



Eber Creek Fish Passage Improvement & Riparian Enhancement Project

Restoring Stream and Riparian Habitat for Cutthroat Trout

Project Background

This project was a result of the Long Tom Watershed Council's Sub-watershed Enhancement Program, which brings neighboring landowners together to discuss water quality, habitat conditions, and possible restoration projects in their creek basin. The Ferguson and Bear Creek sub-watersheds are the only streams that fluvial cutthroat trout, migrating up from the Willamette River, can utilize for spawning in the Long Tom Watershed, because fish passage to the upper two-thirds of the watershed is blocked by Fern Ridge Dam. These sub-watersheds also provide important rearing and spawning habitat for resident cutthroat trout and a host of other native aquatic fauna.

High water temperature in the summer and poor instream habitat, including a lack of spawning gravels, instream habitat diversity, and large wood, are primary limiting factors for cutthroat trout productivity in the Long Tom Watershed. This makes it particularly important to provide access to the upper stream reaches where cooler summer stream temperatures and spawning gravels can be found. Also, results from the Council's water quality monitoring program show that the Ferguson Creek sub-watershed has one of the highest average *E. coli* levels in the watershed.



Before the project: Prior to fencing, this section of the stream was eroding on the outside of the bend.

Project Goals and Objectives

The goals of this restoration project were to allow upstream fish passage and improve riparian zone conditions & water quality. Project objectives included:

- ◆ Open up 1.5 miles of rearing & spawning habitat for cutthroat trout
- ◆ Reduce bank erosion
- ◆ Reduce *E. coli* contributions to creek from livestock
- ◆ Establish native shrubs and trees in the riparian area



After the project: Willows & alder have stabilized the vertical part of the bank, and conifers are establishing at the top.

The Long Tom Watershed Council serves to improve water quality and watershed condition in the Long Tom River basin through education, coordination, consultation, and cooperation among all interests, using the collective wisdom and voluntary action of our community members.

751 S. Danebo Ave., Eugene, OR 97402 · Phone: (541) 683-6578

www.longtom.org

Eber Creek Fish Passage & Riparian Enhancement

Restoration Techniques

Two undersized culverts were replaced—one on Eber Creek and another on a tributary. A bridge was built over Eber Creek and a rocked low-water crossing was installed on the tributary. Four thousand feet of high tensile electric fencing and an off-channel watering station was installed, and an off-channel watering station was to allow livestock to drink and cool off away from Eber Creek and its riparian area. Native trees and shrubs, including Douglas fir, western red cedar, grand fir, ponderosa pine, and willows were then planted in the riparian areas.



Before the project: This crossing of Eber Creek was a migration barrier for resident and fluvial cutthroat trout and other aquatic species.

Project Results

This project opened up 1.5 miles of high quality spawning and rearing habitat for resident & fluvial cutthroat trout as well as other aquatic species. Bank erosion has visibly decreased by excluding livestock from Eber Creek and its riparian area. Riparian plantings will provide increased shade and in the long-term become a source of large wood to the stream. Riparian plantings will also add roughness to the channel bank and provide cover for juvenile fish during high flows.



After the project: The undersized culvert was replaced with this bridge allowing year-round passage for cutthroat trout.



Landowner Andy Thomson assists with the installation of steel bridge supports

Project Funding & Partners

Project Cost: **\$34,058**

OWEB: \$24,653

Local & Federal Match: \$ 9,405

Partners

Oregon Watershed Enhancement Board (OWEB)
Andy & Mary Rae Thomson, *Landowners*
Gary Galovich, *Oregon Dept. of Fish and Wildlife*
Paul Clements, *Oregon Department of Forestry*
Individual volunteers

The Long Tom Watershed Council thanks our partners and funders!