R & E Grant Application

Project #:

WF Millicoma River Fish Passage Improvements

Project Information

Requested Cycle:	17-6
R&E Project Request:	$0
Other Funding:	$0
Total Project:	$0
Spending Start Date:	7/1/2015
Spending End Date:	6/30/2017
Project Start Date:	7/1/2015
Project End Date:	6/30/2017
Organization:	Coos Watershed Association (Tax ID #: 93-1146207)

Fiscal Officer

Name:	Chris Bauman
Address:	P.O. Box 388 Coos Bay, OR 97420
Telephone:	541-888-5922
Fax:	541-808-9501
Email:	admin@cooswatershed.org

Applicant Information

Name:	Allison Tarbox
Address:	P.O. Box 388 Coos Bay, OR 97420
Telephone:	541-888-5922
Email:	atarbox@cooswatershed.org

Past Recommended or Completed Projects

This applicant has no previous projects that match criteria.

Location Information

Where is it?

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

Landowner Information

Name:	Coos County Road Department (C/O John Rowe)
Address:	1281 W. Central Blvd Coquille, OR, 97423
Phone:	541-396-7660
Email:	jrowe@co.coos.or.us

Site Description

Street Address, nearest intersection, or other descriptive location.

Allegany, Oregon. On the West Fork Millicoma Road (WF Millicoma Road), 3 miles past the junction with the Elliott State Forest 2000 Road and the end of the blacktop. Schumacher Creek is located at river mile 8.4 on the West Fork Millicoma River (WFMR) (Attachment A).

Directions to the site from the nearest highway junction.

For the town of Allegany, proceed approximately 6.5 miles on the WF Millicoma Road from the junction with East Fork Millicoma Road toward the ODFW Millicoma Interpretive Center/STEP Hatchery.

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

Full 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.

WFMR is able to floated for angler access below the creeks. There are a number of landowners that allow access although no formal agreements. Fish produced from these streams will be present in reaches of the WFMR up to and above the hatchery, where property is the Elliott State Forest.

Dominant Land Use Type:

Rural residential

Project Location

General Project Location.

County:	COOS
ODFW Dist:	Umpqua
Stream/Lake/Estuary Name:	Schumacher Creek
Sub-basin:	17100304
Tributary of:	West Fork Millicoma River

Specific Project Location.

Latitude	Longitude

43.48043	-124.03941

Project Summary

Project Summary

Please provide a couple sentence summary of the proposal.

We propose to replace two undersized, perched culverts on the WF Millicoma Road with bridges at the Schumacher Creek and an unnamed tributary at the ODFW Millicoma Hatchery. The new bridge crossings will improve fish production and watershed function by improving fish passage and flow conveyance within the WFMR basin.

Overall Project Goals

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

This project is designed to improve the passage on Schumacher Creek for winter steelhead, coho, and fall chinook by allowing adult and juvenile access at the stream crossing on the WF Millicoma Road that has been a barrier since 1996.

This project is designed to improve the passage of Hatchery Creek, unnamed tributary to WFMR that runs to the ODFW Millicoma Interpretive Center/STEP Hatchery, for winter steelhead by allowing adult and some juvenile access at the stream crossing on the WF Millicoma Road.

This project is also designed to reduce crossing failure risk and improve water quality and flood conveyance by converting the undersized culverts at Schumacher Creek and the Hatchery Creek into bridges on the WF Millicoma Road.

Primary objectives of R&E funding

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

Improve fish passage on Schumacher Creek by upgrading an undersized culvert that has the potential to plug and blocks fish passage to a bridge that will be passable for all juvenile and adult salmonids and steelhead.

Effectively pass a 100-year flow event by calculating post-project flow capacities once the undersized culvert is upgraded to a bridge on Schumacher Creek.

Improve water quality by reducing sediment loads in Schumacher Creek and WFMR through post-implementation observations of the substrate in the stream channel.

Current Situation/Justification

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

The Schumacher and Hatchery Creek crossings have ACWs of 13.2ft and 11.35ft, respectively, with 36” plastic pipes that are extremely undersized and at-risk of delivering catastrophic fine sediment to the WFMR. The Schumacher crossing blew out in 1996 and a replacement culvert was improperly imbedded to the perched position, blocking access to 2.5 miles of good spawning and rearing habitat for coho and steelhead juveniles and adults. The perched Hatchery crossing blocks access to 0.25 miles of good spawning and rearing habitat and the transportation of approximately 270 cubic yards of high quality spawning gravels.

