BONNEVILLE POWER ADMINISTRATION

NEZ PERCE TRIBAL HATCHERY PROGRAM

RECORD OF DECISION

Summary. As Administrator of the Bonneville Power Administration (BPA), I have decided to implement the Proposed Action Alternative of the proposed Nez Perce Tribal Hatchery Program (NPTH) in the Clearwater River Subbasin in Idaho. BPA is taking this action in partial fulfillment of its duties under the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act) to protect, mitigate, and enhance fish affected by the Federal hydroelectric projects in the Columbia River Basin. This supplementation program responds directly to a need to mitigate for naturally producing salmon in the Clearwater River, a tributary to the Snake River, which empties into the Columbia River. In the Proposed Action, BPA would build and the Nez Perce Tribe would operate two central incubation and rearing hatcheries and six satellite facilities. Spring and fall chinook salmon would be reared and acclimated to different areas in the Subbasin and released at the hatcheries and satellite sites or in other watercourses throughout the Subbasin. Fish would return to reproduce naturally in the areas where they are released.

Background. Populations of anadromous fish in the Pacific Northwest have become severely depleted. Since the construction of non-Federal dams in the Clearwater Subbasin in the early part of the century, indigenous spring/summer chinook salmon have been extirpated, and fall chinook recolonization is at low levels. The Northwest Power Planning Council (Council) recognized the opportunity to mitigate impacts to salmon runs in the Clearwater River Subbasin and listed the Nez Perce Tribal Hatchery Program in its 1982, 1987, and 1994 Fish and Wildlife Programs. In addition, in 1996 NPTH was included as one of the fifteen high-priority supplementation projects. After years of study to evaluate potential genetic and other environmental impacts, it is important to proceed with the NPTH to work in concert with other efforts to restore salmon populations.

The Nez Perce Tribal Hatchery is a supplementation hatchery. It is intended to rear and release spring and fall chinook salmon into rivers and streams of the Clearwater River Subbasin with the express purpose of increasing the numbers of fish spawning, incubating and living in the natural environment. It will use the modern technology that hatcheries offer (e.g., incubators, disease control, etc.) to overcome the high mortality rate that typically occurs in rivers and streams after eggs are laid in the gravel. NPTH will use innovative NATUREs techniques to rear fish that are more like wild fish than those typically reared in hatcheries. When NPTH has proven itself to be successful in aiding the restoration of wild runs, it will provide fish for harvest by tribal and nontribal fishermen. The number of fish that will be available for harvest will depend on the number needed for broodstock and to reach the carrying capacity of the outplanting streams. See Section 2.1, Proposed Action, of the environmental impact statement (EIS) for more information on supplementation.

Authority. BPA has prepared the NPTH EIS and Record of Decision (ROD) pursuant to the process specified in the National Environmental Policy Act (NEPA), regulations of the Council on Environmental Quality (40 CFR Part 1505), Implementing Procedures of the Department of Energy (DOE) (57 FR15122; April 24, 1992), and under the authorities of the Northwest Power Act (P.L. 96-501; December 5, 1980). The Bureau of Indian Affairs is the co-lead Federal agency. The Nez Perce Tribe has also chosen to participate in this process as a cooperating entity. Because some proposed actions would occur on national forest land, the U.S. Forest Service is a cooperating agency. Because the program could impact listed species, the U.S. Fish and Wildlife Service is also a cooperating Federal agency. BPA is the lead agency for Federal decisions on this program. BPA is issuing this ROD for its actions only.

