

Sheep Creek Stewardship Project

Atlas Tier 1, WMS-1 Sheep Creek Subwatershed (HUC 170601040105)

IMPLEMENTER: Trout Unlimited

Location: Project center is approx. Lat: 45.0627 Lon: -118.45451, located along Forest Road 5160 and 5182, about 24 miles southwest of La Grande, Oregon.

Implementation: 2023; Contract #: 88892

LOCATION & PROJECT BACKGROUND: The Sheep Creek Stewardship Project is located on Sheep Creek, which originates in the Blue Mountains and flows into the Grande Ronde River. This project is taking place across 4.5 miles of Wallowa-Whitman National Forest (WWNF) and Vale District Bureau of Land Management (BLM) land. Approximately 2.5 miles were completed in the first phase during 2023 funded partially by the Bonneville Power Administration (BPA).

Trout Unlimited in partnership with the BLM, the WWNF, Grande Ronde Model Watershed, Oregon Watershed Enhancement Board, and BPA, implemented this phase of work on Sheep Creek. Sheep Creek and its meadow habitats are not in proper functioning ecological condition due to historic anthropogenic influences.

The overall goal of this project is to achieve proper ecological form and function of Sheep Creek and its meadows, and thereby enhance habitat for Snake River Basin Spring/Summer Chinook, Snake River Basin steelhead, resident Redband trout, Bull trout and numerous other aquatic and terrestrial species. This includes habitat for beaver and other small mammals, the once and future floodplain ecosystem engineers.

ESA, ESU, or DPS: Snake River spring/summer Chinook salmon ESU, Grande Ronde River spring Chinook salmon population. Snake River summer steelhead ESU, Grande Ronde River summer steelhead population. Mid-Columbia Bull trout.

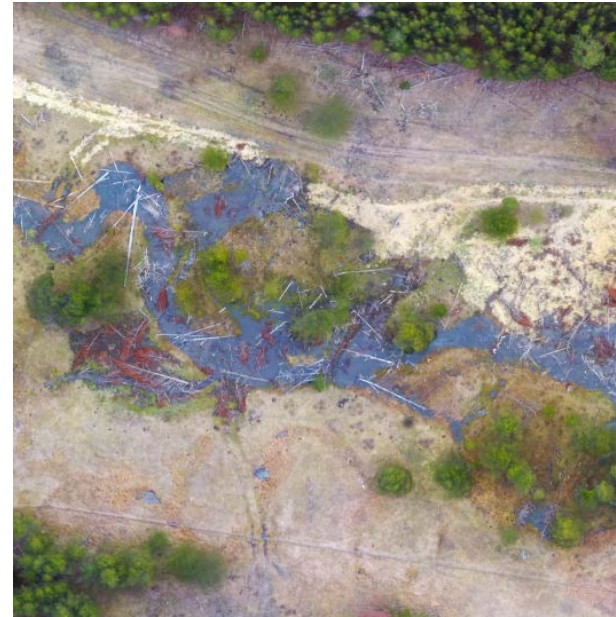


IMPLEMENTATION ACTIONS:

- Installed 377 pieces of large wood in the channel and surrounding floodplain, as well as 45 rootwads/BDA/PALs for habitat complexity, hydraulic roughness, and floodplain connectivity.
- Selectively and intermittently filled around 1 mile of stream channel. This action expanded connected side channel and wetland habitats, corrected stream channel incision, and created more habitat heterogeneity and complexity.
- Planted 4,000 plus riparian shrubs for rehabilitation and recovery of the riparian plant community.

HABITAT RESPONSE: Improved aquatic connectivity for all species at all life stages, improved floodplain connectivity, increased floodplain acreage, increased native vegetation, increased large wood recruitment, improved off-mainstem beaver habitat, and significantly enhanced habitat complexity.

FISH RESPONSE: This project has improved migration, holding, spawning, and summer and winter rearing habitat for salmon, steelhead, and Pacific lamprey, ultimately resulting in positive impacts to population abundance, productivity and viability.



PROJECT AS-BUILT OBJECTIVES:

- Install 377 pieces of large wood for hydraulic roughness and habitat complexity.
- Install 45 rootwad/PAL/BDA for habitat complexity, slow water habitats, and sediment sorting/aggradation.
- Place selective channel and floodplain cut/fill (Stage-0/8) approach to reconnect the floodplain at all phases of the hydrograph.
- Plant 4,000 shrubs for fish and wildlife habitat, stream shading, and sediment sorting,



