NORTHWEST POWER PLANNING COUNCIL
851 S.W. SIXTH AVENUE, SUITE 1100
PORTLAND, OREGON 97204-1348

Fax: 503-820-2370
Phone: 503-222-5161 1-800-452-5161
Internet: www.nwcouncil.org

November 4, 2002

MEMORANDUM

TO: Council Members

FROM: Bruce Suzumoto

SUBJECT: Chelan County P.U.D. Habitat Conservation Plan presentation

Shaun Seaman, Tracy Yount and Roger Purdom of Chelan County Public Utility District will provide a historical background and summarize the essential elements of the Habitat Conservation Plans (HCPs) for Rocky Reach and Rock Island dams. The HCPs were developed in cooperation with state and federal agencies and tribes to address impact of Chelan P.U.D. dams on anadromous ESA listed and non-listed fish.

Attached is a summary and an overview of the Rocky Reach and Rock Island HCPs.

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The Rocky Reach and Rock Island
Habitat Conservation Plans

What are they and how will they work?
More than nine years ago, Public Utility District No. 1 of Chelan County (Chelan PUD) began to assess how it should respond to a changing regulatory environment that would increasingly affect operation of its Rocky Reach and Rock Island Hydroelectric Projects on the Mid-Columbia River. The prospect of ESA listings for salmon and steelhead prompted the District in 1993 to develop two Habitat Conservation Plans (HCP) for anadromous fish in cooperation with federal and state regulatory agencies and Tribes. The plans commit Chelan PUD to a 50-year program to ensure our hydro projects have "no-net-impact" on mid-Columbia salmon and steelhead runs. This ambitious level of protection will be accomplished through a combination of project survival, off-site hatchery programs and evaluations, and habitat restoration work conducted in mid-Columbia tributary streams.

Implementation of the HCP agreement will require the continued cooperation of all the parties who signed the agreement in 2002. Therefore, a number of Committees were formed to oversee the various elements of the agreement.

Passage Survival - The Rocky Reach and Rock Island Coordinating Committees
While the overall project survival goal for adult and juvenile fish is 91%, biologists agree that at this time adult fish survival cannot be conclusively measured for each species covered by the plan. To compensate for the scientific unknowns, the HCPs set even higher standards for juvenile survival - 95% juvenile dam passage survival and 93% juvenile survival throughout the Project. Juvenile passage survival is the major component of both the Rocky Reach and Rock Island HCPs, but since the Projects are so distinct, different methods will be used at each dam to meet the survival goals set forth in the HCP. The Rock Island and Rocky Reach Coordinating Committees were created under section 4 of the HCPs to oversee all aspects of standards, methodologies and implementation related to passage survival for covered fish species. Each HCP signatory has a representative on the Coordinating Committees.

Spill
"Spill" is a traditional method for moving migrating juvenile fish past a hydroelectric dam. This occurs when a hydroelectric operator releases some water through the headgates without utilizing it for power generation. In successful spill situations, young fish are attracted by the free flowing water and are conducted into the project tailrace. Sometimes, however, because of a project's specific configurations, spill is not the most effective option for protecting young fish.

At Rocky Reach, Chelan PUD intends to utilize a juvenile bypass system as the primary method for moving young fish around the dam; spill will supplement the bypass system.

At the Rocky Island Project, however, spill will be the primary tool for meeting juvenile survival standards under the Rock Island HCP.

Chelan PUD will spill between 15 and 25 percent of water at Rocky Reach in the spring and 15 percent in the summer, and 20 percent of water at Rock Island during the spring/summer migration period in 2003. Based on studies conducted in 2003, the Rocky Reach Coordinating Committee may adjust required spill for the 2004, 2005 and 2006 migrations based on a formula contained in the HCP. During 2004, 2005, and 2006 studies will establish the survival rate for fish migrating past Rocky Reach. Studies for Rock Island commended in 2002 and will continue in 2003 and 2004.

Juvenile Bypass System

The juvenile bypass system is the key component of the Rocky Reach HCP. The system will collect juvenile fish before they reach the dam and return them to the river through a large pipe that terminates in the tailrace of the river project. Chelan PUD has hired contractors to install the surface collector in the Rocky Reach forebay and construct the bypass conduit.

