



R & E Grant Application 17-19 Biennium

Project #: 17-049

Forest Creek Dam Removal and Habitat Restoration

Project Information

Requested Cycle: 17-5
R&E Project Request: \$33,000
Other Funding: \$223,054
Total Project: \$256,054
Spending Start Date: 5/1/2018
Spending End Date: 6/30/2019
Project Start Date: 7/1/2017
Project End Date: 6/30/2019
Organization: Applegate Partnership (Tax ID #: 93-1151372)

Fiscal Officer

Name: Janelle Dunlevy
Address: PO Box 899
Jacksonville, OR 97530
Telephone: 541-899-9982
Email: janelle@apwc.info

Applicant Information

Name: Jakob Shockey
Address: PO Box 899
60 Upper Applegate Road
Jacksonville, OR 97530
Telephone: 541-899-9982
Telephone 2: 541-890-9989
Email: jakob@apwc.info

Past Recommended or Completed Projects

This applicant has no previous projects that match criteria.

Authorized Agent

Name: Janelle Dunlevy
Address: 3259 Tahitian Avenue
Medford, OR 97504
Telephone: 541-890-3107

Email: jrdunlevyco@msn.com

Location Information

Where is it?

The project will occur on private land owned or managed by another party

Landowner Information

Name: Daniel L Hunter
Address: 7170 Hwy 238
Jacksonville, OR, 97530
Phone: 541-899-1442

Site Description

Street Address, nearest intersection, or other descriptive location.

7200 Hwy 238 Ruch/Jacksonville, OR
4M Timber

Directions to the site from the nearest highway junction.

0.5 miles NE of the Hwy 238 and Upper Applegate Road junction.

Following project completion, public anglers will be allowed the following level of access to the project site:

No access

Please describe what leases, easements, agreements are in place to ensure angler access to the project site, and what is the length of each agreement.

This is private land on tributary to the Applegate River. Angling is not allowed on this stream but this stream directly contributes to the coho and steelhead fishery in the Applegate River.

Dominant Land Use Type:

Retired Range/Pasture

Project Location

General Project Location.

County: Jackson
Town/City: Ruch/Jacksonville
ODFW Dist: SW
Stream/Lake/Estuary Name: Forest Creek
Sub-basin: 17100309004
Tributary of: Applegate

Specific Project Location.

Latitude	Longitude
42.23992	-123.0392

Project Summary

Project Summary

Please provide a couple sentence summary of the proposal.

Forest Creek Dam is lowest, most severe fish passage barrier to Coho salmon, steelhead, and cutthroat trout on Forest Creek, a tributary of the Applegate River. The concrete dam will be partially removed and a bypass channel will be created that will contain instream features designed to enhance fish habitat.

Overall Project Goals

Describe the primary goals or outcomes of the entire project, including elements not requesting funding from R&E.

The goal is to eliminate the lowest, most severe fish passage barrier on Forest Creek, Forest Creek Dam and restore access to 2.4 miles of high intrinsic potential habitat for ESA-listed SONCC Coho salmon and 4.2 miles of habitat for steelhead and cutthroat trout.

The project will improve instream habitat for fish, macroinvertebrates, and other aquatic species by increasing habitat complexity, cover, and quality.

The project will also improve water quality and watershed health by improving riparian health, increasing streambank stability, improving channel morphology, and decreasing accelerated erosion at the dam site.

Primary objectives of R&E funding

Please describe the measurable objectives for the R&E portion of the funding request.

Improved fish passage through the project reach for adult and juvenile fish including Coho salmon, steelhead, and cutthroat trout

Increased aquatic habitat complexity, quality, and cover in the project reach

Improved streambank stability and morphology, reduced erosion in the project reach

Improved native riparian vegetation health, diversity, and cover in the project area

Current Situation/Justification

Please describe the current situation and explain why this funding is needed.

