

Project Completion Report for OWEB Grant 216-6015-12130

Final Completion Summary

Bridge Creek is high quality steelhead spawning and rearing habitat located in Wheeler County. The section where work was performed had been bermed and the stream had been artificially confined with very limited floodplain access. There was a distinct lack of pools and holding water in this stretch with very little large woody debris. There was also a well-used ford crossing that was hazardous to the landowner at high water and detrimental to the in-stream habitat. The holistic aspect of this project involved the clearing of 80 acres of juniper trees. Many of the trees of sufficient size were used in-stream or within the floodplain in order to increase the habitat complexity of the nearby stream. There was an area of erosional concern at the upstream end of the project area. The stream was encroaching towards the road with very little buffer distance before vehicle passage would have been affected.

Background

The section of the project reach where the work was completed had previously been bermed and the stream was artificially confined. There was a lack of pools and holding water with very little large woody debris. The north/northeast slope adjacent to the project was overgrown with juniper. There was an area of erosion next to a road on the upstream end of the project. There was also a well-used ford crossing that was hazardous to the landowner at high water and detrimental to the in-stream habitat.

Work Done

Work Done - This project removed the berm and installed 90 logs within the stream and floodplain to provide enhanced habitat complexity. A total of 80 acres of juniper was cut as part of this project. The existing berm was removed and a new high flow channel was built through the floodplain. The erosional area was stabilized using a combination of rootwads and large rock as ballast. The ford crossing was replaced with a pre-fabricated steel bridge. 150 cuttings of cottonwood and willow were planted near the stream, mainly in disturbed areas, to enhance the recovery timeline and riparian area. The disturbed areas were treated for yellowstar thistle and seeded.

Changes from Proposed

The original proposal called for 68 pieces of wood and five vertical post structures. The substrate was determined to be too hard to drive the posts for the vertical post structures so the pieces of wood was increased to 90 to create the same desired effect.

Yellowstar thistle treatment and the downstream crossing to bridge replacement was added to the project because of the ecological need and the addition of more Confederated Tribes of the Warm Springs funding.

Public Awareness or Education

The project was included in the District's newsletter, county fair display and annual meeting display.

Lessons Learned

When installing bridges over non-perpendicular footers, the bridge length should be increased to allow for extra span above the 1.5 times OHW minimum. Flagging or staking LWD placement and staging is important. Increase survey budget in areas with difficult access or limited GPS reception.

Recommendations

Increase bridge lengths in non-perpendicular installations. Ensure LWD is fully placed instream for maximum effect.

Aquatic Habitat

Wheeler SWCD has reviewed the Oregon Aquatic Habitat Restoration and Enhancement Guide, acquired all appropriate permits, and followed all appropriate measures in the implementation of the project. The project met objectives of the Oregon Aquatic Habitat Restoration and Enhancement Guide with grass seeding in juniper removal areas to reestablish perennial vegetation, control of yellowstar thistle within the riparian habitat areas, and woody debris placement to enhance fish habitat.

Special Conditions

- 1) Submit two copies of all grant related materials
- 2) Secure signed landowner agreement
- 3) Submit online completion report 60 days after project deadline
 - a) Map showing all final project components & photo point locations
 - b) Minimum of 10 color photos
 - 1) 1 of berm removal
 - 2) 5 of large wood placement along stream
 - 3) 3 of VSP structures
 - 4) 1 of reseeded area

Funding Sources

Source	Identifier	Cash	InKind Type	Inkind
Confed Tribes Warm Springs (CTWS)		\$51,550.00		\$0.00
Landowner		\$0.00	Labor	\$7,220.00
OWEB	216-6015-12130	\$34,865.00		\$0.00
USDA-NRCS		\$18,606.00		\$0.00

Totals

OWEB Amount	Non OWEB Cash	Inkind Total	Non OWEB Amount	OWEB Match	Total Project Cost
\$34,865.00	\$70,156.00	\$7,220.00	\$77,376.00	33.0%	\$112,241.00

Uploaded Files

Image Type	File Name	Description
Photo Point	Bank stabilization before.jpg	Bank Stabilization before
Photo Point	Bank Stabilization after.jpg	Bank Stabilization after
Photo Point	before bank stabilization.jpg	Bank Stabilization before
Photo Point	after bank stabilization.jpg	Bank Stabilization after
Photo Point	floodplain with seeding.jpg	seeding after
Photo Point	Seeding.JPG	seeding before
Photo Point	Berm Before.JPG	berm before

Photo Point	picture taken on old upstream berm dug out for historic channel.jpg	berm after
Photo Point	Pic #3 historic channel.JPG	Historic channel before LWD placement
Photo Point	Large wood historic channel.jpg	Historic channel after LWD
Photo Point	PC045096.JPG	Juniper site before
Photo Point	P5095375.JPG	Juniper site after
Photo Point	IMG_0970.JPG	Historic channel before LWD placement.
Photo Point	P4177030.jpg	Historic channel after LWD placement.
Photo Point	IMG_2576.JPG	Before LWD placement in stream.
Photo Point	P4177040.jpg	After LWD placed in stream.
Photo Point	IMG_0973.JPG	Before LWD placement in side channel and plantings/seeding
Photo Point	P4177033.jpg	After LWD placement in side channel and plantings/seeding.
Photo Point	20160308_113401.jpg	Juniper site before treatment.
Photo Point	P4177012.jpg	Juniper site after treatment was finished
Photo Point	IMG_0974.JPG	Before LWD placement in stream.
Photo Point	P4177036.jpg	After LWD placed in stream.
Photo Point	20160308_113211.jpg	Juniper site before treatment.
Photo Point	P4177014.jpg	Juniper site after treatment.
Photo Point	IMG_1081.JPG	Junipoer site before
Photo Point	P4177025.jpg	Juniper site after treatment.
Map	Site photo points.docx	Photo points

Map	Bridge Ck Holistic Location Map.pdf	Bridge Creek Holistic Location Map
Map	Bridge Creek Holistic In-Stream Elements.pdf	Bridge Creek Holistic In-Stream Elements Map
Federal Lobbying Certificate	Bridge Cr Holistic Federal Lobby Form.pdf	Bridge Creek Holistic Restoration #1 Federal Lobbying Certificate