer migration has passed the project. The basis for making this determination shall be the historic hydro-acoustic index, verified by the historical species composition information. The bypass will not operate past August 31 unless a Party to this Agreement provides credible scientific evidence to the Coordinating Committee that the run timing is such that a significant component of a Plan Species migrates through the Forebay, Dam and Tailrace outside the usual migration period (April 1 through August 31).

Run timing information will be gathered through the 2002 migration. The Historic Hydroacoustic and Fyke Netting information (1982 – 2002) will be used to verify that 95% of the spring and 95% of the summer migrations are being protected by operating the bypass system from April 10 through August 15.

After the 2002 migration, changes to the April 10 through August 15 operation may be agreed to by the Coordinating Committee based upon historical hydroacoustic and species composition information that would provide bypass operations for 95% of the spring and 95% of the summer migration of juvenile Plan Species.

Additional hydroacoustic and species composition monitoring shall be conducted once every 10 years in order to verify that a significant component (greater than 5%) of the juvenile migration is not present outside the normal bypass operating period (April 10 through August 15) and to verify that the

operations established by the Coordinating Committee are adequately protecting 95% of the spring and summer migrations of juvenile Plan Species.

4.3.3 Predator Control Measures shall be implemented by the District and will consist of both northern pikeminnow removal and piscivorous bird harassment and control Measures. The northern pikeminnow removal program may include a pikeminnow bounty program, fishing derbies and tournaments, the use of long lines and trapping. Piscivorous bird populations, which include, Caspian terns, double-crested cormorants, and various gull species will be hazed. Hazing techniques may include elaborate wire arrays in the tailrace to deter foraging, propane cannons, various pyrotechnics, and lethal control when necessary. This program will continue to run during the juvenile outmigration.

4.4 Adult Passage Plan. The District shall emphasize adult project passage Measures in order to give high priority to adult survival in the achievement of 91% Combined Adult and Juvenile Project Survival for each Plan Species. The District shall use Tools, including but not limited to the following.

4.4.1 The District shall use best efforts to maintain and operate adult passage systems at the Project according to criteria developed through the Coordinating Committee and as provided in Appendix A: Wells Hydroelectric Project, Adult Fish Passage Plan.

4.4.2 The District shall operate Spill and turbine units in a manner that provides for adult passage while meeting the pertinent juvenile survival standard.

4.4.3 Areas within the adult fish passage systems which are identified by the Coordinating Committee as either consistently out of criteria or where significant delay occurs (as it relates to the biological fitness of the adult Plan Species) shall be modified as soon as feasible.

4.4.4 The District shall use best efforts to eliminate identified sources of adult injury and mortality during adult migration through the Dam.

4.4.5 By the end of Phase I, the District shall identify adult fallback rates at the Dam. This evaluation will include the magnitude of voluntary and involuntary fallback, and will assess the effects of ladder trapping, project operations, the Wells Fish Hatchery and downstream tributaries upon observed rates of fallback. This assessment will also determine the biological significance of these fallback events on the overall fitness of adult Plan Species. If the observed rates of adult fallback and steelhead kelt loss are determined to be significant, then the Coordinating Committee shall determine the most cost

effective methods to protect adult fallbacks and steelhead kelts at the Dam, and the District shall immediately implement the Measures. Reduction in fallback rates, mortalities and protection of kelts shall be factored into juvenile bypass and adult passage development and implementation and into Project operation decisions.

4.4.6 The Parties to this Agreement recognize that current technology does not allow for a precise estimate of hydroelectric project induced mortality to adult salmonids. Until adult survival studies can accurately differentiate between natural and hydro-project induced mortality, the District shall use the best available technology to conduct, on a periodic basis, adult passage verification studies toward the diagnosis of adult loss, injury and delay at Wells Dam. Prior to the completion of adult survival studies, compensation for adult mortality shall be assumed completely fulfilled by the District's contribution to the Plan Species Account. Following the completion of adult survival studies, should adult survival rates fall below 98% but the Combined Adult and Juvenile survival rate be maintained above 91%, additional hatchery compensation for that portion of adult losses that exceeds 2%, toward a maximum contribution of 7% compensation provided through hatchery programs and 2% tributary funding, would be utilized to satisfy NNI compensation requirements for each Plan Species.

4.4.7 Pursuant to the 2000 Biological Opinion (BiOp) for the Federal Columbia River Power System, the federal action agencies are required to conduct a comprehensive evaluation to assess adult survival at federal dams. The BiOp sets forth a series of evaluation methods to be employed. The Coordinating Committee should review the information and techniques utilized in those studies and evaluate their potential for accurately measuring Combined Adult and Juvenile Project Survival. The Coordinating Committee should also evaluate technologies found at the federal dams to increase adult survival for possible implementation at the Project. Based upon those evaluations, the District shall implement as necessary, technologies appropriate for the Project.

SECTION 5 RESERVOIR AS HABITAT AND WATER QUALITY

5.1 When making land use or related permit decisions on Project owned lands that affect reservoir habitat, the District shall consider the cumulative impact effects in order to meet the conservation objectives of the Agreement, requirements of the FERC license, and other applicable laws and regulations. The District further agrees to notify and consider comments from the Parties to the Agreement regarding any land use permit application on Project owned lands.

5.2. The District shall notify all applicants for District permits to use or occupy Project lands or water that such use or occupancy may result in an incidental take of species listed as endangered or threatened under the ESA, requiring advance authorization from NMFS or USFWS.

5.3 The Parties recognize that there are potential water quality issues (temperature and dissolved gas) related to cumulative hydropower operations in the Columbia River. The Parties will work together to address water quality issues.

SECTION 6 COORDINATING COMMITTEE

6.1 Establishment of Committee. There shall be a Coordinating Committee composed of one (1) representative of each Party, provided, that the District's Power Purchasers may participate as a non-voting observer through a single representative, whom they will designate from time to time. Each representative shall have one vote. Each Party shall provide all other Parties with written notice of its designated representative to the Coordinating Committee.

6.2 Meetings. The Coordinating Committee shall meet whenever requested by any two (2) members following notice (unless waived).

6.3 Meeting Notice. The chair of the Coordinating Committee shall provide all committee members with a minimum of ten (10) Days advanced written notice of all meetings unless a member waives notice in writing or reflects the waiver in the approved meeting minutes. The notice shall contain an agenda of all matters to be addressed and voted on during the meeting.

6.4 Voting. The Coordinating Committee shall act by unanimous vote of those members present in person or by phone for the vote and shall develop its own rules of process, provided, that the chair shall ensure that all members are sent notice regarding agenda items that may be brought to a vote during the proposed Coordinating Committee meeting. Abstention does not prevent a unanimous vote. If a Party or its designated alternate cannot be present for an agenda item to be voted upon at a Coordinating Committee meeting, the Party must notify the chair of the Coordinating Committee who shall delay a vote on an agenda item for up to five business days on specified issue(s) to be addressed in a meeting and conference call scheduled with all interested Parties, or as otherwise agreed to by the Coordinating Committee. A Party may invoke this right only once per delayed item. If the Coordinating Committee cannot reach agreement, then upon request by any Party, that issue shall be referred to Dispute Resolution.

6.5 Chair of the Coordinating Committee. The Parties shall choose and the District shall fund a neutral third party to act as the chair the Coordinating Committee. The chair is expected to prepare an annual list of understandings based on the results of studies (See below sub-Section 6.7 (Authority)), prepare progress reports, prepare meeting minutes, facilitate and mediate the meetings, and assist the members of the Coordinating Committee in making decisions. At least every three years, the Coordinating Committee shall evaluate the performance of the chair of the Coordinating Committee.

6.6 Use of Coordinating Committee. The Coordinating Committee will be used as the primary means of consultation and coordination between the District and the FP in connection with the conduct of studies and implementation of the Measures set forth in this Agreement and for Dispute Resolution. Any entity not executing this Agreement shall not be a Party to this Agreement and shall not be entitled to vote on any committee established by this Agreement. However, any Committee established by this Agreement may agree to allow participation of any governmental entities not a Party to this Agreement.

6.7 Authority. The Coordinating Committee will oversee all aspects of standards, methodologies, and implementation. The Coordinating Committee shall 1) establish the protocol(s) and methodologies to determine whether or not the survival standards contained within Section 4 (Passage Survival Plan) are being achieved for each Plan Species; 2) determine whether the Parties are carrying out their responsibilities under this Agreement; 3) determine whether NNI is achieved; 4) determine the most appropriate standard in Section 4 (Passage Survival Plan) to be measured for each Plan Species; 5) approve all studies prior to implementation; and 6) review study results, determine their

applicability, and develop an annual list of common understandings based on the studies; 7) periodically adjust the Measures (after Phase I) to address survival and Unavoidable Project Mortality as provided herein; provide that no more than 9% Unavoidable Project Mortality shall be replaced through hatchery and tributary compensation without concurrence of the Coordinating Committee, and hatchery compensation shall not exceed 7% and tributary funding shall not exceed 2% unless agreed to by the Coordinating Committee; 8) resolve disputes brought by the Hatchery and Tributary Committees, and (9) adjust schedules and dates for performance. If the Coordinating Committee cannot reach agreement, then these decisions shall be referred to Dispute Resolution as set forth in Section 11 (Dispute Resolution).

6.8 Studies and Reports. All studies and reports prepared under this Agreement will be available to all members of the Coordinating Committee as soon as reasonably possible. Draft reports will be circulated through the Coordinating Committee representatives for comment, which shall be due within 60 Days unless the Coordinating Committee decides otherwise, and comments will either be addressed in order or made an appendix to the final report. All reports will be kept on file with the District. All studies will be conducted following techniques and methodologies accepted by the Coordinating Committee. All studies will be based on sound biological and statistical design and analysis. The Coordinating Committee shall have the ability to select an independent, third party for the purpose of providing an independent scientific review of any disputed survival study results and/or reports.

6.9 Progress Reports: Each year, with assistance from the chair of the Coordinating Committee, the Hatchery Committee, and the Tributary Committee shall prepare an annual report to the Coordinating Committee describing their progress. Each year, the Coordinating Committee shall prepare an annual report to the Parties describing progress toward achieving the survival standards contained within Section 4 (Passage Survival Plan), and common understandings based upon studies. By March 2013, a comprehensive progress report shall be prepared by the District, at the direction of the Coordinating Committee, assessing overall status of achieving NNI. The Coordinating Committee shall direct an analysis to determine whether each Plan Species is rebuilding. Comprehensive progress reporting shall continue to occur at successive ten-year intervals.

SECTION 7 TRIBUTARY CONSERVATION PLAN

7.1 Tributary Plan. The Tributary Conservation Plan (Tributary Plan) consists of this Agreement and is supported by Supporting Document D, (Tributary Plan, Project Selection, Implementation, and Evaluation). The Tributary Plan is also supported by Supporting Document A (Aquatic Species and Habitat Assessment: Wenatchee, Entiat, Methow, and Okanogan Watersheds). The Parties recognize that Supporting Document A and D do not, by themselves, create contractual obligations.

7.2 Purpose. Under the Tributary Plan, the District shall provide a Plan Species Account to fund projects for the protection and restoration of Plan Species habitat within the Columbia River Watershed (from the Chief Joseph Tailrace to the Wells Tailrace) and the Methow, and Okanogan watersheds, in order to compensate for up to two percent Unavoidable Project Adult and/or Juvenile Mortality; provided that the Parties shall not be required to actually measure whether the Tributary Plan compensates for up to two percent Unavoidable Adult Project Mortality.

7.3 Tributary Committee.

7.3.1 Establishment of Committee. There shall be a Tributary Committee composed of one (1) representative of each Party, provided that an entity eligible to appoint a representative to the Tributary Committee is not required to appoint a representative, and further provided that, representatives from USFWS shall participate in a non-voting, ex-officio capacity unless they otherwise state in writing, and further provided that, the Power Purchasers may participate as a non-voting observer through a single representative, whom they will designate from time to time. The Tributary Committee may select other expert entities, such as land and water trusts/conservancy groups to serve as additional, non-voting members of the Tributary Committee. Each entity eligible to appoint a representative to the Tributary Committee shall provide all other eligible entities with written notice of its designated representative. The Tributary Committee is charged with the task of selecting projects and approving project budgets from the Plan Species Account for purposes of implementing the Tributary Plan.

7.3.2 Full Disclosure. After full written disclosure of any potential conflict of interest, which shall appear in the minutes of the Tributary Committee and prior to project approval, the Tributary Committee may approve a project that may benefit a person or entity related to a committee member, or an entity which appointed the committee member.

7.3.3 Meetings. The Tributary Committee shall meet not less than twice per year at times determined by the Tributary Committee. Additionally, the Tributary Committee may meet whenever requested by any two (2) members following a minimum of ten (10) Days advance written notice to all members of the Tributary Committee unless a member waives notice in writing or reflects the waiver in the approved meeting minutes. The notice shall contain an agenda of all matters to be addressed during the meeting including items that may be brought to a vote during the meeting.

7.3.4 Voting. Except as set forth in sub-Section 7.3.7.1 (Prohibited Use of Account), the Tributary Committee shall act by unanimous vote of those members present in person or by phone for the vote and shall develop its own rules of process, provided, that the chair shall ensure that all members are sent notice of all Tributary Committee meetings. Abstention does not prevent a unanimous vote. If a Party or its designated alternative cannot be present for an agenda item to be voted upon, the Party must notify the chair of the Tributary Committee who shall delay a vote on an agenda item for up to five business days on specified issue(s) to be addressed in a meeting or conference call with all interested Parties, or as otherwise agreed to by the Tributary Committee. A Party may invoke this right only once per delayed item. If the Tributary Committee cannot reach agreement, then upon request of any Party, that issue shall be referred to the Coordinating Committee.

7.3.5 Chair of the Tributary Committee. The Parties shall choose and the District shall fund a neutral third party to chair the Tributary Committee meetings. The chair of the Tributary Committee shall have the same responsibilities and authorities with regard to the Coordinating Committee. At least every three years, the Tributary Committee shall evaluate the performance of the chair of the Tributary Committee.

7.3.6 Coordination With Other Conservation Plans. Whenever feasible, projects selected by the Tributary Committee shall take into consideration and be coordinated with other conservation plans or programs. Whenever feasible, the Tributary Committee shall cost-share with other programs, seek matching funds, and “piggy-back” programs onto other habitat efforts.

7.3.7 Plan Species Account. The District shall establish a Plan Species Account in accordance with applicable provisions of Washington State law and this Agreement. Interest earned on the funds in the Plan Species Account shall remain in the Plan Species Account. The Parties to this Agreement may audit the District's records relating to the Account during normal business hours following reasonable notice. The Tributary Committee shall select projects and approve project budgets from the Plan Species Account by joint written request of all members of the Tributary Committee. The Tributary Committee shall act in strict accordance with sub-Section 7.3.7.1 (Prohibited Uses of Account).

7.3.7.1 Prohibited Uses of Account. No money from the Plan Species Account shall be used to enforce compliance with this Agreement. Members of the Tributary Committee and their expenses to attend and participate in Tributary Committee meetings shall not be compensated through the Plan Species Account. Administrative costs, staffing and consultants, reports and brochures, landowner assistance and public education costs collectively shall not exceed \$80,000 (1998 dollars) in any given year without the unanimous vote of the Tributary Committee.

7.3.7.2 Financial Reports. At least annually, the District shall provide financial reports of Plan Species account activity to the Tributary Committee.

7.3.7.3 Selection of Projects and Approval of Budgets. The Tributary Committee shall select projects and approve budgets for expenditure from the Plan Species Account for the following: (1) Any action, structure, facility, program or measure (referred to herein generally as "tributary projects") intended to further the purpose of the Tributary Plan for Plan Species. Tributary Projects shall be chosen based upon the guidelines set forth in Supporting Document D, "Tributary Compensation, Project Selection, Implementation, and Evaluation" and Supporting Document A, "Aquatic Species and Habitat Assessment: Wenatchee, Entiat, Methow, and Okanogan Watersheds ". Tributary Projects shall not be implemented outside the area specified in sub-Section 7.2 (Purpose). High priority shall be given to the acquisition of land or interests in land such as conservation easements or water rights or interests in water such as dry year lease options; (2) studies, implementation, monitoring, evaluation, and legal expenses associated with any project financed from the Plan Species Account; and (3) prior approved administrative expenses associated with the Plan Species Account.

7.3.7.4 Ownership of Assets. The Tributary Committee shall make determinations regarding ownership of real and personal property purchased with funds from the Plan Species Account. Title may be held by the District, by a resource agency or tribe or by a land or water conservancy group, as determined by the Tributary Committee. Unless the Tributary Committee determines that there is a compelling reason for ownership by another entity, the District shall have the right to hold title. All real property purchased shall include permanent deed restrictions to assure protection and conservation of habitat.

7.3.7.5 Account Status Upon Termination. Upon the Agreement's termination, (1) the District's unspent advanced contributions to the Plan Species Account shall be promptly released to the District, (2) if funds remain in the Plan Species Account after the return of the District's advance contributions, then the Tributary Committee shall remain in existence and continue to operate according to the terms of this Agreement until the funds in the Plan Species Account are exhausted, and 3) all real and personal property which the District holds title shall remain its property.

7.4 Funding.

7.4.1 The District shall make an initial contribution of \$1,982,000 in 1998 dollars to the Plan Species Account. Five years after the initial contribution to the Plan Species Account, the District shall do one of the following: 1) make annual payments of \$176,178 (2%) in 1998 dollars as long as the Agreement is in effect; or 2) provide an up front payment of \$1,761,780 (2% for 10 years) in 1998 dollars, but deducting the actual cost of bond issuance and interest.

7.4.2 The District's funding of the Plan Species Account will be considered to be full and complete compensation for adult mortality associated with the Wells Hydroelectric Project until the actual adult survival rate can be accurately determined.

7.4.3 If the adult survival rate is determine to be equal to or greater than 98% and the Juvenile Project Survival rates is determined to be greater than 93%, the Tributary Fund will be reduced to reflect the actual adult survival estimate of the four Permit Species. Adult survival estimates for each Permit Species will independently determine one quarter of the Plan Species Account (See Example 1).

7.4.4 If the Juvenile Project Survival rate for each Plan Species is less than 93% but the Combined Adult and Juvenile Project Survival rate is maintained above 91%, the Plan Species Account may be used to compensate for juvenile losses, with a maximum compensation rate of 2%.

