

Final Completion Summary

1) This project is located along Pine Hollow Creek, approximately 15 miles East of the town of Mitchell, Oregon. Pine Hollow Creek is a steelhead bearing tributary of Rock Creek, which flows to the John Day River. 2) This project was a continuation of restoration work within the Pine Hollow Creek Watershed to address limiting factors of watershed health and fish passage. 3) This project provided habitat complexity needed on the lower reach of Pine Hollow Creek by installing 70 VPS, 6 partial VPS, and 78 pieces of Large Woody Debris. In addition, an undersized culvert was replaced with a large bottomless arched culvert opening up 2.5 miles of fish habitat to allow full connectivity for steelhead passage for all stages and at all flows. The previous inundated shallow pond area has been restored with riparian plantings, rootwads, and large stones to assist in stream and habitat complexity. 4) Project partners included USFWS Partners Program, Antone Ranch, ODFW, and Wheeler SWCD.

Background

Past management was strictly focused on farming and cattle operations without the consideration of conserving natural resources or enhancing habitat. This led to the stream systems being degraded and multiple crossings becoming jump barriers. Neglected maintenance led to many of the watersheds limiting factors and fish passage concerns, ultimately contributing to degraded instream and riparian habitat. Altered habitat complexity and limited in-channel wood both were ranked as high impact with a high confidence rating as well by both The John Day Subbasin Plan and OWEB Basin Priorities. This culvert configuration provided no fish passage and the severity of it being undersized was causing the road to be frequently over topped during large flow events.

Additionally, the Rock Creek Reach Assessment led to many of the overall restoration efforts needed in the Pine Hollow Watershed from upland health to instream passage concerns. The Rock Creek Reach Assessment shows that Pine Hollows limiting factors consists of large wood, riparian shading, and overall habitat complexity. In addition, the fish barrier in this project was the last remaining significant passage barrier along Pine Hollow and removing this barrier alone would open 2.5 miles of steelhead habitat and potentially allow further spawning and rearing ground into Shingle Creek, being a direct tributary to Pine Hollow.

Work Done

This project replaced an undersized culvert with a 15' wide, 5'8" high, 40' long bottomless arch culvert and designed riffle to provide full connectivity for all life stages of steelhead. The riffle installed eliminated the backwater effect in the pond area upstream from the existing culvert. The pond area was restored with riparian plantings, rootwads, and large stones to provide habitat complexity. In addition, the secondary culvert which operates as an emergency overflow and had a significant drop, was also removed. The lower portion of Pine Hollow installed 70 VPS, 6 partial VPS, and 78 pieces of Large Woody Debris to promote floodplain connection and increase habitat complexity.

Changes from Proposed

The VPS installation was altered from the design set as the contractor hit bedrock in two spots trying to install the vertical post structures. Instead of moving the location of the posts that were not part of a previously approved design, it was decided to exclude these two structures out of the project scope.

Public Awareness or Education

No outreach activities have been included this project. Information about the project was included in the Wheeler County Fair and Rodeo.

Lessons Learned

There were multiple lessons learned through project management and implementation. When applying for projects that consist of multiple permits for different restoration efforts it's easier to separate permits by conservation practice to be installed for the project. This project had two in-stream components and due to the vastly different requirements and ways to review it was decided to separate the permits to reduce confusion between all agencies involved for each of the in-stream components. In addition, cultural resource surveys and review processes for these projects keep changing protocols resulting in project delays. Project managers need to ensure an adequate timeline is made and everyone is up to date on the newest protocol for following cultural resource compliance.

During the installation of the VPS there was two spots that structures couldn't be installed at as the contractor hit bedrock restricting the posts from pounding into the ground. It will always be a challenge to determine if contractors can install every structure as people do not know what the ground will be like until they start pounding. Accounting for unsuitable areas and project changes is helpful in trying to make quick modifications for grant applications.

Aquatic Habitat

Wheeler SWCD has read the Oregon Aquatic Habitat Restoration and Enhancement Guide and all project components are within compliance.

Special Conditions

Special Conditions for this project are fulfilled within the uploads section.

