

FISH SCREENS & FLOW METERS

Reducing ESA listed salmon mortality



Summary

In 2001 there were hundreds of irrigation diversions which did not meet federal standards for protecting endangered fish species. Area irrigators, the Walla Walla County Conservation District, the Washington Department of Fish and Wildlife, the Snake River Salmon Recovery Board, and the Washington Dept. of Ecology came together and developed a program to help defray the cost of upgrading to National Marine Fisheries approved fish screens. The Dept. of Ecology provided funding to include modern water meters with the screens, which helped irrigators use their water more efficiently. For 17 years, the WWCCD implemented this program which helped local landowners come into compliance with federal standards. This joint approach helped reduce fish mortality and increase flows through greater efficiency while continuing irrigation.

Conservation Problem



Salmonids and other species such as Lamprey can be impacted by improperly screened or unscreened irrigation diversions

Some irrigation pump diversions were completely unscreened. Most were operating with a screen designed as a trash rack rather than a safe, protective barrier for fish. Mortality rates were high for salmonids as migrating juveniles were sucked against irrigation pumps unable to escape or killed by irrigation pumping stations or stranded in diversion ditches. The screens protect young fish from irrigation pump intakes while protecting landowners from regulatory penalties. Many early projects were simple and straight forward. Today, projects require complex designs and may use specialized screens and/or screening methods. Funding for both programs has halted.

Project Outcomes



Fish are no longer sucked into irrigation pumps and are able to survive and migrate through the watersheds.



Flow meters allowed irrigators a way to measure their irrigation use.

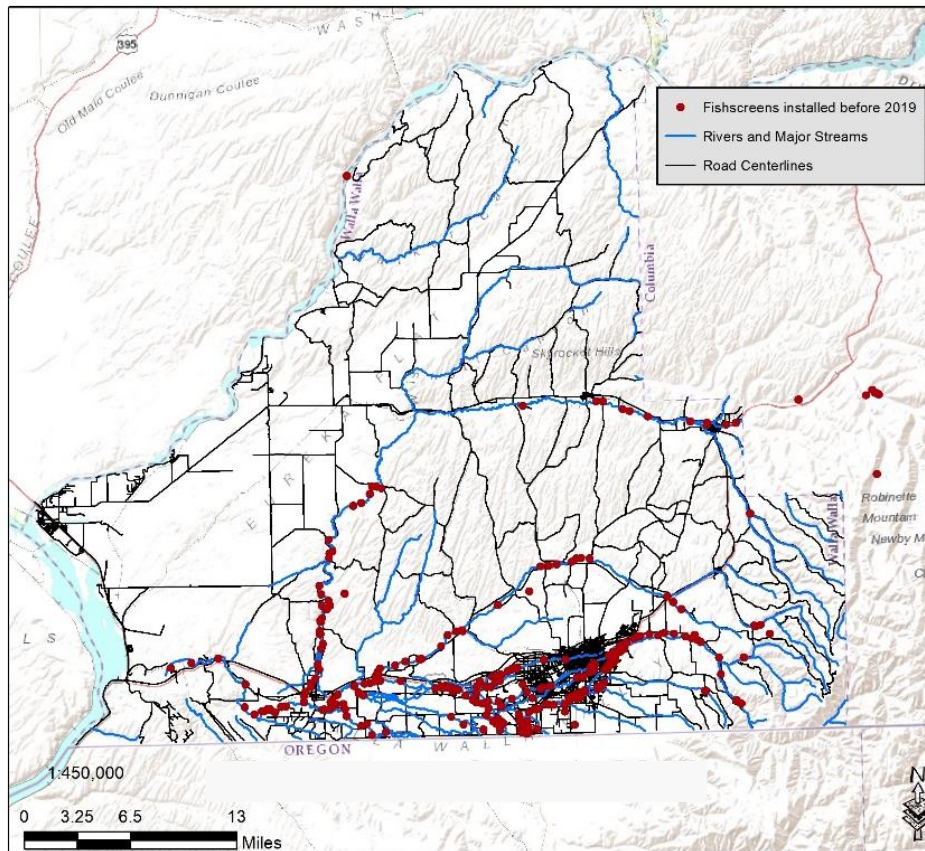


Passive Fish Screen

Technical Assistance



Flow Meter and River Fish Screen at irrigation diversion



Fish screens installed from 2001 to 2018.

Project Details

- 377 fish screens installed in Walla Walla County
- 49 fish screens designed/installed for Columbia, Benton, North Yakima & Okanogan Conservation Districts.
- 529 flow meters installed on surface diversions and wells in Walla Walla County
- 67 data loggers installed with flow meters

Project Partners

Landowners & irrigators
 Walla Walla County Conservation District
 Washington State Conservation Commission
 Washington Department of Fish and Wildlife
 Snake River Salmon Recovery Board
 Washington Department of Ecology
 Bonneville Power Administration
 Confederated Tribe of Umatilla Indian Reservation