In 2017, the engineering project designs were completed to 90% through a technical assistance grant from the Oregon Watershed Enhancement Board (OWEB) in consultation with the landowner, the tenant, and Oregon Department of Fish & Wildlife (ODFW) fish biologist staff. The APWC is currently seeking and securing funding to implement the designs that will eliminate Forest Creek Dam as a fish passage barrier. We have received partial funding from OWEB, Trout and Salmon Foundation, Middle Rogue Steelheaders, and Oregon Wildlife. Applications have been made to Patagonia and the ODOT/ODFW Fish Passage Mitigation fund. However additional funding is still necessary to complete the project and leverage these funds.

Recreation and Commercial Benefit

This project will provide benefits to:

Recreational fisheries
Commercial fisheries

Explain how this project will contribute to current (and/or potential) fishing opportunities, access, or fisheries management.

Forest Creek contains habitat for Chinook salmon, Coho salmon, steelhead, and cutthroat trout. In addition to limiting adult access to spawning habitat, Forest Creek Dam completely obstructs juvenile fish access to 6.4 miles of critical rearing and escapement habitat. This habitat is of

high ecological significance; Forest Creek was listed by the Middle Applegate Watershed Analysis as one of three important streams that are essential to the propagation of anadromous fish and to maintaining and sustaining anadromous fish habitat and populations in the Applegate River Watershed. Over the last few summers Applegate Partnership & Watershed Council staff have observed juvenile fish trapped below the dam in an isolated, evaporating pool that decreases in size during the summer months. The removal of the dam will increase spawning success and fecundity and improve juvenile fish survival thereby supporting fish populations.

Percent benefit split between Commercial and Recreational anglers:

50 % Commercial

50 % Recreational

Please explain, or justify, how the percentage split was determined:

Forest Creek supports populations of Chinook salmon, Coho salmon, steelhead, and cutthroat trout. These species are utilized by both recreational and commercial anglers.

This project has been identified as an ODFW priority for:

Local/watershed

Basin/regional

Statewide

Does this project directly support implementation of the ODFW Strategic Plan and/or current Fish Division priorities?

Please briefly explain when this was identified as a priority and what process or workgroup was used to identified this as an ODFW priority.

Identify any plan or other document that identifies this priority.

Final Southern Oregon/Northern California Coast (SONCC) Coho Recovery Plan

Rogue Basin Partnership Rogue Basinwide Priority Barrier Removal Analysis (OWEB #215-2034-11632)

Middle Rogue Watershed Assessment

Watershed Health Factors Assessment

OWEB Technical Assistance Grant (215-2033-11631)

Is this project part of an approved Salmon-Trout Enhancement Program (STEP) activity?

Yes

The removal of Forest Creek Dam will uphold the STEP objectives of rehabilitation and improving natural habitat and native fish stocks and will provide for citizen volunteer participation in achieving the Oregon Department of Fish and Wildlife's fish management objectives.

This project is intended to benefit the following species:

Coho Salmon

Winter Steelhead

Summer Steelhead

Cutthroat Trout

This project will benefit anglers or fishery by providing:

Habitat Enhancements

Fish Passage

Habitat Enhancements

The primary purpose of this project is to improve/increase:

In water structure, complexity, and habitat
Fish passage
Riparian - reduce bank erosion

Fish Passage

This fish passage project will:

Remove a barrier that does not have an existing fishway/passage structure

We have contacted or have been working with:

Local ODFW staff
ODFW has been contacted
The project has received approval

Project Description

Schedule

Activity	Date	RE Funding
Permit Applications/Secured	June 2018	No
Final Design Drafting	June 2018	No
Materials Acquisition	May 2018	Yes
Contracting	May 2018	Yes
Construction	August 2018	Yes
Project Inspection	September 2018	No
Post Project Implementation Review	September 2018	Yes
Planting	November 2018	Yes
Monitoring	December 2018	No

Permits

Permit	Secured?	Date Expected
USACE/DSL Joint Permit-Applied	No	6/2018
Jackson County Riparian Ordinance Certification	Yes	
Jackson County No Rise Certification	Yes	
State Historic Preservation Office	No	4/2018

Project Design and Description

Please describe in detail the methods or approach that will be used to achieve the project objectives.