The Coos County Road Department has faithfully maintained the gravel road to the ODFW Millicoma STEP hatchery. Between Schumacher Creek and the hatchery, the road is extremely prone to wet weather degradation from steady traffic school buses and volunteers traveling to assist ODFW with hatchery operations, as well as fishermen traveling to fish for winter steelhead near the hatchery. With very few houses upstream of Schumacher Creek, the County efforts grading the road surface and hauling gravel to keep the road in travelable condition during the winter months to the bus turn-around at the hatchery over the years has saved ODFW thousands of dollars.

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.

These crossings on the WF Millicoma Road create frequent problems throughout the winter months and during fishing seasons when there are heavy rain events and the water levels are higher tha normal. The Schumacher crossing is notorious for becoming plugged with debris during high winter flows and washing out the road with the diverted flows, preventing STEP Hatchery volunteers, school buses, steelhead fishermen, and landowners from reaching their destination up the road. The WF Millicoma Road provides the only access to the ODFW Millicoma Interpretive Center/STEP Hatchery and private property along this road. It also is the only access for recreation steelhead anglers to reach the six miles upstream of the Schumacher Creek confluence that are considered excellent steelhead fishing waters on the WFMR, with the most popular spots between Schumacher Creek and the hatchery.

The Coos County Road Department regularly maintains the WF Millicoma Road up to the ODFW Millicoma STEP hatchery, especially during the winter month when the wet weather conditions quickly degrade the gravel road due to the steady traffic of school buses and hatchery volunteers.

Percent benefit split between Commercial and Recreational anglers:

15 % Commercial
85 % Recreational

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

Improving fish passage at Schumacher Creek and Hatchery Creek will result in increased production of primarily winter steelhead and coho salmon. In the ocean, commercial fisherman are able to harvest coho and/or allow greater access to coho due to reduced ESA restrictions when wild/natural coho abundance is greater, thus there will be commercial benefits from the project. However, steelhead are not harvested commercially from the Coos Stock (although some by tribal fishers in the Columbia), thus benefits from increased coho and steelhead production resulting from restored fish passage will be largely for recreational anglers in the bay and WFMR.

This project has been identified as an ODFW priority for:

Local/watershed
Basin/regional

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.

The Coos Watershed Association Action Plan (1995) identifies improving adult salmon migration to headwater spawning gravel as one on its Action Plans (page 31).

OWEB's Summary of Watershed Health Indicators for the Oregon Coast Coho ESU (2007) identifies fish passage barriers as one of the limiting factors for coho in the Millicoma watershed.

CoosWA's Bonneville Environmental Foundations Model Watershed Program proposal compliments this project by determining the cumulative effects of watershed restoration on critical indicators of watershed health.

These actions to replace two culverts that block fish passage are directly in alignment with the Oregon Plan for Salmon and Watersheds.

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

No

This project is intended to benefit the following species:

Fall Chinook Salmon
Coho Salmon
Winter Steelhead
Cutthroat Trout

This project will benefit anglers or fishery by providing:

Angler Access
Fish Passage

Angler Access

This project will:

Maintain/restore current angler access
Improve access to existing angling opportunities

Choose the following that best describes the angling access provided by the project:

Bank
Road

Do similar access sites, facilities, or fisheries exist within 10 miles of the project site?

Yes

There is access to steelhead fishing waters downstream of Schumacher Creek, however it is very limited because it is a highly rural residential area. The majority of the bank access is privately owned, limiting the areas that anglers can access by foot. Of the 8 miles downstream of the Schumacher Creek confluence, only approximately 10% can be accessed by anglers on foot. Upstream of the confluence, there is approximately 6 miles of steelhead fishing water with the majority (75%) of it being public lands.

Fish Passage

This fish passage project will:

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

Purchase/installation of culvert or bridge

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	1/2018-4/2018	No
Materials Acquisition	4/2017-8/2018	Yes
Bridge Construction	8/2018-10/2018	No
Project Inspection	8/2018-10/2018	No
Post-Implementation Review	12/2018-12/2020	No
Project Maintenance	As Needed	No

Permits

Permit	Secured?	Date Expected
USACE/DSL Joint Permit	No	April 2018
ODF Forest Practices Notification	No	June 2018