7.4.5 The choice of annual or up front payment under sub-Sections 7.4.1 shall be made by the FP.

7.4.6 If the “up front payment option” is selected then at the end of 15 years, the Parties will determine the distribution of the remaining funds to the Plan Species Account in amounts equivalent to annual payments of \$176,178.00 in 1998 dollars.

7.4.7 The first installment is due within ninety (90) Days of the effective date of the Agreement. The rest of the installments are due by the 31st day of January each year thereafter. The dollar figures shall be adjusted for inflation on the 1st day of January each year based upon the Consumer Price Index for all Urban Consumers for the Seattle/Tacoma area, published by the U.S. Department of Labor, Bureau of Labor Statistics. If said index is discontinued or becomes unavailable, a comparable index suitable to the Tributary Committee shall be substituted.

7.5 Tributary Assessment Program.

The District shall provide support for a Tributary Assessment Program separate from the Plan Species Account. The Tributary Assessment Program will be utilized to monitor and evaluate the relative performance of tributary enhancement projects approved by the Tributary Committee and directly funded by the initial contribution to the Plan Species Account (See Section 7.4.1). It is not the intent of the Tributary Assessment Program to measure whether the Plan Species Account has provided a 2% increase in survival for Plan Species. Instead, the program has been established to ensure that the dollars allocated to the Plan Species Account are utilized in an effective and efficient manner. The District shall develop, in coordination with and subject to approval by the Tributary Committee, the measurement protocols for the Tributary Assessment Program. The Tributary Committee may choose to either evaluate the relative merits of each individual tributary enhancement project or it may choose to evaluate an aggregation of projects provided that the total cost associated with the Tributary Assessment Program does not exceed \$200,000 (not subject to inflation adjustment).

Example 1. Adult steelhead and spring chinook survival measured at 99% but no other adult Permit Species have been studied. Tributary funding would remain at 2% for sockeye and summer/fall chinook but would be reduced to 1% based upon the results from the adult steelhead and spring chinook survival studies. Annual Contributions to the Plan Species Account would reduce the prospective payments from a full 8/8 contribution to a 6/8 contribution.

Plan Species Account Calculations:

Before Adult Studies		After Adult Studies
Steelhead	(2%)	(1%)
Spring Chinook	(2%)	(1%)
Summer/Fall Chinook	(2%)	(2%)
Sockeye	(2%)	(2%)
8/8th		6/8th

SECTION 8 HATCHERY COMPENSATION PLAN

8.1 Hatchery Objectives.

8.1.1 The District shall provide hatchery compensation for all of the Permit Species including; a) spring chinook salmon, b) summer/fall chinook salmon, c) sockeye salmon d) summer steelhead as further described in Section 8 (Hatchery Compensation Plan). The District shall also provide hatchery compensation for coho salmon should they become established under the criteria set forth in Section 8.4.5.1 (Coho).

8.1.2 The District shall implement the specific elements of the hatchery program consistent with overall objectives of rebuilding natural populations, and achieving NNI. Species specific hatchery program objectives developed by the JFP may include contributing to the rebuilding and recovery of naturally reproducing populations in their native habitats, while maintaining genetic and ecologic integrity, and supporting harvest. This compensation may include Measures to increase the off-site survival of naturally spawning fish or their progeny (i.e. Sockeye Enhancement Decision Tree, Section 14, Figure 3).

8.2 Hatchery Committee.

8.2.1 Establishment of the Committee. There shall be a Hatchery Committee composed of one (1) representative of each Party, provided that a Party is not required to appoint a representative and further provided that the Power Purchasers may participate as a non-voting observer through a single representative whom they will designate from time to time. A Party shall provide all other eligible Parties with written notice of its designated representative.

8.2.2 Responsibilities. The Hatchery Committee shall oversee development of recommendations for implementation of the hatchery elements of this Agreement for which the District has responsibility for funding. This includes overseeing the implementation of improvements and monitoring and evaluation relevant to the District's hatchery programs, as identified in the Hatchery Compensation Plan, the Permit and this Agreement. The Hatchery Committee shall also coordinate in-season information sharing and shall discuss unresolved issues. The Hatchery Committee decisions shall be based upon: likelihood of biological success, time required to implement, and cost-effectiveness of solutions.

8.2.3 Meeting Notice. The Hatchery Committee shall meet at least twice per year or whenever requested by any two (2) members following a minimum of ten (10) Days advance written notice to all members of the Hatchery Committee unless a member waives notice in writing or reflects the waiver in the approved meeting minutes. The notice shall contain an agenda of all matters to be addressed during the meeting including items that may be brought to a vote during the meeting.

8.2.4 Voting. The Hatchery Committee shall act by unanimous vote of those members present in person or by phone for the vote and shall develop its own rules of process, provided, that the chair shall insure that all members are sent notice of all Hatchery Committee meetings. Abstention does not prevent a unanimous vote. If a Party or its designated alternative cannot be present for an agenda item to be voted upon, then the Party must notify the chair of the Hatchery Committee who shall delay a vote on an agenda item for up to five business days on specified issue(s) to be addressed in a meeting or conference call scheduled with all interested Parties, or as otherwise agreed to by the Hatchery Committee. A Party may invoke this right only once per delayed agenda item. If the Hatchery Committee cannot reach agreement, then upon request of any Party, that issue shall be referred to the Coordinating Committee.

8.2.5 Chair of the Hatchery Committee. The Parties shall choose and the District shall fund a neutral third party to chair the Hatchery Committee meetings. The chair shall have the same responsibilities and authorities with regard to the Hatchery Committee as the chair of the Coordinating Committee has with regard to the Coordinating Committee. At least every three years, the Hatchery Committee shall evaluate the performance of the chair of the Hatchery Committee.

8.3 Hatchery Operations. The District or its designated agents shall operate the hatchery facilities according to the terms of Section 8 (Hatchery Compensation Plan), the ESA Section 10 permit(s) and in consultation with the Hatchery Committee.

8.4 Hatchery Production Commitments.

8.4.1 Hatchery Agreements. The District may enter into agreements with other entities for the rearing, release, monitoring and evaluation and research of hatchery obligations. However, it is the District's responsibility to ensure that their obligations under Section 8 (Hatchery Compensation Plan) are satisfied. The Hatchery Committee must approve any proposed agreements or trades of production.

8.4.2 Calculation of Hatchery Commitments. During Phase I, the District shall provide the funding and capacity required of the District to meet the 7% hatchery compensation level necessary to achieve NNI. Juvenile Project Survival estimates, when available, will be used to adjust hatchery based compensation programs and adult survival estimates will be used to adjust the Plan Species Account contribution. However, should adult survival rates fall below 98% but the Combined Adult and Juvenile survival rates be maintained above 91%, additional hatchery compensation for adult losses, toward a maximum contribution of 7% compensation provided through hatchery programs, would be utilized to provide compensation for Unavoidable Project Mortality. The rationale for determining the initial hatchery production commitment requirement is supported by Supporting Document B, "Biological Assessment and Management Plan: Mid-Columbia Hatchery Program". The Parties recognize that Supporting Document B is a supporting document and does not by itself create contractual obligations.

8.4.3 Phase I Production Commitment. Douglas will continue to fund the operation and maintenance of the Wells Hatchery and Methow Spring Chinook Supplementation Hatchery. The Parties agree that the Phase I production commitments to be provided by the District for juvenile passage losses are satisfied by maintaining current production commitments at existing facilities of 49,200 pounds of spring chinook at about 15 fish per pound (738,000 fish) and 30,000 pounds of summer steelhead at about 6 fish per pound (180,000 fish). Summer chinook passage losses are mitigated with 40,000 pounds of summer chinook at about 10 fish per pound (400,000 fish), currently being satisfied through the species trade with Chelan PUD (40,000 pounds of summer chinook are reared by Chelan PUD in exchange for 19,200 pounds of spring chinook reared by Douglas PUD). A portion of passage losses for sockeye (5%) are satisfied through the substitution of 15,000 pounds of spring chinook production (225,000 fish) at the Methow Hatchery as a species substitution for 9,240 pounds of sockeye (231,000 fish). After 2003 brood, NNI for sockeye will be accomplished through the implementation of a set of options identified in the Sockeye Enhancement Decision Tree (See Section 14, Figure 3). As a result of implementing the Sockeye Enhancement Decision Tree, the District's spring chinook obligation shall be reduced by 15,000 pounds starting with the 2004 brood.

8.4.4 Adjustment of Hatchery Compensation - Survival Studies. Hatchery production commitments, except for original inundation compensation, shall be adjusted based upon the results of survival studies conducted during Phase I, Phase II and Phase III (Standard Achieved, Additional Juvenile Studies, and Provisional Review). Hatchery compensation for yearling chinook and steelhead shall be adjusted based upon the results from the three years of accurate and precise Juvenile Project Survival studies completed at the Wells Hydroelectric Project. The arithmetic average of the three years of survival study indicate that the survival of yearling chinook and steelhead averages 96.2%. As a result, compensation for spring chinook, yearling summer chinook and steelhead shall be reduced to 3.8% as indicated below:

Spring Chinook: The District's commitment for Methow Basin spring chinook shall be 4,071 pounds at about 15 fish per pound (61,071 smolts). In addition, the District will provide 15,000 pounds of spring chinook at about 15 fish per pound (225,000 fish) through brood year 2003 as compensation for sockeye salmon losses.

The District will rear for Chelan PUD, through contractual agreement between the two PUDs, up to 19,200 pounds of spring chinook at about 15 fish per pound (288,000 fish).

Steelhead: The passage loss of steelhead shall be mitigated through the production of 8,143 pounds of fish at about 6 fish per pound (48,858 fish).

Sockeye: Through spring 2005 (2003 Brood), 15,000 pounds (225,000 smolts) of spring chinook salmon will be raised as species substitution for 9,240 pounds of sockeye. After 2005, NNI for sockeye will be accomplished through the implementation of a set of options identified in the Sockeye Enhancement Decision Tree (See Section 14, Figure 3).

Summer Chinook: The District's commitment for summer chinook shall be 10,857 pounds of yearling summer chinook at about 10 fish per pound (108,570 fish). Chelan PUD, through contractual agreement with Douglas PUD, will rear these fish at the Carlton Acclimation Pond.

8.4.5 Adjustment of Hatchery Compensation - Population Dynamics. Hatchery production commitments, except for original inundation mitigation, shall be adjusted in 2013 and every 10 years thereafter to achieve and maintain NNI as required to adjust for changes in the average adult returns of Plan Species and for changes in the adult-to-smolt survival rate and for changes to the smolt-to-adult survival rate from the hatchery production facilities, using methodologies described in Supporting Document B, "Biological Assessment and Management Plan (BAMP): Mid-Columbia Hatchery Program". However, it should be noted that Supporting Document B is a supporting document and does not by itself create contractual obligations.

Example 2: Juvenile Project Survival for steelhead measured at 96.2% with error of less than 5% at a 95% confidence interval. Hatchery supplementation commitments for steelhead would be established at 3.8% (14% compensation for steelhead under the Wells Settlement Agreement equates to 30,000 pounds of steelhead; 7% compensation for steelhead equates to 15,000 pounds). At a 3.8% compensation rate, steelhead production would be reduced to 3.8/7 of 15,000 pounds or 8,143 pounds of steelhead raised as compensation for mainstem project passage losses. This production would be in addition to the fixed inundation compensation of 50,000 pounds of steelhead. Total steelhead production would be established under Phase III (Standards Achieved) at 58,143 pounds of steelhead at 6 fish per pound.

8.4.5.1 Coho. Compensation for Methow River coho will be assessed in 2006 following the development of an anticipated long-term coho hatchery program and/or the establishment of a Threshold Population of naturally reproducing coho in the Methow Basin. The Hatchery Committee shall make a determination on whether a hatchery program and/or naturally reproducing population of coho is present in the Methow Basin (by an entity other than the District and occurring outside this Agreement). Should the Hatchery Committee determine that such a program and/or population exists, then the Hatchery Committee shall determine the most appropriate means to satisfy NNI for Methow Basin coho. Programs to meet NNI for Methow Basin coho may include but is not limited to; 1) provide operation and maintenance funding in the amount equivalent to 3.8% project passage loss or 2) provide funding for acclimation or adult collection facilities both in the amount equivalent to 3.8% juvenile passage loss at the Wells Project. The programs selected to achieve NNI for Methow Basin coho will utilize an interim value of project survival, based upon the three-year average Juvenile Project Survival estimate of 96.2%, until project survival studies can be conducted on Methow Basin coho.

8.4.5.2 Okanogan Basin Spring Chinook. Compensation for Okanogan Basin spring chinook will be assessed in 2007 following the development of a long-term spring chinook hatchery program and/or the establishment of a Threshold Population of naturally reproducing spring chinook in the Okanogan watershed (by an entity other than the District and occurring outside this Agreement). The Hatchery Committee shall make a determination on whether a hatchery program and/or naturally reproducing population of spring chinook is present in the Okanogan Basin. Should the Hatchery Committee determine that such a program and/or population exists, then the Hatchery Committee shall determine the most appropriate means to satisfy NNI for Okanogan Basin spring chinook. Programs to meet NNI for Okanogan Basin spring chinook may include but not be limited to; 1) provide O & M funding in the amount equivalent to 3.8% project passage loss or 2) replace project passage losses of hatchery spring chinook with annual releases of equivalent numbers of yearling summer chinook into the Okanogan River Basin or 3) provide funding for acclimation or provide funding for adult collection facilities in the amount equivalent to 3.8% juvenile passage loss at the Wells Project. The programs selected to achieve NNI for Okanogan Basin spring chinook will utilize an interim value of project survival based upon the three-year average Juvenile Project Survival estimate of 96.2% until project survival studies can be conducted on Okanogan Basin yearling chinook.

8.4.6 Fixed Hatchery Compensation - Inundation. Of the existing production commitment 50,000 pounds of yearling steelhead at about 6 fish per pound (300,000 fish), 32,000 pounds of yearling summer chinook at about 10 fish per pound (320,000 fish) and 24,200 pounds of subyearling summer chinook, at about 20 fish per pound (484,000 fish), is compensation for original inundation and shall not be subject to adjustment as provided in sub-Section 8.4 (Hatchery Production Commitments).

8.5 Monitoring and Evaluation.

8.5.1 The Hatchery Committee shall develop a five-year monitoring and evaluation plan for the hatchery program that is updated every five years. The first monitoring and evaluation plan shall be completed by the Hatchery Committee within one year following FERC approval of this Agreement. Existing monitoring and evaluation programs will continue until replaced by the Hatchery Committee.

8.5.2 The Parties agree that over the duration of this Agreement new information and technologies may be developed and may be considered in a comprehensive hatchery evaluation program. The District shall fund the comprehensive hatchery evaluation program consistent with the hatchery goals set forth in sub-Section 8.1.2 and 8.4 (Hatchery Production Commitments) and the monitoring and evaluation guidelines as outlined in the BAMP and as determined by the Hatchery Committee.

8.5.3 The Hatchery Committee shall plan and the District shall implement the following steelhead studies that are related to the District's production program. First, the District shall fund a study to investigate the natural spawning (reproductive) success of hatchery reared steelhead relative to wild steelhead. This study should utilize a statistically valid number of fish necessary to develop baseline DNA profiles for Methow River steelhead. This analysis should be conducted for approximately 5 brood years. The District shall also conduct an assessment of longer-term acclimation for steelhead, using small scale temporary or existing facilities. This study shall continue for approximately 3 brood years and will not compromise in any way on-going supplementation programs at existing facilities.

8.6 Program Modifications.

8.6.1 Hatchery program modifications shall make efficient use of existing facilities owned by the District or cooperating entities including adult collection, acclimation and hatchery facilities, provided that existing facility use is compatible with and does not compromise ongoing programs. The District in consultation with the Hatchery Committee shall make reasonable efforts to implement program modifications when needed to achieve overall and specific program objectives. Program modifications may include changes to facilities, release methods, and rearing strategies necessary to achieve NNI as determined by the monitoring and evaluation program. Program modifications will be made following unanimous agreement of the Hatchery Committee, as set forth in sub-Section 8.2.4 (Voting), to achieve specific program objectives as outlined in Section 8 (Hatchery Compensation Plan), including sub-Section 8.4.4 (Adjustment of Hatchery Compensation – Survival Studies) and sub-Section 8.4.5 (Adjustment of Hatchery Compensation – Population Dynamics), as determined by Section 10 Permit and as defined in monitoring and evaluation plans to be developed. The District will make reasonable efforts to complete program modifications as soon as possible, following agreement with the Hatchery Committee.

8.6.2 As of the date this Agreement is signed by the Parties, two areas have been identified for program modification and improvement. The District working with the Hatchery Committee shall assess program modification options and implement them based upon the results of the assessment, as indicated below.

1) Improve the adult trapping facility efficiency for adult spring chinook returning to the Chewuch River without undue delay in adult migration and/or displacement of natural spawners to non-target areas. In coordination with the JFP, the District will use its best effort to implement trap improvements by removal of rock debris below Fulton Dam (Chewuch River) by May 2002. The Hatchery Committee will assess whether these improvements are sufficient to achieve the trapping objective without changing adult migration/spawning behavior. If the trapping objectives are achieved, no additional improvements will be required. In the event that these repairs do not result in achievement of the trapping objective, the District, working with the Hatchery Committee, will assess the methods to improve trap efficiency including the following options; 1) additional improvements to Fulton Dam, or 2) a new trapping facility. Based on these assessments, the Hatchery Committee shall select a preferred option and an implementation plan shall be developed by the District. The District will complete

program modifications as soon as reasonably possible (possibly 2003), following agreement with the Hatchery Committee.

2) Improve the adult trapping facility efficiency for adult spring chinook returning to the Twisp River without undue delay in adult migration and/or displacement of natural spawners to non-target areas. The Hatchery Committee will assess methods to improve trap efficiency including the following two options; 1) modifying the existing trap and weir or 2) development of a new trapping facility. Based on these assessments, the Hatchery Committee shall select a preferred option and the District shall develop an implementation plan. The District will complete program modifications as soon as reasonably possible (possibly 2003), following agreement with the Hatchery Committee.

8.6.3 In addition to these program modifications and with concurrence from the Hatchery Committee, the District may pursue the development of a memorandum of understanding between parties concerning use of shared facilities, fish, and water rights.