The system represents a $93 million investment by the PUD and will be operational in time for the next juvenile migration period, which begins in April 2003. Chelan PUD will continuously operate the bypass system from April 1 to August 31 to accommodate juvenile fish migration. Periodic fish capture information, video counts, and other empirical data will be gathered to determine whether bypass operations are meeting the HCP standards. Any needed modifications to the normal bypass operating period will be made by the Rocky Reach Coordinating Committee.

Habitat Improvements – The Tributary Committee

Preserving habitat is essential to the rebuilding of salmon and steelhead in North Central Washington. Through the HCPs, Chelan PUD established the Tributary Conservation Plan to fund projects for the protection and restoration of habitat within the watersheds of the Columbia, Okanogan, Methow, Entiat, and Wenatchee Rivers. Grants will be made to groups and individuals interested in habitat restoration. Projects will be selected for funding by a Tributary Committee composed of voting representatives appointed by the parties to the HCP. The Tributary Committee may also include expert advisors such as land and water conservancy groups.

Under the terms of the HCP, Chelan PUD will contribute $229,800 annually to a "Plan Species Account" for Rocky Reach and $485,200 to a "Plan Species Account" for Rock Island to fund the projects selected by the Tributary Committee. Alternatively, the Tributary Committee has the ability to request a fifteen-year lump sum payment in lieu of annual payments. In addition, Chelan PUD will fund a tributary assessment program for the purpose of monitoring and evaluating the performance of projects supported through the Tributary Conservation Plans.

Habitat improvements will contribute 2% toward the 100% "no-net-impact" goal.

Hatchery Supplementation
To address the decline in the chinook, sockeye, coho salmon and steelhead populations in North Central Washington, Chelan PUD established a Hatchery Compensation Plan to help rebuild fish populations. Through the plan, Chelan PUD will provide the funding for hatchery facilities that are operated and maintained by either Chelan PUD or a designated agent (such as the Washington Department of Fish and Wildlife). A Hatchery Committee composed of voting representatives appointed by parties to the HCP will oversee the development, implementation and monitoring of species specific hatchery programs.

Hatchery supplementation will contribute 7% toward the 100% "no-net-impact" goal.

Fulfilling Regulatory Obligations
Approval of these plans will allow the National Marine Fisheries Service (NMFS) to issue Chelan PUD Section 10 permits under the Endangered Species Act (ESA). The Section 10 permits issued by NMFS will provide for the continued operation of the Rocky Reach, and Rock Island hydro projects and PUD funded fish hatcheries, even though they may incidentally impact ESA listed spring chinook salmon and steelhead. Without the permits, operation of the hydro projects and hatcheries could be drastically altered.

In addition to the Endangered Species Act, the plans are intended to satisfy the projects' obligations under the Federal Power Act; the Fish and Wildlife Coordination Act; the Essential Fish Habitat provisions of the Magnuson-Stevens Fishery Conservation and Management Act; the Pacific Northwest Electric Power Planning and Conservation Act; and Title 77 RCW of the State of Washington. It will also obligate the parties to work together to address water quality issues. Finally, the plans will satisfy the projects' relicensing issues for the five plan species.

For More Information
If you would like more information about the HCPs or would like to see the plans and the environmental review documents, please visit Chelan PUD's Web site at www.chelanpud.org and click on the HCP icon. You may also call Suzanne Bacon or Tracy Yount at (509) 663-8121.

BACK TO HCP

Overview of the 2002 Anadromous Fish Agreements and Habitat Conservation Plans For the Wells, Rocky Reach and Rock Island Hydroelectric Projects[1]

Background

On July 30, 1998 and amended on May 22, 2002, the Public Utility Districts of Douglas and Chelan Counties, Washington submitted incidental take permit applications to NMFS for the Wells, Rocky Reach, and Rock Island Hydroelectric Projects (the "Projects"). The incidental take permit applications are based upon proposed Anadromous Fish Agreements and Habitat Conservation Plans (the "Agreements").[2] The Agreements are "intended to constitute a comprehensive and long term adaptive management plan for Plan Species and their habitat as affected by the Projects."[3] They are unlike any other habitat conservation plan ever filed with the United States Fish and Wildlife Service or the National Marine Fisheries Services.