History. BPA issued a Draft NPTH EIS in June 1996 (DOE/BP-2885). BPA issued the Final EIS in July 1997 (DOE/EIS-0213), revising the Proposed Action by removing summer chinook production (Section 2.1, Proposed Action), adding a new alternative that included using existing facilities as part of the program (Section 2.2, Use of Existing Facilities Alternative), including two biological assessments as appendices, and updating

resource and other information to respond to comments received on the Draft EIS. Chapter 10 of the Final EIS contains all comments made on the Draft EIS and includes responses. One comment was received on the Final EIS. This comment has been reviewed. The comment questions some asumptions used in a computer model, and the availability of fall chinook broodstock for the program. The comment also supported the Use of Existing Facilities Alternative to reduce costs. As the Administrator of BPA, I have reviewed this information to make my decision.

Related actions that could have a bearing on the implementation of this decision include the following: (1) the final version of the National Marine Fisheries Service (NMFS) Proposed Recovery Plan for Snake River Salmon; (2) BPA's Endangered Species Act Section 7 consultation with NMFS on 1998-2002 Hatchery Operations of the Proposed Nez Perce Tribal Hatchery; (3) the Council's final hatchery review report due by June 1998 as requested by the Conference Committee Report accompanying H.R. 2203, appropriations for energy and water development for fiscal year 1998; and (4) if finalized, the Programmatic EIS on Interactions of Hatchery and Naturally Spawning Salmon and Steelhead In the Columbia River Basin, addressed at Section 1.6.3 of the NPTH Final EIS. Any of these could affect the funding or timing of this project or could impose additional conditions on its construction and operation.

Alternatives Considered. In addition to the Proposed Action, the following alternatives were considered in reaching this decision. Each alternative is evaluated in detail in the EIS.

- No Action Alternative - BPA would not fund a supplementation program in the Clearwater River Subbasin.
- The Use of Existing Facilities Alternative would use existing production hatcheries and the proposed satellite facilities in the Proposed Action. Facilities at Dworshak National Fish Hatchery, Kooskia National Fish Hatchery, and Hagerman National Fish Hatchery would be used as central incubation and rearing facilities.

Chapter 2 of the Final EIS describes each alternative in detail, as well as alternatives eliminated from further consideration.

Decision Factors. The factors I considered in making the decisions on whether to fund the program, and, if so, which alternative to select, are as follows:

- The ability of the alternative to:
  - use state-of -the-art hatchery techniques; such as natural rearing strategies (NATUREs) designed to increase adult survival of spring and fall chinook returning to the Clearwater River Subbasin as compared to survival for fish reared under standard hatchery techniques.
  - increase natural production of anadromous fish in the Clearwater River Subbasin while sustaining long-term fitness and genetic integrity of targeted fish populations and improving harvest opportunities;
- The alternative's consistency with the Council's Columbia River Basin Fish and Wildlife Program;
- The economic factors relative to the alternative: long-term employment, changes in property and sales tax and the revenue brought in by fishing opportunities;
- The environmental impacts of the alternative on the following resources: water quality and quantity; fisheries, vegetation, floodplains, wetlands, and wildlife (including threatened and endangered species); socioeconomics; land use and recreation and visual resources; cultural resources; air quality and public health and safety. Chapter 4 of the Final EIS discusses the impacts of the alternatives on these resources.

Decisions. I have decided to proceed with the Proposed Action, because it best meets the need and purposes stated in the Final EIS.

1. Decision to Construct and Maintain Facilities - The following facilities would be built: a central incubation and rearing hatchery facility at Cherrylane for incubating and rearing spring and fall chinook; a central incubation and rearing facility at Sweetwater Springs for incubating and rearing fall chinook; six satellite facilities to acclimate and release young fish, and to capture and hold returning adult broodstock. The satellite sites would be at Luke's Gulch, Cedar Flats, North Lapwai Valley,

Yoosa/Camp Creek, Mill Creek, and Newsome Creek. Map 3 of the Final EIS shows the locations of the facility sites.

