R & E Grant Application 17-19 Biennium

Project #: 17-025

Milton Creek-Hancock Stream Restoration

Project Information

Requested Cycle:	17-3
R&E Project Request:	$18,000
Other Funding:	$126,043
Total Project:	$144,043
Spending Start Date:	12/1/2017
Spending End Date:	12/31/2018
Project Start Date:	11/1/2017
Project End Date:	12/31/2019
Organization:	Scappoose Bay Watershed Council (Tax ID #: 93-1266389)

Fiscal Officer

Name:	Pat Welle
Address:	57420-2 Old Portland Road Warren, OR 97053
Telephone:	503-397-7904
Email:	pat@scappoosebay-wc.org

Applicant Information

Name:	Pat Welle
Address:	57420-2 Old Portland Road Warren, OR 97053
Telephone:	503-397-7904
Telephone 2:	503-947-9704
Email:	pat@scappoosebay-wc.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 private land owned or managed by another party

Landowner Information

Name: Mike and Kathy Chakos
Address: 61508 Hancock Dr.
St. Helens, OR, 97051
Phone: 503-366-3445
Email: budlong62@hotmail.com

Name: Tim and Roxanne Rathmanner
Address: 31226 Pittsburg Road
St. Helens, OR, 97051

Name: Jim and Sonya Harding
Address: PO Box 1380
St. Helens, OR, 97051

Name: Loren Stelzenmueller
Address: 61510 Hancock Dr.
St. Helens, OR, 97051

Site Description

Street Address, nearest intersection, or other descriptive location.

Project site is located approximately 7 miles west of St. Helens, Oregon. The location is off Hancock Drive on Pittsburg Road

Directions to the site from the nearest highway junction.

Drive 7 miles from St. Helens on Pittsburg Road. Go left onto Hancock Dr; follow it around to the right, then left. Site is on private property at end of Hancock.

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.

NA

Dominant Land Use Type:

Forest
Rural residential

Project Location

General Project Location.

County: Columbia

Town/City:	St. Helens
ODFW Dist:	NW Region; North Willamette Watershed District
Stream/Lake/Estuary Name:	Milton Creek
Sub-basin:	Lower Columbia Drainage Basin
Tributary of:	Multnomah Channel and Columbia River

Specific Project Location.

Latitude	Longitude
45.888595	-122.922865

Project Summary

Project Summary

Please provide a couple sentence summary of the proposal.

The project goal is to enhance habitat for all life stages of salmon in Milton Creek, a major tributary of the Lower Columbia River. Four large wood complexes will be installed to address extremely low mainstem wood complexity. Results will be increased pools, shading, gravel sorting, and detritus material.

Overall Project Goals

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

Enhanced stream habitat for all life stages of salmonids at a mainstem location directly downstream of identified Anchor Habitat; extending existing quality habitat at a key reach.

Increased wood complexity, off-channel habitat, and gravel retention; and increase groundwater connectivity for low-water recharge.

Increase riparian diversity and future large wood recruitment by removing invasive vegetation and replanting approximately 2800 native plants on 3.2 acres of riparian forest.

Primary objectives of R&E funding

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

Install four large wood complexes within 1400-feet of mainstem creek, within one year of project onset.

Remove invasive plant species on approximately 3.2 acres through mechanical methods, and plant 2800 native trees and shrubs during the first winter after wood install (2018-19).

Current Situation/Justification

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

Milton Creek supports ESA-listed Lower Columbia Spring Chinook, coho, steelhead, cutthroat and lamprey. A 2012 Limiting Factor Analysis identified functional summer pool habitat as the most limiting factor in fish production in Milton Creek. Historic logging practices and rural development have resulted in an extreme lack of wood to create pools, a lack of riparian plants for shading or detritus, and a lack of riparian conifers for wood recruitment. The stream also lacks the ability to retain and sort spawning gravels. Portions of the lower creek have been identified as having elevated stream temperatures, making middle and upper reaches critical.

This project is at RM 11.2, directly downstream of relatively high quality habitat (LFA Anchor Site 3), making this an ideal reach for enhancement. R&E funding is needed to match an OWEB grant, and will be used to purchase the logs for the wood complexes.

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.

