

Wallowa Green Valley Ranch Fish Passage Atlas Tier 1, WLL4 Subwatershed



IMPLEMENTER: Oregon Department of Fish and Wildlife was project sponsor with partners: Grande Ronde Model Watershed, and Bonneville Power Administration.

Location: Located on a side channel of the Wallowa River 1.5 miles upstream from the town of Enterprise, Oregon.

Implementation: 2023; Contract #s: 90768 Rel 1, 84041 Rel 16

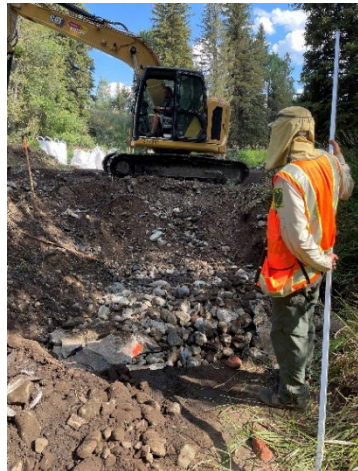
PROJECT BACKGROUND: . This section of the Wallowa River is in the Wallowa Atlas as Tier 1 and provides important spawning and rearing habitat for ESA listed spring Chinook salmon and summer steelhead. Chinook and steelhead spawning and rearing occurs in the project reach. It is also used by ESA listed bull trout, Oregon Sensitive Species redband trout, reintroduced Coho salmon, and other important native fish species. The main component of this project addresses a trash push up dam that is a fish passage barrier. A secondary component is moving a turbine pump behind an established fish screen to avoid potential fish entrapment.

ESA ESU or DPS: ESA listed Snake River spring Chinook salmon and summer steelhead. A migration corridor for ESA listed bull trout.

IMPLEMENTATION ACTIONS : Restoration actions for this project target critical salmonid life stages and limiting factors. The major action removed the push up dam to eliminate the fish passage barrier and was replaced with a new headgate diversion structure with a roughened riffle to allow continued irrigation operations and 100% fish passage. A large turbine pump was moved behind an already operational fish screen to be in compliance and avoid entrapment. A flow measuring device was installed to help regulate water use. Side channel and off-channel habitat restoration using LWD. Adding floodplain roughness by placing LWD with heavy machinery.

HABITAT RESPONSE: The project aims to improve the following habitat features: Fish passage for all life stages, side channel and off channel habitat complexity, floodplain roughness and vegetation, and restoring more natural sediment transport in this reach.

FISH RESPONSE: This project is striving to improve migration, holding, spawning, and summer and winter rearing habitat for salmon, steelhead, and bull trout, ultimately resulting in positive impacts to population abundance, productivity and viability. Juveniles of ESA listed salmon and steelhead were observed in the project reach.



Left :
Beginning construction of roughened riffle and completed with new headgate.

Right : Pump moved behind existing fish screen.





Top Left: Trash push-up dam before project.

Lower Left: Push-up dam removed, LWD installed in channel, floodplain wood installed for roughness.

Bottom : Post project photo taken in October of new headgate and roughened riffle.

