

# Yakima River Basin Water Enhancement Project, Washington



## Record Of Decision Final Programmatic Environmental Impact Statement

FES-99-3



U.S. Department of the Interior  
Bureau of Reclamation  
Pacific Northwest Region  
Upper Columbia Area Office  
Yakima, Washington

March 1999

**BUREAU OF RECLAMATION  
RECORD OF DECISION  
MARCH 1999**

**Final Programmatic Environmental Impact Statement  
Yakima River Basin Water Enhancement Project**

**I. Introduction**

This document constitutes the Record of Decision (ROD) of the Department of Interior, Bureau of Reclamation (Reclamation) Pacific Northwest Region, regarding the preferred alternative for implementing the measures cited in Phase 2 of the Yakima River Basin Water Enhancement Project (YRBWEP) authorized by Title XII of the Act of October 31, 1994, Public Law 103-434. Title XII is the subject of the Final Programmatic Environmental Impact Statement (FPEIS), filed with the Environmental Protection Agency (FES-99-3) on January 20, 1999. A notice of availability was published in the *Federal Register* on January 25, 1999. The FPEIS was prepared pursuant to the Council on Environmental Quality Regulations for implementing the procedural requirements of the National Environmental Policy Act (NEPA), Department of Interior policies, and Reclamation's NEPA handbook. Reclamation was the lead agency for the NEPA process; with the Bureau of Indian Affairs, the Bonneville Power Administration, the Natural Resources Conservation Service, the Yakama Indian Nation, and the State of Washington's Department of Ecology being cooperating agencies.

This ROD is based on the Final Programmatic Environmental Impact Statement (FPEIS). The FPEIS provides "umbrella" coverage for implementing the general provisions of Title XII and evaluates general rather than site-specific impacts. Additional NEPA compliance for specific actions will be developed as appropriate. Much of the analysis in subsequent NEPA documents will refer to information in the FPEIS in a process called tiering. Site specific decisions regarding Title XII implementation, as well as opportunities for future public involvement, will be publicized as appropriate.

Reclamation's action will be to implement Phase 2 of YRBWEP authorized by Title XII. Title XII centers on a voluntary cost-shared Basin Conservation Program to reduce demands on available water supply, and specifically states that conserved water resulting from the expenditure of Federal funds shall not be used to expand irrigation in the Yakima River Basin (except as specifically provided in section 1204(a)(3) for actions on the Yakama Indian Reservation). The purpose of the action is to meet the water needs of the basin through improved water conservation and management and other appropriate means. Title XII authorizes Phase 2 of the YRBWEP to protect, mitigate, and enhance fish and wildlife and to improve the reliability of the water supply for irrigation through improved water conservation and management and other appropriate means. The provisions and measures of Title XII form the parameters and methods for achieving improved instream flows and irrigation water supplies. Chapter 1 in the FPEIS fully describes the complete history and background of the legislation.

## II. The Alternatives Considered

Five alternatives including a No Action alternative were evaluated in the FPEIS. The action alternatives represent implementation of the various general provisions of Title XII. Because Title XII can be implemented in more than one way, and some provisions may not be implemented until additional studies are completed, several action alternatives were developed using different components of Title XII.

Title XII sets limits, or "side boards," on measures to be implemented or considered. Consequently, the FPEIS defined and evaluated alternatives according to measures authorized in Title XII. Title XII emphasizes water conservation. Those who have current entitlements and rights will not be forced to give them up; water rights will change only through willing seller acquisitions or leases.

The general provisions of Title XII are:

