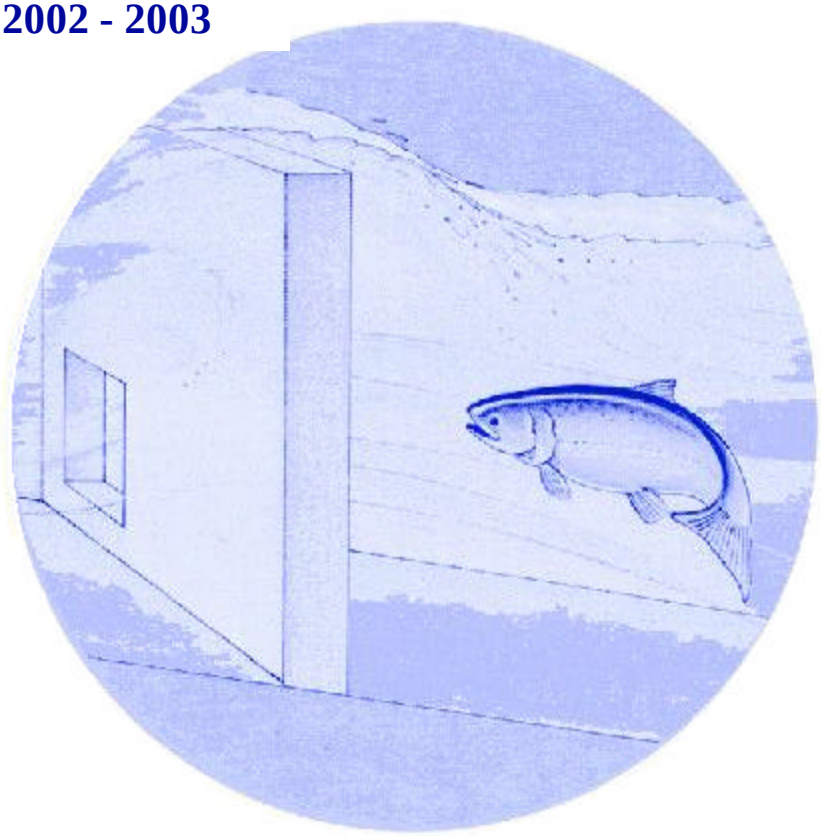
Reestablish Safe Access into Tributaries of the Yakima Subbasin

Progress Report
2002 - 2003



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Reestablish Safe Access into Tributaries of the Yakima Subbasin

Progress Report for 2002 -2003

Project Number 1998-034-00

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Progress Report – *Reestablish Safe Access Into Tributaries of the Yakima Subbasin* **1998-03400**
Period: 2002 to 2003

Safe Access work has concentrated on the lower portions of five drainages in the Upper Yakima Basin. Streams in the Kittitas Valley include Wilson Creek, Naneum and Little Naneum Creeks, Reecer and Currier Creeks, and Manastash Creek. Tucker Creek is tributary to the Yakima River near Easton, Washington to the northwest.

For numerous reasons delays in project implementation have occurred. Unclear water rights have resulted in long delays; however, permitting delays, general landowner reluctance to commit to any deviation from past practices, and lengthy legal review have all been factors. Realistic work windows are short and do not coincide well with fiscal year planning and contract renewals.

The following is a summary of the projects anticipated under *Safe Access* that the Yakama Nation thought would be funded by BPA via carry-forward/over monies. Preparatory work toward construction in '03 was done for projects in the Wilson, Naneum and Tucker Creek systems; feasibility studies were done in the Manastash and Reecer systems by Montgomery Watson Harza (MWH) relative to screening and passage options and associated costs.

Project 1 Eaton Project – Wilson Creek south of Ellensburg

- Purpose of the project is to convert an open ditch, gravity irrigation system to a pressurized system. Several miles of open ditch and four unscreened diversions would be unnecessary under the proposed system; two diversion dams (passage barriers) would be removed, and an estimated 45% water savings would result.
- Funding: Cost-share BPA / Salmon Recovery Funding Board (SRFB) – Yakama Nation Contract
- Permitting is complete.
- A Landowner Agreement has been signed that includes:
  a. Removal of two diversion dams (barriers); screened pumps; elimination of miles of open ditch; a provision for saved water to be put instream in Trust; a fenced riparian buffer (Conservation easement in perpetuity).
- A RFP was issued, a contractor selected, a contract written and agreed to. The project was scheduled to begin in March, '03.

