

Horse Heaven Creek Instream Restoration for Redband Trout

State(s): Oregon

Managing Agency/Organization: Crooked River Watershed Council

Type of Organization: Nonprofit Organization

Project Status: Underway

Project type: WNTI Project

Project action(s): Riparian or instream habitat restoration, Barrier removal or construction

Trout species benefitted: Redband Trout

Population: Horse Heaven Creek

The Horse Heaven Creek Instream Restoration project will address watershed health by increasing riparian vegetation, reducing sedimentation from erosion, improving floodplain function, and improving fish passage and screening. Improvements in watershed processes from this project will facilitate improved water quality, quantity, and timing of flow to benefit native Redband trout and riparian habitat conditions along approximately 3 miles of Horse Heaven Creek. Project activities include instream channel restoration, fish passage and screening improvements, bank stabilization treatments, seeding and planting, weed control, and monitoring post-project responses.

The instream components of the project will improve fish passage and riparian and instream habitat by increasing riparian vegetation diversity and abundance, increasing habitat complexity, and improving floodplain access and function. Funds from WNTI will be used for the construction and implementation of fish screens at two irrigation diversions on Horse Heaven Creek. These funds will be matched by funds from the Oregon Watershed Enhancement Board, the NRCS, and the USFWS Partners Program which will be used for the fish passage, channel restoration, and riparian planting components of the project.

This project is important to Horse Heaven Creek and the redband trout population of the Upper Crooked watershed because it will establish a fish habitat stronghold in the middle reach of the Upper Crooked River. It is the first phase of full fish passage and screening within Horse Heaven Creek, which will ultimately connect and restore ~25 miles of redband trout habitat.

Objectives:

The project will implement fish passage and screening at two diversion sites on Horse Heaven Creek, opening up ~3.5 miles of fish habitat. This is the first step toward fish passage throughout the watershed, which includes ~25 miles of habitat for Redband trout. In addition, the project will improve ~3000' of instream and riparian habitat through full channel restoration, LWD structures, and riparian planting.

The project will restore habitat previously degraded by unsustainable livestock grazing, channel straightening and armoring, and poorly managed, unscreened diversions.

Project proponents anticipate conducting a landowner tour at the completion of this project to show the success of fish screens, fish passage, and channel restoration. We have had similar tours in the past on other projects that have been very successful and well attended. In addition, the tour will coincide with a tour of previous upland restoration and riparian fence construction conducted in the Horse Heaven watershed that was funded by Oregon Watershed Enhancement Board and the U.S. Fish and Wildlife Service. The project will also be incorporated into field visits of our local high school. Currently, we have a collaborative educational partnership with Crook County High School, involving students from their Natural Resources Management Program (Forestry Management, Wilderness Management, and Wildland Fire Management) in restoration projects. We hope to involve students in the replanting aspects of the project as well as on follow up tours.

Partners:

- Crooked River Watershed Council
- Oregon Watershed Enhancement Board
- U.S. Fish and Wildlife Service
- Natural Resources Conservation Service
- Oregon Department of Fish and Wildlife
- Private landowner

Funding Source(s): U.S. Fish and Wildlife Service Fish Passage Program
Project cost: \$40,242 .00
Start Date: 07/01/2015 **Completion Date:** 9/30/2016
Project Contact: Tim Porter, Oregon Dept. of Fish and Wildlife