8.6.4 During the duration of the Agreement, NMFS shall have the opportunity to seek hatchery program modifications (that do not change the 7% program levels) but are otherwise necessary to address emergency effects of a hatchery program on listed Permit Species. Such program modifications shall be supported by a minimum of two years of field data from the river or stream in question. Other information documenting a significant and adverse effect on the productivity of listed Permit Species from other rivers can be considered, but only if applicable to the listed Permit Species and stream in question. Any proposal to modify a hatchery program will be documented in a memorandum from the Regional Administrator to the Hatchery Committee summarizing the problem, and then followed by up to six months of Hatchery Committee evaluation. The Parties recognize that initially a portion of the production contemplated in this Agreement will be for purposes of supplementation of Plan Species or re-establishing runs in areas from which they have been extirpated. In the event the concerns raised in this sub-Section (8.6.4) involve the use of such a program, NMFS agrees to take the program design and intent into account in reaching any conclusion regarding the need for emergency modifications.

8.7 Changed Hatchery Policies under ESA.

8.7.1 Except in 2013 and every ten years hereafter, NMFS will refrain from applying hatchery policy decisions that would preclude the 7% hatchery levels (as adjusted) from being achieved. In 2013, and every 10 years thereafter (at the time of the program review), if NMFS proposes hatchery policy decisions that would preclude the 7% hatchery levels (as adjusted) from being achieved, NMFS will (a) propose application of the policies to the Hatchery Committee and seek agreement, (b) propose a revised hatchery program consistent with the principles of NNI and an expeditious transition plan from the existing hatchery program to the revised hatchery program, (c) if agreement is not possible, discuss the application of the policies with the Coordinating Committee and then with the Policy Committee, if necessary, and (d) if agreement is still not possible then allow the issue to be elevated to the Administrator of NMFS. Between 2013 and 2018, except as provided in sub-Section 8.4 (Program Commitments) and 8.6 (Program Modifications), if NMFS fails to allow full utilization of the District's hatchery capacity to achieve the 7% hatchery levels (as adjusted), this shall not be considered a basis for NMFS withdrawal from the Agreement or revocation of the Permit until 2018. In such a case, the District working with the Parties shall develop a transition plan between 2013 and 2018 to make up for the 7% hatchery levels (as adjusted). The transition plan may be implemented as soon as reasonably possible however the transition plan must be initiated by 2018. The Parties recognize that initially a portion of the production contemplated in this Agreement will be for purposes of supplementation of Plan Species or re-establishing runs in areas from which they have been extirpated. NMFS agrees to take the program design and intent into account in reaching any conclusion.

8.7.2 Until 2013, facility modifications are based on monitoring and evaluations and may not reflect changes in NMFS hatchery policy. During 2013 and every 10 years thereafter (at the time of the program review), facility modifications can also reflect changes in ESA policy with the understanding that a reasonable period of time will be provided to complete the modifications. The 2013 date for achievement of NNI in Section 3.1 will be adjusted if necessary to reflect the time needed to complete such modifications (as determined by the Hatchery Coordinating Committee).

8.8 Program Review. In 2003 and every ten years thereafter, the hatchery evaluations program, including natural population/hatchery interaction studies, will undergo a program review to determine whether or not the applicable hatchery program is operating in a manner that is consistent with the goals outlined in that particular facilities hatchery evaluation plan. In 2013 and every ten years thereafter, the hatchery program will undergo a program review to determine if adult-to-smolt and smolt-to-adult survival standards, hatchery

program goals, and objectives as defined in the Hatchery Plan, the Section 10 Permits, and as further defined in this document have been met or sufficient progress is being made towards their achievement. This review shall include a determination of whether hatchery production objectives are being achieved. The Hatchery Committee shall be responsible for conducting the hatchery program review, developing a summary report, and in the event that program objectives, as defined in sub-Section 8.1 (Hatchery Objectives) above, are not being met, shall be responsible for establishing alternative plans to the District to achieve them. The District shall be responsible for developing and funding implementation plans.

8.9 New Hatchery Facilities. Before being required to construct new hatchery facilities, the Hatchery Committee shall make efficient use of existing or modified facilities owned by the District or entities consenting to the use of their facilities including adult collection, acclimation and hatchery facilities, provided that existing or modified facility use is compatible with and does not compromise ongoing programs.

SECTION 9 ASSURANCES

9.1 Project License. The Parties agree to join with the District's filing with FERC requesting that FERC issue appropriate orders: (1) to amend the Project's existing license to include this Agreement as a condition thereof, and (2) to terminate the Wells Settlement Agreement dated October 1, 1990.

9.2 Regulatory Approval.

9.2.1 The Parties shall provide reasonable efforts to expedite any NEPA, SEPA, and other regulatory processes required for this Agreement to become effective. The Parties (except the lead agency) may file comments with the lead agency. Such comments will not advocate additional Measures or processes for Plan Species. The Parties shall provide reasonable efforts to expedite the approval process of the District's incidental take permit application.

9.3 Regulatory Approval Without Change.

9.3.1 Except for the District's obligations in sub-Section 10.2 (Permit Issuance) and sub-Section 9.1 (Project License), the terms of this Agreement shall not take effect until the NMFS issues the District a Permit, the FERC issues the required FERC orders and the USFWS completes necessary consultations under the ESA. Provided, the Parties shall continue to conduct planning and study efforts throughout the approval process.

9.3.2 Any Party may withdraw from this Agreement within 60 Days of FERC issuing a license modification in the event that: (1) the NMFS issues the District a Permit with terms and conditions in addition to or different from those set forth in this Agreement, (2) the FERC fails to include this Agreement, in its entirety, or adds terms or conditions inconsistent with this Agreement as a license condition of the current Project license or of the first new long-term Project License approved within the term of this Agreement, or (3) a Party as a result of compliance with NEPA or SEPA requires a material change to the terms or conditions of this Agreement. In order to withdraw from this Agreement, a Party shall provide all other Parties with notice of their intent to withdraw and state in the notice their reason(s) for withdrawing from the Agreement. The ability of a Party to withdraw from this Agreement, pursuant to this paragraph, terminates if not exercised within said period. The notices required by this sub-Section shall be in writing and either served in person or provided by U.S. Mail, return receipt requested.

9.4 Release, Satisfaction and Covenant Not to Sue.

9.4.1 The Parties, within the limits of their authority, shall from the date of construction of the Project to the effective date of this Agreement, release, waive, discharge the District and the District's predecessors, commissioners, agents, representatives, employees, and signatory power purchasers from any and all claims, demands, obligations, promises, liabilities, actions, damages and causes of action of any kind concerning impacts of the Project on Plan Species except for the obligation to provide compensation for original construction impacts of the Project implemented through the hatchery component of this Agreement. This release, waiver, and discharge shall not transfer any of the above listed District liabilities or obligation to any other entity.

9.4.2 Provided that the District is in full compliance with its Permit, this Agreement, and its FERC project license provisions relating to Plan Species, each Party agrees not to institute any action under the ESA, the Federal Power Act, the Fish and Wildlife Coordination Act, the Pacific Northwest Electric Power Planning and Conservation Act and the Essential Fish Habitat provisions of the Magnuson-Stevens Fishery Conservation and Management Act against the District and its signatory Power Purchasers related to impacts of the Project on Plan Species from the date this Agreement becomes effective through the date this Agreement terminates.

9.4.3 Termination of this Agreement or withdrawal of a Party shall have no effect upon the release provided for in sub-Section 9.4.1.

9.4.4 This Agreement does not affect, limit or address the imposition of annual charges under the Federal Power Act, or the right of any party in any proceeding or forum to request annual charges.

9.5 Re-Licensing.

9.5.1 With respect to Plan Species, the Parties agree to be supportive of the District's long-term license application(s) to the FERC filed during the term of the Agreement for the time period addressed in this Agreement, provided that the District has adhered to the terms and conditions of this Agreement, the Permit, and the FERC license provisions relating to Plan Species, as well as any future terms, conditions, and obligations agreed upon by the Parties hereto or imposed upon the District by the FERC. To the extent that the District has met such terms and conditions, the Parties agree that the District is a competent license holder with respect to its obligations to Plan Species. If the fifty (50)-year term of this Agreement will expire during a long-term license, any Party may advocate license conditions that take effect after this Agreement expires.

9.5.2 This Agreement shall constitute the Parties' terms, conditions and recommendations for Plan Species under Sections 10(a), 10(j) and 18 of the Federal Power Act and the Fish and Wildlife Coordination Act, provided that NMFS and USFWS maintain the right to reserve their authorities under Section 18 of the Federal Power Act on the condition that such reserved authority may be exercised only in the event that this Agreement terminates provided further that, the Parties as part of their terms, conditions and recommendations under Section 10(a) of the Federal Power Act may request that Plan Species protection or mitigation Measures contained in a competing license application be included as a condition of the District's new long-term Project license.

9.5.3 Notwithstanding sub-Section 9.5.2 and sub-Section 9.10 (Drawdowns/Dam Removal/Non-Power Operations), this Agreement does not limit the participation of any Party in any FERC proceeding to assert: (1) any condition for resources and other aspects of the District's license other than for Plan Species, and (2) to assert conditions for Plan Species to implement this Agreement.

9.6 Limitation of Reopening. During the term of this Agreement, the Parties shall not invoke or rely on any re-opener clause set forth in any FERC license applicable to the Project for the purpose of obtaining additional Measures or changes in project structures or operations for Plan Species, except as set forth in sub-Section 9.5.2 and 9.5.3.

9.7 Additional Measures. This Agreement sets out certain actions, responsibilities, and duties with regard to Plan Species to be carried out by the District and by the JFP to satisfy the legal requirements imposed under the ESA, the Federal Power Act, the Fish and Wildlife Coordinating Act, the Pacific Northwest Electric Power Planning and Conservation Act and the Essential Fish Habitat provisions of the Magnuson-Stevens Fishery Conservation and Management Act. This Agreement is not intended to prohibit the Parties from opposing or recommending actions in reference to (1) Project modifications such as pool raises and additional power houses, and (2) activities not related to Project operations that could adversely affect Plan Species. The Parties recognize that various Parties to this Agreement have governmental rights, duties, and responsibilities as well as possible rights of action under statutes, regulations and treaties that are not covered by this Agreement. This Agreement does not limit or affect the ability or right of a Party to take any action under any such law, regulation or treaties. However, the Party shall use reasonable efforts to exercise their rights and authority under such statutes, regulations, and treaties (consistent with their duties and responsibilities under those statutes, regulations and treaties) in a manner that allows this Agreement to be fulfilled.

9.8 Title 77 RCW. Provided the District is in compliance with the Agreement, the Permit, and the FERC license provisions relating to Plan Species, WDFW shall not request additional protection or mitigation for Plan Species under Title 77 RCW as now exists or as may be amended, unless WDFW is specifically required to take such action by statute.

9.9 Cooperation in Studies/Approval/Permits. The Parties shall cooperate with the District in conducting studies and in obtaining any approvals or permits which may be required for implementation of this Agreement.

9.10 Drawdowns/Dam Removal/Non-Power Operations. With respect to Plan Species under the ESA, the Federal Power Act, the Fish and Wildlife Coordination Act, the Pacific Northwest Electric Power Planning and Conservation Act, and the Essential Fish Habitat provisions of the Magnuson-Stevens Fishery Conservation and Management Act each Party during the term of this Agreement will not advocate for or support additional or different fish protection Measures or changes in Project structures or operations other than those set forth in this Agreement. For example, the Parties will not advocate or support partial or complete drawdowns, partial or complete dam removal, and partial or complete non-power operations. However, this Agreement does not preclude: spillway or Tailrace modifications; Spill; structural modifications and concrete removal (holes in Dam) to accommodate bypass; structural modifications to accommodate adult passage facility improvements; and future

consideration of additional Measures that may include reservoir elevation changes if all Parties agree. The Parties agree to work within this Agreement to address any issues that may arise in the future concerning Plan Species.

9.11 Stipulation of Plan Species. Each Party stipulates that the performance of the District's obligations under this Agreement, its Permit, and its FERC license will adequately and equitably conserve, protect, and mitigate Plan Species pursuant to the ESA, the Federal Power Act, the Fish and Wildlife Coordination Act, the Pacific Northwest Electric Power Planning and Conservation Act, and the Essential Fish Habitat provisions of the Magnuson-Stevens Fishery Conservation and Management Act as those Plan Species are affected by the Project through the term of the Agreement.

9.12 Vernita Bar. Nothing in this Agreement is intended to affect the protection of Plan Species in the Hanford Reach or the Vernita Bar Agreement, as it exists now or may be modified in the future.

9.13 Non-Plan Species. Non-Plan Species are not addressed in this Agreement.

SECTION 10 ENDANGERED SPECIES ACT COMPLIANCE

10.1. Scope. This Section 10 Endangered Species Act Compliance applies only between the NMFS and the District and does not apply to the other Parties unless specifically referenced.

10.2. Permit Issuance.

10.2.1 The District shall revise its incidental take permit applications for Permit Species based upon this Agreement and submit a directed take permit application for Hatchery Operations. This Agreement and its Figures and Appendices shall constitute the District's habitat conservation plan in support of the District's incidental take permit application. Supporting Documents A, B, C and D are to be used as supporting documents to the Agreement and as such, Supporting Documents A, B, C and D do not, by themselves, create contractual obligations under this Agreement or through the permit issued by NMFS.

10.2.2 NMFS issuance of a Permit to the District assures the District that based upon the best scientific and commercial data available and after careful consideration of all comments received, NMFS has found that with respect to all Permit Species that: (i) any take of a Permit Species by the District under this Agreement will be incidental to the carrying out of otherwise lawful activities; (ii) under this Agreement the District will, to the maximum extent practicable,

minimize and mitigate any incidental take of Permit Species; (iii) the District has sufficient financial resources to adequately fund its affirmative obligations under this Agreement; (iv) as long as the actions required by this Agreement to minimize/mitigate incidental take of Permit Species are implemented, any incidental take of a Permit Species will not appreciably reduce the likelihood of the survival and recovery of such species in the wild; and (v) other Measures and assurances required by NMFS as being necessary or appropriate are included in this Agreement

10.2.3 After opportunity for public comment, compliance with NEPA and concurrent with the effective date of this Agreement, NMFS will issue a Permit to the District pursuant to Section 10(a)(1)(B) of the ESA to authorize any incidental take of listed Permit Species which may result from the District's otherwise lawful operation of the Project, conducted in accordance with this Agreement and the Permit (Hatchery permits are addressed in sub-Section 10.2.5). In addition, the Permit shall authorize any incidental take of listed Permit Species which may result from the District's otherwise lawful operation of the hatchery facilities required by this Agreement, conducted in accordance with this Agreement and the Permit. The Permit and this Agreement shall remain in full force and effect for a period of fifty (50) years from the effective date, or until revocation of the Permit under sub-Section 10.5 (Permit Suspension, Revocation and Re-Instatement), whichever occurs sooner. Amendments to the Permit or this Agreement shall remain in effect for the then-remaining term of this Agreement or until revocation under sub-Section 10.5 (Permit Suspension, Revocation and Re-Instatement), whichever occurs sooner. Withdrawal from this Agreement and revocation of the Permit as provided in Section 2 is not limited by the no surprises regulation. The Permit shall incorporate by reference the no surprises rule set forth in 50 CFR § 222.307 (g) (2001). This Agreement provides for changed circumstances and the mitigation Measures to respond to changed circumstances. Any circumstance relating to Permit Species not addressed by this Agreement is an Unforeseen Circumstance (See Section 13, "Unforeseen Circumstances").

10.2.4 The Permit shall authorize the District to incidentally take Permit Species that are listed under the ESA, to the extent that such incidental take of such species would otherwise be prohibited under Section 9 of the ESA, and its implementing regulations, or pursuant to a rule promulgated under Section 4(d) of the ESA, and to the extent that the take is incidental to the District's lawful operation of the Project, subject to the condition that the District must fully comply with all requirements of this Agreement and the Permit. The Permit will be immediately effective upon issuance for Permit Species currently listed under the ESA. The Permit will become effective for currently unlisted Permit Species upon any future listing of such species under the ESA.

10.2.5 In the event that an additional or amended Section 10 Permit is required for the implementation of any aspect of the Tributary Conservation Plan or Hatchery Compensation Plan, the NMFS shall expedite the processing of such permits or amendments. The Hatchery Permits (direct and incidental) will initially be issued to authorize take through 2013. Beginning in 2013 and every ten (10) years thereafter the District or its agent shall submit to NMFS hatchery permit applications incorporating changes in the hatchery Programs identified in ten (10) year program reviews (See Section 8.8 Program Review).

10.3. Permit Monitoring. Upon issuance of the Permit, the implementation thereof, including each of the terms of this Agreement shall be monitored and evaluated as provided for in Section 4 (Passage Survival Plan). Any reports the FERC should require regarding this Agreement shall be provided to the NMFS at the time such reports are provided to the FERC.

10.4. Permit Modification.

10.4.1 The Permit issued to the District, shall be amended in conformance with the provisions 50 CFR 222.306 (a) (2001) through 222.306 (c) (2001), provided, that if said regulations are modified the modified regulations will apply only to the extent the modifications were required by subsequent action of Congress or court order, unless the Parties otherwise agree.

10.4.2 This Agreement provides for on-going, active and adaptive management activities. Adaptive management provides for on-going modification of management practices to respond to new information and scientific development. Adaptive management will yield prescriptions that may vary over time. Such changes are provided for in this Agreement and do not require modification of the Agreement or amendment of the Permit, provided, that such changes will not result in a level of incidental take in excess of that otherwise allowed by this Agreement and the Permit.

10.5 Permit Suspension, Revocation and Re-Instatement. Except as set forth in sub-Section 2.2.1 (Enough Already), the Permit shall be suspended, revoked and reinstated in conformance with the provisions of 50 CFR 220.306 (d) (2001) and 50 CFR 222.306 (e) (2001), provided, that if said regulations are modified the modified regulations will apply only to the extent the modifications were required by subsequent action of Congress or court order, unless the Parties otherwise agree.

