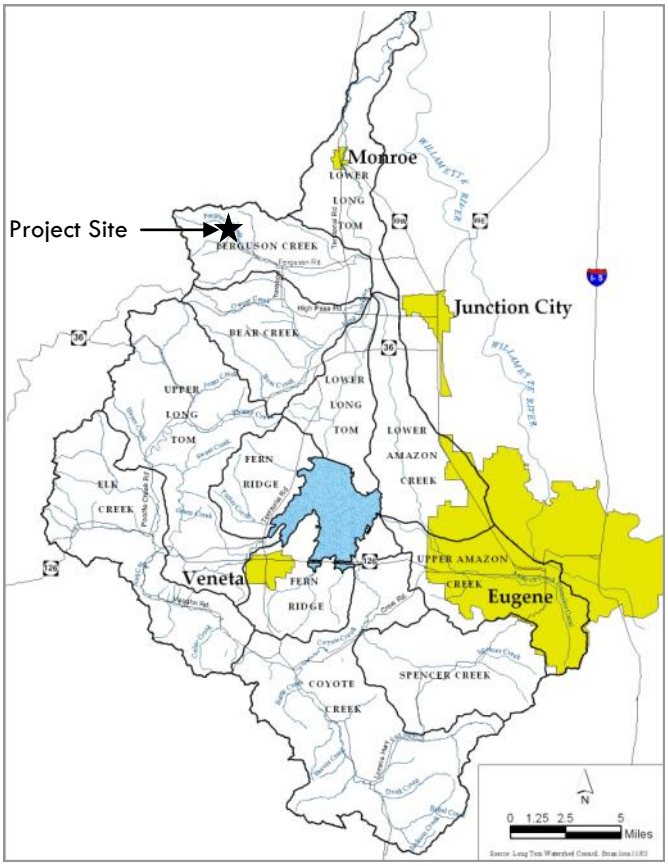
Ferguson Creek Wood Placement & Riparian Enhancement at Holzbauer's

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.

Lack of large pieces of instream wood is a significant limiting factor for cutthroat trout on most streams in the Long Tom Watershed, as is insufficient number, size and density of riparian trees. This has led to decreased channel complexity, loss of pool habitat, and the scouring of gravel from streambeds.



Implementation: An excavator was used to place large wood at 5 sites along Ferguson Creek.

After the project: Three years later a variety of well-sorted gravels & large wood has accumulated upstream of the placed wood.

Project Goals and Objectives

The goals of this restoration project were to improve trout spawning and rearing habitat, water quality, and riparian zone conditions. Objectives included:

- Increase gravel accumulation, pool formation, and instream cover.
- Enhance stream-floodplain interaction.
- Eradicate blackberry and English ivy in the riparian zone.
- Increase stream shading/reduce stream temperatures.
- Increase native tree & shrub cover in the riparian zone.

Ferguson Creek Instream & Riparian Enhancement

Restoration Techniques

We placed 25 large conifer logs (1.5-foot dbh x 50-feet long) at 5 locations where natural anchoring was possible between large riparian trees or at points where the creek bends sharply. The Army Corps of Engineers donated 7 logs with attached root wads for the project.

Riparian restoration included mowing and spot spraying of blackberry and English ivy. In addition, native trees and shrubs were planted in a 40 to 100-foot band along the creek. Species planted at the site included western red cedar, Douglas fir, grand fir, ponderosa pine, salmonberry, elderberry, and Pacific ninebark.

After the project: The large wood has increased overbank flows during flood stage.

Project Benefits

Instream wood placement and riparian restoration at this site contributed approximately 1/10 of a mile of high quality spawning and rearing habitat for cutthroat trout. The large wood provides cover for fish from predators and habitat for aquatic invertebrates. It has also created scout pools. Additionally, large wood has helped slow stream velocities, which has facilitated deposition of gravel for spawning beds. Overbank flows during flood stage have also increased.

Landowner Gary Holzbauer proudly displays his riparian plantings.

Project Funding & Partners

Partners

Oregon Watershed Enhancement Board (OWEB)
Gary & Jo Holzbauer, *Landowners*
Gary Galovich & Joe Sheehan, *Oregon Department of Fish and Wildlife*
Kelly Albers, *Willamette Restoration Initiative*
Army Corps of Engineers
Council tree planting volunteers

Project Cost: **$11,963**

Funding:

OWEB:	$ 7,318
Local & Federal Match:	$ 4,645

The Long Tom Watershed Council thanks our partners and funders!