The Agreements are highly innovative due to their scope and management plan. The Agreements are titled Anadromous Fish Agreements and Habitat Conservation Plans and not just "habitat conservation plans" because they address more than the Endangered Species Act. They also address the Federal Power Act, the Fish and Wildlife Coordination Act, the Pacific Northwest Electric Power Planning and Conservation Act, the Magnuson-Stevens Fishery Conservation and Management Act, and Title 77 of the Revised Code of Washington in one comprehensive agreement for each Project.[4]

Because the Agreements are comprehensive settlements, they propose a standard and scope greater than that required under the Endangered Species Act. The Agreements establish a survival standard of 100% No Net Impact ("NNI") which means that the Projects will be virtually invisible to the species migrating past the Projects. There are two basic components of NNI: protection for species migrating past the Projects and mitigation for unavoidable mortality.

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[1] This document is intended to explain only the *general* concepts contained within the Agreements. The obligations of the parties are of course determined by the specific language in the Agreements.

[2] The Agreements were prepared by the Chelan and Douglas PUDs, National Marine Fisheries Service ("NMFS"), U. S. Fish and Wildlife Service ("USFWS"), Washington Department of Fish and Wildlife ("WDFW"), Confederated Tribes of the Colville Reservation ("Colville"), Confederated Tribes and Bands of the Yakama Indian Reservation ("Yakama"), Confederated Tribes of the Umatilla Reservation ("Umatilla"), American Rivers, Inc, and Chelan and Douglas' power purchasers. The 2002 Agreements have been signed pending completion of regulatory reviews by NMFS and the Federal Energy Regulatory Commission by all entities except for the Yakama, Umatilla, and American Rivers. Chelan's power purchasers chose not to sign the Rocky Reach and Rock Island Agreements.

[3] E.g., Introduction, Paragraph A, Rocky Reach HCP (2002). Throughout this document citations are not made to the Wells and Rock Island HCPs to keep the footnotes as short as possible. The text in the Wells and Rock Island HCPs are similar to that of the Rocky Reach HCP.

[4] The Agreements' treatment of water quality issues under the Clean Water Act is explained below in the section titled "What are the biological plans?"

Protection for the migrating species is accomplished through a series of performance (survival) standards, which are based upon actual survival of the migrating species, not simply measures to be implemented regardless of their actual benefit to the migrating species. Unavoidable mortality is mitigated though tributary habitat improvements and state of the art hatchery supplementation.

The level of protection afforded in the Agreements is provided to listed Upper Columbia River steelhead and Upper Columbia River spring chinook as well as all other species of salmon migrating past the Projects; even coho salmon, which are extinct from the Upper Columbia River and are being re-introduced, will be covered by the Agreement.

The Agreements are the result of an extensive collaborative process dating back to 1993, and represent the collective wisdom and professional judgment of the scientists and regional policy makers participating in the process.[5] This collaborative process is also central to the decision making and dispute resolution aspects of the Agreements. All the stakeholders that sign the Agreements make the decisions.

The Agreements

What species are protected?

The Agreements apply to the anadromous salmonids known as the "Plan Species." Plan Species are defined as spring, summer and fall chinook salmon (*Oncorhynchus kisutch*), sockeye salmon (*O. nerka*), coho salmon (*O. kisutch*), and steelhead (*O. mykiss*).[6] However, since coho salmon are extinct in the portion of the Columbia River affected by the Projects, Chelan and Douglas did not request that the incidental take permit apply to coho salmon. The sub-set of the Plan Species for which the incidental take permits are requested are referred to in the Agreement as the "Permit Species."[7]

What are the biological plans?

The biological plan is comprised of three primary components: 1) The survival standards for species migrating past the Projects; 2) Hatchery and tributary plans for mitigation of unavoidable mortality; and 3) Land use and other critical actions that impact either the survival standards of the species or the effectiveness of the Agreements.