2. Decision to Implement Spring and Fall Chinook Supplementation by Adaptive Management - A critical feature of this proposed program is its policy of adaptive management, which specifies an ongoing, iterative approach to planning for the program to protect fishery resources from unforeseen, adverse program impacts. The effects of management actions would be monitored and evaluated; programs, procedures, and facilities may all be modified in response to these findings. Full detailed plans for supplementing the stocks would be continuously developed and revised, using the scientific method and information gained from the previous year's activities. The details of the spring and fall chinook supplementation program are described in Section 2.1 of the Final EIS.
3. Decision to Implement Monitoring and Evaluation - The Monitoring and Evaluation Plan For the Nez Perce Tribal Hatchery (DOE/BP-36809-2, January 1997) details a monitoring and evaluation program for supplementing spring and fall chinook. In general, the plan uses risk assessment and prioritization techniques to define the magnitude and significance of risks associated with the program, then proposes strategies for avoiding undesirable impacts and collecting the information necessary to evaluate program success. The Monitoring and Evaluation (M&E) plan would be revised and expanded as part of the adaptive management process. A more detailed description of the M&E program can be found in Section 2.1.5, Monitoring and Evaluation Plan, of the Final EIS.

Rationale for Decisions. I have selected the Proposed Action because this alternative has the best potential for increasing the number of adult spring and fall chinook returning to the Clearwater River Subbasin. Under the Proposed Action, anadromous fish populations should increase more quickly, and harvest opportunities should be increased. The alternative is consistent with the Council's Plan. While it is the most costly of the three alternatives evaluated in the EIS, it would provide the best opportunity for significant returns in the Clearwater River Subbasin. For these reasons it is also the environmentally preferred alternative.

Having considered the environmental impacts described in detail in Chapter 4 of the Final EIS and the responses to comments in Chapter 10, I find the benefits of the Proposed Action outweigh the potential adverse environmental impacts.

- The greatest potential impact (positive and negative) from the Proposed Action would be on fishery resources. However, impacts to targeted and nontargeted fish are expected to be low to moderate, with no long-term detrimental effects. Project

managers will use adaptive management to learn from and continually adapt their actions to prevent or correct problems.

- Surface water quality could be moderately affected by erosion during construction of the facilities, but this will be a short-term impact. Water quantity impacts would be low, as water used for the program would be returned to the source immediately after use. Groundwater would be used for some facilities. Such water would be discharged to nearby streams or rivers. Groundwater pumping is not expected to adversely affect other nearby wells. Floodplains would not be impacted.

- Impacts to vegetation would be moderate as riparian vegetation is removed for construction of satellite and central incubation and rearing facilities. Impacts to the wetland at the Yoosa/Camp Creek site would be moderate depending on how many trees were removed and the amount of fill placed in the wetland. Mitigation would be coordinated with the appropriate agencies and land managers. Impacts to the wetland at Luke's Gulch would be low.

- There may be short-term displacement and disturbance on individual wildlife species during construction. The Proposed Action would benefit species dependent on fish for forage. No impacts are expected on the listed threatened or endangered species in the vicinity of the proposed facilities sites. The U.S. Fish and Wildlife Service concurred with BPA's determination that there would be no adverse effects on these species.

  BPA is now in consultation with NMFS under Section 7 of the Endangered Species Act. In its comments on the Draft EIS, NMFS generally was supportive of the NPTH. BPA has sent a biological assessment to NMFS, which is part of the Final EIS (Appendix B). However, a final letter from NMFS about the effects on listed species has not been received. BPA will not issue construction contracts until after NMFS issues its final letter. Should the final letter vary substantively from NMFS's earlier comments, or should NMFS require consultation for newly listed species such as steelhead, BPA will review its decision to proceed with NMFS and issue an amended ROD, if necessary.

- Impacts on recreation and visual resources would be low to moderate. The Proposed Action could increase fishing opportunities in the future. Construction of the smaller satellite facilities would cause low impacts to visual resources; the larger central hatchery facilities and satellites would create moderate impacts to visual resources. Low impacts would occur for cultural resources. Cultural resources found at Sweetwater Springs would be mitigated through avoidance, if possible; or otherwise treated under consultation in accordance with the National Historic Preservation Act.

