

Organization: Lake County Umbrella Watershed Council
RLF Program: ORF
Project Name: Muddy Creek Fish Passage and Habitat Enhancement
Grant Number: 17026
Grant Amount: \$90,000

Project Outcomes: *Provide a brief summary of the actual outcomes achieved during the reporting period. Please use the “Expected Outcomes,” “Activities,” and “Indicators” that you mentioned in your application as reference (425 word limit).*

Muddy Creek, located in Lake County Oregon, is a 12-mile system separated by Juniper Reservoir in 1965. The upper system has maintained stream function and habitat integrity as a viable fishery for Goose Lake Redband trout, but the lower habitat is fragmented and degraded by instream flow structures, dams and diversions. Goose Lake Redband trout are distributed as isolated populations above and below the reservoir. Aquatic species thrive in the reservoir; however, fish passage barriers preclude adfulvial fish from reaching the lower stream system except during spring and early summer flows, when the reservoir spills into lower Muddy Creek.

The completed project provides an additional 6 miles of habitat and connects the upper and lower Muddy Creek system. The project benefits nine Goose Lake native fish species, four of which are listed as “species of concern” by the US Fish and Wildlife Service (Goose Lake red band trout, Goose Lake lamprey, Goose Lake sucker, and the California Pit Roach).

The table below demonstrates the task items and completion year.

Task (X = Complete) (IP = In Progress) (P = Planned)	2018	2019	2020	2021	2022	2023	2024
Project Development	X	X	X				
Design, Compliance (DSL, USACE, ODFW)		X	X				
Phase I Construction (Lower Segment Fish Passage and Habitat Restoration)							
Fish Bypass Channel 1				X			
Reactivate Stream Channel (450ft)				X			
Remove Culvert (1)				X			
Fish Bypass Channel 2				X			
Low Water Crossing				X			
Grade Control Structures (6)				X			
Willow Plantings (500)				X			
Riparian Fence (1 mile)					X		
Phase II Construction (Spillway Fish Passage)							
Design Modification					X		
ODFW Fish Passage Authorization					X		
Department of State Lands Permit						X	
Rock Ramp/Roughened Channel Fish Passage						X	
Monitoring Phase I and Phase II							P

Narrative: *Please limit the narrative to no more than five (5) pages in length (standard 12-point font). Report progress made toward the original project objectives as noted in your proposal and grant agreement.*

During the summer 2022, phase I construction was fully completed with riparian fence implementation. 1.5 miles of stream habitat and passage was improved below the reservoir. Partners then focused on phase II which involves fish passage at the spillway of the reservoir. The design plan was modified and approved by ODFW.

We consulted with the Department of State Lands (DSL) for the final permitting portion in March 2023 and DSL determined we were working outside of the waters of the US and the project was not under their jurisdiction. The project was advertised and solicited for public bids in June of 2023. The Watershed Council contracted a local

contracting company in July of 2023. A concrete fishway structure to support upstream passage was ordered from Idaho Precast and delivered in September. Mobilization of equipment and material began August 21st. Project construction continued through November as the precast concrete fishway was installed and a rock ramp roughened channel was implemented at the reservoir spillway. The project was completed the first of December.

Funding partners include Oregon Watershed Enhancement Board, Oregon Department of Water Resources, US Fish and Wildlife Services, and Ducks Unlimited. Technical Assistance and in-kind contribution have been provided by Oregon Department of Fish and Wildlife, Shine Brothers Ranches, Cascade Stream Solutions, and Lake County Umbrella Watershed Council.

Financial: Provide an accounting of grant funds spent to date. If you have unspent funds and have finished the work that was proposed in the Grant, return the unspent funds to RLF or submit a request to use those funds for other acceptable, charitable purposes.

Organization	Cash Contributed	In-Kind Contributed	Status
Oregon Watershed Enhancement Board	\$238,341		Expended (Phase I)
Oregon Watershed Enhancement Board	\$331,571		Expended (Phase II)
Oregon Water Resources Department	93,500		Expended (Phase II)
Ducks Unlimited	\$65,000		Expended (Phase I)
US Fish and Wildlife Service	\$49,500		Expended (Phase I)
Oregon Department of Fish and Wildlife		2,500	Expended
Lake County Umbrella Watershed Council		\$8,085	Expended
Resource Legacy Fund	\$90,000		Expended
TOTAL	\$867,912	\$6,585	

Photographic Documentation

Site 1 and 2 - Roughened Channel Spillway Fish Passage



Site 3 - Rock Ramp Fish Bypass and Hardened Crossing



Site 4/5 - Re-establish Stream Channel



Site 6 - Install hardened water crossings



Site 7 – Reconstruct downstream dam and fish bypass



Site 8 – Riparian Fence



Muddy Creek Water Use and Stream Restoration Project



Site 1 and 2: Phase II, Fish Passage at the spillway of reservoir. Removed from scope of work for this Phase I project.

Site 3A: Upper Fish Bypass Channel around newly constructed earthen dam. Willows staked.

Site 3B: Culvert removed and replaced with low water hardened crossing.

Site 4: Headgate installed to control water to wetland and stream. Large wood placed.

Site 5: Reactivated stream corridor for fish transport channel. Willow staked and rooted willows planted.

Site 6: Culvert removed and replaced with low water hardened crossing.

Site 7: Lower Fish Bypass Channel around newly constructed earthen dam. Rooted willows planted.

Site 8: Riparian fence constructed.

Symbols mark locations where low water crossings and large root wads were placed in association with one another.



Submit full and complete reports to Katt Lundy, Program Coordinator, Open Rivers Fund, klundy@resourceslegacyfund.org, by the dates noted in your Grant Agreement. RLF will provide substantive feedback to grantees within eight weeks of receipt of the final report. Failure to provide timely and complete reports to RLF on your project may result in your disqualification for future grants from RLF.