The Survival Standards. The objective of the Agreements is to achieve 100% No Net Impact for each Plan Species affected by the Projects.[8] NNI consists of two

[5] The entities participating in the development of the Agreements were the National Marine Fisheries Service, the United States Fish and Wildlife Service, the Washington Department of Fish and Wildlife, the Confederated Tribes of the Colville Reservation, the Confederated Tribes and Bands of theYakama Indian Nation, the Confederated Tribes of the Umatilla Indian Reservation, and American Rivers, Inc.
[6] E.g., Section 13.20, Rocky Reach HCP.
[7] E.g., Section 13.19 Rocky Reach HCP.
[8] E.g., Introduction, Paragraph B, Rocky Reach HCP.

components: (1) 91% Combined Adult and Juvenile Project Survival achieved by project improvement measures implemented within the geographic area of the Project; and (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.[9] NNI will be maintained for the duration of the Agreement for each Plan Species affected by the Project. A coordinating committee for each Project composed of each entity that signs the Project's Agreement will ensure the NNI is achieved and maintained.[10]

To achieve the survival standards of NNI, Chelan and Douglas are first obligated to achieve and maintain 91% Combined Adult and Juvenile Project Survival. Since this standard is not measurable at this time due to the inability to measure adult survival rates, Chelan and Douglas must show survival based on prioritized surrogate measurements. The first surrogate measurement is a Juvenile Project Survival rate of 93%. If Juvenile Project Survival cannot be measured, then Juvenile Dam Passage Survival shall be measured as the next best alternative until the Juvenile Project Survival measurement is possible. Finally, if none of these measurements are possible, then the calculated Juvenile Dam Passage survival can be used until Juvenile Project Survival measurable. For each of these survival paths as shown in Figure 1 below, there are decision and measurement points that either lead to showing achievement of the standard or to additional steps to achieve the standards.

For some Plan Species such as sockeye and sub-yearling chinook where measurement of Juvenile Dam Passage Survival and Juvenile Project 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.

[9] E.g., Section 3.1, Rocky Reach HCP.
[10] E.g., Section 4.7, Rocky Reach HCP.

