

Cle Elum Fish Passage: Providing Passage for Reintroducing Sockeye and Other Salmonids

Abstract:

The Cle Elum Dam Fish Passage project is the first reservoir passage project to be implemented in the Yakima Basin under the Yakima Basin Integrated Plan. Passage at this dam will provide access to 29 miles of river and stream habitat and to a large headwater lake. Once it was determined to build passage at Cle Elum Dam, reintroduction of Sockeye and other anadromous species was initiated by the Yakama Nation and WDFW with Reclamation providing support.

This project will provide both upstream adult passage and downstream juvenile passage. The upstream passage facility will be a trap and haul system. The downstream passage facility includes an innovative system that includes six intake ramps, a helix system and a tunnel bypass that will transport fish downstream to the Cle Elum River. The downstream passage system will function as the pool fluctuates over the top 63 feet of the reservoir elevation.

As part of this project, Reclamation is working with USGS, the Yakama Nation and WDFW to identify migration issues for both downstream juvenile and upstream adult migrants. Migration factors for adults that are being evaluated include: thermal barriers, cool water refuge areas, false attraction, migration delays at diversion dams and Columbia River stranding. Our juvenile monitoring program is just starting and we hope to better understand downstream migration timing and issues including passage at diversions and impacts to migration as the lower Yakima River warms up during the outmigration.

This presentation will discuss developing community support as part of the Yakima Basin Integrated Plan, will provide an overview of the facility design and construction and will introduce monitoring efforts being conducted to identify migration challenges in an altered river ecosystem.