

Project Completion Report for OWEB Grant 220-8208-19239

Final Completion Summary

1) This project is located along Thirtymile Creek, 9 miles Southeast of the town of Fossil, Oregon in Wheeler County. 2) The existing culvert has a skewed entrance relative to the upstream channel and has two associated jump barriers downstream. ODFW has put in a temporary fish ladder to provide passage for juveniles, but the ladder is undersized for adult salmonoids and the jump barrier into the culvert is too high for juveniles. 3) This project created a comprehensive design set to replace the pipe culvert with a realigned bottomless arch culvert and remove the barriers to fish passage. 4) Project partners included OWEB, Wheeler SWCD, RSI (Resource Specialists Inc.), ODFW, and BPA.

Background

The barrier identified on Thirtymile Creek is limiting access to 3.11 miles of listed steelhead habitat. This barrier consists of two undersized culverts with the upstream inlets being skewed in relation to the remaining upstream channel. The skew of the culvert entrance causes erosion of the surrounding road banks during peak flows, and has two associated jump barriers downstream. The first jump is approximately one foot, located at a pool at the immediate downstream end of the culvert. This pool was created by a three-foot diameter log placed approximately thirty feet downstream of the culvert and perpendicular to the stream flow. This log has created its own three-foot barrier and has a very small downstream pool. Oregon Department of Fish and Wildlife has put in a temporary fish ladder to provide passage for juveniles, but the ladder is undersized for adult salmonoids and the jump barrier into the culvert is too high for juveniles. This was listed as a priority with the Oregon Department of Fish and Wildlife.

Work Done

This technical assistance grant provided support for a full design set of a culvert replacement along Thirtymile creek with a joint effort between Wheeler SWCD, ODFW, RSI, and BPA. 15% design level included the current conditions and a hydrologic analysis of velocity and flood potential throughout the century. After reviewing this portion of the conceptual design, BPA was able to weigh the pros and cons of the design developed thus far. This created the criteria of the project elements by establishing preferred alternatives at the 30% design level. The 60% design level partially amended any faults and changes that arose during the 30% comment period by BPAs reviewers. BPAs main concern during this portion of the design set was the habitat location not being specified in the drawings. This correction was not completed and was still resubmitted by the engineer for additional comments and review to proceed forward to 90%, the final set. Due to the 90% design set not addressing habitat location, BPA was not able to approve this project design as a complete design set. However, ODFW fish screen and passage program was and will include their habitat division to ensure habitat location is specified and completed accordingly when implementation occurs.

In addition, the Wheeler SWCD submitted an FIP application to the John Day Basin Partnership Steering Committee as this project was reaching completion and nearing implementation. However, since specific

plans of habitat restoration were not included within the BPA approved design, the steering committee denied the proposal.

The proposed design will replace the double culvert with a single bottomless arch culvert that will be 60'x 21' x 6'11". Even though the design set doesn't account for habitat restoration, when implementation occurs Wheeler SWCD will partner with ODFW Habitat Division to ensure habitat restoration is included and located appropriately throughout the project area to ensure restoration success. Habitat restoration will include range seeding, riparian tree and shrub establishment, and large woody debris placement.

Changes from Proposed

This project had to go through a series of time extensions as the comment period and review process with partnering agencies became more in-depth and time consuming to ensure project success. In addition, there were delays in communication between the contracted engineer and BPA/NMPH resulting in the design turn around time to be longer than expected, which resulted in the grant having to be extended multiple times.

BPA required the habitat features to be removed from the design due to fear of creating issues with the passage structures and downstream structures if the habitat features fail in the future. Despite the concern of potential streambank erosion due to higher velocities, BPA would not approve habitat to be included in the design. BPA required signature documentation stating Wheeler County assumed all liability of potential failures to the county road. Wheeler SWCD is still in contact with ODFW Fish Passage and Habitat Divisions to continue assessments and planning efforts to eliminate BPA concerns of liability and including habitat into the design for implementation. ODFW Habitat Division anticipates onsite evaluation of Thirtymile Creek and further discussion with BPA engineers.

Public Awareness or Education

No public outreach or awareness was involved in this project.

Lessons Learned

Documentation from the beginning of project planning is crucial to the success of projects to ensure that the plan is followed through despite potential staffing changes. Additionally, all parties involved in the project should be included in communications during all phases of the design process. Lastly, it is important to have formal, binding contracts in place with contractors and engineers to ensure obligations are met within the specified grant timeline for applications/agreements.

Recommendations

Recommendations include keeping documentation - both formal and informal - in a secure filing system accessible to appropriate staff. Also, being proactive with communication and check-ins with all agencies/partners involved.

Special Conditions

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

Funding Sources

Source	Identifier	Cash	InKind Type	Inkind
ODFW		\$0.00	Labor	\$8,500.00
ODFW		\$2,925.92		\$0.00
OWEB	220-8208-19239	\$30,752.00		\$0.00
Wheeler SWCD		\$0.00	Labor	\$4,055.52

Totals

OWEB Amount	Non OWEB Cash	Inkind Total	Non OWEB Amount	OWEB Match	Total Project Cost
\$30,752.00	\$2,925.92	\$12,555.52	\$15,481.44	50.0%	\$46,233.44

* This grant agreement has a special condition that alters the match funding requirement; to read the requirement see Exhibit B of the grant agreement.

Uploaded Files

Image Type	File Name	Description
Project Design	Final Project Design_220-8208-19239.pdf	Final Designs
Project Design	App B - Kinzua Culvert - HEC output - Existing Vs Proposed FINAL.pdf	HEC Output
Project Design	Kinzua Culvert - Basis for Design FINAL_220-8208-19239.pdf	Final Design Report
Final Metrics	MetricsTA-Design_220-8208-19239.pdf	Final Metrics
Project Designs	2022(100_)ThirtymileCreek-Kinzua_CommentTracking_20230815.pdf	Design Comment Tracking Sheet - Final
Special Condition Requirement	Special_Conditions_220-8208-19239.pdf	Special Conditions Requirement
Exhibit B	19239_Conditions.pdf	
Final Payment Checklist	Final Payment Check List_220-8208-19239_2.22.24.pdf	Final Payment Request Checklist