10.6 Early Termination Mitigation. If the Permit is terminated early and de-listing has not occurred, NMFS may require the District to mitigate for any past incidental take of Permit Species that has not been sufficiently mitigated prior to the date of termination. Such mitigation may require the District to continue relevant mitigation Measures of the Agreement for some or all of the period, which would have been covered by the Permit. NMFS agrees that the District may invoke the dispute resolution procedures of this Agreement to pursue resolution of any disagreement concerning the necessity or amount of such additional mitigation, NMFS reserves any authority it may have under the ESA or its regulations regarding additional mitigation. So long as the District meets and continues to meet the pertinent survival standards, its Tributary Plan funding obligations, and its Hatchery Plan funding and capacity obligations, early termination mitigation shall not apply to the District.

10.7 Funding. In its current financial position, the District has sufficient assets to secure funding for its affirmative obligations under the Agreement. To ensure notification of any material change in the financial position of the District during the term of the Permit, the District will provide the NMFS with a copy of its annual report each year of the Permit.

10.8 USFWS. USFWS does not exercise ESA authority over Permit Species.

SECTION 11 DISPUTE RESOLUTION

11.1 Stages of Dispute Resolution.

11.1.1 Stage 1: Coordinating Committee. Any dispute regarding this Agreement shall first be referred to the respective committee dealing with that issue (the Coordinating Committee is the default committee). That Committee shall have 20 Days within which to resolve the dispute. If at the end of 20 Days there is no resolution, any Party may request that the dispute proceed as provided in sub-Section 11.1.2 (Stage 2: Policy Committee). However, Tributary Committee and Hatchery Committee disputes must first proceed to the Coordinating Committee, before the Policy Committee is utilized to resolve the dispute.

11.1.2 Stage 2: Policy Committee. Following the completion of Stage 1, the chair of the Coordinating Committee or any Party may refer the dispute to the Policy Committee. The chair of the Coordinating Committee shall chair all meetings of the Policy Committee. The chair of the Policy Committee shall provide advanced written notice of all meetings. The Policy Committee shall

have 30 Days, following the referral, to convene and consider the dispute. The notice shall contain an agenda of all matters to be addressed and voted on during the meeting.

Each Party shall designate a policy representative who shall be available to participate on the Policy Committee. Any Party that fails to name a Policy Committee representative or to have its Policy Committee representative participate in the Policy Committee shall waive that Party's right to object to the resolution of the dispute by the Policy Committee.

Agreements reached in the Policy Committee shall be based upon unanimous agreement of those Parties present in person or by phone for the vote and shall develop its own rules of process, provided, that the Policy Committee shall ensure that all Parties are sent notice of all Policy Committee meetings. Abstention from votes does not prevent a unanimous vote. If a Party or its designated representative cannot be present for an agenda item to be voted upon it must notify the chair of the Coordinating Committee who may delay a vote on the agenda item for up to five business days on specified issues to be addressed in a meeting or conference call scheduled with all interested parties. A Party may invoke this right only once per delayed agenda item.

11.1.3 Options following Stage 2. If there is no resolution of a matter following completion of Stage 1 and 2 of this Procedure, then any Party may pursue any other right that they might otherwise have. The Parties agree that the inability of the Coordinating Committee and Policy Committee to make a decision shall be considered a dispute. The Parties are encouraged to resolve disputes through alternative dispute resolution.

11.2 Implementation of Settlement Dispute. If the Procedure outlined above results in a settlement of the dispute then: (1) the Parties shall implement, consistent with the terms of the settlement, all aspects of the settlement that can lawfully be implemented without FERC approval, or the approval of another federal agency; and (2) where FERC or other federal agency approval is needed before some or all of the settlement can be implemented, all settling Parties shall jointly present the resolution of the dispute to FERC or the appropriate federal agency for approval.

11.3 No Intent to Create Jurisdiction. The Parties agree that this Agreement is not intended to create jurisdiction in any court.

SECTION 12 MISCELLANEOUS

12.1 Conflict Between Agreement and Appendix. In the event of a conflict between this Agreement and an Appendix to this Agreement, this Agreement shall control and the Parties shall cause the Appendix in conflict to be revised accordingly.

12.2 Amendment of Agreement. This Agreement may be amended or modified only with the written consent of the Parties, provided, that Parties who withdraw from the Agreement do not need to, and have no right to approve any amendments or modifications, provided further, that this Agreement provides for on-going, active and adaptive management activities. Adaptive management provides for ongoing modification of management practices to respond to new information and scientific developments. Adaptive management will yield prescriptions that may vary over time. Such changes are provided for in this Agreement and do not require modification of the Agreement or amendment of the Permit, provided that such changes will not result in a level of incidental take in excess of that otherwise allowed by this Agreement, or modify the provisions set out in Section 3 (Survival Standards and Allocation of Responsibility for No Net Impact), further provided, that unless otherwise agreed to by the Parties, NNI applies only to the identified Plan Species on the date this Agreement became effective.

12.3 Notices. Except as set forth in sub-Section 2.3 (Conditions Precedent to Withdrawal) and sub-Section 9.3 (Regulatory Approval Without Change), all written notices to be given pursuant to this Agreement shall be mailed by first-class mail, postage prepaid to each Party. Parties shall inform all Parties by written notice in the event of a change of address. Notices shall be deemed to be given three (3) Days after the date of mailing.

12.4 Waiver of Default. Any waiver at any time by any Party hereto of any right with respect to any other Party with respect to any matter arising in connection with this Agreement shall not be considered a waiver with respect to any subsequent default or matter.

12.5 Integrated Agreement. All previous communications between the Parties, either verbal or written, with reference to the subject matter of this Agreement are superseded by the terms and provisions of this Agreement, and once executed, this Agreement and Appendices (See Section 15, Appendix) shall constitute the entire Agreement between the Parties, provided, that titles to sections and sub-Sections thereof are for the assistance of the reader and are not part of the Agreement.

12.6 Benefit and Assignment. This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their successors and assigns provided, no interest, right, or obligation under this Agreement shall be transferred or assigned by any Party hereto to any other Party or to any third party without the written consent of all other Parties, except by a Party: (1) to any person or entity into which or with which the Party making the assignment or transfer is merged or consolidated or to which such Party transfers substantially all of its assets, (2) to any person or entity that wholly owns, is wholly owned by, or is wholly owned in common with, the Party making the assignment or transfer, provided that, the assignee is bound by the terms of this Agreement and applies for and receives an incidental take permit for listed Plan Species.

12.7 Force Majeure. For purposes of this Agreement, a *force majeure* is defined as causes beyond the reasonable control of, and without the fault or negligence of, the District or any entity controlled by the District, including its contractors and subcontractors. Economic hardship shall not constitute, *force majeure* under this Agreement.

In the event that the District is wholly or partially prevented from performing obligations under this Agreement because of a *force majeure* event, the District shall be excused from whatever performance is affected by such *force majeure* event to the extent so affected, and such failure to perform shall not be considered a material breach. Nothing in this Section shall be deemed to authorize the District to violate the ESA or render the standards and objectives of this Agreement unobtainable. The suspension of performance shall be no greater in scope and no longer in duration than is required by the *force majeure*.

The District shall notify the other Parties to this Agreement in writing within seven calendar days after a *force majeure* event. Such notice shall: identify the event causing the delay or anticipated delay; estimate the anticipated length of delay; state the Measures taken or to be taken to minimize the delay; and estimate the timetable for implementation of the Measures. The District shall have the burden of demonstrating by a preponderance of evidence that delay is warranted by a *force majeure*.

The District shall use a good faith effort to avoid and mitigate the effects of the delay and remedy its inability to perform. A *force majeure* event may require use of the adaptive management provisions of this Agreement in remedying the effects of the *force majeure* event. When there is a delay in performance of a requirement under this Agreement that is attributable to a *force majeure*, the time period for performance of that requirement shall be reasonably extended as determined by the Coordinating Committee. When the District is able to resume performance of its obligation, the District shall give the other Parties written notice to that effect.

12.8 Appropriations. Implementation of this Agreement by the FP is subject to the availability of appropriated funds. Nothing in this Agreement will be construed by the Parties to require the obligation, appropriation, or expenditure of any money from federal, state or tribal governments. The Parties acknowledge that the FP will not be required under this Agreement to expend any of their appropriated funds unless and until an authorized official of that agency or government affirmatively acts to commit to such expenditures as evidenced in writing.

12.9 Legal Authority. Each Party to this Agreement hereby represents and acknowledges that it has legal authority to execute this Agreement and is fully bound by the terms hereof. NMFS is authorized to enter into this Agreement pursuant to the ESA, the Federal Power Act, the Fish and Wildlife Coordination Act, the Northwest Electric Power Planning and Conservation Act, and the Essential Fish Habitat provisions of the Magnuson-Stevens Fishery Conservation and Management Act.

12.10 Execution. This Agreement may be executed in counterparts. A copy with all original executed signature pages affixed shall constitute the original Agreement. The date of execution shall be the date of the final Party's signature. Upon execution of this Agreement by the Parties, this Agreement shall be submitted to the Secretary of the Interior, or her designee, for any approval to the extent required by 25 U.S.C. § 81.

12.11 Indian Tribal Treaty or Reserved Rights. Nothing in this Agreement is intended to nor shall it in any way abridge, limit, diminish, abrogate, adjudicate, or resolve any Indian right reserved or protected in any treaty, executive order, statute or court decree. This sub-Section shall be deemed to modify each and every Section and sub-Section of this Agreement as if it is set out separately in each Section.

12.12 U.S. v Oregon. Nothing in this Agreement is intended by the signatories who are parties to the continuing jurisdiction case of U.S. v Oregon 302 F. Supp. 899 (D. OR 1969), to change the jurisdiction of that court or their participation there in.

12.13 No Precedent/Compromise of Disputed Claims. The conditions described and measures proposed to rectify the issues set forth in this Agreement are fact specific and uniquely tied to the circumstances currently existing at the Wells Project. The Parties agree that the conditions existing here and the proposed actions to deal with them are not intended to in any way establish a precedent or be interpreted as the position of any Party in any proceeding not dealing specifically with the terms of this Agreement. Further, the Parties acknowledge that this Agreement is a compromise of disputed claims for which each Party provided consideration to the other as contemplated under Federal Rule of Evidence 408, and will not be used by any Party in a manner inconsistent with the provisions of Federal Rules of Evidence 408.

SECTION 13 DEFINITIONS

Capitalized terms are defined as follows:

13.1 “Agreement” means this document, figures and Appendix A - B. This Agreement is supported by Supporting Documents A through D but does not incorporate these documents.

13.2 “BAMP” means Supporting Document B “Biological Assessment and Management Plan (BAMP): Mid-Columbia Hatchery Program”.

13.3 “Combined Adult and Juvenile Project Survival” means that 91% of each Plan Species (juvenile and adult combined) survival Project effects when migrating through the Project’s reservoir, Forebay, Dam and Tailrace including direct, indirect, and delayed mortality wherever it may occur and can be measured (as it relates to the Project) given the available mark-recapture technology.

13.4 “Dam” means the concrete structure impounding the Columbia River.

13.5 “Day” is defined by the Federal Rules of Civil Procedure.

13.6 “ESA” means the Endangered Species Act, 16 U.S.C. ss 1531 through 1543, as amended, and its implementing regulations.

13.7 “Essential Fish Habitat provisions of the Magnuson-Stevens Fishery Conservation and Management Act” means the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. § 1801 et seq., as amended by the Sustainable Fisheries Act and as may be amended, and its implementing regulations.

13.8 “Federal Power Act” means the Federal Power Act, 16 U.S.C. §§ 791a - 828c, as amended, and its implementing regulations.

13.9 “FERC” means the Federal Energy Regulatory Commission or its successor.

13.10 “Fish and Wildlife Coordination Act” means the Fish and Wildlife Coordination Act, 16 U.S.C. §§ 661-668c, as amended, and its implementing regulations.

13.11 “Forebay” means the body of water from the Dam face upstream approximately 500 feet.

13.12 “Historic Hydroacoustic and Fyke Netting” refers to the use of the 20-year record (1982-2002) of available hydroacoustic and species composition information collected at the Wells Project, as it relates to the passage of juvenile spring and summer migrants.

13.13 “Juvenile Dam Passage Survival” means that 95% of each juvenile Plan Species over 95% of each species migration survive Projects effects when migrating through the Project’s Forebay, Dam and Tailrace including direct, indirect and delayed mortality wherever it may occur and can be measured (as it relates to the Project), given the available mark-recapture technology.

13.14 “Juvenile Project Survival” refers to the measurement of survival for juvenile Plan Species over 95% of each species migrating from tributary mouths and through the Project’s reservoir, Forebay, Dam and Tailrace including direct, indirect and delayed mortality, wherever it may occur and can be measured (as it relates to the Project) given the available mark-recapture technology.

13.15 “Juvenile Project Survival Standard” refers to a surrogate measurement of the Combined Adult and Juvenile Survival Standard. If Juvenile Project Survival for each Plan Species is measured to be greater than or equal to 93%, then the District will be assigned to Phase III (Standards Achieved). If Juvenile Project Survival is measured at less than 93% but greater than or equal to 91%, then the District will be assigned to Phase III (Provisional Review). If Juvenile Project Survival is measured at less than 91%, then the District will be assigned to Phase II (Interim Tools).

13.16 “Measures” means any action, structure, facility, or program (on-site or off-site) intended to improve the survival of Plan Species, except those prohibited in sub-Section 9.10 (Drawdowns/Dam Removal/Non-Power Operation). Measures do not include fish transportation unless otherwise agreed by the Coordinating Committee.

13.17 “Pacific Northwest Electric Power Planning and Conservation Act” means the Pacific Northwest Electric Power Planning and Conservation Act, 16 U.S.C. §§ 839 - 839h, 16 U.S.C. §§ 839 - 839h, as amended, and its implementing regulations.

13.18 “Permit” shall mean permit(s) issued to the District by NMFS pursuant to Section 10 of the ESA to authorize take of Permit Species which may result from the District’s or its agent’s implementation of this Agreement.

13.19 “Permit Species” means all Plan Species except coho salmon (*Onocorhynchus kisutch*). Permit Species do not include coho salmon (*O. kisutch*) since wild coho salmon are extirpated from the Mid-Columbia Region and therefore not protected by the ESA.

13.20 “Plan Species” means spring, summer/fall chinook salmon (*Onocorhynchus tshawytscha*), sockeye salmon (*O. nerka*), coho salmon (*O. kisutch*), and steelhead (*O. mykiss*).

13.21 “Power Purchasers” refers to entities that have executed long-term power sales contracts specifically Puget Sound Energy, Inc., Portland General Electric, PacifiCorp., and Avista Corp.

13.22 “Project” means the Wells Hydroelectric Project owned and operated by Public Utility District No. 1 of Douglas County, Washington pursuant to FERC Project Number 2149. The geographic boundaries of the Project including the reservoir, Forebay, Dam and Tailrace are defined in Exhibit K of the Project’s FERC License.

13.23 “Representative Environmental Conditions” means river flows between the 10% and 90% points on the Flow Duration Curve, as calculated using the best available information on historical average river flow (1929-1978, 1993-2001HydroSim) as measured at the Tailrace of Grand Coulee Dam.

13.24 “Representative Operational Conditions” means normative plant operations at Wells Dam that have and are expected to take place during future outmigrations (e.g. normal bypass, fishway and turbine operations).

13.25 “Spill” means the passage of water through spill gates.

13.26 “TDG” means total dissolved gas.

13.27 “Tailrace” means the body of water from the base of the Dam to a point approximately 1000 feet downstream.

13.28 “Threshold Population” refers to a naturally reproducing population that contains a five-year average of greater than 500 adults as assessed at Wells Dam and is composed of a population that is reproductively isolated from other populations of the same species.

13.29 “Tools” means any action, structure, facility or program (on-site only) at the Project, except those prohibited in sub-Section 9.10 (Drawdowns/Dam Removal/Non-Power Operation) that are intended to improve the survival of Plan Species migrating through the Project. Tools do not include fish transportation unless otherwise agreed by the Coordinating Committee. This term is a sub-set of Measures.

13.30 “Unavoidable Project Mortality” refers to the assumed 9% mortality caused by the Project to Plan Species that is compensated through the tributary and hatchery programs.

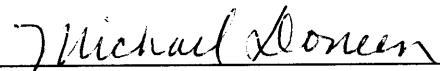
13.31 “Unforeseen Circumstance” is defined by 50 CFR 222.102 (2001), and implemented according to 50 CFR 222.307(g) (2001). If these regulations are modified, the modified regulations will apply only to the extent the modifications were required by subsequent action of Congress or court order, unless the Parties otherwise agree.

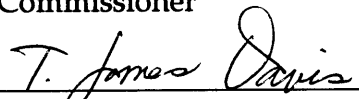
IN WITNESS WHEREOF, the Parties hereto execute this Agreement as of the date last signed below.