1. Eliminate Forest Creek Dam as a fish passage barrier.
 - Complete removal of the dam was determined to be not advisable through site surveys; rather, Forest Creek Dam will be partially demolished and buried in place. The demolished dam will no longer be within the active stream channel. The preliminary designs for this project were completed with funding from OWEB TA grant 215-2033-11631, and in consultation with the landowner, the tenant, and Oregon Department of Fish & Wildlife (ODFW) fish biologist staff. Project partners include the Bureau of Land Management (BLM) and the ODFW.
 - A fish passage channel will be created that bypasses the Forest Creek Dam (Refer to Preliminary Plans). The dam structure will be partially demolished and the remaining concrete dam sill will be buried and serve as grade control to fortify the adjacent road base and utilities. The fish passage channel will be designed and constructed to be passable by adult and juvenile fish. All streamflow will be directed into the constructed stream channel located to the northwest of the dam structure. Large rock and rootwads will be placed within the constructed fish passage channel to improve streambank stability. Riparian plantings will be designed and

implemented to provide additional streambank stability. Success of the planting plan will result in a vegetated floodplain that will create roughness that will slow flows, reduce shear stresses, and provide root mass that will stabilize the constructed floodplain.

- The risk of recapture of the dam structure by the stream will be minimized by design features. The designed fish passage channel will be lower in elevation than the Forest Creek Dam structure and will direct flow away from and to the northwest of the dam structure. The dam will be partially demolished and buried. Riparian plantings and the placement of rootwads and boulders will stabilize the stream in the constructed channel. Large rock along the constructed streambank toe and the placement of rootwads will contain low flows within the primary channel. Sloping of the adjacent floodplain will create relatively shallow flow depths.

2. Restore access for adult and juvenile fish that are among those listed as Strategy Species in the Oregon Conservation Strategy to 2.4 miles of Coho spawning habitat and 4.2 miles of steelhead and fluvial cutthroat trout habitat along Forest Creek and its tributaries.

- A fish passage channel will be constructed (See Attachment—Preliminary Plans). The channel will be designed to be passable by adult and juvenile fish. The design will be based on similarly constructed and designed bypass channels that are known to pass fish.
- Post-implementation spawning surveys and juvenile fish snorkel surveys will be conducted by BLM and ODFW within the project site and upstream to assess effectiveness.

3. Improve instream habitat.

- The placement of root-wads, boulders, and riparian plantings will improve habitat complexity, reduce erosion, enhance sediment capture, increase streambank stability, and improve channel morphology.

4. Improve water quality and streambank stability; reduce accelerated erosion and sedimentation.

- Removal of Forest Creek Dam from the active stream channel will reduce water velocity and lessen the elevation drop that has created accelerated streambank erosion and sedimentation downstream of the dam structure.
- The placement of root-wads, boulders, and riparian plantings will reduce erosion, slow water velocities, increase streambank stability, and improve channel morphology.
- Riparian plantings designed to increase shade will help decrease water temperature, thus increasing instream dissolved oxygen, a factor limiting water quality throughout the summer months.

5. Improve the quality and quantity of riparian habitat on site.

- Invasive vegetation (Himalayan blackberry, *Rubus armeniacus*) will be reduced within 0.7 acres and replanted with native species, increasing the overall footprint of the riparian area in the project site.
- The project site will be revegetated with native plants by planting native shrub and tree species and seeding native grass species. The planting plan will include native riparian species and be designed to expand the extent of riparian vegetation and increase diversity.

Engineering

Does the project involve capital improvement, engineering, site grading or other construction?

No

Project Management and Maintenance

What is the life expectancy of R&E funded construction, structures, equipment, supplies, data or fishery?

The benefits from the removal of Forest Creek Dam and the created bypass channel are expected to remain in place permanently.