- 1) The Basin Conservation and Water Acquisition Programs.
- 2) Project Operations and Facilities Modifications, which include:
  - a) project operation changes and use of conserved water resulting in the implementation of an operational regime, using estimates of the total water supply available, to determine target instream flows (over Sunnyside and Prosser Diversion Dams),
  - b) raising the gates at Cle Elum Lake,
  - c) instituting a Yakima River Basin Tributary Enhancement program which, following consultation with the State of Washington, tributary water right owners, and the Yakama Indian Nation, will study non-storage items that can be implemented to enhance water supplies for fish and wildlife and irrigation purposes in Taneum Creek,
  - d) the electrification of the Chandler Pumping Plant,
  - e) Kachess Lake augmentation for maximizing stored water supplies in Kachess Lake from the flows of Cabin Creek and Silver Creek, and
  - f) instituting a Interim Comprehensive Basin Operating Plan which will provide a general framework within which the Yakima Project may be operated.
- 3) Work on the Yakama Indian Nation in which Title XII provides funding for developing a water conservation plan for the Wapato Irrigation Project (WIP) and implementing appropriate measures. Also authorized are:
  - a) an irrigation demonstration project on the Yakama Indian Reservation if the Yakama Indian Nation decides to use the water savings for this purpose, and
  - b) a study to develop and implement a Toppenish Creek Corridor enhancement project to demonstrate integrated management of agricultural, fish, wildlife, and cultural resources.

### ***Description of Alternatives***

The No Action Alternative was presented as the most likely future condition that could be expected without implementing the measures specified in Title XII. In this case, the No Action Alternative includes the new operational criteria for target flows that were required for immediate implementation under Title XII. Impacts of all the alternatives were compared to the No Action Alternative.

Alternative 1 included implementing all the measures cited in Title XII except for the Basin Conservation Program.

Alternative 2 consists of all of the Title XII measures included in Alternative 1, plus different levels (Alternatives 2A, 2B, and 2C) of the Basin Conservation Program implementation at various locations within the basin. Alternative 2A includes implementing all Title XII measures plus reducing diversion demands by 7.5 percent basin-wide except for on the WIP since this project has its own set of criteria in the legislation and on the Yakima-Tieton Canal which has already completed most of its conservation activities. Alternative 2B includes implementing all Title XII measures plus reducing diversions by 15 percent from the Yakima River downstream from the Roza Diversion Dam except for WIP. Alternative 2C includes implementing all Title XII measures plus reducing diversions by 21 percent for the Sunnyside and Roza Canals except for WIP. Alternative 2A was identified as the preferred and environmentally preferred alternative.

Alternative 3 is similar to Alternative 2A except that the Kachess Lake augmentation and the tributary measures are assumed not to be implemented because these two Title XII measures depend upon the outcome of future feasibility studies.

### **III. The Environmentally Preferred Alternative**

Alternative 2A includes implementation of all the general Title XII measures. Specifically, the Yakima River Basin Water Conservation Program (Basin Conservation Program), which identifies a 7.5-percent, basin-wide reduction in diversions except for WIP; since this project has its own set of criteria in the legislation, and on the Yakima-Tieton Canal which has already completed most of its conservation activities. Alternative 2A is identified as the preferred and environmentally preferred alternative, in accordance with 40 Code of Federal Regulations (CFR) 1502.14(e) and *Departmental Manual* Part 516, Chapter 4, 4.10.A.

### **IV. Public Response to the Final PEIS**

Following the *Federal Register* Notice of Availability of the FPEIS on January 25, 1999, Reclamation has received no letters of comment from the public. Therefore, no changes have been made to the FPEIS.

### **V. Status of Consultation on Special Status Species Under Section 7(c) of the Endangered Species Act**

Reclamation initiated informal consultation on April 12, 1996, with letters to the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) requesting a list of Federally threatened or endangered species as well as any critical habitat designations. The FWS

and NMFS sent letters dated April 16, 1996, and April 24, 1996, respectively, indicating that the listed species of bald eagle, gray wolf, grizzly bear, marbled murrelet, northern spotted owl, peregrine falcon, bull trout, snake river sockeye, snake river spring/summer chinook salmon, and snake river fall chinook salmon may occur in the project area. FWS also indicated that 38 plant and animal species of concern could occur in the project area. Reclamation prepared a biological evaluation (see Appendix E of the FPEIS) to address the listed species. The biological evaluation determined that the proposed Federal action, being programmatic in nature, would have "no effect" on threatened and endangered species or critical habitat. A letter of concurrence was received from the FWS on December 20, 1996, and a verbal concurrence was received from the NMFS. All parties agree that any impacts associated with the implementation of a specific action would be evaluated on a site-specific basis, and appropriate consultation and/or conferencing would be completed at that time.

