

## 13330-2008-058 Panther Creek, Washington, Passage Barrier Removal Project for Westslope cutthroat trout

**State(s):** Washington

**Managing Agency/Organization:** U.S. Fish and Wildlife Service

**Type of Organization:** Federal Government

**Project Status:** Completed

**Project type:** WNTI Project

**Project action(s):** In-stream and riparian habitat

**Trout species benefitted:** Westslope Cutthroat

The main goal of this project is to provide up-stream fish passage for Westslope cutthroat trout (WCT). This project will provide access to more than a mile of in-stream habitat in Panther Creek, a tributary to Toppenish Creek. Additionally, it will facilitate the re-colonization of WCT in the watershed

The importance to the Resource: A small isolated population of WCT reside in Panther Creek. Extensive genetic studies suggest that WCT are native to this area (Trotter 1999). Their habitat is fragmented by undersized culverts at stream crossings.

The problem: The undersized culverts have about a 1 foot drop at the outlet. These culverts are partially plugged with bedload and debris on the up-stream end. Upstream movement of WCT is obstructed at two location (see attached maps). In addition to improving fish passage, properly sized culverts will help to return form and function to Pather Creek.

The method: The current double 18" culvert will be replaced with a corrugated 4 foot diameter steel pipe arch. Small grade control structures will be installed downstream from the crossing to prevent headcutting. A second culvert 1.2 miles up-stream will be replace in 2010 if funding can be secured.

Further description:

Stream habitat surveys were conducted in 2008 downstream from the lower stream crossing. A follow up survey will be conducted 5 to 10 years after the project is completed. Electrofishing surveys were conducted in 2008. A follow up survey will be conducted after the completion of the project including 100 meter section above the stream crossing and a 100 meter section below the stream crossing.

The salaries of the project personnel will be paid by BPA and/or YN Forest Management. This will cover the cost of planning, coordination and monitoring. Additionally, collaboration with other projects in the area will occur. A meadow restoration project is proposed for the headwaters of Toppenish Creek. A second meadow restoration project is proposed by YN Wildlife for the Pather Creek Meadow directly downstream of this project.

### **Objectives:**

- The main objective of this project is to increase the effective population of native WCT. Other objectives are to increase the range of the species, increase genetic diversity and gene flow and to improve the resiliency of this population to stochastic events (e.g. drought and fire) by facilitating faster recolonization.

### **Partners:**

- Bonneville Power Administration - Matching \$31,400 - In Kind \$0
- Bureau of Indian Affairs - Matching \$0 - In Kind \$10,000
- Yakama Nation - Matching \$4,000 - In Kind \$0

### **Measures:**

- Number of miles re-opened to fish passage - 1.2

### **Funding Source(s):**

- National Fish Habitat Action Plan

**Project cost:** \$80,400.00

**Start Date:** 01/01/2009 **Completion Date:** 01/01/2010