

## **Final Completion Summary**

The Rock Creek Derr – Meadow aimed to restore creek function after years of degradation caused by poor agricultural practices by installing a combination of partial and full structures to reduce the flow rate and keep water instream longer, which is critical during the summer months for steelhead rearing. In addition, 55 pieces of Large Woody Debris was placed strategically in-stream to aid in stream complexity and habitat.

## **Background**

The Rock creek meadows have seen years of abuse as the previous landowners heavily grazed the area and livestock had unlimited access to the riparian corridor during all times of the year. This has led to this meadow system being over grazed, the creek banks and bed being heavily eroded resulting in additional sediment inputs, and becoming overly simplified from the lack of vegetation and habitat being able to establish and expand. Additionally, the creek is bordered by irrigated fields, which makes the Rock creek meadow the only source for both water and food for livestock during the group rotation. The ranch, however, has switched hands and the new landowners focus on promoting healthy and sustaining ecosystems for fish and wildlife while creating a more balanced and efficient agricultural operation.

## **Work Done**

Past land management was strictly focused on agricultural practices and livestock operations without the consideration of conserving natural resources or enhancing healthy ecosystems for aquatic and terrestrial wildlife. This led to the stream system being degraded impacting ESH listed species, such as steelhead who use this system to migrate, spawn, and rear in. As Rock creek was limited in habitat complexity and riparian habitat, increasing these limiting factors would allow the riparian corridor to able expand into a sustainable meadow system.

This project installed 11 VPS (vertical post structure), 12 partial VPS, and 55 pieces of Large Woody Debris to promote floodplain connection, increase habitat complexity, and ultimately increase the riparian area in health and vigor along 0.42 miles of Rock Creek. Additionally, this project also repaired 1,408 feet of riparian fence and installed and protected 1300 riparian plantings. The plant species that planted consisted of White alder, Black cottonwood, Quaking aspen, Ponderosa pine, Red dogwood, Blue elderberry, Wax currant, Service berry, Mock orange, and Golden currant.

These practices will increase water quality, stream bank stability, instream complexity, instream habitat; and reduce stream temperatures, soil erosion, and flow rate. The benefits to the creek will be transported throughout the remaining stream system as it is a main tributary to the lower John Day River. The John Day River is critical Steelhead and salmon habitat and by improving upper tributaries, the water quality and habitat conditions of the John Day River will also be benefitted.

## **Changes from Proposed**

The project scope changed after a site visit with the Wheeler SWCD, landowner, USFWS, USBR, and the project engineer where it was determined more structures would be beneficial to meet the project objectives. The engineer created the design at a smaller scale, but project partners wanted to visit the site and look over the design in detail to determine quantity and placement before proceeding with implementation. This resulted in a State of Work (SOW) Modification to have additional structures installed and more LWD (Large Woody Debris) placed in-stream.

In addition, this project was challenged with a series of obstacles with trying to be enrolled into the USDA FSA CREP program. The original goal and objective of the project was to install a new CREP exclusion fence to protect the riparian area that has been treated with VPS structures and Large Woody Debris to increase and enhance salmonid habitat. However, as the property encountered landowner transition and historic farming/cropping documentation was overlooked during the planning for CREP it caused a major delay in the enrollment process and ultimately led to the new landowners being ineligible for the program. In addition, there was already an exclusion fence around the project area that is approximately 50-100 feet offset from the original proposed CREP fence plan. As a result, it was compromised to have the fencing be repaired to ensure the project area would continue to be protected. The fence repair and riparian planting was in-kind on behalf of the landowners to meet the grant match requirement.

### **Public Awareness or Education**

Project will be included in the in displays presented at the Wheeler SWCD's annual meeting, and at the Wheeler County Fair and Rodeo. In addition, the project overview is listed on the Wheeler SWCD website under projects: [Wheelerswcd.org](http://Wheelerswcd.org).