- Construction would affect land use and socioeconomics. Impacts range from low to moderate, depending on the location of the site and size of facility. The Cherrylane site is located on soils designated as prime farmland. The proposed hatchery has special siting requirements that this location satisfies. Site requirements include

proximity to the Clearwater River, level terrain, and land availability. Alternative sites do not meet the siting requirements. Finally, air quality and public health and safety impacts are anticipated to be low with some increase in vehicle emissions, construction activities, and number of workers and facilities in otherwise rural and forested areas.

The Use of Existing Facilities Alternative would undertake the same actions as the Proposed Action, except the Cherrylane facility would not be built. Environmental impacts would differ slightly between the two alternatives. While it would be less costly initially, the Use of Existing Facilities Alternative would offer less potential for adult chinook returns since state-of-the-art rearing techniques designed to increase smolt-to-adult survival would be difficult to incorporate without additional, costly physical modifications to these facilities.

The No Action Alternative would have the fewest environmental impacts because (with no construction) it would not disturb soils, vegetation, wildlife, cultural resources or other resources, nor would it use the materials required for construction under the action alternatives. I have not selected this alternative because it does not address the immediate need to mitigate for naturally reproducing salmon in the Clearwater River Subbasin in northcentral Idaho. I have selected the Proposed Action because, while it has greater environmental risks and would cost more than the No Action Alternative, it also has the potential for much greater environmental benefits.

Mitigation. Mitigation actions are an integral part of the Proposed Action, and must be funded and carried out along with supplementation actions. All practicable means to avoid or minimize harm from implementation of the Proposed Action have been adopted and are summarized below. Monitoring and evaluation of the spring and fall chinook supplementation actions are essential to allow continuous feedback to program management, and minimize any actions that may have negative consequences for existing stocks. Environmental impacts predicted from implementation of these decisions have the potential to be significant if not adequately mitigated.

A Mitigation Action Plan is attached; it contains all mitigation measures addressed in the Final EIS for the Proposed Action. These include the following:

- Specific mitigation plans may be developed to insure appropriate cultural resource scientific information is collected prior to site disturbance if locations cannot be avoided. All appropriate agencies and tribes would be consulted.
- Standard quality construction practices would be used to control erosion during construction. Devices such as sediment fences would be left in place until revegetation has occurred. The contractor working in and around streams would submit a construction dewatering and erosion control plan prior to construction, and would be required to obtain and comply with all necessary permits.
- Surface water withdrawals will generally be nonconsumptive; water will be returned to the source after use. Surface water sources that may be impacted by operation of the facilities would be gauged to test flow and temperature changes. If changes are detrimental, an adjustment in operations would be made.
- New construction will not alter floodplain or floodway characteristics or channel flow capacity. All facilities will be as high above active drainages as possible. Portable equipment will be removed at the end of the season.
- Disease control and monitoring practice would conform with standards developed by the Nez Perce Tribe Fish Health Policy and the Integrated Hatchery Operations Team.
- Water withdrawals from Yoosa and Camp creeks will be no more than one half of either Yoosa or Camp creeks so as not to adversely impact instream habitat.
- Mitigation plans for wetlands at the Yoosa/Camp Creek and Luke's Gulch sites will be developed after complete wetland delineations are conducted to determine the amount of impacted area and possible mitigation strategies.
- At the Cherrylane site, landscaping would be provided and all signs used to notify the public would conform to local and state ordinances. If the site is at risk from fugitive spray from the adjoining seed orchard facility, a row of poplar trees may be planted.
- At the Sweetwater Springs site, BPA would meet or exceed the conditions of the local zoning ordinance for a conditional use permit.
- At the Cedar Flats site, facilities would be designed with the U.S. Forest Service so they would not affect Selway River float boaters as they pass by.
- At the Cherrylane site, the Nez Perce Tribe will work with the owner of the nearest residence and screen as much of the facility as possible from the residence. At other sites, vegetation will be left in place as much as possible. Vegetation to help screen facilities could be planted if necessary.
- Take action to ensure hatchery construction and operation does not jeopardize species listed under the Endangered Species Act.

