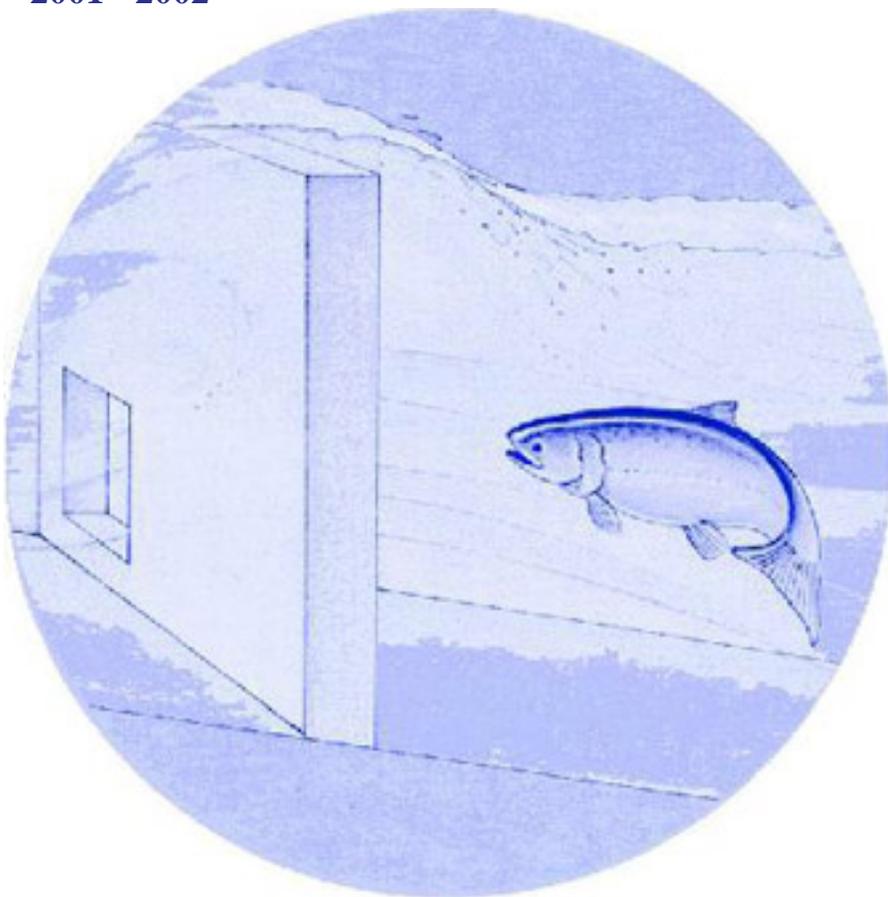


# Yakima/Klickitat Fisheries Project Phase II Fish Screen Operation and Maintenance

Washington Department of Fish and Wildlife

Annual Report  
2001 - 2002



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# **YAKIMA BASIN PHASE II FISH SCREENS OPERATION & MAINTENANCE (O&M)**

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Prepared for:

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Fish and Wildlife Program

PROJECT IDENTIFICATION 199200900  
PROJECT CONTRACT NUMBER 00004111  
PROJECT SUBBASIN YAKIMA

2001-2002 Report

## **GOAL**

The goal of this project is to assure that the benefits of BPA's capital investment in Yakima Basin Phase II fish screen facilities are realized by performing operations that assure optimal fish protection and long facility life through a rigorous preventative maintenance program, while helping to restore ESA listed fish stocks in the Yakima River Basin.

## **BACKGROUND**

The WDFW has been actively involved with Yakima River Basin Phase II screen O&M for the last ten years (1993), the start of the Phase II Screening Program. Yakima Fish Screen Phase II O&M, project # 199200900, was originally started with Intergovernmental Agreement # DE- B179-93BP71031 effective April 1, 1993. In 1994, a Memorandum of Agreement (MOA) between BPA, BOR, and WDFW was drafted and agreed upon (BPA # 95A137444, BOR # 1425-4-MA-10-00840, WDFW# 241-950010). This MOA, through the use of an Annual Work Plan (AWP), assigns specific duties to WDFW for O&M of Phase II facilities and is funded by BPA through master contract #, 000041111.

The following tasks were routinely performed at the Phase II fish screen facilities listed below (Pg.4) during the 2001 and 2002 irrigation seasons.

## **TASKS**

### **Spring Startup Functions (Jan-Mar):**

O&M crews perform correction of any deficiencies that could not be addressed during prior years winter maintenance period. This included setting and sealing fish screens in preparation for water diversion, ensuring that they meet current state and federal fish screening criteria. Ensuring that all systems, (i.e. electrical, mechanical, etc.) are operational, and coordinate with irrigators on start up procedures.

### **Routine Inspections and Maintenance (Mar-Oct):**

O&M crew provided weekly operation inspections, providing irrigators guidance in proper operation there by ensuring compliance with state and federal fish passage criteria, provide minor maintenance, contractor (irrigator) monitoring, emergency repairs, removal of seasonal silt accumulations, and record keeping.

**Fall Annual Inspections (Nov-Dec):**

O&M crew will provided removal of seasonally accumulated sand, silt, and debris. They also completed comprehensive inspection/evaluations of all facilities looking at structural and mechanical components for wear and serviceability. Perform scheduled maintenance, major and minor repairs, and/or replacements of fish screen components, and winterization.

**Contractor Reimbursements:**

O&M staff have verify and processed invoices submitted for payment by contractors, (irrigators) for costs over and above their historic operation and maintenance costs incurred during the irrigation season Base historical costs are established in O&M contracts negotiated by the BOR with individual irrigators.

**Participation in Annual Work Plan (AWP) Meetings:**

O&M staff has participated in the AWP meetings, (2001-02) providing updates of season activities, reviewing evaluation of monitored sites, consulting on assignment of new or reassigned sites, and provided annual reports.

**Additional Activities:**

Gleed Facility: At the completion of the 2002 irrigation season the four Gleed belt screens were disassembled and inspected. It was determined that two of the screens needed screen cloth replacement. All four-screen assemblies were exhibiting excessive corrosion and were sent off for blasting and re-coating.

**Additional information:** The BOR performs tasks that are related to these facilities through their "O&M Of Yakima Phase II Fish Facilities" project # 19950330. Measurable benefits of proper operation and maintenance of fish screening facilities is being documented through an on-going evaluations program conducted under Project # 198506200 by Pacific Northwest National Laboratory (PNNL).

## YAKIMA BASIN PHASE II FISH SCREEN FACILITIES

Facility	Type
1. Anderson	Portable Drum
2. Emerick	Portable Drum
3. Fruitvale	Fixed Panel
4. Gleed	Belt
5. Kelly-Lowry	Drum
6. Mason-Hays (Brewer)	Drum-PW
7. Naches-Cowiche	Drum
8. Nache-Selah	Fixed Panel
9. New Cascade	Drum
10. Holmes Portable	Drum
11. Snipes-Allen	Drum
12. Stevens	Drum-PW
13. Taylor	Drum
14. Bull Fixed	Panel
15. Ellensburg Mill	Fixed Panel
16. Clark Hydraulic Drive	Drum-PW
17. Lindsey	Drum
18. Union Gap	Fixed Panel
19. Congdon	Drum
20. Old Union	Fixed Panel
21. Younger Hydraulic Drive	Fixed Panel-PW
22. Chapman Nelson	Portable Drum
23. Bull/Wilson	Portable Drum
24. Powell/LaFortune	Drum
25. Selah Moxee	Plate
26. Lewis	Portable Drum