Project Design and Description

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

These fish passage bridges were designed by Don Porior, P.E., (Porior Engineering), with project development assistance by Allison Tarbox (CoosWA Project Manager), Chris Claire (ODFW Assistant District Fisheries Biologist), Gary Gangewer (Coos County Road Department Bridge Inspector) and John Rowe (Coos County Road Department Roadmaster and Public Works Director). Don Porior is a retired BLM and registered professional engineer with over 30 years of experience in designing infrastructure to be compatible with fish passage requirements. Allison Tarbox has a Master's in Geography with emphasis in fluvial geomorphology and has five years of experience with river systems and a year and a half of experience (two work seasons) with watershed restoration specifically dealing with wood placements and fish passage issues. Chris Claire has provided fish habitat restoration project oversight in southwestern Oregon for six years. Gary Gangewer has over 30 years of experience with the county road department and a bridge inspector since 1993, managing consulting engineers for all the bridge replacements and repair projects. John Rowe has been involved in road construction since 1983, working for the Oregon Highway Department, Bracelin-Yeager, Knife River/LTM, and Coos County.

The Schumacher Creek crossing will be upgraded to a bridge that was designed to optimize fish passage and reduce the risk of crossing failure (see attached designs: Attachment B). The channel gradient through the project site is moderate at 9%. This fish passage site was designed to have an opening with a width that was wider than the bankfull width measured in the field and a height that yielded a cross-sectional area that could pass at least a 100-yr flood event.

An upgraded culvert was considered, which would need to be at least 19.7 ft in diameter based on NOAA fish passage criteria and the active channel width. Upgrading the crossing to a bridge

would meet criteria and provide the best passage for fish as well as drainage and decrease the potential to plug.

Engineering

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

Yes

Not associated with ODFW

Project Management and Maintenance

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

These bridge crossings are meant to be permanent structure that will have an estimated 50-yr lifespan.

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

CoosWA will conduct annual inspections of the site for 2 years after project completion to assess fish passage parameters and assess the revegetation of disturbed soils at the site. The County Road Department will perform all bridge structural and integrity inspections following major flood flow events and maintain annual inspections at a minimum. Coos County Road Department will be assume responsibility for any maintenance or repairs that are needed, and CoosWA will assist if needed to make sure it is accomplished.

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?

Yes

Monitoring during migratory seasons and high flows will be conducted at the bridge sites to make sure the bridges are working as designed.

Project Funding

Funding

Have you applied for OWEB funding for this project?

Yes

Awaiting a decision from the panel.

CoosWA submitted an application in the Fall 2016 cycle of OWEB funding. We are awaiting the Board's decision on which projects are being funding this round. In the chance that the project does not received OWEB funds from this past cycle, the project will be resubmitted in the Spring 2017 OWEB cycle and will be awaiting their decision until early Fall 2017.

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

[{"source":"OWEB","type":"Cash","secured":"Pending","dollarValue":110201,"comments":"Bridge materials and construction, project manager and county surveyor time"},{"source":"Coos County Road Department","type":"Cash","secured":"Secured","dollarValue":155420,"comments":"Bridge

materials, engineered designs"},{"source":"ODFW","type":"In-Kind","secured":"Secured","dollarValue":768,"comments":"Staff time for project development and technical assistance"}]

Other Funding Source	Type	Secured	Dollar Value	Comments
OWEB	Cash	Pending	110201	Bridge materials and construction, project manager and county surveyor time
Coos County Road Department	Cash	Secured	155420	Bridge materials, engineered designs
ODFW	In-Kind	Secured	768	Staff time for project development and technical assistance
		Total	266389	

Budget

Item	Unit Number	Unit Cost	In-kind or non-cash contributions	Funding from other sources	R&E Funds	Total Costs
PROJECT MANAGEMENT						
			0	0	0	0
		SUBTOTAL	0	0	0	0
IN-HOUSE PERSONNEL						
			0	0	0	0
		SUBTOTAL	0	0	0	0
CONTRACTED SERVICES						
			0	0	0	0
		SUBTOTAL	0	0	0	0
TRAVEL						
			0	0	0	0
		SUBTOTAL	0	0	0	0
SUPPLIES/MATERIALS						
			0	0	0	0
		SUBTOTAL	0	0	0	0
EDUCATION/OUTREACH						
			0	0	0	0
		SUBTOTAL	0	0	0	0
EQUIPMENT						
			0	0	0	0
		SUBTOTAL	0	0	0	0
FISCAL ADMINISTRATION						
			0	0	0	0
		SUBTOTAL	0	0	0	0
		BUDGET TOTAL	0	0	0	0

Additional Files

Budget Information

Maps

Photos

Design Information

Management Plans and Supporting Documents

Permits and Reviews

Partnerships

Public Comment

Administrative Documents

Completion Report

A completion report has not been submitted for this project.