Department of Energy
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

Oct 1 7 1996

HOOD RIVER FISHERIES PROJECT
RECORD OF DECISION

ACTION: Bonneville Power Administration (BPA) has prepared the enclosed Record of Decision (ROD) for the Hood River Fisheries Project. The Environmental Impact Statement (EIS) for this project was previously provided.

BACKGROUND: BPA proposes to protect and improve anadromous salmonid populations in the Hood River Basin. These actions are proposed in an attempt to mitigate the losses of fish and wildlife associated with the construction and operation of Federal hydro-power facilities in the Columbia River Basin. The proposed project would be located in Hood River, Hood River County, Oregon. BPA prepared an EIS in accordance with the requirements of the National Environmental Policy Act (NEPA), and the Council on Environmental Quality regulations implementing NEPA, and the Department of Energy NEPA Regulations.

DOCUMENTS AVAILABLE: If you would like additional copies of this ROD, or the EIS, please call our toll-free document request line: 1-800-622-4520.

FOR FURTHER INFORMATION: If you have any questions about this ROD, please contact Tom Morse, Project Manager at (503) 230-3694. You may also contact our Public Involvement and Information Office in Portland, Oregon, at 503-230-3478, or toll-free 1-800-622-4519.

/s/ Linda McKinney
Linda McKinney
Environmental Project Leader

Enclosure
ROD

6450-O1-P

DEPARTMENT OF ENERGY

Bonneville Power Administration

Hood River Fisheries Project
Record of Decision

AGENCY: Bonneville Power Administration (BPA), Department of Energy (DOE).

ACTION: Notice of Availability of Record of Decision (ROD). SUMMARY: As Administrator of the Bonneville Power Administration (BPA), I have decided to implement Alternative 1 of the proposed Hood River Fisheries Project (Project). Under this alternative; BPA would fund the Confederated Tribes of the Warm Springs (CTWS) and the Oregon Department of Fish and Wildlife (ODFW) to undertake fishery mitigation and research activities in the Hood River Basin in north central Oregon. The project responds directly to a need for mitigation of anadromous fish and fish habitat in the Hood River Basin through the re-establishment of a self-sustaining spring chinook population and the increased natural production of populations of winter and summer steelhead. This is in response to the requirement in the Pacific Northwest Electric Power Planning and Conservation Act of 1980 to protect, mitigate, and enhance fish and wildlife that have been affected by the construction and operation of the Federal Columbia River Power System. Alternative 1 would re-establish naturally sustaining spring chinook and rebuild naturally sustaining winter and summer steelhead salmonid runs via a combination of supplementation, habitat improvements, and a monitoring and evaluation program.

BACKGROUND: The Hood River Basin is home to four species of anadromous fish: chinook salmon, coho salmon, steelhead, and cutthroat trout. Indigenous spring chinook salmon are extinct in the Hood River Basin. The naturally spawning spring chinook

salmon currently present in the basin are the progeny of releases of two different out-of-basin stocks. The fall chinook and coho in the system are believed to be the progeny of out-of-basin strays. ODFW has determined that the indigenous stock of summer steelhead is at a moderate risk of extinction, and winter steelhead and sea-run cutthroat trout are at a high risk of extinction.

Beginning in 1987, the Northwest Power Planning Council's (Council) Fish and Wildlife Program recommended BPA investigate the feasibility of developing artificial production facilities for chinook salmon and steelhead in the Hood, Umatilla, Walla Walla, Grande Ronde, and Imnaha rivers: The Council accepted the Hood River Production Master Plan on April 16, 1992, and recommended adoption of a phased approach (that is, evaluation studies, project implementation, and follow-up monitoring and evaluation studies).

Environmental Review. In 1993, BPA determined that evaluation studies and several supporting facilities for the Hood River Fisheries Project would not have significant environmental impact and did not warrant preparation of an EIS. Based on information from the evaluation studies, BPA proposed to proceed with project implementation and, in April 1995, BPA published a Notice of Intent to prepare an EIS on full implementation of the Hood River Fisheries Project. In March 1996, BPA issued the Draft EIS. Comments were received from four agencies and four individuals. BPA responded to these comments and issued the Final EIS in July 1996. As the Administrator of BPA, I have relied upon this information to make my decision.

Related Actions. A number of groups and individuals have been involved in actions to rebuild the fisheries resources in the Hood River Basin. In addition to BPA, CTWS, the U.S. Forest Service, PacifiCorp, Portland General Electric, the Hood River Watershed Group, local landowners, private timber companies, local irrigation districts, the angling

community, and members of the general public have been involved in planning and implementing project activities in the basin.