Dated MAY 28, 2002

PUBLIC UTILITY DISTRICT NO. 1 OF
DOUGLAS COUNTY, WASHINGTON

By 
Commissioner


Commissioner


Commissioner

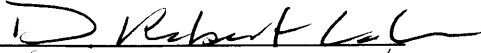
Address for Notice:

Public Utility District No. 1 of
Douglas County, Washington
1151 Valley Mall Parkway
East Wenatchee, WA 98802-4497

Attn: Chief Executive Officer/Manager

Dated 4/5/02

NATIONAL MARINE FISHERIES SERVICE,

By 
Regional Administrator
Director, Northwest Region

Address for Notice:

7600 Sandpoint Way, NE
Box C15700, Bldg 1
Seattle WA 98115-0070

Dated 4/10/2002

UNITED STATES FISH AND WILDLIFE SERVICE,

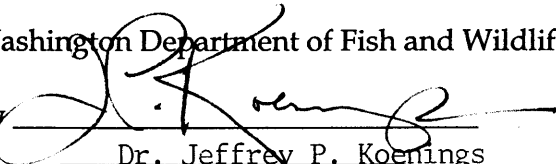
By Rowan W. Gauld
(Title) Deputy Regional Director

Address for Notice:

Project Leader
US Fish and Wildlife Service
Eastern Washington Ecological Services
Office
32 C Street NW
P.O. Box 848
Ephrata, WA 98823

Dated 4/2/2012

Washington Department of Fish and Wildlife

By 
Dr. Jeffrey P. Koenigs
(Title) Director

Address for Notice:
Washington Department of Fish & Wildlife

600 Capitol Way North
Olympia, WA 98501-1091

Dated April 4, 2002

CONFEDERATED TRIBES OF
THE COLVILLE RESERVATION


By Colleen F. Causton
Chair, Colville Business Council
(Title)

Address for Notice:

P.O. Box 852
Nespelem, WA 99155

Dated 3-24-05

CONFEDERATED TRIBES AND BANDS OF
THE YAKAMA INDIAN NATION

By 
Tribal Council Chairman
(Title)

Address for Notice:

P. O. Box 151

Toppenish WA 98948

Dated _____

CONFEDERATED TRIBES OF THE
UMATILLA INDIAN RESERVATION

By _____

(Title)

Address for Notice:

Dated _____

AMERICAN RIVERS, INC., a Washington
D.C., nonprofit corporation

By _____

(Title)

Address for Notice:

Dated May 8, 2002

PUGET SOUND ENERGY

By Stuart P. Reynolds
CEO
(Title)

Address for Notice:

Mail: P.O. Box 97034 OBC-15
Bellevue, WA 98009-9734

Location: One Bellevue Center Bldg.
411 108th Ave N.E. 15th Floor
Bellevue, WA 98009-~~9734~~ 5515

Dated May 7, 2002

PORTLAND GENERAL ELECTRIC

By [Signature]
Vice President
(Title)

Address for Notice:

121 SW Salmon, SWTCB06
Portland, OR 97204

PGE Approved By:	
Business Terms	<u>BNA</u>
Legal	<u>LM</u>
Credit	<u>NA</u>

Dated 5/10/02

PACIFICORP

By 

Vice President
(Title)

Address for Notice:

Director, Contract Administration
PacifiCorp
825 NE Multnomah, Suite 600
Portland, OR 97232

Dated April 3, 2002

AVISTA CORPORATION

Lloyd H. Meyers

By Lloyd H. Meyers
Vice President, Power Supply

(Title)

Address for Notice:

Avista Corporation
1411 East Mission Avenue
P.O. Box 3727
Spokane, WA 99220-3727

SECTION 14

FIGURES

Figure 1. Wells HCP Survival Standard Decision Matrix.

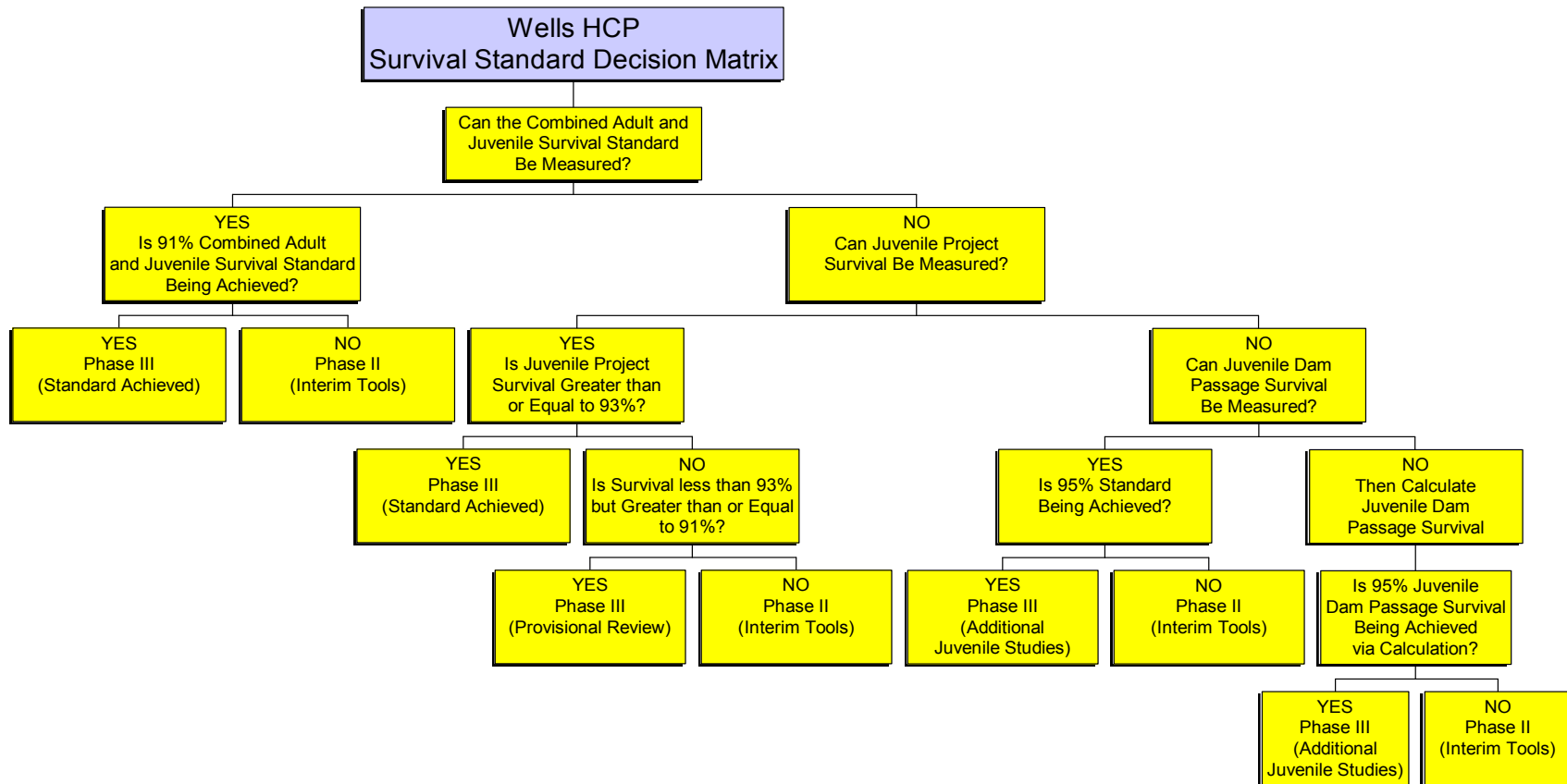


Figure 2a. Spring Flow Duration Curve

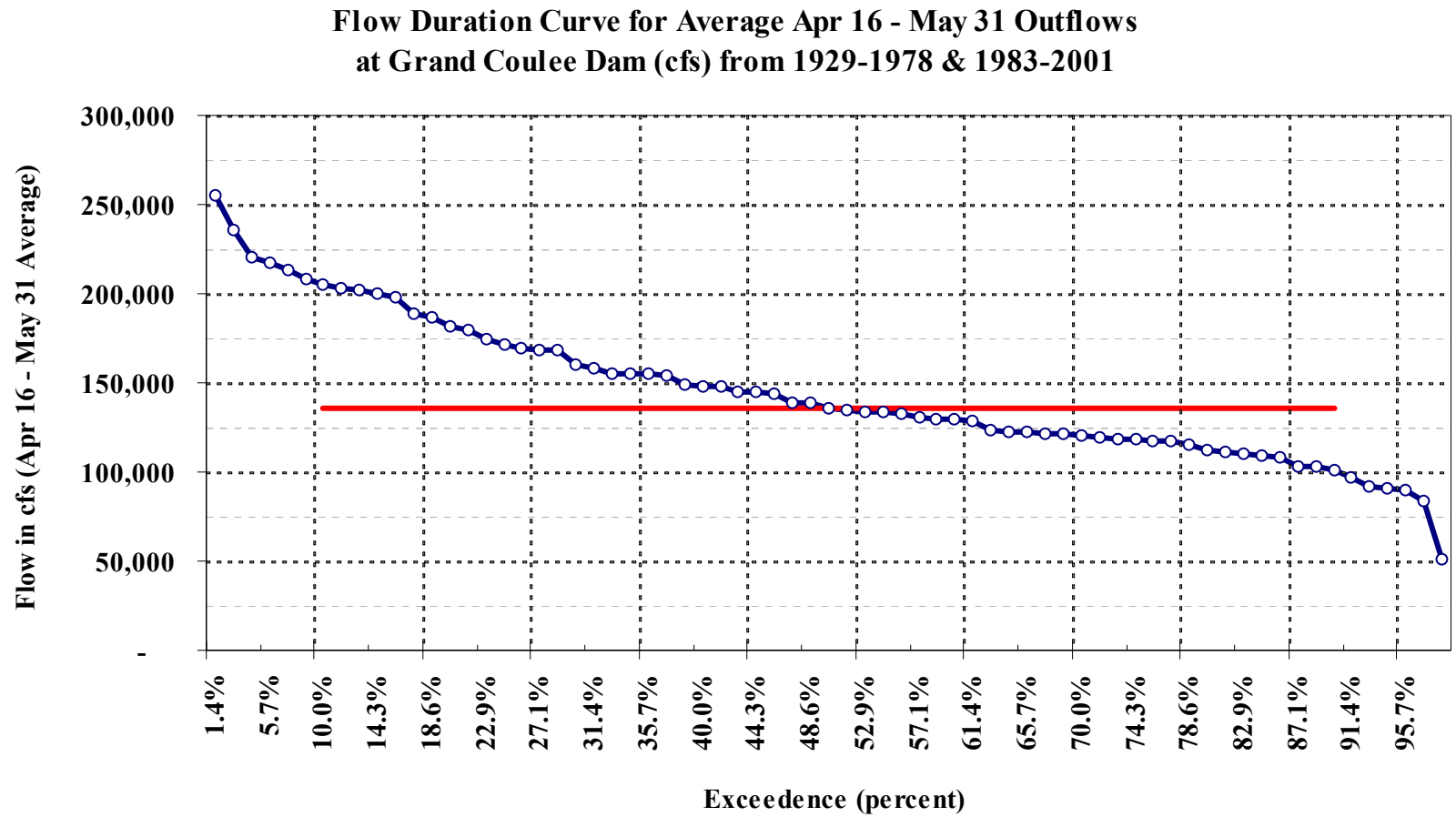


Figure 2b. Summer Flow Duration Curve

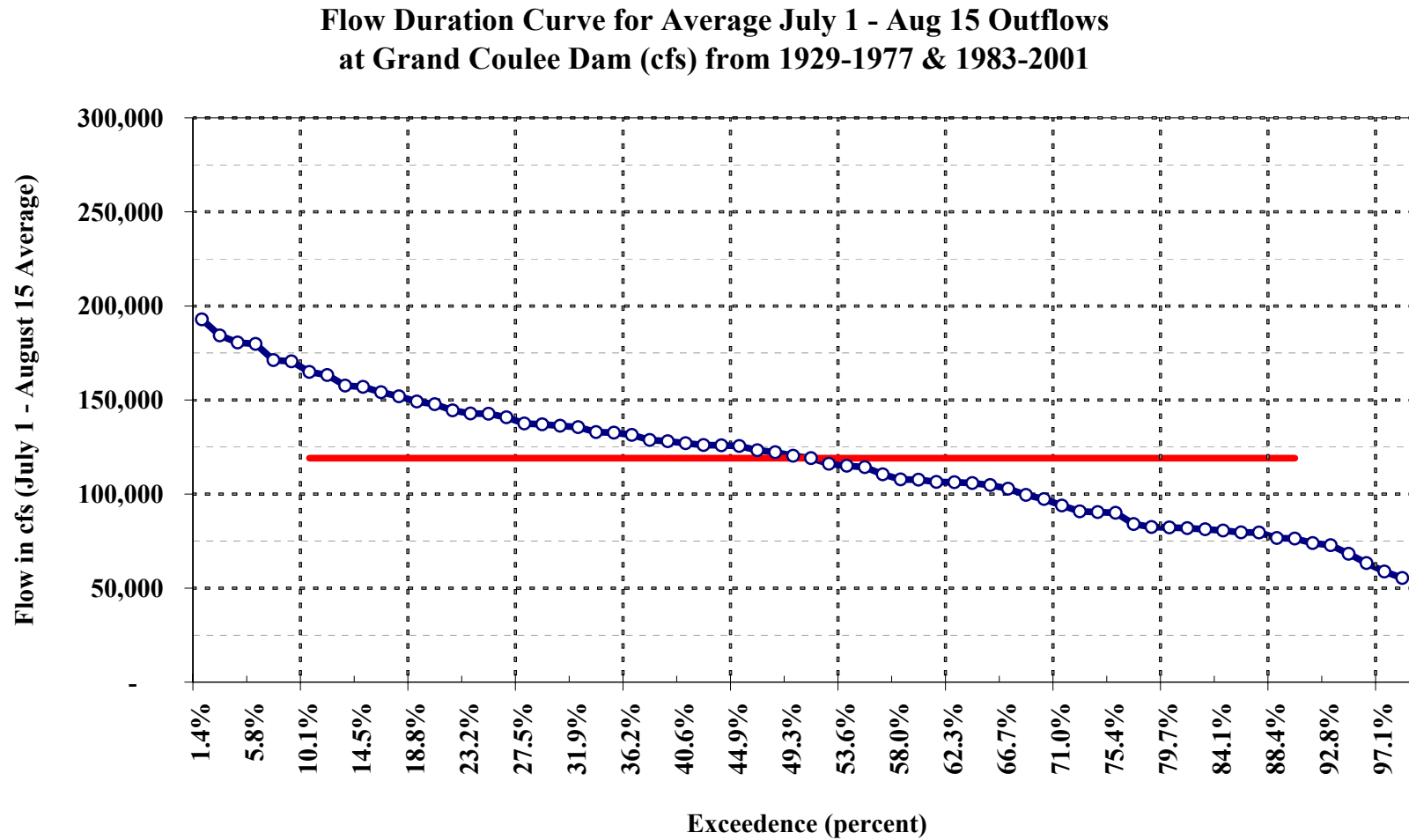
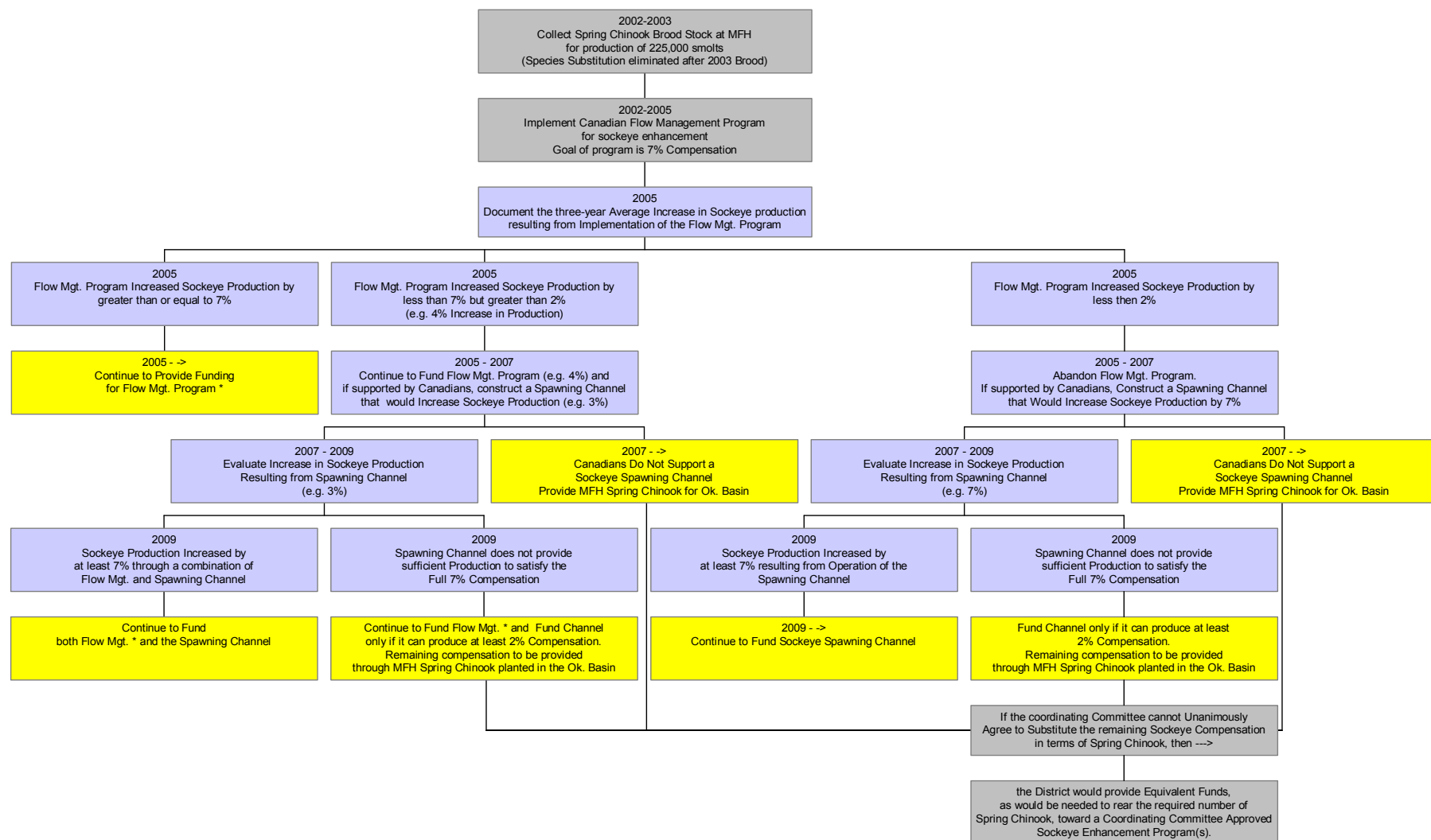


Figure 3. Sockeye Enhancement Decision Tree



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SECTION 15

APPENDIX

Appendix A: Wells Hydroelectric Project, Adult Fish Passage Plan.

Adult Passage Plan

Adult passage at Wells Dam was addressed under the project's FERC license (Project No. 2149). Minor modifications to the FERC fish passage conditions were made during negotiations of the Settlement Agreement. Fishway operations are coordinated with the Fish Passage Center. Changes in operating criteria require unanimous support of the Coordinating Committee including approval by NMFS Hydro Program.

Wells Dam was constructed with two fish ladders. Since 1967, an average of 50,000 adult salmon and steelhead have ascended Wells Dam on their way to spawning grounds above the Dam.