Bull trout was proposed for listing in June 1997 and listed as threatened in June 1998. Steelhead were proposed for listing as endangered in February 1998. On July 15, 1997, Reclamation met with the FWS to discuss conferencing requirements. All parties agreed that the decision to proceed on the administrative action would not necessitate conferencing, but future conferencing would be required for site-specific actions.

## **VI. Status of Consultation on Cultural Resources Under Section 106 of the National Historic Preservation Act**

The preferred alternative could have an adverse effect upon historical, archeological, and traditional cultural properties. Many Yakima Project irrigation facilities are eligible for the *National Register of Historic Places*. Structural changes to the facilities could damage their historic integrity. Archeological or Traditional Cultural Properties (TCP) resources could be damaged or destroyed by implementation activities. Raising Cle Elum Lake will initiate bank erosion that is highly likely to damage or destroy archeological sites and perhaps TCPs. Potential construction activities associated with facility modification, new facilities, habitat improvements, or other actions could damage or destroy sites or TCPs within the impact area.

Reclamation will implement inventory, evaluation, and mitigation activities consistent with the requirements of the National Historic Preservation Act and will consult with appropriate parties about site significance, project effect, and appropriate treatment consistent with 36 CFR 800. As part of the project-specific environmental evaluation, cultural property and TCP inventories will be completed to determine if such resources are present. The impacts of the potential effects of proposed implementation actions upon resource properties would be assessed. If properties were eligible for the *National Register of Historic Places*, then mitigation would occur through archeological excavations, Historic American Engineering Record documentation, or other appropriate means.

## VII. Sacred Sites

Possible impacts to sacred sites on Federal lands cannot be determined at a programmatic level for any of the action alternatives. Reclamation will consult with potentially affected Tribes during the planning phase of specific actions to determine if sacred sites exist and will be affected. If specific impacts are identified during the evaluations conducted for site-specific actions associated with Title XII implementation, Reclamation will consult with the affected Tribes on a government-to-government basis to avoid, minimize, or mitigate effects.

## VIII. Indian Trust Assets

Indian Trust Assets (ITAs) for the proposed actions would undergo little impact under Alternative 1. The effect on ITAs for Alternatives 2A, 2B, 2C, and 3 would be positive because increased instream flows at critical periods of time in the river would protect Tribal rights for hunting, fishing and gathering off reservation. Additional water in the Yakima River at critical periods would have a positive effect on chinook salmon runs which are important to fulfilling traditional Tribal fishing rights. Secondly, increased flows would have a positive effect on wildlife of the area. Therefore, Alternative 2A, the preferred alternative, should have a positive effect on Indian Trust Assets.

## IX. Implementing the Decision and Environmental Commitments

At a broad basin-wide level, no significant adverse impacts have been identified in the FPEIS. It will be the responsibility of the YRBWEP project manager, in consultation and coordination with the State of Washington, the Yakama Indian Nation, the local irrigation districts, and others as necessary, to implement the general provisions of the Title XII legislation in accordance with the measures cited in Alternative 2A.

### *Environmental Commitments*

Reclamation will comply with all appropriate environmental statutes when undertaking future site-specific Federal actions which may be tiered from this FPEIS, including the following:

- National Environmental Policy Act of 1969
- Regulations of the Council on Environmental Quality
- Endangered Species Act - Section 7
- Fish and Wildlife Coordination Act
- National Historic Preservation Act
- Clean Water Act
- Farmland Protection Policy Act
- Protection of Indian Trust Assets, taking into consideration all applicable laws, rules, regulations, and Executive orders

- Executive Order 12898 on Environmental Justice in Minority Populations and Low-Income Populations
- Executive Order 13007 on Indian Sacred Sites
- Executive Order 11988 on Floodplain Management
- Executive Order 11990 on Protection of Wetlands

Specific commitments include:

### ***Wetland Conservation***

Reclamation supports the National Wetland Policy, which mandates no net loss of wetlands as a result of any Federal action. As such, Reclamation will take an active role in working with State and local organizations, other Federal agencies, and the Yakama Indian Nation to identify environmental and other current needs for conserved water, including instream flows for fish and wildlife, environmental restoration, wetlands conservation, etc., which will enhance wetland values.

