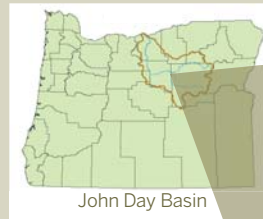




The  
Freshwater Trust™

# Rudio Creek Ranch



John Day Basin



The Freshwater Trust and its partners seek to restore habitat to benefit federally-listed summer steelhead and spring Chinook on Rudio Creek, an ecologically significant tributary of the North Fork John Day River. The Rudio Creek Ranch Restoration Project is located on Rudio Creek between river miles 3 and 5, beginning just upstream of its confluence with Gilmore Creek. During the early and mid-1900s, Rudio Creek at the project site was straightened and channelized in order to drain wet meadow floodplain habitat and create livestock pasture. This channelization coupled with agricultural development of the floodplain throughout the mid-1900s led to the loss of beaver dam complexes and riparian hardwoods. This resulted in a higher stream energy system with reduced habitat diversity and reduced cold-water storage.

Reestablishment of beaver dam complexes is a key action in restoring Rudio Creek.



Successful working ranches are a critical component to efforts to restore John Day summer steelhead and spring Chinook.

## Benefits of Habitat Restoration

The Rudio Creek Ranch Habitat Restoration Project will increase pool habitat, habitat complexity, floodplain connectivity, and riparian vegetation by restoring Rudio Creek to its historic channel alignment, by constructing large wood habitat structures, and restoring riparian vegetation. Project conceptual designs have been completed, and our restoration approach is to use the lightest touch possible in returning Rudio Creek to a riffle-pool dominated stream type within a diverse and connected floodplain. The restored site will mimic pre-disturbance conditions to the greatest extent possible. Structures will be located where they would be expected to occur under natural conditions and are designed to be self-sustaining. Beavers are present at the project site, though their numbers and influence on the aquatic and floodplain has been greatly reduced. Anecdotal accounts indicate Rudio Creek and its floodplain were significantly influenced by beavers prior to channel modification and floodplain/riparian clearing. It is anticipated that the proposed restoration project will result in habitat conditions that will support a larger beaver population and perennial dam complexes.

## Project Site Selection

The project site was selected after evaluation of restoration potential, land ownership, land use, and risk assessment. The proposed restoration project will implement high priority recovery plan actions to benefit summer steelhead.



### Basin-scale Restoration

This project is part of and central to a larger effort with Rudio basin landowners around the development of a comprehensive restoration approach that advances ecological restoration in a manner consistent with working lands. The intent of this effort is to build upon the momentum of past work on Rudio Creek as well as landowner desires to address issues that cross property boundaries. These issues include weeds, juniper, stream flow, and riparian habitat. Work implemented recently on lower Rudio Creek /Campbell Ranch with investment from OWEB and other partners produced instream flow benefits in concert with irrigation system changes that enhance agricultural production, and resulted in landowner interested in advocating for a larger-basin effort. The proposed project is aimed at demonstrating the ability to achieve large-scale stream restoration (channel meander and wet meadow restoration) as well as additional instream flow gains in concert with working landscape values. This effort will also engage another key landowner in the bigger-picture effort and further demonstrate to others that conservation-based working lands are not only possible but desirable.

- 1: Conceptual designs of Rudio Creek Ranch restoration project.
- 2: John Day summer steelhead.
- 3: Reactivation of flow to historic channel on Middle Fork John Day in 2009.



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