Who is responsible for long term management, maintenance, and oversight of the project beyond what is funded by R&E.

The benefits from the removal of Forest Creek Dam and the created bypass channel are expected to remain in place permanently. No long term management will be required, as of any stream system, once the artificial barrier is removed natural stream processes will maintain the stream channel and associated aquatic habitat. Riparian planting and blackberry removal maintenance will be continued for 3 years following the project and the landowner will assume responsibility after the initial maintenance phase is completed.

Will the project require ongoing maintenance?

No

Is there a plan to collect baseline data and to conduct monitoring efforts to measure the effectiveness of the project?

No

Spawning surveys will be completed.

Project Funding

Funding

Have you applied for OWEB funding for this project?

Yes

OWEB application number: 217-2033

Received an award.

R&E money is needed as matching funds.

Has this proposal, or similar proposal for this project location, previously been denied by OWEB or other funding source?

[{"source":"OWEB (217-2033)","type":"Cash","secured":"Secured","dollarValue":97704,"comments":""},{ "source":"OR Wildlife Foundation","type":"Cash","secured":"Secured","dollarValue":10000,"comments":""},{ "source":"T rout & Salmon Foundation","type":"Cash","secured":"Secured","dollarValue":4000,"comments":""},{ "source":"Mi ddle Rogue Steelheaders","type":"Cash","secured":"Secured","dollarValue":3000,"comments":""},{ "source":"ODFW Technical Support","type":"In-Kind","secured":"Secured","dollarValue":750,"comments":"ODFW has worked on this project since our OWEB Technical Asst. grant. Jay Doino & Pete Samarin"}, {"source":"4M Timber & Sawmill","type":"In-Kind","secured":"Secured","dollarValue":7100,"comments":"Land tenant, In-kind site preparation work"}, {"source":"BLM ","type":"In-Kind","secured":"Secured","dollarValue":17200,"comments":"Logs/Rootwads, Grass Seed"}, {"source":"Applegate Partnership","type":"In-

Kind","secured":"Secured","dollarValue":925,"comments":"Riparian plants, willow stakes"},{"source":"Patagonia","type":"Cash","secured":"Pending","dollarValue":10000,"comments":"Application submitted awaiting response."},{"source":"Additional funds needed for project","type":"Cash","secured":"Pending","dollarValue":72375,"comments":"Additional applications have been submitted for this sum."}]

Other Funding Source	Type	Secured	Dollar Value	Comments
OWEB (217-2033)	Cash	Secured	97704	
OR Wildlife Foundation	Cash	Secured	10000	
Trout & Salmon Foundation	Cash	Secured	4000	
Middle Rogue Steelheaders	Cash	Secured	3000	
ODFW Technical Support	In-Kind	Secured	750	ODFW has worked on this project since our OWEB Technical Asst. grant. Jay Doyno & Pete Samarin
4M Timber & Sawmill	In-Kind	Secured	7100	Land tenant, In-kind site preparation work
BLM	In-Kind	Secured	17200	Logs/Rootwads, Grass Seed
Applegate Partnership	In-Kind	Secured	925	Riparian plants, willow stakes
Patagonia	Cash	Pending	10000	Application submitted awaiting response.
Additional funds needed for project.	Cash	Pending	72375	Additional applications have been submitted for this sum.
		Total	223054	