Project 2 Ludwick Diversion –Wilson Creek south of Ellensburg (3cfs)

- Purpose: to install a gravity screen on a currently unscreened diversion
- Funding: BPA Direct to Montgomery Watson Harza (MWH) under existing Task Order
- Permitting**:** complete, pending MWH revisions to initial planning
- Landowner Agreement: drafted; under legal review

Project 3 Sorensen Diversion –Wilson Creek south of Ellensburg (4cfs)

- Purpose: a screened pump on a currently unscreened gravity diversion; remove diversion dam (barrier) and forego fish ladder construction
- Funding: BPA Direct - MWH under existing Task Order
- Permitting**:** complete
- Landowner Agreement: drafted; under legal review

Project 4 Bull Ditch / Wilson Creek fish screen (45cfs) and ladder – Completed in '01

Project 5 Snowden Diversion –Wilson Creek east of Ellensburg (2cfs)

- Purpose: a screened pump on a currently unscreened gravity diversion; remove diversion dam (barrier) and forego fish ladder construction
- Funding: BPA Direct- MWH under existing Task Order
- Permitting: complete
- Landowner Agreement: drafted; under legal review

Project 6 Little Naneum Creek Siphon – SE of Ellensburg (30cfs)

- Purpose: to separate Bull Canal from the creek where they currently co-mingle. The siphon (Bull Canal under Little Naneum) will allow fish passage upstream without the possibility of entrainment into agricultural fields.
- Funding: BPA Direct - MWH under existing Task Order
- Permitting: complete
- Design is complete.
- Outstanding Item: The agreement with Bull Canal is currently stalled in BPA legal review

*** Of Note**: This project was delayed because Yakama Nation staff were reluctant to construct a gravity screen on the creek in addition to the siphon. Flow measurements showed that Bull Canal did not use creek water; however, the canal company was claiming 15 cfs. A screen of that size, according to recent MWH estimates, would probably cost between $400,000 and $800,000. By waiting until Bull Canal agreed to forego water rights from the creeks, the Yakama Nation saved BPA the cost of a screen but could not implement construction until water rights were resolved.

Project 7 Naneum Creek Siphon – SE of Ellensburg

- Purpose: to separate Bull Canal from the creek where they currently co-mingle. The siphon (Bull Canal under Naneum Creek and No. 6 Rd.) will allow fish passage upstream without the possibility of entrainment into agricultural fields.
- Funding: BPA Direct, not to exceed $20,000 toward the siphon. The siphon project will be a part of the "No. 6 Rd. Project" to be done by Kittitas County Public Works. YN/BPA are strictly a cost-share funding source.
- Permitting and Design**:** county responsibility -- complete
- Outstanding items: Agreement with Kittitas County to facilitate transfer of funding (YN/BPA to county).

Project 8 Tucker Creek Grade Controls (Near Easton, WA)

- Purpose: to reestablish fish passage over the Kittitas Reclamation District siphon on Tucker Creek. The siphon constitutes the single barrier to upstream passage in the Tucker Creek Drainage. A series of 8 rock weirs would back-water the siphon to facilitate upstream passage.
- Funding: Cost-share BPA / SRFB – Yakama Nation Contract
- Permitting and Preliminary Design**:** complete
- Outstanding items: Agreement with U.S Bureau of Reclamation (BoR). The most upstream grade-control structure falls within the federal right-of-way.
- Of Note: Local BoR staff and the Kittitas Reclamation District favor the project because it would result in fish passage and relieve them of implied ESA liability. BoR legal staff are caught in the federal rule book somewhere.

Habitat gain on Lower Wilson Creek would amount to approximately eight miles of stream that are currently inaccessible to fish and/or have unscreened diversions. The siphons on Little Naneum and Naneum Creeks would open about a mile of stream, until subsequent barriers are reached; however, solving the co-mingling of Bull Canal with the creeks at these sites is an important first step in reestablishing passage in the drainage. The Yakima River Species Interaction Studies have documented the use of juvenile anadromous salmonids downstream of barriers in both the Wilson and Naneum systems – the projects contemplated under the Safe Access contract are the most downstream impediments to fish in each drainage.

The Tucker Creek Project would open 2 –3 miles of habitat upstream of the current barrier at the Kittitas Reclamation District siphon. The siphon constitutes the single barrier in the entire drainage -- rainbow trout/steelhead can be seen trapped immediately below the siphon structure.

In addition to the projects listed above, barrier/screen surveys have been conducted on Lower Manastash Creek and lower Reecer Creek. Feasibility studies with preliminary engineering and cost estimates have been done by MWH. The Manastash feasibility study is complete. Six alternatives were generated in the study which examined screening, passage and water conservation measures. Alternatives considered various consolidation options for screening and passage, various piping scenarios, and alternative water sources to augment late-season instream flow. Water conservation is a concern in the Manastash because the lower 4+ miles are dewatered from July 1st through the duration of irrigation season (Oct. 31).

The Reecer Creek study is nearing conclusion. Diversions on Reecer and Currier Creeks were assessed singly and in several consolidation plans. Costs were compared between flat-plate and drum screens and several ideas for piping were preliminarily developed. One option considered piping water from Town Canal to eliminate all downstream diversions from the creeks.

Progress can be measured in terms of requisite preparatory work for the projects anticipated in the lower Wilson and Naneum systems. Construction would have begun on several projects in March if the carry-forward funding had been available. The feasibility studies done by MWH on Manastash and Reecer Creeks provide a basis for decision making and subsequent funding requests.