### ***Streamflow Monitoring***

Reclamation commits to encouraging irrigation districts and others to implement and promote monitoring streamflows in the upper basin, and in areas critical to salmon. This will provide documentation of improvements in fish production and to identify any unanticipated results.

### ***Endangered Species Act***

In June 1997, FWS proposed to list bull trout (*Salvelinus confluentus*) in the Columbia and Klamath River Basins. Bull trout were listed as threatened in June 1998. Steelhead were proposed for listing as endangered in February 1998. Reclamation will consult and/or conference with both the FWS and NMFS when site-specific actions are proposed.

### ***Fish and Wildlife Coordination Act***

In accordance with Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), FWS provided a Fish and Wildlife Coordination Act Report on the Yakima River Basin Water Enhancement Project, dated October 3, 1996. Reclamation has initiated or will initiate compliance with the following specific recommendations in that report:

- Any construction efforts that may affect aquatic resources needs to be conducted in an environmentally sound way to prevent any adverse impacts to anadromous and resident fish.

- Opportunities to reduce the introduction of sediments and contaminants into the aquatic system need to be encouraged in the development of the Basin Conservation Program water conservation plans, Yakama Indian Nation projects, and any of the tributary programs.
- Mitigate for any flow changes attributable to implementing Title XII elements which may reduce the effectiveness of fish passage structures and screens.
- Continue efforts to moderate flow fluctuations in the regulated reaches of the river system by adopting more gradual ramping rates.
- Establish an accurate water measurement and accounting system to ensure maximum benefits to fish and wildlife resources.
- Develop a canal/drain right-of-way management plan to improve wildlife habitat associated with irrigation facilities. The management plan should include such things as eliminating, minimizing, and/or better managing mowing, spraying, burning, and grazing; establishing grass cover; and, where possible, maintaining tree and shrub cover along disturbed rights-of-way.
- To improve riparian and wetland habitats, grazed areas along the Yakima River and its tributaries, reservoirs, and wetlands should be fenced to exclude or manage the intensity and timing of livestock grazing.
- Any areas disturbed by future construction of the various project elements need to be revegetated with native vegetation. Plants removed during construction should be replaced with the same or similar species as soon as possible following construction.
- Trees affected by the 3-foot Cle Elum Lake pool rise will not be removed. These trees will die and become snags valuable for perching, feeding, and nesting sites.
- The selection and siting of borrow areas, spoil sites, construction staging areas, etc., need to be analyzed to avoid or minimize impacts to important fish and wildlife habitats.
- Big game protection measures should be installed on existing canals which have been identified as having the potential to trap animals. Fences, bridges, ladders, ramps, and deflectors could be used to prevent trapping or to facilitate escape from the canals. In the future, if canals are modified for water conservation (for example, lining with cement), then fences, bridges, ladders, ramps, and/or deflectors should be incorporated into the construction specifications to prevent the trapping of animals or to facilitate their escape from the canals.

- As an alternative to rip-rapping, bioengineering techniques (live gabions, brush wattling, and/or willow stakes) can and should be used to reduce construction costs, potentially decrease operation and maintenance costs, and enhance riparian habitat where bank stabilization is proposed.
- To help control or reduce the spread of purple loosestrife, Eurasian milfoil, and other non-native weeds in the Yakima River Basin, appropriate vegetation management activities should be implemented. An active program for control of noxious weeds should be established to ensure program activities do not increase weed problems in the Yakima River Basin.
- Fulfill habitat requirements of certain species in conjunction with project operations, construction, or mitigation and enhancement activities by implementing opportunities to benefit threatened and endangered species, neotropical migratory birds, and other species of concern.
- Wetland and riparian habitats adjacent to irrigation facilities and that would be dried up through water conservation measures should receive water directly for maintenance of those habitats.
- Implement wetland mitigation banking to mitigate wetland losses. Mitigation banking is the restoration, creation, enhancement, and, in exceptional circumstances, preservation of wetlands and/or other aquatic resources expressly for the purpose of providing compensatory mitigation in advance of authorized impacts.
- Combining mitigation efforts with ongoing conservation efforts so that such efforts maximize funding efficiency and facilitate a larger and more ecologically sound project. Furthermore, the potential for long-term success of mitigation efforts can be increased. A larger wetland mitigation project in the Yakima River flood plain will provide important flood control, public recreation, and water quality benefits; tie in with existing protected wetland and riparian areas; improve habitat for wildlife which use wetlands; and, perhaps, benefit anadromous fish by providing rearing areas, reducing water temperatures through shading, and increasing invertebrate production.
- Mitigation activities should not be confined to Reclamation project lands. If mitigation opportunities are better on other lands, then interagency agreements, easements, fee title acquisition, or other mechanisms to accomplish this mitigation should be implemented.
- Mitigation measures for unavoidable project impacts need to be determined for each element and presented and fully evaluated before any program-specific construction begins.