The two fish ladders at Wells Dam are conventional staircase type fish ladders with 73 pools. The ladders are located at the east and west ends of the Dam. The lower 56 pools discharge a constant 48 cfs of water. At each pool, the water drops approximately one foot until this water reaches the tailwater level in the collection gallery. Supplemental water can be added at each inundated pool at the upper end of the collection gallery. The upper pools in the adult fishway, pools 73 - 56, discharge water from one pool to another through fishway weirs. Each weir in the upper portion of the adult fishways contains two orifice openings. These orifices are located one foot from the base of the weir. This design provides a sanctuary pool between each of the upper fishway weirs. From pool 56 downstream to the collection gallery, each fishway weir is designed to operate with 48 cfs of water. The water passes from one weir to the next via a seven foot wide overflow section between pools and through two 18 inch by 15 inch submerged orifices.

To accommodate 10 feet of reservoir drawdown, the drop between the upper 17 pools varies from one foot at full reservoir to six inches during a 10 foot reservoir drawdown. The flow through the upper 17 ladder pools consequently varies from 44 cfs at full reservoir to about 31 cfs at maximum reservoir drawdown. To increase the flow to the 48 cfs required in the lower ladder pools, supplementary water is introduced into Pool No. 56 through a pipeline from the reservoir.

Pool No. 64 of both fishway ladders contains facilities for counting fish. The main features of the counting facility include a counting room, an observation window into the fish ladder, a telescoping gate to guide the fish closer to the observation window, a light panel and a bypass gate to control the flow and velocity past the observation window. Video records of fish passage are collected 24-hours per day starting on May 1 and continue

through November 15. The video are then reviewed and counts of fish by species by ladder are made available on a daily basis through coordination with the Army Corps of Engineers adult fish counting program.

At Pool No. 40, each of the two fish ladders has provisions for sorting and trapping various species of fish. The west ladder sorting facility allows for selected fish to travel through a flume to a holding pond at the Wells Hatchery. The east ladder sorting facility allows for fish to travel to a holding container where they are anesthetized, netted and placed in transportation containers to be moved across the Dam to appropriate hatchery facilities. The fisheries agencies and tribes currently develop species-specific broodstock collection protocols at the beginning of each season. Brood stock presently collected at Wells Dam includes spring and summer chinook and summer steelhead. Brood stock collection protocols are developed by the Washington Department of Fish and Wildlife and are annually submitted to the Wells Coordinating Committee and NMFS Hydro Program for annual approval prior to trapping at the Dam. In addition to brood stock collection, the adult fish traps are occasionally used to collect information from CWT tagged steelhead, collect sockeye scales for stock identification and age analysis and collect adult bull trout, chinook, sockeye and steelhead for radio-tagging.

The 2000-2002 Wells Biological Opinion (Section 10.1.4, page 45) requires that the operation of the Wells ladder traps for the collection of broodstock or other fisheries assessment be limited to a maximum of 16-hours per day for three days per week or as approved by NMFS Hydro Program, Portland, Oregon. The Wells Biological Opinion (Section 10.1.4, page 45) requires that adult trapping facilities be manned whenever the trap is in operation and that the collection of adults from the fishway traps be discontinued whenever river water temperature exceed $69^{\circ} F$. Specific operating criteria for the fish ladder traps can be found below (See: Adult Trap Operating Criteria).

At the bottom of the fish ladder, projecting downstream from the line of the hydrocombine is the portion of the endwall structure that incorporates the functions of fish attraction and collection. Two turbine pumps on each ladder deliver 800 to 2500 cfs (depending upon tailwater elevation) of fish attraction flow to the water supply chamber located immediately adjacent to the collection gallery. Supply chamber water flows into the upper sections of the collection gallery where it is used to maintain an attraction velocity of 2 feet per second; and also into the main collection gallery at the foot of the ladder through diffusion gratings. The total fishway flow from the turbine pump(s) and the 48 cfs coming down the ladder from the forebay is discharged into the tailrace through two fish entrances. Fishway entrances are operated according to hydraulic conditions as

specified in the Wells Settlement Agreement. The specific operating conditions of the ladder are described below (See: Adult Fishway Operating Criteria). Modification to the ladder operating criteria can only take place following approval by the Wells Coordinating Committee.

To reduce the total project passage times of adult fish, the main fishway entrances will be operated at an 8-foot opening. To reduce the incidence of fish falling out of the collection gallery, the side gates to the collection gallery will remain closed during normal fishway operations.

Since July 1970, the ladders have been operated with a 1.5 foot differential maintained by constantly adjusting the output of the fish pumps. Under normal conditions the fish pumps operate automatically to maintain a pre-set differential level between the water supply chamber and the main collection chamber.

Fishways are inspected daily to ensure that debris accumulations are removed, that the automated fishway instruments are calibrated properly and to ensure that lights in the fishway are maintained.

Adult Fish Ladder Operating Criteria

Water Depth Criteria

The water depth over the weirs of the adult fish ladder will be 1.0 to 1.2 feet.

Entrance Criteria

1. Head: 1.5 feet
2. Gate Settings: Main Wing Gate open 8 feet,
Side Wing Gate closed,
Side Gate Attraction Jets closed.

Staff Gauge and Water Level Indicator Criteria

Staff gauge and water level indicators are located and maintained upstream and downstream of the Main Wing Gates and adult fishway exit trashracks. These gauges should be clearly visible from a convenient location and they should be clean and readable at all water levels. Manual staff gauge readings should be checked each day to ensure that consistent readings are being displayed within the control room.

Trashrack Criteria

Visible buildups of debris will be cleaned immediately from picketed leads near counting stations, and from trashracks at adult fishway exits. The staff gauges located immediately upstream and downstream of the adult fishway exit trashracks should be monitored for water surface differential, which may indicate a buildup of debris on the submerged trashracks. The trashracks will be cleaned immediately if the differential reading is greater than 1.0 foot.

Modification of Adult Passage Facilities

If adult passage studies identify biologically significant delay and/or mortality, the operating criteria described above may be changed or modified following approval of the Coordinating Committee. If changes in the operating criteria do not alleviate the problems, then structural modifications to the adult passage facilities may be required. Provided that any disagreements over the appropriateness of facility modifications of \$325,000.00 or less (1988 dollars) may be taken through dispute resolution and any disagreement over the appropriateness of facility modifications of more than \$325,000.00 (1988 dollars) is resolved under the FERC Rules of Practice and Procedure.

Adult Trap Operating Criteria

Startup: The adult fish traps are located on each fish ladder at Pool 40. The traps are operated by placing a barrier fence across the entire width of Pool 40. Once the barrier fence is in place, the steep-pass denil, upwelling enclosure and sorting chute jets are turned on.

Fish Sorting: Fish that swim up the denil eventually enter the upwell enclosure. Once inside the upwell enclosure, fish are attracted down the sorting chute by jets of water introduced into the upwell enclosure near the top of the sorting chute. As fish slide down the chute, they are identified and a decision is made to either shunt the fish back into the ladder immediately upstream of the barrier fence, or to retain the fish for brood stock or stock assessment. Excess water introduced into the fish ladder from the trap denil and upwell enclosure can, when necessary, be removed from the fish ladder through a piped diversion located downstream of the trap in Pool 40.

Fish Disposition: At the east ladder trap, fish retained for stock assessment are anesthetized, sampled and re-introduced back into the ladder via a recovery/re-introduction tank that is located upstream of the pool 40 barrier fence. Fish retained for brood stock are anesthetized, marked and placed into hatchery transport vehicles. On the west ladder trap, fish retained for brood stock and for stock assessment are passed into a holding pond at the Wells Fish Hatchery. Fish in the holding pond are sorted by WDFW personnel. Fish retained for brood stock are either retained in the hatchery holding pond or placed into transportation vehicles for distribution to other hatchery facilities. Fish retained for stock assessment purposes are placed into transport vehicles and released upstream of the dam.

Safety Measures: The steep-pass denil has been outfitted with two removable gates. The bottom gate prevent fish from moving into the upwell enclosure when the trap is unattended and the top gate prevents fish in the upwell enclosure from moving down the steep-pass denil. The sorting chute has also been upgraded to include a gate on the upstream end. This gate prevents fish from moving down the sorting chute once sufficient numbers of fish have already been placed in the anesthetic tank. The sorting chute has been modified to include full padding and jets of water to keep it moist and cool. Temperature monitors are deployed in the ladder at pool 40 and in the anesthetic tank to ensure compliance with the Wells 2000 BiOp trapping criteria.

Shut Down – Daily: At the end of each trapping day, the barrier fence is lifted out of the ladder, the steep-pass denil is gated first at the bottom and then at the top, the water to the upwelling enclosure is left on, the sorting chute is locked in the return to ladder direction, the sorting chute water jets are left on, the anesthetic tank is drained away from the ladder and all of the fish in the recovery tank are released back into the fish ladder.

Shut Down – Annual: At the end of the trapping season, all water is turned off, all tanks should be checked for fish and then drained. The upwell enclosure water is turned off last and all remaining fish and water should be drained directly into the fish ladder through the upwell enclosure bypass pipe.

BiOp Conditions: The 2000-2002 Wells Biological Opinion (Wells 2000 BiOp) requires that the operation of the Wells ladder traps be limited to a maximum of 16-hours per day for three days per week. To ensure adherence to this trapping schedule, the District has installed remote monitors on the fishway traps. The fish ladder trap monitors notify District personnel when the trap is in operation. The location and duration of ladder trapping is recorded daily and reviewed weekly with WDFW staff. The Wells 2000 BiOp also requires that the adult trapping facilities be manned whenever the trap is in operation and that the collection of adults from the fishway traps be discontinued whenever river water temperature exceed 69 F° . Thermographs have been installed immediately adjacent to the traps to ensure that the temperature criteria is not exceeded during adult trapping.

Annual Meeting: District and WDFW trapping personnel meet annually to review the annual brood collection goals, assessment projects, to review current ladder trapping and operating criteria and to discuss modifications to the trap.

Adult Ladder Dewatering Plan

Stage 1 (Notification): Project personnel requiring access to the submerged portions of the adult fish ladders must contact a District Fish Biologist seven days prior to initiating any temporary or extended dewatering of either of the two fishways at Wells. Emergency ladder dewatering should be coordinated with District Fish Biologists to the maximum extent practical given the extent of the emergency. Ladder dewatering to clean the visitor center and the fish counting windows is not considered an emergency. Notice is required to allow District Biologists time to ensure coordination between the scheduled dewatering event and ongoing efforts to collect brood stock for hatcheries, tag fish for stock assessment studies, coordinate fisheries passage inspections and to monitor fish behavior relative to normal project operations. In addition, due to the presence of three stocks of ESA listed fish (UCR spring chinook, UCR steelhead and Columbia River Bull trout) it is important that dewatering events be coordinated with the appropriate resource agencies responsibility for administering the ESA.

Stage 2 (Equipment Preparation): Once notice has been provided to all appropriate entities and resource agencies (including WFH staff), an agreed to ladder dewatering schedule and fish salvage plan should be discussed and coordinated with all affected departments. District personnel are responsible for gathering and inspecting all necessary equipment required to safely collect, hold, transfer and release adult and juvenile fish salvaged from the dewatered fishways. Equipment required for a successful salvage operation include dip nets, a block seine, waders, rain gear, ropes, two 20 foot extendable ladders, flood lights, head lamps, fish totes and fish transport vehicles. Equipment needed for salvaging fish from the dewatered ladder should be moved to the fish ladder at least one day prior to initiating Stage 5 (Exit Gate Closure).

Stage 3 (Day Prior to Dewatering): The day before a scheduled fish ladder dewatering and salvage operation, project personnel should turn off and bulk head each of the two fish pumps located within the water supply chamber. The collection gallery entrances and the ladder exit orifice gates should be operated at normal levels for the remainder of the day.

Stage 4 (Evening Prior to Dewatering): The evening prior to dewatering the fish ladder, the exit orifice gates should be partially closed to allow less than full orifice flow through each of the weirs located in the upper fishway (Weir 73 - 57). The Pool 56 supplemental water supply valve should be set to the fully open position. These settings should remain in place until Stage 7 (Fish Salvage - Upper Fishway) operations have been completed.

Stage 5 (Exit Gate Closure): On the morning of the scheduled dewatering and salvage operation, the exit orifice gates must be turned off gradually. It should require at least 2 hours to completely close off the exit orifice gates. It is important that a District Fish Biologist and appropriate WFH staff be in close proximity to the upper fishway, with equipment in place, prior to project personnel completely closing off the exit orifice gates.

Stage 6 (Supplemental Water): Once the exit orifice gates are closed, it is important to verify that sufficient supplemental water is being added into the middle fishway at Pool 56. If additional water is required, the control room should be contacted to ensure that the supplemental water supply system is being operated at maximum capacity. If the plant operators cannot provide additional water into Pool 56 via the supplemental water supply system, then the District Fish Biologist and the appropriate plant supervisor should discuss whether it is appropriate to move to Stage 7 (Fish Salvage – Upper Fishway). It may be more appropriate to re-open the exit orifice gate and attempt to fix the problem with the supplemental water supply system prior to proceeding to State 7. However, if a determination is made to continue to Stage 7 (Fish Salvage – Upper Fishway) then it is the responsibility of the operators to carefully add additional water into the ladder by opening the exit orifice gate until adequate amounts of water are flowing through the middle ladder. Adding supplemental water through the exit orifice gates should only be used as a last resort as this operation establishes a dangerous work environment for personnel attempting to salvage fish from the upper fishway.

Stage 7 (Fish Salvage – Upper Fishway): Provided that sufficient water exists in the middle fish ladder (below Pool 56) fish salvage operations should proceed as described below. Fish salvage operations should start at Pool 73 and move downstream until the upper fishway is free of fish. Fish found in each sanctuary pool will have to be collected with a dip net and transferred directly into the portable fish totes. The order of priority is to net and transfer ESA listed adults, ESA listed juveniles, anadromous adults, anadromous juveniles and then non-listed resident fish.

Once loaded with fish, the fish totes should be hoisted from the sanctuary pool and deposited into Pool 56. Fish collected from Pool 73 through pool 57 are to be hoisted into Pool 56 where supplemental water has been added to carry fish downstream through the middle and lower fishway and into the collection gallery and tailrace. Once all fish have been salvaged from Pool 73 through 57 and all personnel have been evacuated from the fish ladder, the

operators should be contacted to initiate a Stage 8 (Middle Fishway – Pulsed Flow Operation) as described below.

State 8 (Middle Fishway – Pulsed Flow Operation): In order to move fish from Pool 56 down to the tailrace of the project, the adult fishway should be partially re-watered and then dewatered several times. It may become necessary to pulse water from the exit orifice gates several times. Typically three pulses of water are required to flush fish out of the middle and lower ladder and into the tailrace. Pool 40 is a location where fish frequently become stranded during the pulsed flow operation. A hatchery tanker truck and appropriate fish salvage personnel should be stationed at Pool 40 should fish require transport back to the river. The order of priority for fish collection shall be to net and transfer ESA listed adults, ESA listed juveniles, anadromous adults, anadromous juveniles and then net and transfer non-listed resident fish.

Once the fishway has been cleared of fish, the fish being held in the tanker truck should be released back into the river and the exit orifice gates should be closed. Fish salvaged from the east ladder will be released upstream of the dam and fish salvaged from the west ladder will be released into the tailrace.

Stage 9 (Lower Fishway – Collection Gallery): The lower fishway and collection gallery can only be dewatered following the placement of bulkheads across the entrance gates. The floor of the collection gallery can be up to 40 feet below the surface of the tailrace. Therefore the collection gallery must be dewatered with a sump pump. This operation can take several hours depending upon tailrace elevation and leakage into the collection gallery. Once the collection gallery is within one foot of becoming dry, fish salvage personnel should be hoisted with a crane down into the gallery. Once in the gallery, the fish totes should be filled with water and a seine net deployed upstream of the floor diffuser. Fish on top of the floor diffusers should be netted before the water levels drop to less than 6 inches. Once netted, fish should be placed into the fish totes. Depending upon the number and size of fish captured, the fish totes may need to be lifted out of the collection gallery before all of the fish have been collected. Once the crane has lifted the fish totes onto the deck of the dam, the fish should be placed into either a fish release container (300 gallon) or a hatchery transport truck.

Once the collection gallery has been cleared of stranded fish, the fish being held in the tanker truck will be released into either the forebay or tailrace of the dam.

Wells Project Survival Estimates

1998 WELLS SURVIVAL STUDY

The 1998 Survival Study, as described in the 1998 study plan "1998 Wells Dam Pilot Survival Study", was submitted to the WCC for review on September 2, 1997. The study plan was discussed during the September 8th and October 16th meetings of the WCC. The Study plan was modified in September 1997 to include several items requested by the WCC. The Study plan was approved during a conference call on October 16th as documented in the Wells Coordinating Committee meeting minutes (97-8). All parties to the Wells Settlement Agreement were contacted and provided unanimous support for the 1998 study.

The study was completed as directed in the study plan and draft results were presented to the WCC as documented in the 98-4, -5, -6, -8 meeting minutes. The Draft report was submitted to the WCC for review and comment on February 12, 1999. No comments were received by the end of the 60-day comment period. The comment period was extended to allow NMFS additional time for review. The comment period was closed following a 90-day review and following a call from Bob Dach (NMFS) indicating that no comments were going to be submitted by NMFS. The final report entitled: "Project Survival Estimates for Yearling Chinook Salmon Migrating through the Wells Hydroelectric Facility, 1998" was completed on May 27, 1999 and was distributed to the WCC on June 7, 1999. Results of the 1998 Survival Study using yearling Chinook indicated that project survival (Mouth of the Methow River to 1000 feet downstream of Wells Dam) was 99.7% ($\hat{SE} = 0.015$).

1999 WELLS SURVIVAL STUDY

The 1999 Survival Study, as described in the 1999 study plan "Wells Dam Steelhead Survival Study, 1999", was distributed prior to the August 12, 1998 meeting of the WCC. The study plan was discussed during the August 12th and September 22nd meetings. The study plan was revised based upon committee input in late September. The modified study plan was re-submitted to the WCC on October 2, 1998. The modified study plan was further discussed at the October 20, 1998 meetings of the WCC. The 1999 Study plan was unanimously approved during a conference call on November 2nd and reaffirmed at the next formal WCC meeting on November 12, 1998 as documented in the Wells Coordinating Committee meeting minutes (98-10, -11). All parties to the Wells Settlement Agreement were contacted and provided unanimous support for the 1999 study.

