

Klickitat Subbasin Fish Passage Facility Updates Improvements to Support Hatchery Reform Efforts

Bill Sharp

Research Scientist

Yakama Nation Fisheries Program - YKFP

P.O. Box 151

Toppenish, WA. 98948

509.865.5121 Ext. 6355

sharp@yakama.com

Project website: <http://www.ykfp.org/klickitat/Accords.htm>

ABSTRACT:

Over the past two years, the Yakima/Klickitat Fisheries Project (YKFP) has modernized Klickitat Subbasin fishways to increase passage efficiency and incorporate monitoring capabilities.

Conversion of the 1960's-era Castile Falls Fishway from a pool-weir to a vertical-slot fishway has opened over 55 miles of pristine headwater habitat to salmon and steelhead. To monitor re-colonization into this habitat, a remote sensing station using both Passive Integrated Transponder (PIT)-detection and digital imagery, powered by an unmanned power station, was installed at the exit of the uppermost fishway. In addition, adult fish-collection capabilities have been incorporated into the fishway for bio-sampling and potential brood collection.

The Lyle Falls Fishway reconstruction project converted a non-compliant, vertical-slot fishway into a state-of-the-art fish passage facility incorporating brood stock collection, PIT detection, and a pacific lamprey eelway. The updated design now meets federal fish passage and handling criteria. Updates included a 350-ft. transportation channel extension, 110-cfs screened auxiliary water supply, 56,000-gallon reservoir, 38-ft. vertical-foot fish lift and mechanical fish-crowder. This new trap and collection system maintains a water-to-water transfer for bio-sampling and brood collection.

Presentation will highlight facility improvements and identify their function in reforming current hatchery practices. An update of Bonneville Power Administration's Klickitat Hatchery Complex Environmental Impact Statement timeline will also be presented.