- Set up a comprehensive management plan (similar to the interim comprehensive basin operating plan) and an interagency committee to facilitate coordination between various entities involved in Title XII and to guide mitigation and enhancement efforts throughout the Yakima River Basin. A basin-wide coordinated effort is needed to ensure avoidance and minimization of impacts and to ensure that mitigation measures are soundly developed and implemented. Good coordination across the various boundaries (district, Tribal, Federal, state, private, etc.) is needed to maximize the benefits of water conservation measures to irrigation interests and fish and wildlife resources.

### ***National Historic Preservation Act***

As a matter of policy, Reclamation attempts to avoid impacts to *National Register of Historic Places* eligible properties, traditional cultural properties, and paleontological resources; however, proposed projects could adversely affect prehistoric and historic period archeological sites and historical engineering structures. If mitigation of adverse impacts is needed, it would be completed before the start of construction and/or operational changes that would adversely affect significant cultural resources. Cultural resources planning will be completed prior to construction in compliance with the regulations of the Advisory Council on Historic Preservation, 36 CFR Part 800.

### ***Native American Coordination***

Reclamation will consult with interested Tribes for future actions in accordance with 36 CFR 800, Executive Order 13007, and Reclamation policy. Consultations will include traditional cultural properties, sacred sites, and Indian Trust Assets.

These consultations will be government-to-government. Reclamation coordinated the FPEIS with the Yakama Indian Nation Tribal staff and provided periodic updates of progress to the Tribal Council. Potential impacts to any of the resources discussed in this FPEIS from implementing specific components of Title XII will be identified, and any required mitigation will be developed in consultation with the affected tribes.

## **X. Decision**

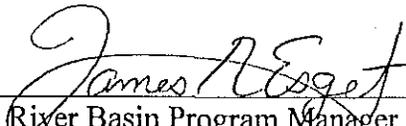
It is my decision that the Yakima River Basin Program Manager proceed with implementing the Preferred Alternative (Alternative 2A) as described in the FPEIS. Alternative 2A is the most efficient and environmentally preferable alternative. This alternative best achieves the objectives and meets the purpose and need of the project in an environmentally sensitive manner. Implementation of the recommended commitments would avoid or minimize any impacts associated with the preferred alternative.

Over the years, various storage and non-storage measures to improve the water supply in the Yakima River Basin were studied in a cooperative effort that culminated in the passage of Title XII. This was considered in selection of a preferred alternative. Fulfilling agricultural needs, protection of Indian Trust Assets, protection and enhancement of vegetation, wildlife and fish, surface water flows, water quality, and groundwater supplies were also important considerations.

The evaluation of the various alternatives showed that Alternative 1 would not provide as many benefits to natural resources as Alternatives 2 and 3. Alternatives 2A, 2B, and 2C complied fully with Title XII, because they included all of the Title XII components. Alternative 3 would provide fewer benefits to vegetation, wildlife and fish than would Alternative 2. Alternative 2A provided the most benefits to agriculture, vegetation, wildlife, and fish.

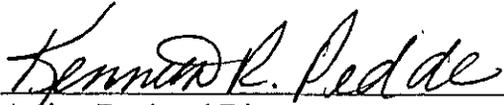
Signatures

**Recommended:**

  
\_\_\_\_\_  
Yakima River Basin Program Manager  
Upper Columbia Area Office

2/26/99  
Date

**Approved:**

  
\_\_\_\_\_  
Acting Regional Director  
Pacific Northwest Region

3/5/99  
Date