### **Lessons Learned**

It is very crucial for all CREP related project planning and implementation to be completed strictly with the CREP Technician/Conservation Technician II. The Conservation Technician II faced many challenges in enrolling the CREP project into irrigated acres as project partners and the landowner wasn't aware of what it entails to actually enroll in irrigated acres. In addition, with including CREP into a grant application, it is important to have all planning materials and documentation completed as not having the project enrolled within the grant timeline can impact the grants goals, objectives, and meeting required match.

### **Recommendations**

Having direct communication with the landowner is key to implementing successful projects. If the landowner had a better understanding of each partner and program's role in the project it would have led to a more successful relationship in developing and implementing the project.

### **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	\$10,500.00
Landowner		\$0.00	Materials	\$20,818.00
OWEB	221-6012-19036	\$56,573.00		\$0.00
Wheeler SWCD		\$0.00	Labor	\$1,448.10

## Totals

OWEB Amount	Non OWEB Cash	Inkind Total	Non OWEB Amount	OWEB Match	Total Project Cost
\$56,573.00	\$0.00	\$32,766.10	\$32,766.10	58.0%	\$89,339.10

## Uploaded Files

Image Type	File Name	Description
Photo Point	P4287910.JPG	Overview of Rock Creek and beginning of instream work to take place.
Photo Point	P4287916.JPG	View of proposed BDA location.
Photo Point	P4287921.JPG	Close up of BDA to be installed across floodplain.
Photo Point	P4287925.JPG	Looking upstream at proposed BDA location.
Photo Point	P4287934.JPG	Looking downstream at Large Woody Debris placement location.
Photo Point	P4287936.JPG	Looking upstream at Large Woody Debris location.
Photo Point	P4287942.JPG	Overview of proposed wood placement around island.

Photo Point	P4287948.JPG	Showing proposed Large Woody Debris placement to slow down stream
Photo Point	P4287956.JPG	Looking upstream at a series of BDA structures to be installed.
Photo Point	P4287965.JPG	Looking downstream at a series of BDA structures to be installed.
Photo Point	P4287971.JPG	Looking upstream at proposed BDA series.
Photo Point	P4287973.JPG	Overview of proposed BDA location that will be extending into the floodplain.
Photo Point	P4287979.JPG	Looking downstream at final BDA structures to be installed.
Photo Point	P4287984.JPG	Looking upstream at project end point. Showing proposed location of BDA structures.
Photo Point	P9289410.JPG	Overview of Rock Creek and beginning of instream work. Showing BDA and vegetation.
Photo Point	P9289416.JPG	View of BDA structures in Rock Creek.
Photo Point	P9289417.JPG	Close up of BDA throughout floodplain weaved with willow whips.
Photo Point	P9289422.JPG	Looking upstream at BDA and large wood placement.
Photo Point	P9289426.JPG	Looking downstream at LWD placement.
Photo Point	P9289433.JPG	Looking upstream at LWD and boulder placement for fish habitat.
Photo Point	P9289435.JPG	Overview of large woody debris around island.
Photo Point	P9289440.JPG	Showing LWD throughout floodplain to slow down stream velocity.
Photo Point	P9289446.JPG	Looking upstream at a series of BDA structures.
Photo Point	P9289450.JPG	Looking downstream at BDA structures.

Photo Point	P9289456.JPG	Looking upstream at BDA structures.
Photo Point	P9289459.JPG	Overview of BDA series extending throughout floodplain.
Photo Point	P9289466.JPG	Looking downstream at final BDA structures.
Photo Point	P9289470.JPG	Looking upstream at project end point. Showing final BDA structure in Rock Creek.
Map	Photo Point Map.pdf	Photo Point Map
Map	Layout_Map.pdf	Final layout of installed in-stream vertical structures.
Federal Lobbying Certificate	LobbyingCertificate_221-6012-19036.pdf	Federal Lobbying Certificate
Exhibit B	19036_Conditions.pdf	