Funding Sources

Source	Identifier	Cash	InKind Type	Inkind
Landowner		\$0.00	Materials	\$16,224.00
ODFW		\$0.00	Materials	\$31,680.00
ODFW		\$0.00	Labor	\$64,965.68
OWEB	220-6005-17068	\$122,842.00		\$0.00
USDA Farm Services Agency (FSA)		\$15,540.00		\$0.00
Wheeler SWCD		\$0.00	Labor	\$826.91

Totals

OWEB Amount	Non OWEB Cash	Inkind Total	Non OWEB Amount	OWEB Match	Total Project Cost
\$122,842.00	\$15,540.00	\$113,696.59	\$129,236.59	105.0%	\$252,078.59

Uploaded Files

Image Type	File Name	Description
Photo Point	P8172888.JPG	Down stream end of culvert to be replaced, facing upstream.
Photo Point	PB171261.JPG	Newly constructed culvert, facing upstream.
Photo Point	P8172875.JPG	Facing downstream on upstream end of culvert. Fish passage limited with blockage of algal growth.
Photo Point	PB171286.JPG	Overview of new culvert installed allowing fish passage and access to the rest of the stream system.
Photo Point	P8172880.JPG	East of culvert crossing, facing West.

Photo Point	PB171290.JPG	East of culvert crossing, facing West.
Photo Point	P8172901.JPG	Upstream from culvert to be replaced on West side. Culvert partially sealed creating minimal passage.
Photo Point	PB171293.JPG	Upstream from newly constructed culvert on West side.
Photo Point	P8172912.JPG	Downstream from culvert to be replaced, facing upstream.
Photo Point	PB171305.JPG	Newly constructed culvert allowing fish passage for all stages, facing upstream.
Photo Point	P8172893.JPG	West of culvert crossing, facing East.
Photo Point	PB171314.JPG	West of culvert crossing, facing East.
Photo Point	P8172973.JPG	Location of BDA #23,24, and 25 to be installed.
Photo Point	P9173984.JPG	Location of BDA #23,24, and 25.
Photo Point	P8172918.JPG	Location of BDA #19,20, and 21 to be installed.
Photo Point	P9173965.JPG	BDA #19,20, and 21.
Photo Point	P8172926.JPG	BDA location of #17 and #18 to be installed.
Photo Point	P9173937.JPG	Newly installed BDA #17 and #18.
Photo Point	P8172931.JPG	Overview of BDA #14,15,16, and 17 to be installed.
Photo Point	P9173945.JPG	Overview of BDA #14,15,16, and 17.
Photo Point	P8172942.JPG	Overview of BDA #30 and #31 to be installed.
Photo Point	P9173971.JPG	Close up of BDA #30 and #31.
Photo Point	P8172966.JPG	BDA location #37 and #38 to be installed.

Photo Point	P9173935.JPG	View of BDA #37 and #38.
Photo Point	P8172995.JPG	#41,42, and 43 BDA to be installed.
Photo Point	P9173914.JPG	BDA #41,42, and 43 installed.
Photo Point	P8172999.JPG	Location of BDA #39 and #40 to be installed.
Photo Point	P9173830.JPG	Overview of BDA #39 and #40.
Photo Point	P8173021.JPG	BDA location of #51 and #52 to be installed.
Photo Point	P9173834.JPG	BDA #51 and #52.
Photo Point	P9173905.JPG	Overview of BDA #47.
Photo Point	P8173034.JPG	BDA location of #55 and #56 to be installed.
Photo Point	P9173898.JPG	Location of BDA #55 and #56.
Photo Point	P8173095.JPG	Location of BDA #1. Start of BDA installation.
Photo Point	P9173993.JPG	Overview of BDA #1. Beginning of BDA installation.
Photo Point	PB171328.JPG	Overview of large wood placement, seeding, and riparian planting around pond area.
Photo Point	PB171320.JPG	Overview of seeding and planting around and below culvert.
Photo Point	PB171280.JPG	Landscape view of area seeded and planted along with large wood placed in pond area.
Photo Point	PB171265.JPG	View of pond area with large wood.
Photo Point	P8173028.JPG	#47 BDA structure to be installed.
Map	OWRI Map.pdf	CREP Map

Map	Overview of Photo Points.pdf	Photo Point Map
Other	Project Specific_Other.pdf	CREP Enrollment Status
Photo (other)	Completed_Before&After_Report.pdf	Before and After Post Implementation Photos
Grazing Management Plan	Grazing Management Plan.pdf	Grazing Management Plan
Federal Lobbying Certificate	Federal-Lobbying-Certificate_signed.pdf	Lobbying Certificate
Exhibit B	17068_Conditions.pdf	