Budget

Item	Unit Number	Unit Cost	In-kind or non-cash contributions	Funding from other sources	R&E Funds	Total Costs
PROJECT MANAGEMENT						
Project Management/Final Reporting	200	36.50	0	6300	2000	8300
Post Grant Reporting (per year) (OWEB funding, & totally separate line item that only fit in this location)	2	500.00	0	1000	0	1000
		SUBTOTAL	0	7300	2000	9300
IN-HOUSE PERSONNEL						
Restoration Crew Lead	200	25.50	0	5100	0	5100
Restoration Crew	343	25.50	0	8755	0	8755
Plant Establishment (Restoration Crew/Project Manager (lump))	1	3000.00	0	3000	0	3000
		SUBTOTAL	0	16855	0	16855
CONTRACTED SERVICES						
Technical Service/Engineering (lump)	1	12650.00	750	11900	0	12650
Site Preparation/Site Clean-Up (lump)	1	15900.00	5300	8500	0	13800
Roughened Bypass Channel (lump)	1	72220.00	0	64220	8000	72220
Site Cleanup/Erosion Control (lump)	1	3900.00	0	3900	0	3900
Planting Prep Contract (per plant)	1030	3.00	0	1090	2000	3090
		SUBTOTAL	6050	89610	10000	105660
TRAVEL						
Travel (mileage)	400	0.54	0	216	0	216
		SUBTOTAL	0	216	0	216
SUPPLIES/MATERIALS						
Bypass Channel Materials (lump)	1	54790.00	15700	21000	16000	52700
Planting Materials (lump)	1	24512.00	2425	21202	885	24512
Erosion Control Materials (lump)	1	12290.00	0	8175	4115	12290
		SUBTOTAL	18125	50377	21000	89502
EDUCATION/OUTREACH						
			0	0	0	0
		SUBTOTAL	0	0	0	0
EQUIPMENT						
Permit Fees & Related: DSL/USACE/SHPO/DEQ/County	1	24958.00	0	26002	0	26002
		SUBTOTAL	0	26002	0	26002
FISCAL ADMINISTRATION						
OWEB Fiscal Admin	1	9519.00	0	8519	0	8519
ODFW R&E Admin	1	0.00	0	0	0	0
		SUBTOTAL	0	8519	0	8519
		BUDGET TOTAL	24175	198879	33000	256054

Internal Review Results

Review Score: 0.2 out of 3

(0 = Do Not Fund, 1 = Strengthen Proposal, 2 = Recommend, 3 = Strongly Recommend)

Summary of Review Team Comments

While this is apparently a priority project, it was not supported as the project appears to be fully funded and there were significant discrepancies when compared with the application for ODFW/ODOT passage mitigation funds. This application, without identifying those funds, showed a need for \$72k, yet they were recently awarded nearly \$113 from those funds. Review scores included seven 0s and one 2.

Specific Review Team Comments

With the recent award of \$113k by the ODFW Passage Program, which exceeds the identified need, the applicant needs to completely revise the budget and explain why RE funds are still necessary. The applicant should withdraw the application if their need has been met.

There is no justification or explanation of the recreational or commercial fishing benefits of this project.

Specific Review Team Questions

Please explain how the design will meet fish passage requirements, and where it is in the approval process, as current statements seem to indicate certain elements may not meet passage requirements (shallow depth, no low flow channel).

Please better describe the priority of this structure in the larger context (watershed, Rogue Basin, statewide). While not explained in the application we understand that the project is presently not on the 2013 Statewide Fish Passage Priority list, even though it should be, and will be on the new 2018 list.

What other barriers are upstream from this site? How much of a barrier are they. How does this fit in with other passage restoration above this site?

Additional Files

Budget Information

[Budget Detail](#)

[Quote/Bid 2016](#)

Funding Summary & Detailed Budget Page

Instream Work Expense Quote from Engineer 2016

Maps

[Site Map](#)

Map

Photos

[Forest Creek Dam Photos](#)

Design Information

[Forest Creek Dam Construction Plan](#)

[Forest Creek Dam Planting Plan](#)

[Forest Creek Dam Removal Designs](#)

Management Plans and Supporting Documents

Permits and Reviews

Partnerships

[Forest Creek Dam Landowner Agreement](#)

Public Comment

[Forest Creek Dam American Rivers](#)

[Forest Creek Dam ODFW LOS](#)

Administrative Documents

[501\(c\)3 Non Profit Letter](#)

[Signature Page](#)

Letter of Proof for tax exempt status from IRS

ODFW R&E Grant Signature Page

Completion Report

A completion report has not been submitted for this project.