



FERGUSON CREEK STREAM HABITAT ENHANCEMENT AT THOMSON'S

PROJECT BACKGROUND & DESCRIPTION

The Thomson's previously partnered with LTWC in the 2004 to improve fish passage and riparian habitat on Eber Creek, a tributary to Ferguson Creek. The project in 2011-12 focused on improving 2.3 miles habitat within and along Ferguson Creek and Eber Creek. The Thomson property is located near the upper end of Ferguson Creek and adjacent to or close by four other LTWC project sites, creating complex of over 5 stream miles of improved habitat for cutthroat trout, lamprey, and other fish and native wildlife.

The primary goal of the project was to improve stream habitat for cutthroat trout and the aquatic insects they feed on. Placing log jams in streams creates deep pools, causes the accumulation of gravels for spawning, and provides cover that both adult and juvenile cutthroat trout use.

Before the project, cattle on this working ranch utilized over 1.5 miles of Ferguson Creek for water. Fencing and livestock watering stations provide an alternative place for cattle to access water. Moving livestock back from the stream will improve the health of the stream and increase the productivity of the pastures by keeping nutrients from manure on the fields.



Before the Project: Ferguson Creek had areas of excessive erosion that provided no fish habitat, increased downstream sediment, and threatened adjacent infrastructure.



Implementation: An excavator positions logs to create a log jam at the site to stabilize the bank and reduce erosion while also providing excellent habitat for native fish and insects.



PROJECT FUNDING & PARTNERS

Total Project Cost: **\$126,520**

Funding & Partners

Maryrae & Andy Thomson (landowners)
Oregon Department of Fish & Wildlife (ODFW)
Oregon Watershed Enhancement Board (OWEB)
Bureau of Land Management (BLM)
Finley National Wildlife Refuge



FERGUSON CREEK STREAM & RIPARIAN HABITAT ENHANCEMENT AT THOMSON'S



Before the Project (Dec 2010): This section of Ferguson Creek was lacking in native vegetation to provide cover and shade for fish and wildlife and hold the soil in place to reduce erosion.



Post-Implementation (June 2013): Same section of stream with 2-wire electric fencing and newly planted native trees and shrubs. The fencing is designed for seasonal setup and takedown as the pastures are grazed.

RESTORATION TECHNIQUES

Enhanced Instream Habitat

- Installed 60 pieces of large wood, donated by Finley Wildlife Refuge, throughout 1.5 stream miles.
- Tree top mats and log jams were embedded into stream banks that were re-sloped to reduce erosion and provide cover for fish.

Improved Streamside Habitat

- Installed 9,000 feet of 2-wire poly-string electric fencing on field that is seasonally grazed. Fencing is designed for seasonal setup and takedown to avoid flood and elk damage when the pastures aren't grazed.
- Installed 8 off-channel watering troughs for livestock.
- Removed Reed canarygrass, blackberry, and other invasive weeds.
- Planted a mix of over 28,000 native trees and shrubs on over 13 acres.

ENVIRONMENTAL & ECONOMIC BENEFITS

- Engineered log jams provide habitat for fish and insects and decrease streambank erosion.
- Logs placed in the stream increase the depth and frequency of pools trout use for habitat.
- Logs also increase retention of sediment and organic matter that creates habitat for insects and fish. As the logs decompose they provide food for aquatic insects. Stimulating aquatic insects provides an important food source for trout.
- Riparian plantings will increase shade in the long-term, leading to cooler water temperature. These trees & shrubs also provide better bank stability and create forage and cover for native wildlife.
- Installation of fencing along the riparian area and watering troughs for livestock will help reduce erosion and bacteria such as *E. coli* from entering the stream.
- Contractors from the local area were used for all phases of the project. This contributes to the local economy.

The Long Tom Watershed Council thanks our partners and funders!