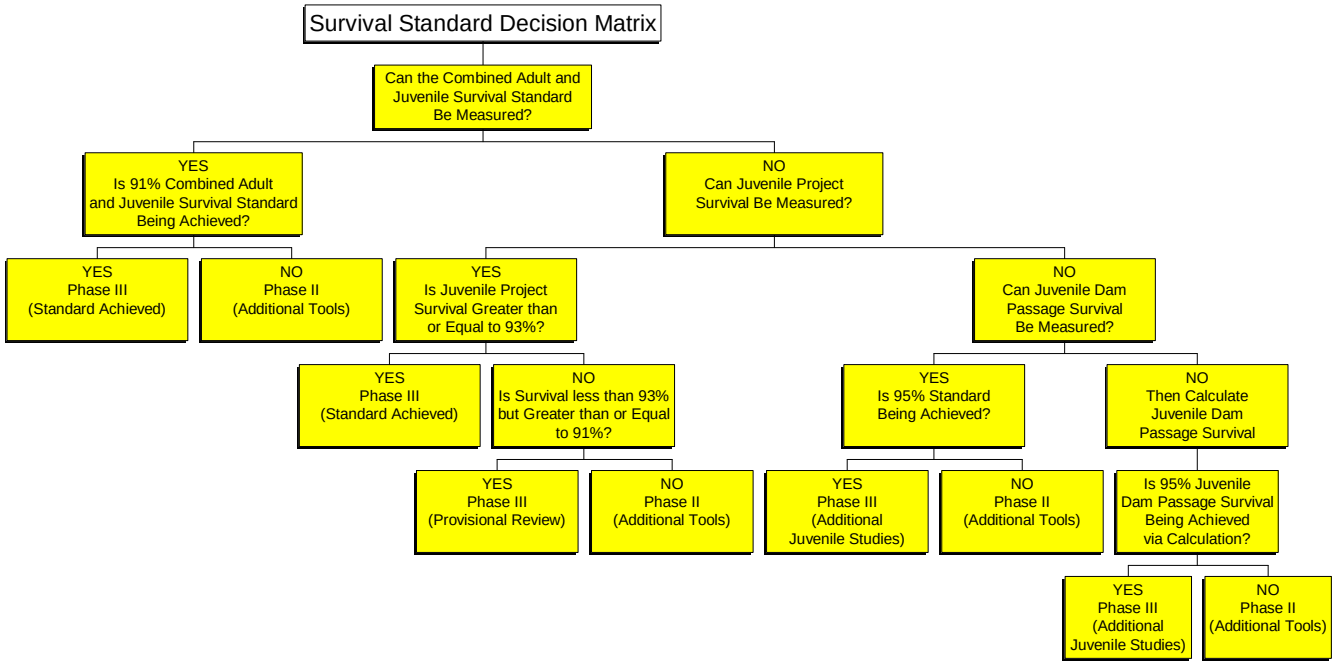

Figure 1, Survival Standard Decision Matrix

If Chelan and Douglas are unable to achieve 91% Combined Adult and Juvenile Project Survival, or 93% Juvenile Project Survival, or 95% Juvenile Dam Passage Survival, then Chelan and Douglas are obligated to consult with the parties through the coordinating committee to jointly seek a solution.[11] If a solution cannot be identified to achieve the standards, then any Party may take action to withdraw from the Agreement on the basis that it is impossible to achieve the standards in the Agreement, or take action under any other provision of the Agreement.[12]

Unavoidable Project Mortality. Since hydroelectric projects obstruct the waterways the salmon use to migrate there is some mortality that just cannot be eliminated. This mortality is addressed in the Agreements as "Unavoidable Project Mortality." Unavoidable Project Mortality is addressed through hatchery and tributary compensation, with 7% compensation provided through hatchery programs and 2% compensation provided through tributary programs.[13] Unavoidable Project Mortality is initially assumed to be 9%, based on several assumptions regarding Project impacts.[14] The word "initially" is very important. It is currently not possible to measure Unavoidable Project Mortality, due to the technical inability to measure adult mortality caused by hydroelectric projects. Since Unavoidable Project Mortality is an assumption, it is implicit within the Agreements that once technology is developed to measure these numbers it will be accurately established. Since the Agreements do not assign responsibility to any one party to take on this responsibility, the responsibility lies with

[11] E.g., Section 3.2, Rocky Reach HCP.
[12] E.g., Section 3.2, Rocky Reach HCP.
[13] E.g., Section 3.1, Rocky Reach HCP.
[14] E.g., Section 13.31, Rocky Reach HCP.

the coordinating committee as a whole. Since the Agreements provide for the assumption to be verified, all signatories to the Agreements have the incentive to develop the technology and have it implemented as soon as possible. In the event Unavoidable Project Mortality is proven to be something other than 9%, then the coordinating committee must decide the appropriate response.[15]

Hatchery Compensation Plan. Hatchery compensation is provided by the Agreements' Hatchery Compensation Plan. Chelan and Douglas will provide the necessary funding and capacity to provide the 7% hatchery compensation level set by the NNI, and operate the hatcheries (either directly or though a contractor) according to the terms developed by the parties through the hatchery committee, and the NMFS Section 10 permits.[16] Juvenile Project Survival estimates, when available, will be used to adjust hatchery based compensation programs and adult survival estimates will be used to adjust Plan Species Account contribution.[17]

Except in 2013 and every ten years thereafter, NMFS will refrain from applying hatchery policy decisions that would preclude the 7% hatchery levels (as adjusted) from being achieved.[18] During the 10-year periods, NMFS has a very limited window of circumstances where changes in NMFS hatchery policies could modify the production of the hatcheries. During the 10th year, NMFS is allowed to adjust the hatchery permits in response to changes in its hatchery policy. If NMFS fails to allow full utilization of the PUDs hatchery capacity to achieve the 7% hatchery levels (as adjusted), this will not be considered a basis for NMFS withdrawal from the Agreements or revocation of the permits until 2013 for Chelan and 2018 for Douglas. As such, any party other than NMFS may withdraw from the Agreements.[19] While NMFS may adjust the level of hatchery production, hatchery production cannot be reduced to preclude the production of hatchery fish to compensate for original Project inundation without action by the Federal Energy Regulatory Commission ("FERC").[20]