- If Congress directs the Council or another entity to conduct a basin wide assessment of the environmental impact of hatcheries, BPA will cooperate in the assessment and change NPTH design or operations as necessary to avoid undue adverse impacts to fish and wildlife.

The Mitigation Action Plan will be distributed along with this ROD. To the extent applicable, the Mitigation Action Plan will include a monitoring and enforcement program.

Coordination With Council. At its September 17, 1997, meeting, the Council reached several decisions regarding the priorities for BPA Fish and Wildlife funding in Fiscal Year 1998 that are germane to the NPTH EIS. First, despite a technical recommendation from the Independent Scientific Advisory Panel for a moratorium on all new anadromous fish production facilities in the Basin, the Council made the policy decision to conditionally encourage BPA funding of the NPTH. The Council's draft Outline For 1998 Annual Implementation Work Plan budgets $8 million for the NPTH. Second, the Council recommended a new three-step review process for review of all new artificial production initiatives. Each step will have Council review requirements with funding recommended only for specific components within each step. Also recommended is an independent scientific peer review at each stage of the project. While the Council's recommendations are still in draft--and may be so for an indefinite period--they clearly encourage proceeding with the NPTH and accurately reflect BPA's understanding of the decisions made at the September meeting.

Having completed the NEPA process with this ROD, BPA has finished what is the second stage in the Council's new production facility review process. Before BPA proceeds with final design of the NPTH (the last phase before construction), we will work with the Council to arrange for independent peer review of the scientific underpinnings of the NPTH. In addition, BPA will work with the Nez Perce Tribe to demonstrate how this action will meet the Council's other recommended standards for new production facilities. A review of the quality and quantity of the habitat available in the Clearwater River Subbasin for recolonization by spring and fall chinook is already

found in the Final EIS at Section 3.6. If significant new information arises, or the project changes significantly, upon completion of the final design and the independent scientific peer review, BPA will revisit its decision to proceed with construction of the NPTH.

Errata. The Final EIS at page 3-21 states that the Federal hydroelectric dams on the Columbia and Snake Rivers "created a series of slackwater impoundments and barriers to migration that have contributed to the reduction of smolt-to-adult survival to the point that, on average, fewer than two fish return for every pair of fish that spawned in the previous generation." Recent studies suggest this is not correct. NMFS scientists report that adults are now returning at a rate estimated to be in the range of pre-dam adult returns. If the federal dams contributed to the reduction of survival in the past, they no longer appear to be the factor limiting recovery Snake River spring and fall chinook. (Memorandum from Michael Schiewe to William Stelle, Preliminary Results - 1995 Smolt Transportation Study; NMFS, August 1, 1997).

Public Availability. Copies of the NPTH Final EIS, and additional copies of this ROD, which includes the Mitigation Action Plan, are available to all interested and affected persons and agencies from BPA's Communications Office, P.O. Box 12999, Portland, OR 97212. Copies of these documents may also be obtained by using BPA's nationwide toll-free request line, 1-800-622-4520.

Conclusion. The Proposed Action is the best course of action to meet the need and purposes of this project. While I have selected the Proposed Action, other entities influence the speed, timing, and funding levels of the spring and fall chinook supplementation program. As individual proposals needed to implement these actions are defined, they must be submitted to the Council's project prioritization process, which may affect funding. With Council concurrence on estimated funding levels, final design leading to construction of facilities for the supplementation action, is expected to begin in 1998, and to be completed in 2000.

Issued in Portland, Oregon, on October 8, 1997.

/s/ Jack Robertson

Jack Robertson
Acting Administrator
and Chief Executive Officer