Concurrent related actions that could have a bearing on the implementation of this . decision include the National Marine Fisheries Service (NMFS) Proposed Recovery Plan for Snake River Salmon (and the final version of the Recovery Plan), any amendments to the NMFS Biological Opinion for 1995 to 1998 Hatchery Operations in the Columbia River Basin related to the operation of the Hood River project, and the March 1995 NMFS Biological Opinion on the operation of the Federal Columbia River Power System. Any of these could affect the funding or timing of this project, or could impose additional conditions on its operation.

Authority. BPA has prepared the Hood River Fisheries Project EIS and Record of Decision (ROD) pursuant to the process specified in the National Environmental Policy Act, regulations of the Council on Environmental Quality (40 CFR Part 1505), Implementing Procedures of the Department of Energy (57 FR15122; April 24, 1992), and under the authorities of the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act; P.L. 96-501; December 5, 1980). The ODFW and the CTWS have chosen to participate in this process as cooperating entities. BPA is the lead agency for the Federal decisions on this project. All three entities favor the. implementation of Alternative 1.

ALTERNATIVES CONSIDERED: Chapter 3 of the EIS describes the proposed action and alternatives that would meet the need for-action. The alternatives incorporate various combinations of four main components:

• **Supplementation:** the use of artificial propagation in the attempt to maintain or increase natural production, while maintaining the long-term genetic fitness of the target population and keeping the ecological and genetic impacts on non-target populations within specified biological limits.

• **Traditional hatchery program:** the continuedplanting of hatchery-reared fish in a stream to provide harvest opportunities.

• **Habitat improvement:** the alteration of existing instream habitat to improve the ability of the basin to sustain fish populations.

• **Monitoring and evaluation program:** analysis of how various management practices achieve their goals. Guides future management actions and project planning.

Five alternatives were presented in the EIS, as described below. The alternatives contain various combinations of the above components.

Alternative 1(Preferred Alternative): Re-establish or rebuild naturally sustaining anadromous salmonid runs in the Hood River Basin via a combination of supplementation, habitat improvements, and a monitoring and evaluation program.

Alternative 2 (Traditional Hatchery): Re-establish or rebuild and sustain populations of anadromous salmonids in the Hood River Basin via a traditional hatchery program. This alternative was eliminated from detailed evaluation in the EIS since it would not meet the need for mitigating and protecting self-sustaining anadromous fish populations.

Alternative 3 (Supplementation): Re-establish or rebuild and sustain populations of anadromous salmonids in the Hood River Basin via supplementation and a monitoring and evaluation program only.

Alternative 4 (Habitat Improvement): Re-establish or rebuild and sustain populations of anadromous salmonids in the Hood River Basin via a program of habitat improvements and a monitoring and evaluation program only.

Alternative 5 (No Action): Continuation of the status quo. Currently, ODFW funds a traditional hatchery program with no acclimation, using a mix of locally adapted and hatchery broodstocks. Habitat improvements and monitoring and evaluation may be continued or undertaken by others, without BPA funding, although monitoring of run size at Powerdale Dam likely would be discontinued.

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

- The ability of the alternative to:
    - re-establish a self-sustaining spring chinook salmon population in the Hood River Basin;
    - help rebuild self-sustaining populations of native winter and summer steelhead in the Hood River Basin;
    - contribute to successful habitat improvement in the Hood River Basin;
    - provide a mechanism to review the results of the proposed actions and provide feedback to be used in modifying them if necessary; and
    - achieve the above in a manner that protects and mitigates, where practicable, other aquatic species in the Hood River Basin.
- The alternative's consistency with the Council's Columbia River Basin Fish and Wildlife Program (CRBFWP);
- The economic factors relative to the alternative; and
- The environmental impacts of the alternative on the following resources: fisheries (including genetics and threatened and endangered species); water quality and use; socioeconomics; cultural resources; land use; soils; and wetlands and floodplains. Chapter 4 of the Final EIS discusses the impacts of the alternatives on these resources.

Decisions. I have decided to proceed with Alternative 1, because it best meets the need and purposes stated in the Final EIS.

1. Decision to Construct Facilities - The following facilities will be built:

   Oak Springs Hatchery new facilities: four new rearing ponds for summer steelhead, one new rearing pond for winter steelhead, new water delivery system, and isolation, incubation, and early rearing facilities.

   Parkdale site: Two adult holding ponds, two concrete acclimation ponds and piping, weir and trap in Rogers Creek, residence, bunkhouse, office and storage building, septic field and effluent treatment, well and piping, and roads and parking.

   East Fork Irrigation District or Toll Bridge County Park acclimation site:. temporary raceway and piping, temporary parking for recreational vehicle.

   Dry Run Bridge acclimation site: Two temporary raceways and piping, temporary parking for recreational vehicle.

   Figure 1 shows the locations of the project facility sites.