The study was completed and preliminary results were sent to the WCC on July 13, 1999. These results were formally presented to the WCC at the September 21, 1999 meeting (99-7). The Draft report was submitted to the WCC for review and comment on November 16, 1999. No comments were received by the end of the 60-day comment period. However, comments were received on February 18, 2000 from Steve Smith (NMFS) and all of Steve's comments were addressed in the final report. Steve Smith's comments and the authors response to Steve's comments can be found in the final report in Appendix C. The final report entitled: "Project Survival Estimates for Yearling Summer Steelhead Migrating through the Wells Hydroelectric Facility, 1999" was completed on March 9, 2000 and was distributed to the WCC on March 24, 2000. Results of the 1999 Survival Study using yearling summer steelhead indicated that project survival (Mouth of the Methow River to 1000 feet downstream of Wells Dam) was 94.3% ($\hat{SE} = 0.016$).

2000 WELLS SURVIVAL STUDY

The 2000 Survival Study, as described in the 2000 study plan "Wells Dam Steelhead Survival Study, 2000", was distributed to the WCC on September 21, 1999 (99-7). The study plan was discussed during the September, October and November 1999 meetings of the WCC (99-7, -8, -9). The Study plan was modified prior to the November meeting based upon input from the WCC. The 2000 survival study plan was approved at the November 1999 meeting as documented in the Wells Coordinating Committee meeting minutes (99-9). All parties to the Wells Settlement Agreement were contacted and provided unanimous support for the 2000 study.

The study was completed and preliminary results were presented to the WCC at the September 12, 2000 meeting (00-10). The Draft report was submitted to the WCC for review and comment on November 30, 2000. No comments were received by the end of the 60-day comment period. However, comments were later received from NMFS and these comments were addressed in the final report. NMFS comments and the author's response to NMFS's comments can be found in the final report in Appendix E of the final report. The final report entitled: "Project Survival Estimates for Yearling Summer Steelhead Migrating through the Wells Hydroelectric Facility, 2000" was completed on March 23, 2001 and was distributed to the WCC on March 29, 2001. Results of the 2000 Survival Study using yearling summer steelhead indicated that project survival (Mouth of the Methow River to 1000 feet downstream of Wells Dam) was 94.6% ($\hat{SE} = 0.015$).

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SECTION 16
LIST OF SUPPORTING DOCUMENTS

Supporting Document A: Aquatic Species and Habitat Assessment: Wenatchee, Entiat, Methow, and Okanogan Watersheds (1998).

Supporting Document B: Biological Assessment and Management Plan (BAMP): Mid-Columbia Hatchery Program (1998).

Supporting Document C: Briefing Paper: Estimating Survival of Anadromous Fish through the Mid-Columbia PUD Hydropower Projects (2002).

Supporting Document D: Tributary Plan, Project Selection, Implementation and Evaluation (1998).

To receive copies of the Supporting Documents please refer to the District's website, the National Marine Fisheries Service website or contact the District directly as indicated below.

www.douglaspud.org

www.nwr.noaa.gov/1hydrop/hydroweb/ferchcps.html

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2005 Wells HCP Annual Report

**ANNUAL REPORT
CALENDAR YEAR 2005
OF ACTIVITIES UNDER THE ANADROMOUS FISH AGREEMENT
AND HABITAT CONSERVATION PLAN**

**WELLS HYDROELECTRIC PROJECT
FERC LICENSE NO. 2149**

Prepared for

Federal Energy Regulatory Commission
888 First Street N.E.
Washington, D.C. 20426

Prepared by

Anchor Environmental, L.L.C.
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Seattle, Washington 98101
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1151 Valley Mall Parkway
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April 2006



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Appendix K	Wells Hatchery Compliance Report
Appendix L	Tributary Committees Funding Policies
Appendix M	Summary Agreement – Douglas PUD M&E Plan

1 INTRODUCTION

On June 21, 2004, the Federal Energy Regulatory Commission (FERC) approved an Anadromous Fish Agreement and Habitat Conservation Plan (HCP) for the Wells Hydroelectric Project (Wells Dam – FERC License No. 2149) on the Columbia River in Washington State. The Wells Project is owned and operated by Public Utility District No. 1 of Douglas County (Douglas PUD). The HCP provides a comprehensive and long-term adaptive management plan for species covered under the HCP (Plan Species) and their habitat. This document is intended to fulfill Section 6.9 of the HCP and Article 59 of the Wells Project FERC License requiring an annual report of progress toward achieving the No Net Impact (NNI) goal described in Section 3 of the HCP and common understandings based upon completed studies.

Designated representatives of the signatories of the Mid-Columbia HCPs (HCPs of the Wells, Rocky Reach, and Rock Island hydroelectric projects) comprise the Coordinating Committees, Hatchery Committees, and Tributary Committees for each HCP, which meet collectively to expedite the process for overseeing and guiding the implementation of their respective HCPs. Minutes from the monthly meetings are compiled in Appendices A (Coordinating Committees), B (Hatchery Committees), and C (Tributary Committees); Appendix D lists members of the Wells HCP Committees. The Coordinating Committee for the Wells HCP oversaw the preparation of this second Annual Report for calendar year 2005, which covers the period from January 1 to December 31, 2005 (the first Annual Report covered January 1 to December 31, 2004).

2 PROGRESS TOWARD MEETING NO NET IMPACT

The Wells Dam HCP requires preparation of an Annual Report that describes progress toward achieving the performance standard of NNI for each Plan Species. The NNI standard consists of two components: 1) 91 percent combined adult and juvenile project survival achieved by project improvement measures implemented within the geographic area of the project, and 2) 9 percent compensation for unavoidable project mortality provided through hatchery and tributary programs, with 7 percent compensation provided through hatchery and 2 percent through tributary programs (Section 3.1 of the HCP). Section 4.1 of the HCP states that, given the present inability to differentiate between the sources of adult mortality, initial compliance with the combined adult and juvenile survival standard will be based on the measurement of 93 percent juvenile project survival or 95 percent juvenile dam passage survival (described further in Section 4.1.2 of the HCP).

A major feature of the Wells HCP is what is termed a “phased implementation plan” to achieve the survival standards. Briefly, Phase I consists of implementation of juvenile and adult operating plans and criteria to meet the survival standards, and a monitoring and evaluation program to determine compliance with the survival standards. Following completion of the 3-year monitoring and evaluation program in Phase I, the Wells HCP Coordinating Committee will determine whether the pertinent survival standards have been achieved. Depending upon the results of this determination, Douglas PUD would either proceed to Phase II (if the applicable survival standards have not been achieved) or Phase III (if the applicable survival standards have been achieved). Under Phase II conditions (where the Wells HCP Coordinating Committee has determined that the standards have not been met), Douglas PUD would be responsible for evaluating additional tools to improve survival. Under Phase III conditions (where the Wells HCP Coordinating Committee has determined that the survival standards have been achieved), Douglas PUD would be required to re-evaluate survival at 10-year intervals. It should be noted that juvenile survival studies conducted during Phase I may result in different phase designations for each of the Plan Species.

Throughout 2005, the HCP Coordinating, Hatchery, and Tributary Committees made and noted a number of agreements during committee meetings in order to document HCP decisions and support the future achievement of NNI. These agreements are summarized in Table 1 and are discussed in the remainder of this report.

Table 1
2005 Decisions for Wells HCP

Date	Agreement	HCP Committee	Reference
January 19, 2005	Tributary Committee Funding Policies	Tributary	Appendix L
February 10, 2005	HCP Tributary Committee Operating Protocols	Tributary	Appendix C, Feb. 10
February 22, 2005	2005 Bypass Operating Plan	Coordinating	Appendix A, Feb. 22
February 22, 2005	Summary Agreement – Adult Fall-back Studies and Phase Designation	Coordinating	Appendix A, Feb. 22
February 22, 2005	Wells Action Plan	Coordinating	Appendix A, Feb. 22
May 18, 2005	CRITFC request to sample fish at Wells Dam in concert with normal broodstock collection activities	Hatchery	Appendix B, May 18
June 14, 2005	2005 Broodstock Collection Protocols (for hatchery production facilities operated by WDFW)	Hatchery	Appendix H; Appendix B, Jun. 14
July 26, 2005	HCP Coordinating Committee Operating Protocols	Coordinating	Appendix A, Jul. 26
August 19, 2005	HCP Hatchery Committee Operating Protocols	Hatchery	Appendix B, Aug. 19
September 21, 2005	Summary Agreement – Douglas PUD M&E Plan	Hatchery	Appendix B, Sep. 21.
September 21, 2005	Douglas PUD providing Grant PUD with 150,000 steelhead for survival studies at Priest Rapids Dam	Hatchery	Appendix J; Appendix B, Sep. 21
January 12, 2006*	Funding of 2005 General Salmon Habitat Proposals	Tributary	Appendix C, Jan. 12

* This 2006 decision is included here because of its relevance to text in Section 2.3.3.

As of the HCP approval date (June 2004), Douglas PUD has met the survival standards for all Plan Species, completed adult fall-back assessments, completed all Phase I testing, and is in Phase III of the phased implementation. In February 2005, the Wells HCP Coordinating Committee agreed that yearling Chinook and steelhead are designated to be in Phase III (Standards Achieved) and that sockeye and subyearling Chinook are in Phase III (Additional Juvenile Studies) (Appendix F). In addition to confirming the phase designations for these species, the summary agreement for this decision also states that “The PUD, following agreement of the Wells HCP Coordinating Committee, will test fall-back rates on adult plan species should there be a significant change in project operation, Douglas PUD’s hatchery programs, or if a Mid-Columbia adult telemetry study is planned” (Appendix F). Table 2 summarizes phase designations for the Wells HCP to date.

Table 2
Phase Designations for Wells Dam

Plan Species	Phase Designation	Date
Upper Columbia River steelhead	Phase III (Standard Achieved)	February 22, 2005
UCR spring Chinook	Phase III (Standard Achieved)	February 22, 2005
UCR summer/fall Chinook	Phase III (Additional Juvenile Studies)	February 22, 2005
Okanogan River sockeye	Phase III (Additional Juvenile Studies)	February 22, 2005
Coho*	N/A	N/A

* A "threshold population" (as defined in the HCP) of coho salmon does not yet exist, nor has the Wells HCP Hatchery Committee made a determination on the existence of a long-term coho hatchery program.

The following sections of this report chart progress made in 2005 toward achieving the HCP objectives as they relate to continued implementation of the juvenile and adult passage plans, and project improvements for hatchery programs and tributary programs.

2.1 Project Operations and Improvements

This section summarizes project operations and progress toward meeting HCP requirements at Wells Dam in 2005.

2.1.1 Operations

Operation of the juvenile bypass system in 2005 was guided by the Bypass Operating Plan contained within Section 4.3 of the Wells HCP. The bypass initiation date of April 12, 2005 and bypass termination date of August 26, 2005 were implemented per the Pre-season Operating Plan agreed to by the Wells HCP Coordinating Committee in February 2005 (Appendix A; Appendix G). In December 2005, Douglas PUD prepared a bypass operation summary that described the operational criteria for the bypass system, as well as the initiation and termination dates for the Wells bypass system (Appendix G). The year 2005 was the second year that operation of the bypass system was guided by representatives of the Wells HCP Coordinating Committee.

Flows at Wells Dam during the 2005 juvenile plan species migration (April to August) were at 95 percent of the 20-year average. Operationally, all five bypass bays were available and were utilized as required during the 2005 outmigration.

The spring bypass season started on April 12 at 0000 hours, and the system operated continuously through June 13 at 2400 hours (63 days). Spring bypass operations utilized a total discharge of 1.1 million acre feet (MAF), or 7.6 percent of total project discharge. During the spring bypass operation, there was forced spill during 67 hours or 4.4 percent of the season, with the highest single hour of forced spill occurring on May 27 with 96.8 thousand cubic feet per second (kcfs) spilled. In May of 2005, Douglas PUD began a 1-year study to develop relationships between spill, spillway operations, tailwater elevation, and observed levels of total dissolved gas in the tailrace of the dam. Most of the forced spill observed resulted from various spill configurations tested during the implementation of that study. The highest hourly discharge occurred on May 25 at 2100 hours with 221.5 kcfs flowing through the project.

Summer bypass started on June 14 at 0000 hours and ran until August 26 at 2400 hours, for a total of 74 days. There was 6.8 percent (1.3 MAF) of the total discharge dedicated to summer bypass. During the summer bypass operating period, there were 26 hours of forced spill.

2.1.2 Assessment of Project Survival

As previously noted, as of the approval of the HCP, Douglas PUD had met the Phase I HCP requirements of 91 percent combined adult and juvenile project survival. In 2005, Douglas PUD successfully implemented the juvenile and adult passage plans, participated in selection of tributary improvement projects, and made progress toward achieving hatchery improvements covered in the HCP, including documenting adult fall-back conditions and facilities maintenance.

2.1.2.1 Adult Passage Monitoring

The HCP acknowledges that no scientific methodology currently exists that would allow the Wells HCP Coordinating Committee to assess adult project survival (presumed to be 98 percent). This is because available methodologies are unable to

differentiate between mortality caused by the project versus mortality from other sources (natural causes, injuries resulting from passage at downstream projects, injuries sustained by harvest activities, etc.). However, the Wells HCP Coordinating Committee is able to evaluate information to assess whether or not there is a high likelihood that the presumed adult survival rates are being achieved. Table 3 details detections of known origin adult Passive Integrated Transponder (PIT)-tagged steelhead and Chinook salmon at McNary Dam in 2005, the number of adults redetected at Wells Dam, the estimated conversion rate (McNary Dam to Wells Dam), and average per project (five dams and reservoirs) conversion rates. These conversion rates are best viewed as a minimum survival estimate between the two detection sites. (They contain mortalities from all sources between the two detection sites.) They do not include any indirect or delayed mortality that might occur upstream of Wells Dam (the redetection site). The per project conversion rate exceeded 96 percent in 2005 for steelhead and spring and summer Chinook salmon (that is, mortalities from all sources averaged less than 4 percent through each project) on a per project basis. It should be noted that this 4 percent figure reflects a combination of mortality attributable to non-project related causes (e.g., harvest, tailrace spawning, and disease), as well as dam passage. For this reason, it is highly likely that the 2005 conversion rate is consistent with the 2 percent per project performance standard set forth in the HCP.

Table 3
Adult Conversion Rates for 2005

Stock Species	McNary Dam	Wells Dam	McNary to Wells Total Conversion Rate	McNary to Wells Average Per Project Conversion Rate¹
All Releases ² Summer Steelhead 2005	1,6132	1,3387	82.9%	96.3%
All Releases ³ Spring Chinook 2005	120	118	98.6%	99.7%
All Releases Summer Chinook 2005	16	14	87.5%	97.3%

1 Calculated as McNary Dam to Wells Dam Total Conversion Rate to the 5th root (five dams and five pools). Any mortality occurring within the 41 mile free-flowing Hanford Reach of the Columbia River is also incorporated into this estimate and evenly distributed among the five dams and reservoirs. Adults detected at Wells Dam that were not also detected at McNary Dam were excluded from the analysis.

Source: Columbia River DART website: http://www.cqs.washington.edu/dart/pit_obs_adult_conrate.html

2 Summer steelhead released into the Okanogan and Methow River Systems – PIT-tag release site designations: CHEWUR, METHR, OKANR, OMAKC, SIMILR, TWIS2P, TWISPR, and WINT.

3 Spring Chinook salmon released into Methow River System – PIT-tag release site designations: CHEWUP, METH, TWISPP, and WINT.

Although not part of the HCP process, bull trout were considered as part of adult passage issues addressed at Wells Dam in 2005. In 2004, FERC issued an order incorporating the HCP and the U.S. Fish and Wildlife Service *Bull Trout Biological Opinion* into the FERC license for the Wells Dam Project. Article 61 of the Wells Project license requires Douglas PUD to file with FERC a multi-year Bull Trout Monitoring and Management Plan (Appendix I). The plan outlines the goals, objectives, and implementation strategy for monitoring and evaluating bull trout presence in the project area, and to quantify and address, to the extent feasible, potential project-related impacts on bull trout from project operations and facilities (Appendix I).

2.1.2.2 Completed Studies 2005

The Wells Dam HCP requires Douglas PUD to identify adult fall-back rates at Wells Dam by the end of Phase I. Studies addressing adult fall-back at Wells Dam were summarized at the December 13, 2004 meeting of the Wells HCP Coordinating Committee. Douglas PUD reviewed adult fall-back studies from 1992 – 2002 at

Wells Dam and the Wells HCP Coordinating Committee approved these rates in February 2005 (Appendix F).

Douglas PUD completed a 1-year Total Dissolved Gas (TDG) study in 2005, which evaluated spill configurations and volumes through Wells Dam. Results showed that certain spill volumes affected TDG. Spill tests looked at 1) spill over loaded and unloaded powerhouse units; 2) spill on the east and west side of the project; and 3) flat spill verses crowned spill. Data analysis has been performed showing slight improvements under certain operations. A report is due by spring of 2006.

2.2 Hatchery Compensation

As required by the HCP, Douglas PUD supported hatchery production in 2005 to compensate for unavoidable project mortality. Section 8 of the Wells Dam HCP outlines a Hatchery Compensation Plan with two hatchery objectives for Douglas PUD: 1) to provide hatchery compensation for all of the Plan Species, including spring Chinook salmon, summer/fall Chinook salmon, sockeye salmon, summer steelhead, and coho salmon (should they become established under the criteria set forth in HCP Section 8.4.5.1); and 2) to implement specific elements of the hatchery program consistent with the overall objectives of rebuilding natural populations and achieving NNI.

Hatchery compensation in 2005 included the release of 1,414,906 smolts from hatcheries associated with Wells Dam (Appendix K). This does not include the sockeye production gained through the Fish-Water Management Tool project administered by the Okanagan Nation Alliance. Also, the 5-year hatchery monitoring and evaluation plan was finalized and approved by the Wells HCP Hatchery Committee on September 21.

2.2.1 Hatchery Production Summary

Tables 4 and 5 summarize and compare HCP hatchery production objectives and actual 2005 production levels for both the original inundation compensation program and HCP passage loss compensation program.

2.2.1.1 *Inundation Compensation Program*

The FERC license to operate the Wells Hydroelectric Project requires Douglas PUD to raise and release fish to compensate for original impacts associated with the development of the Wells Reservoir. All of the fish for this program are raised at the Wells Fish Hatchery. The number and pounds of fish to be released each year for the Inundation Compensation Program can be found in Section 8.4.6 of the Wells HCP Agreement.