The initial estimated hatchery production capacities for Plan Species needed to provide compensation for Unavoidable Project Mortality are based on a variety of factors. Those include average adult returns of plan species for a baseline period, a 7% compensation requirement, and baseline adult/smolt survival rates for existing mid-Columbia River hatcheries. The estimated initial production capacity will be evaluated every 10 years to help achieve and maintain NNI.

Tributary Conservation Plan. The Tributary Plan will compensate for 2% of Unavoidable Project Mortality.[21] The Tributary Conservation Plan consists of the Agreement and Exhibit B "Tributary Compensation Plan Species Account Project

[15] E.g., Section 3, Rocky Reach HCP.
[16] E.g., Section 8.1.2, Rocky Reach HCP.
[17] Section 7.4.3, Wells HCP.
[18] E.g., Section 10.1.4, Rocky Reach HCP.
[19] E.g., Sections 2.1.1, 2.3 and 8.8.1 Rocky Reach HCP.
[20] E.g., Section 8.4.3, Rocky Reach HCP.
[21] E.g., Section 7.2, Rocky Reach HCP.

Selection, Implementation, and Evaluation Plan."[22] Under the Tributary Plan, Chelan and Douglas will provide a Plan Species Account to fund projects for the protection and restoration of Plan Species' habitat within the Columbia River watershed, including the Okanogan, Methow, Entiat and Wenatchee river watersheds. While studies will not be undertaken to verify that the tributary programs have contributed to an additional 2% in fish production, the Agreements provide a separate assessment fund that can be used to assess the relative performance of projects approved by each Project's tributary committee. This is accomplished through a "Tributary Assessment Program."[23] Each hydro-project will contribute up to $200,000 for this assessment. This money is in addition to the monies the Projects will contribute for tributary enhancement.

Each Project's Tributary Plan will be managed by a tributary committee composed of one representative from each party that signs the Project's Agreement. To assure that the maximum amount of money will be spent on actual projects, each Project's annual committee overhead costs cannot exceed $80,000 without the unanimous vote of the tributary committee.[24] Whenever feasible, projects selected by the tributary committee will "take into consideration and be coordinated with other conservation plans or programs", and "whenever feasible, the tributary committee shall cost-share with other programs, seek matching funds, and 'piggy-back' programs onto other habitat efforts."[25]

Land Use Decisions. When Chelan and Douglas make land use or related permit decisions on Project lands that affect reservoir habitat, Chelan and Douglas must consider the cumulative impact effects in order to meet the conservation objectives of the Agreements, requirements of the FERC licenses, and other applicable laws and regulations. Chelan and Douglas will also notify and consider comments from the parties to the Agreements regarding land use permit application on Project owned lands.[26] Applicants to use or occupy Project lands or waters will be informed by Chelan and Douglas that such use or occupation may result in an incidental take of an endangered or threatened species under the ESA, and may require advance authorization from NMFS or USFWS.[27]

Water Quality. While the Agreements are not designed to define the actions necessary to satisfy the Clean Water Act, their implementation must nevertheless satisfy the Clean Water Act.[28] Furthermore, the Agreements require the parties to "work together to address water quality issues."[29] To assist in implementing the Agreements consistent

[22] E.g., Section 7.1, Rocky Reach HCP.
[23] E.g., Section 7.6, Rocky Reach HCP.
[24] E.g., Section 7.4.2, Rocky Reach HCP.
[25] E.g., Section 7.7.2, Rocky Reach HCP.
[26] E.g., Section 6.1, Rocky Reach HCP.
[27] E.g., Section 6.2, Rocky Reach HCP.
[28] It is worthy to note that the parties did engage the Washington State Department of Ecology to seek their participation in the development of the Agreements so that the Agreements could define the actions necessary to satisfy the Clean Water Act and its regulations. The Department of Ecology's staff wanted to participate in the development of the Agreements and understood the significance of the Agreements, but resource limitations precluded their involvement. The parties nevertheless addressed the Clean Water Act the best they could in the Department's absence.
[29] E.g., Section 6.3, Rocky Reach HCP.

with the Clean Water Act, Chelan and Douglas are actively working on water quality issues as part of the total dissolved gas waivers issued by the Washington State Department of Ecology for the fish spill programs.