2. Decision to Fund Spring Chinook and Winter and Summer Steelhead Supplementation - BPA will fully fund spring chinook production initially from Deschutes River stock, and the development of a Hood River stock through supplementation. BPA will fund that portion of production costs for winter and summer steelhead that is above the historical (1990-1996) level of funding for this program by ODFW. This will include the development of Hood River winter and summer steelhead stocks through supplementation.

3. Decision to Implement Monitoring and Evaluation - BPA will fund the monitoring program for supplementing Hood River spring chinook and winter and summer steelhead described in Section 3.2.3. of the EIS. The monitoring program addresses several kinds of monitoring: adult and juvenile fish trapping, electrofishing, genetic sampling, creel surveys, and radio tracking. Fish would be monitored for morphology (size and shape), behavior, and survival. The data from these studies will be evaluated against specific performance criteria listed in section 3.2.3, which address the following factors that will determine the success of the program:

   - natural smolt production
   - adult returns to Hood River
   - retention of indigenous steelhead life history characteristics in the hatchery population, and
   - impact on the indigenous resident and anadromous fish populations.

4. Decision to fund habitat improvement measures - BPA will fund the development of habitat improvement measures in the Hood River basin that are critical to the reestablishment of spring chinook salmon and to an increase in naturally produced Hood River steelhead, but are not the responsibility of another government agency or private organization.

Rationale for Decisions. I have selected Alternative 1 because this alternative has the best potential for re-establishing a self-sustaining population of spring chinook and rebuilding a self-sustaining population of steelhead in the Hood River basin of any of the alternatives. This alternative would contribute to successful habitat improvement in the Hood River Basin, which the supplementation-only alternative (Alternative 3) would not. Under Alternative 1, anadromous fish populations should increase more quickly than under the supplementation-only (Alternative 3) or habitat improvement-only (Alternative 4) alternatives. Alternative 1 incorporates a monitoring arid evaluation component that will allow the fish managers to review their results and provide feedback to modify, if necessary. The alternative is consistent with the Council's CRBFWP. While it is the most costly of the four alternatives evaluated in the EIS, it would best meet the need and purposes for the project.

Having considered the environmental impacts described in detail in Chapter 4 of the EIS and the Response to Comments Appendix, I find the benefits of Alternative 1 outweigh the potential adverse environmental impacts on fisheries, water resources, land use, and other resources.

- Compared to the no action alternative, the highest potential impacts on the Hood River Basin's fishery resources from Alternative 1 would be positive. However, implementation of this alternative could result in low negative effects on existing resident fish populations through ecological interactions, predation, and straying. The monitoring and evaluation program could have a low negative impact on the target species, but Project managers will use the feedback from this program to learn from and adapt their actions to prevent or correct problems with both resident and target populations.

- Low negative impacts could occur to water quality through erosion and sedimentation during construction of the facilities, but this will be a short-term impact and will be controlled through the use of standard erosion control measures. During operation of the permanent and temporary facilities, water quality could be slightly impacted due to the addition of nutrients from the fish holding facilities. However, calculated increases in nutrients would be so low that National Pollutant Discharge Elimination System (NPDES) permits would not be required. Water quantity impacts would be low, as water used for the project would be returned to the source immediately after use. ODFW will apply for additional water rights at the Round Butte Hatchery and water right exemptions for the Parkdale, East Fork Irrigation District (EFID), and Dry Run bridge sites from the Oregon Department of Water Resources.

- Wetlands would not be affected by the Project, the facilities will be designed to avoid wetland impacts. The facilities at the EFID site would be located within the 100-year floodplain of the East Fork of the Hood River. However, impacts would be negligible, since the temporary pond and piping at the EFID site would be placed above ground and would not alter floodplain characteristics or channel flow capacity. They are temporary in nature and will only be present during the months, of April and May.

- About 2 hectares (5 acres) of upland scrub habitat will be- permanently affected at the Parkdale site, temporarily or possibly permanently displacing wildlife. No impacts are expected on listed threatened or endangered species in the vicinity of the project site. Consultation with the US Fish and Wildlife Service (USFWS) has been completed, and USFWS concurred with BPA's determination that there would be no adverse effects on these species.

  In the course of BPA informal consultations with the NMFS under section 7 of the Endangered Species Act, NMFS has concurred by letter of September 13, 1996, that initiation of Section 7 consultation is` not necessary for the Project with respect to listed Snake River salmon. NMFS also concurred that proposed modifications to the Project represent an improvement over the current hatchery programs for Hood River steelhead, which may be included in the proposed listing of Lower Columbia River steelhead.

- Impacts on socioeconomics would be primarily beneficial and high. Spring chinook and steelhead have great social importance to the tribes as well as to others in the' region. Gradually increasing numbers of these fish would create only a very low economic impact in the basin but would be seen as a benefit socially and culturally. The resident trout fishery should not be adversely affected, as this harvest program targets legal-size trout and occurs upstream of the main steelhead production areas.

