



MacPherson side channel reconnection

Background

The MacPherson side channel restoration project is located in the lower Chewuch River drainage of the Methow watershed on a combination of private land and land owned by the Washington State Department of Fish and Wildlife (WDFW). The Chewuch River is a historically important spring chinook salmon and summer steelhead spawning stream. These species are listed as “threatened” or “endangered” under the Endangered Species Act. The draft Methow subbasin plan prepared for the Northwest Power and Conservation Council places highest priority on conservation of ESA-listed species.

Among the major limiting factors for anadromous fish recovery in the Methow Subbasin are the alteration and reduction of riparian habitat, habitat connectivity, and instream and floodplain degradation. Loss of floodplain wetland habitat in the developed reaches of the Methow subbasin and tributaries further reduces the already limited over-wintering habitat for salmonids and reduces potential recharge of shallow groundwater in dry seasons.

Purpose of MacPherson side channel reconnection project

The objective of the project is to enhance approximately 1,000 feet of low gradient, meandering side channel habitat that flows from a diversion point on the Skyline Canal Company’s waste ditch into the Chewuch River. The side channel currently has an average depth of 0.5 to 1 foot and width of 3 to 5 feet with an average gradient of 1 percent. The gradient is higher at the confluence of the channel and Chewuch River, therefore modification of the channel at the

mouth is needed. A step pool fish ladder would be constructed to allow for fish passage upstream into the channel. Enhancement of the side channel habitat will be accomplished by creating a more defined channel with excavation work. The placement of rocks and woody debris in the channel will develop pool formation and habitat complexity and provide cover.

The project will also include creation of one rearing pond estimated to be 100 feet by 200 feet. Streamflow will be controlled by construction of a head gate control and diversion box at the point of divergence from the Skyline waste ditch that will divert 2 to 4 c.f.s. under a “public benefit” controlled by the WDFW into the side channel. In addition, an upgrade will be required to at least one road culvert to create fish passage. Design will be developed in coordination with the WDFW. The project will be implemented in phases beginning with construction of appropriate headworks and culvert replacement in the first year and proceeding to channel reconfiguration, pond construction and lower channel reconnection in the following two years.

This project will benefit Upper Columbia spring chinook, Upper Columbia summer steelhead, and bull trout by enhancing rearing habitat for juvenile fish.

Cost

- The total estimated cost: \$124,000
- BPA cost: about \$106,000
- Project sponsor: Methow Salmon Recovery Foundation