Early Termination Mitigation. Lastly, if the incidental take permits issued by NMFS are terminated early, NMFS may require Chelan and Douglas to mitigate for any past incidental take that has not been sufficiently mitigated prior to the termination of the permit. NMFS would require Chelan and Douglas to continue relevant mitigation measures of the Agreements for some or all of the time period covered by the permits as originally issued.[30]

How are the survival standards measured?

The coordinating committee will oversee the measurement and evaluation of the survival standards.[31] Studies will commence by the 2004 juvenile migration at Rocky Reach, unless agreed to otherwise by the coordinating committee. Studies commenced in 2002 for Rock Island, and 1999 for Wells. The Agreements require three years of measurement and evaluation.[32] Douglas has completed three years of Juvenile Project Survival studies.[33] Based upon these studies Douglas has achieved the 93% Project Survival goal for yearling chinook and steelhead,[34] and the Parties believe that the calculated Juvenile Dam Passage Survival for sockeye and sub-yearling chinook is probably greater than 95%.[35]

The Agreements define how the studies are to be used to establish a species' survival rate through each Project. The Agreements define when a study is valid,[36] how the confidence intervals around the studies are to be taken into account, [37] how the studies combined to produce a single survival rate, [38] how varying river conditions and operating conditions are to be considered,[39] and what happens when the studies show that the standards are close to being achieved but not yet achieved.[40]

NMFS prepared a briefing paper that identifies the current best available measurement technology and the appropriate uses of the technology.[41] The briefing paper along with the Agreements provide each Project's coordinating committee with the necessary information to know what standards they are supposed to measure, what order they are to measure the standards, what tools should be used to measure the standards, and indirectly, what technologies need to be developed and in what priority.

[30] E.g., Section 10.5, Rocky Reach HCP.
[31] E.g., Section 4.7, Rocky Reach HCP.
[32] E.g., Section 5.3, Rocky Reach HCP.
[33] Section 4.2.1, Wells HCP.
[34] Section 4.2.1, Wells HCP.
[35] Section 3.1, Wells HCP.
[36] E.g., Sections 5.2.3 and 13.24 Rocky Reach HCP.
[37] E.g., Section 5.2.3, Rocky Reach HCP.
[38] E.g., Section 5.2.3, Rocky Reach HCP.
[39] E.g., Sections 5.2.3 and 13.24, Rocky Reach HCP.
[40] E.g., Sections 5.2.3 and 5.3.3, Rocky Reach HCP.
[41] E.g., Section 5.2.3 and Supporting Document D, Rocky Reach HCP.

In 2013 and every 10 years thereafter, the coordinating committee will conduct a comprehensive review of the Agreements assessing overall status in achieving NNI for each species.[42] Annually, each of the Agreements' committees will prepare progress reports.[43]

What happens if results fall short of expectations?

If measurement and evaluation concludes that the survival standard has not been achieved, then each Project's coordinating committee will decide on additional "tools"[44] to implement to achieve the survival standard. The following criteria will be used to make the selection: likelihood of biological success; time required to implement; and cost-effectiveness of solutions. However, the balancing of a tool's cost-effectiveness will only take place where two or more alternatives are comparable in their biological effectiveness.[45]

A cycle of implementation of additional tools and measurement is repeated until the survival standards are achieved.[46] If a solution cannot be identified by 2013 (2018 for Wells) to achieve the standards, then any Party may take action to withdraw from the applicable Agreement[47] on the basis that it is impossible to achieve the standards in the Agreement, or take action under any other provision of the Agreement.[48]

How do disagreements get resolved?