Table 4
Production Objectives for the Inundation Compensation Program and Releases in 2005

Inundation Compensation Program	Numeric Target	Poundage Target	Number Released	Pounds Released
Yearling Summer/Fall Chinook (2003 brood year)	320,000	32,000	313,509	31,351
Subyearling Summer/Fall Chinook (2004 brood year)	484,000	24,200	471,123 ¹	13,134
Yearling Summer Steelhead (2004 brood year)	300,000	50,000	300,000	53,571

1 C. Snow June 2005 Memo shows an early release on May 18 of 230,649 (44.6 fpp) and a late release on June 13 of 240,474 (30.2 fpp). The poundage obligation was not met this year due to an early experimental release of fish conducted by hatchery evaluation staff.

2.2.1.2 *No Net Impact Compensation Program*

Section 8.4.3 of the Wells HCP contains specific numbers and pounds of juvenile plan species to be produced to meet Douglas PUD's No Net Impact production levels for unavoidable juvenile losses at the Wells Project. Juvenile passage losses are offset through the production of juvenile plan species at three facilities (Wells Fish Hatchery, Methow Fish Hatchery, and Eastbank Fish Hatchery) and through the implementation of mitigation options identified in the Sockeye Enhancement Decision Tree.

Table 5
Production Objectives for the HCP Passage Loss Compensation Program and Releases in 2005

No Net Impact Compensation Program	Numeric Target	Poundage Target	Number Released	Pounds Released
Yearling Summer Steelhead (2004 brood year)	48,858	8,143	64,546	11,526
Yearling Summer/Fall Chinook (2003 brood year)	108,570 ¹	10,857	108,570	6,786
Yearling Spring Chinook (2003 brood year)	286,071 ²	19,071	157,158 ³	9,701
Yearling Osoyoos Lake Sockeye ⁴	7%	NA	55%	NA

- 1 Carlton Pond Summer Chinook released by Chelan PUD as part of Douglas-Chelan Hatchery Sharing Agreement.
- 2 Spring Chinook obligation includes 61,071 NNI smolts and 225,000 species trade for sockeye. The 03 brood year is the last year of the species trade.
- 3 Methow Hatchery Spring Chinook smolts released were 302,152 at 16.2 fpp (April 2005 Memo from C. Snow) due to insufficient adult collection of Endangered Species Act (ESA) origin fish. This is 55% of a full program of 550,000 fish. Due to the Hatchery Sharing Agreement with Chelan PUD, Douglas shares in the production shortfall equally and thus will show a release of 157,158 fish.
- 4 Okanogan Sockeye obligation for NNI is handled through the Fish/Water Management Tool program managed through the Okanogan Nation Alliance. The Wells HCP Hatchery and Coordinating Committees have agreed that the continued implementation of this program will satisfy Douglas PUD's 7% hatchery compensation requirement.

2.2.2 Hatchery Planning

During 2005, Douglas PUD and Washington Department of Fish and Wildlife (WDFW) completed a *Monitoring and Evaluation Plan* (M&E Plan) for operation of Douglas PUD hatchery programs. During the preparation of the plan, the schedule for plan finalization as required by the HCP was shifted several months upon agreement of both the Wells HCP Hatchery and Coordinating Committees to accommodate Committee comments (see Appendices A and B). Following the inclusion of these comments into the plan, the final plan was approved by the Wells HCP Hatchery Committee in September 2005 (Appendix M). The goal of the M&E Plan is to assist in the determination of whether the specific hatchery objectives defined by the HCP are being met. Implementation of the M&E Plan will begin in 2006, and the HCP specifies that this plan will be reevaluated and adjusted, as necessary, every 5 years.

In July 2005, Douglas and Grant PUDs met within the terms of the 2004 Interlocal Cooperation Agreement to identify and discuss the ability of Douglas PUD to provide Grant PUD with 150,000 yearling steelhead to be used for survival studies. These fish were in addition to the 100,000 steelhead and 201,000 spring chinook already being

reared by Douglas PUD for Grant PUD's mitigation obligations at the Priest Rapids Project (Appendix J).

Grant and Douglas PUDs brought Grant PUD's request to have Douglas PUD raise 150,000 hatchery steelhead for survival studies at Grant PUD's dams to the attention of the Wells HCP Hatchery Committee during the August meeting, and the request was approved at the September 2005 meeting (Appendix B).

2.2.3 Maintenance and Improvements

Maintenance activities supporting hatchery production at Wells Dam in 2005 included the redesign of the Twisp and Chewuch weirs and improvements to the Twisp Acclimation Pond intake screen.

2.2.3.1 Chewuch Weir

Designs for the Chewuch Adult Collection weir were completed in 2004.

Construction was scheduled for 2005; however, permitting difficulties prevented the site from being developed. Douglas PUD is continuing to work with the HCP Hatchery Committees to address public comments and permitting concerns related to the installation of the proposed weir on the Chewuch River.

2.2.3.2 Wells Hatchery Screens

Design refinements were completed in December 2005 during the planning process for the installation of new fish screens on the surface-water intake for the Wells Hatchery. Douglas PUD anticipates that contractor selection and construction of the new screens will occur in 2006.

2.2.3.3 Twisp Weir Improvements

In 2005, improvements were made to the existing Twisp weir. These improvements included the addition of a weir inflation/deflation system to prevent fish stranding behind or on the existing picket panels, and a notch was cut in the weir sill to concentrate attraction flow through the trap box. Following the seasonal removal of the trap box in August 2005, WDFW requested that Douglas PUD enlarge the trap box prior to reinstallation in the spring of 2006. Based upon this request, Douglas

PUD has increased the size of the trap box. The new trap box is scheduled to be installed in the Twisp River in March of 2006.

2.2.3.4 Twisp Screen Improvements

The existing intake screen for the Twisp Acclimation Pond was redesigned and reconstructed during early 2005. The new system includes a newly designed intake screen, intake structure, buried water supply pipeline, and automated air-burst screen cleaning system.

2.3 Tributary Committees and Plan Species Accounts

In 2005, the initial focus of the HCP Tributary Committees was to adopt operating procedures, which provide a mechanism for decision-making on various issues related to the Committees (see Appendix C). Subsequently, the HCP Tributary Committees developed policies for soliciting, reviewing, and approving project proposals (Appendix L). These policies document and provide formal guidance to project sponsors on the submission of proposals for projects to protect and restore habitat of Plan Species within the geographic scope of the HCP. The operating procedures and funding policies of the Rock Island, Rocky Reach, and Wells HCP Tributary Committees are essentially the same. The HCP Tributary Committees established two complementary funding programs, the General Salmon Habitat Program and the Small Projects Program, which are discussed in Sections 2.3.3 and 2.3.4, respectively.

2.3.1 Regional Coordination

To improve regional coordination, the HCP Tributary Committees invited Grant PUD to participate in HCP Tributary Committees meetings; representatives from Grant PUD attend these sessions. This benefits the HCP Tributary Committees through increased coordination and sharing of expertise; however, the Grant PUD representatives have no voting authority in the HCP Committees. The HCP Tributary Committees, through the HCP Coordinating Committees, also invited American Rivers and the Confederated Umatilla Tribes, two parties that contributed to the development of the HCP, yet elected not to sign the document. Neither of these parties have actively participated in the deliberations of the HCP Tributary Committees.

In conjunction with the Washington State Salmon Recovery Funding Board (SRFB), the HCP Tributary Committees held a workshop in June 2005 to inform the public of the procedures to request funds for habitat projects. Moreover, the chairperson of the HCP Tributary Committees attends the meetings of the SRFB and the Upper Columbia Salmon Recovery Board to foster coordination in developing and selecting projects for funding. Roughly half (four of nine) of the projects approved for funding by the HCP Tributary Committees had matches provided by the SRFB.

2.3.2 Ownership of the Plan Species Accounts

The members of the HCP Tributary Committees resolved an important issue related to the ownership of the Plan Species accounts. The opinions of the legal advisors to WDFW and National Marine Fisheries Service (NMFS), differed from those of Chelan and Douglas PUDs regarding whether the funds in the Plan Species accounts were owned by the HCP Tributary Committees or were maintained by the PUDs themselves. This had considerable bearing on the procedures and obligations of the PUDs when contracting with project sponsors. The HCP Tributary Committees (and their legal advisors) agreed that the costs of conducting the work would be significantly less if conducted through the HCP Tributary Committees, compared to that done by the PUDs, which are encumbered with more stipulations on bidding, contracting, and disbursement. Additionally, if the funds were to belong to the PUDs, funding decisions by the HCP Tributary Committees could be subject to approval by the respective Boards of Commissioners of the PUDs, threatening the autonomy of the HCP Tributary Committees.

It was the mutual interest of all parties to maximize the funding efficiencies of the Plan Species accounts through the HCP Tributary Committees voting authority, project management, fiscal reporting, and delegation of executive authority to the chair. All parties agreed that this approach has little precedent and a certain level of legal risk, but they concurred that the benefits outweighed the risk. The legal advisors felt that this was therefore a policy issue that each committee member should address. As a result, the members of HCP Tributary Committees agreed the Plan Species accounts are owned and managed by the HCP Tributary Committees, and the adopted funding policies provide appropriate guidance for entering into contracts with approved project

sponsors. The account-ownership impasse had hindered the progress of the HCP Tributary Committees on funding decisions, and thus, with the timely resolution of the impasse, the HCP Tributary Committees were able to proceed with the funding decisions according to the review schedule that had been announced in March 2005 (see below).

2.3.3 General Salmon Habitat Program

The Tributary Committees established the General Salmon Habitat Program as the principle mechanism for funding projects. The goal of the program is to fund habitat protection and restoration projects that contribute to the rebuilding of the Plan Species. An important aspect of this program is to assist project sponsors in developing practical and effective applications for relatively large projects. Many habitat projects are increasingly complex in nature and require extensive design, permitting, and public participation to be feasible. Often, a reach-level project involves many authorities and addresses more than one habitat factor. To address this, the General Salmon Habitat Program was designed to fund relatively long-term projects. There is no maximum financial request in the General Salmon Habitat Program; the minimum request is \$25,000.

In an effort to coordinate with ongoing funding and implementation programs within the region, the HCP Tributary Committees used the previously-established technical framework and review process for this area, and worked with the other funding programs to identify cost-sharing procedures. The HCP Tributary Committees announced their first requests for project proposals in March 2005, with a due date of September 30, 2005. The HCP Tributary Committees received 29 applications to the General Salmon Habitat Program. Of these applications, 21 projects were cost-shares with state and federal funding sources, and the remaining were stand-alone applications (although some have secured “in-kind” matches through various sources). The geographic breakdown of the applications was as follows: 13 in Wenatchee Subbasin, two in Entiat Subbasin, one on the mainstem Columbia River, eight in Methow Subbasin, and five in Okanogan Subbasin.

The HCP Tributary Committees reviewed the 29 applications received and, after substantial deliberation, agreed to fund nine projects for the amount of \$2,315,004 under

the Wells, Rocky Reach, and Rock Island Plan Species accounts on January 12, 2006, as scheduled (Table 6).

Table 6
Fund Allocations from the Wells, Rocky Reach, and Rock Island Plan Species Accounts to Projects Submitted for Funding under the General Salmon Habitat Program in 2005

Account	Project	Amount
Wells	Okanagan River Restoration Initiative-Phase III	\$ 191,038
	Methow Valley Riparian Protection ¹	\$1,177,500
	Total	\$1,368,538
Rocky Reach	Twisp River Conservation Acquisition	\$ 40,000
	Clees Well and Pump	\$ 15,000
	Entiat Engineering and Permitting	\$ 59,375
	Entiat Instream Structures	\$ 37,500
	Total	\$ 151,875
Rock Island	White River Riparian Protection	\$ 686,000
	Nason Creek Channel Migration Zone	\$ 18,787
	Alder Creek Bridge	\$ 89,804
	Total	\$ 794,591
Grand Total		\$2,315,004

1 Funding of the specific parcels identified in the proposal is dependent on specific negotiations on these items with the project sponsor.

2.3.4 Small Projects Program

The Small Projects Program has an application and review process that increases the likelihood of participation by private stakeholders that typically do not have the resources or expertise to go through an extensive application process. The HCP Tributary Committees encourage small-scale projects by community groups, in cooperation with landowners, to support salmon recovery on private property. Project sponsors may apply for funding at any time, and in most cases, will receive a notification of funding within three months. The maximum contract allowed under the Small Projects Program is \$25,000.

In 2005, the HCP Tributary Committees received six requests for funding under their Small Projects Program, two of which were approved for funding by the Rock Island Tributary Committee; no Small Projects Program funding requests were approved by the Wells HCP Tributary Committee.

3 HCP ADMINISTRATION

This section lists events of note that occurred in 2005 related to the administration of the HCPs.

3.1 Mid-Columbia HCP Forum

In March 2005, representatives of the HCP Committees (Coordinating, Hatchery, and Tributary Committees) participated in a Mid-Columbia HCP Forum (Forum). The Forum was designed to be an opportunity for communicating and coordinating with the non-signatories and other interested parties on the implementation of HCP. Current non-signatory parties at the time of the meeting included the Yakama Nation, Confederated Tribes of the Umatilla Reservation, and American Rivers. These parties were invited by letter to review and comment on the agenda and to attend the Forum, in conformity with FERC Order on Rehearing 109 FERC 61208 and in accordance with the offer to non-signatory parties of non-voting membership in HCP Tributary and Hatchery Committee processes. The Forum was held at the Wenatchee Convention Center in Wenatchee, Washington on March 29, 2005 from 9:30 am to 3:00 pm and meeting minutes were prepared (Appendix E).

3.2 Yakama Nation Signing of the HCP

During the preparation for the Mid-Columbia HCP Forum, the Yakama Nation became a signatory party to the HCP (March 9, 2005). The Yakama Nation began participating as a voting member of HCP Coordinating, Hatchery, and Tributary Committees as of the March 2005 meetings.

3.3 HCP Related Reports Published in Calendar Year 2005

The following is a list of reports released in 2005 related to the implementation of the Wells Dam HCP:

- Snow, Charlie. 2005. Annual Progress Report for Wells Hatchery Summer Steelhead, 2002 Brood Year. Prepared for Public Utility District No. 1 of Douglas County; Washington Department of Fish and Wildlife, 600 Capitol Way North, Olympia, WA 98501-1091. December 2005.
- Columbia Basin Environmental. 2005. Wells Dam Spillway Total Dissolved Gas Evaluation, 23 May to 6 June 2004. Prepared for Public Utility District No. 1 of

- Douglas County, 1151 Valley Mall Parkway, East Wenatchee, WA 98802; Columbia Basin Environmental PO Box 256, The Dalles, OR 97058. December 2004.
- Humling, Michael. 2005. Methow Hatchery 2002 Brood Spring Chinook Salmon Production. Prepared for Public Utility District No. 1 of Douglas County; Washington Department of Fish and Wildlife, 600 Capitol Way North, Olympia, WA 98501-1091. January 2005.
 - Humling, Michael and Charlie Snow. 2005. Methow Hatchery 2003 Brood Spring Chinook Salmon Production. Prepared for Public Utility District No. 1 of Douglas County; Washington Department of Fish and Wildlife, 600 Capitol Way North, Olympia, WA 98501-1091. February 2005.
 - Snow, Charlie. 2005. Wells Hatchery 2003 Brood Summer Chinook Salmon Production. Prepared for Public Utility District No. 1 of Douglas County; Washington Department of Fish and Wildlife, 600 Capitol Way North, Olympia, WA 98501-1091. February 2005.
 - Humling, Michael and Charlie Snow. 2005. Spring Chinook Spawning Ground Survey in the Methow River Basin in 2004. Prepared for Public Utility District No. 1 of Douglas County; Washington Department of Fish and Wildlife, 600 Capitol Way North, Olympia, WA 98501-1091. February 2005.
 - Townsend, Richard L. and John R. Skalski. 2005. Comparison of Survivals for Spring Chinook Salmon and Steelhead Released from Various Mid-Columbia Hatcheries in 2004. May 2005.
 - Snow, Charlie and Kurt Perry. 2005. Methow River Spring Chinook and Steelhead Smolt Monitoring in 2004. Prepared for Public Utility District No. 1 of Douglas County; Washington Department of Fish and Wildlife, 600 Capitol Way North, Olympia, WA 98501-1091. June 2005.
 - Conceptual Approach to Monitoring and Evaluation for Hatchery Programs Funded by Douglas County Public Utility District. Prepared for Wells Habitat Conservation Plan Hatchery Committee. September 2005.
 - Anchor Environmental, L.L.C. 2006. DRAFT - Review of Management of Bacterial Kidney Disease in the Pacific Northwest. Prepared for Wells, Rocky Reach and Rock Island Habitat Conservation Plans Hatchery Committees and Priest Rapids Coordinating Committee. Anchor Environmental, L.L.C., 1423 Third Avenue, Suite 300, Seattle, WA 98101, March 2006.

WELLS HCP 2005 ANNUAL REPORT
APPENDIX A-M

Appendix A	Habitat Conservation Plan Coordinating Committee Operating Protocols and Meeting Minutes
Appendix B	Habitat Conservation Plan Hatchery Committee Operating Protocols and Meeting Minutes
Appendix C	Habitat Conservation Plan Tributary Committee Operating Protocols and Meeting Minutes
Appendix D	List of Wells HCP Committee Members
Appendix E	Mid-Columbia Forum Meeting Minutes
Appendix F	Summary Agreement – Adult Fall-Back Studies and Phase Designation
Appendix G	Bypass Operations Plan and Summary
Appendix H	Brood Stock Collection Protocols
Appendix I	Bull Trout Monitoring and Management Plan
Appendix J	Grant PUD Request for Survival Study Fish
Appendix K	Wells Hatchery Compliance Report
Appendix L	Tributary Committee Funding Policies
Appendix M	Summary Agreement – Douglas PUD M&E Plan

Appendix A – M of the Wells HCP 2005 Annual Report have not been included into the Wells Pre-Application Document. Appendix A – M of the Wells HCP Annual Compliance Report, can be downloaded from FERC's e-library at www.ferc.gov, Docket No. P-2149-121, April 27, 2006.

This filing can also be access directly through the e-library by using the following link:
http://elibrary.FERC.gov/idmws/file_list.asp?accession_num=20060426-5090.