- Land use impacts would be moderate at the Parkdale site, as the development there would not conform to permitted uses under the current zoning. Prime farmland would not be adversely affected. No permanent changes in land use would occur at the other project sites.

- No cultural resources impacts are anticipated. Surveys at the project sites revealed no evidence of the presence of cultural resources.

Alternative 1 is the environmentally preferred action. Alternative 1 (Proposed Action) creates short-term, minor effects from construction that No Action does not; but it would also result in substantial benefits to spring chinook and summer and winter steelhead that current fishery programs cannot. Alternative 3 (Supplementation only) lacks the positive and negative impacts of habitat improvement actions, but because -those benefits would be

relatively low over the study period, the overall impact of Alternative 3 compared to No Action is not significantly different from the Proposed Action. Alternative 4 (Habitat Improvement only) would not have as many impacts from construction as Alternatives 1 and 3, but would also not have its benefits; it would have a low net positive impact compared to No Action. **Mitigation.** Mitigation actions are an integral part of Alternative 1. All practicable means to avoid or minimize harm from implementation of Alternative 1 have been adopted and are summarized below. Monitoring and evaluation of the spring chinook and steelhead supplementation actions are essential to increase knowledge of supplementation, allow continuous feedback to project management, and minimize any actions that may have negative consequences for the existing stocks. A Mitigation Action Plan is being prepared; it will contain all mitigation measures addressed in the EIS for Alternative 1. These include the following:

- Standard erosion control measures will be implemented for all construction.
- All necessary permits for water rights, NPDES, and instream work will be obtained and conditions adhered to.
- If, during construction, subsurface cultural resources are uncovered, work will be halted and consultations held with the State Historic Preservation Officer and CIWS to determine the significance of the objects and the mitigation, if any, that is required.
- To minimize potential adverse impacts to wild fish populations, the protocols developed by the Integrated Hatchery Operations Team and state and tribal guidelines regarding spawning, rearing, and release will be used for the Hood River Fisheries Project.
- The ODFW Natural Production and Wild Fish Management Policy will be adhered to in the implementation of the Project.
- To minimize the opportunity for the two stocks to spawn together in the basin, Hood River hatchery fish and Skamania hatchery fish will be marked differently and Skamania fish will not be passed above Powerdale Dam.

- Hood River steelhead will be fin-marked differently from Deschutes steelhead so strays into the Deschutes can be distinguished.

- To reduce the risk of taking too many wild fish for the steelhead hatchery program, the conversion from Skamania to Hood River stock will proceed in phases, beginning with releases of relatively low numbers of Hood River hatchery smolts (30,000 - 40,000).

- To limit the potential effects of residualization, a local stock would be used for hatchery broodstock, and if some fish do not volitionally leave the acclimation pond, they would be released at a downstream location to minimize the risk of competition with wild steelhead and rainbow trout.

- The monitoring and evaluation program would be designed to determine the number and kinds of hatchery or naturally produced fish occupying sample areas before and after outmigration. Because all hatchery reared fish would be fin clipped, the rates and effects of residualization can be estimated. If the rate of residualism is high, the monitoring and evaluation data can be used to develop appropriate corrective action plans.

- Interactions among juveniles would be reduced by releasing yearlings, rather than sub-yearlings, by reaching full production over a period of years, and by using volitional release methods when possible. In addition, release times and locations have been chosen to minimize interactions with other species.

- Efforts to minimize the impacts of residualized steelhead preying on wild fish would include not releasing those steelhead that do not migrate and instead, transporting them downstream for release below Powerdale Dam. In addition, steelhead would not be released in significant spring chinook spawning areas.

- All spring chinook salmon, summer steelhead and winter steelhead smolts released into the Hood River will be fin clipped and a representative group marked with coded wire tags for research purposes.

  All Project fish would be released by May 10, before Snake River smolts come down the Columbia, so there would be no interactions with listed threatened or endangered fish species.

  Specific habitat improvement actions are not proposed at this time. When they are, they will be subject to site-specific environment review, and additional mitigation may be developed for these projects.

The Mitigation Action Plan will be distributed to those requesting a copy, by calling BPA's toll-free request line (see below). It will be available along with this Record of Decision. To the extent applicable, the Mitigation Action Plan will include a monitoring and enforcement program.

Public Availability. Copies of the Hood River Fisheries Project EIS and the EIS Summary, as well as additional copies of this ROD, are available to all interested and affected persons and agencies from BPA's Public Involvement 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. Alternative 1 is the best. course of action to meet the need and purposes of this project. While I have selected Alternative 1, other entities influence the speed, timing, and funding levels of the spring chinook and steelhead supplementation actions, and the habitat improvement actions. 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.

Issued in Portland, Oregon on October 10 , 1996.