Each Project's coordinating committee first addresses all disputes at a technical level. If the dispute cannot be resolved at the technical level, then the parties' executives convene in a policy committee.[49] If the executives do not resolve the dispute, the parties have their choice of forums.[50] The Agreements do not contain arbitration or mediation provisions; although, the parties are nevertheless encouraged to utilize alternative dispute resolution.[51]

[42] E.g., Section 4.8, Rocky Reach HCP.
[43] E.g., Section 4.8, Rocky Reach HCP.
[44] The term "tools" is a defined term in the Agreements to mean "any action, structure, facility or program (on-site only) at the Project, except those prohibited in Section 9.7 'Drawdowns/Dam Removal/Non-Power Operations' 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". E.g., Section 13.29, Rocky Reach HCP.
[45] E.g., Section 5.3.2, Rocky Reach HCP.
[46] E.g., Section 5.3.2, Rocky Reach HCP.
[47] For Wells this may occur in 2018, but for Rocky Reach and Rock Island this may occur in 2013.
[48] E.g., Section 3.2, Rocky Reach HCP.
[49] E.g., Sections 11.1.1 and 11.1.2, Rocky Reach HCP.
[50] E.g., Section 11.1.3, Rocky Reach HCP.
[51] E.g., Section 11.1.3, Rocky Reach HCP.

What are the terms of the Agreements?

The Agreements commence on the date signed and continue for a period of 50-years, unless the Agreements terminate early.[52]

In developing the 2002 Agreements for Rocky Reach and Rock Island, it was very important for everyone to identify the activities that were to be implemented during NMFS' and FERC's regulatory reviews of these Agreements. As a result, detailed provisions were included in Section 5.4 of the Agreements addressing spill, bypass operations, adult passage and predator control and the staggered effective date was included in Section 1.2. Upon a defined group of entities signing the Rocky Reach and Rock Island Agreements (which did occur), Chelan agreed to implement specific provisions of the Agreements during the regulatory review process. The remaining provisions take effect when NMFS and FERC issue the permits and orders required by the Agreements.

Is a party permitted to withdraw from the Agreements?

While the Agreements have 50-year terms, there are specified circumstances under which the Agreements could terminate early, or where a party may withdraw from the Agreements. These provisions are contained in Section 2 of the Agreements. For example, a party may withdraw from the Agreements if NNI is not being achieved,[53] as a result of another party's failure to comply with the terms of the Agreements,[54] or when a regulatory entity takes action that is detrimental to the achievement of the obligations of the Agreements.[55]

In the event a Party does withdraw from the Agreements, the withdrawing Party is not bound by the Agreements, and all rights and remedies of a non-Party are available to the withdrawing Party.[56] Should the Agreements terminate, become void, or be declared unenforceable, then Chelan and Douglas will continue to implement the last measures agreed upon until FERC orders otherwise.

Conclusion

The Agreements provide each Plan Species with the maximum protection practicable and minimize and mitigate the impacts of any taking as required by Section 10 of the Endangered Species Act.[57] This is accomplished through the Agreements' survival standards, required spill or bypass operations for juveniles, required measures for adults, predator control, standards that must be satisfied for land use and permitting decisions on Project lands, the obligation to address water quality issues, and the requirement to mitigate for any past incidental take that was not sufficiently mitigated in

[52] E.g., Section 1.1, Rocky Reach HCP.
[53] E.g., Section 2.1, Rocky Reach HCP.
[54] E.g., Section 2.2, Rocky Reach HCP.
[55] E.g., Section 2.3, Rocky Reach HCP.
[56] E.g., Section 2.8, Rocky Reach HCP.
[57] 16 U.S.C. § 1539.

the event the incidental take permit is terminated early. Furthermore, in order to protect, restore and increase the abundance of the Plan Species and their habitat, the Agreements mitigate for all the unavoidable mortality associated with the Projects through the Tributary Conservation Plan and the Hatchery Compensation Plan. Therefore, the 100% NNI standard of the Agreements will implement truly innovative salmon management on the Columbia River.