Milton Creek is a major tributary to the Multnomah Channel and Columbia River. Fish surveys in Milton Creek between 2006-2016 found coho, cutthroat, and steelhead populations at pool densities ranging from 0 to 0.6 (count/square meter). The 2012 Limiting Factor Analysis (LFA) estimated 6840 juvenile coho in Milton Creek in 2008. These are significantly lower than historical salmonid population numbers, but support the current use of this basin. Since 2001, 10 fish passage corrections have been completed in this basin, and an additional one is currently in process. The LFA identified functional summer pool habitat as the most limiting factor of smolt production potential. Four mainstem Anchor Sites were also mapped; the largest of these is directly upstream of this project site, and was noted as having the highest current and potential function, due to its low gradient and interactive floodplain. Installing large wood at this location will create a minimum of four new pools, providing increased cool-water habitat and gravel accumulation. This will expand this quality area to provide increased salmonid population growth.

Percent benefit split between Commercial and Recreational anglers:

50 % Commercial
50 % Recreational

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

Milton Creek drains into Scappoose Bay and Multnomah Channel near the Channel's confluence with the Columbia River. This area is heavily used by both commercial and recreational fishermen for coho, steelhead, and other species. Restoration actions will increase quality habitat for all stages of these species, increasing the benefits to both commercial and recreational anglers in the Lower Columbia River area.

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.

Lower Columbia River Conservation & Recovery Plan for Oregon Populations of Salmon and Steelhead. Project implements activities identified in Tables 7-3A-C; pgs. 243, 244, 255, 256.

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
Lamprey
Winter Steelhead
Cutthroat Trout

This project will benefit anglers or fishery by providing:

Habitat Enhancements

Habitat Enhancements

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

In water structure, complexity, and habitat
Planting or vegetation management

Project Description

Schedule

Activity	Date	RE Funding
Final project design - specific LWD locations, number of logs & boulders Obtain permits; final planting plan.	February, 2018	No
Secure contracts for installation, materials acquisition	May-June, 2018	Yes
Install LWD complexes during in-water work window	August, 2018	No
Remove invasive species and prepare site for planting	October, 2018	No
Complete native vegetation planting	April, 2019	No

Permits

Permit	Secured?	Date Expected
ODF Forest Practices Notification	No	April, 2018
Columbia County - Land use	No	April, 2018

Project Design and Description

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

This project was developed through a series of site visits originally initiated by the landowners, whose concern was lack of streambank vegetation and exposure. The ODFW Fish Biologist identified this site as an ideal location for standard LWD structure restoration methods due to the probable enhancement success and benefits, and its location with respect to existing higher quality habitat. Alternatives considered included riparian vegetation only, and a series of alternatives that included up to nine LWD structures. It was determined that vegetation by itself would not provide sufficient benefits, and may be short-lived due to the bank conditions. Four LWD structures were determined to be a reasonable approach, though final design and funding will determine exact number of structures. Four structures at ideal locations will provide significant benefits, and is considered a good balance between ecological benefit and reasonable cost for this reach length. Locations were identified where existing conifer vegetation can be incorporated as supporting anchors; structures will be keyed in as necessary and appropriate per final site design.

Both an engineering firm and an installing contractor, each with extensive experience in these types of projects, reviewed the site to provide estimates of number and placement of large wood structures. The conceptual design includes one structure larger than the other three structures

due to stream conditions relative to a residential unit. The other structures are designed to have an average of five logs and seven supporting boulders. A final design will determine exact large wood placement, the need for keyed vs non-keyed placements, boulder support and ballast logs required.
The revegetation portion of the project includes removal of invasive species and native vegetation planting on approximately 3.2 acres. Native species will include conifers for future large wood recruitment, plants with fast-growing roots along the streambank, and a mix of shrubs to provide complexity and shading.
R&E funds will be used to purchase the logs for the installed LWD structures.

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?

This project is considered a permanent habitat enhancement that will not need replacing. Installed large wood will alter the current streambank condition such that additional large wood and complexity will be an ongoing benefit to this reach.

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

The SBW Council will monitor the site for five years, and will maintain the vegetation survivability with the support of the landowner. Due to the complexity of this site in terms of both large wood structures and vegetation, OWEB funds have been requested to allow a minimum of four visits per year for three years, and two visits per year for the 3-5 year post-project period. Additional vegetation to support streambank enhancements will be planted as needed throughout the post-project period.

Will the project require ongoing maintenance?

Yes

The vegetation planted will require maintenance for a minimum of two years, to reduce impacts of invasive species. Similar projects have been successful through regular weed maintenance, and it is expected similar measures will be required here. However, the Council has had considerable vegetation viability success due to the larger plant sizes and plant quality used, and it is expected maintenance of invasive species will not be a significant factor after 3 years.

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

Yes

Photo points of the project have already been secured, and additional ones will be taken before, during, and after the project. The number and location of pools will also be visually identified before and after project implementation, as well as annually post-project. Ideally, fish monitoring could be conducted, but it is unknown if that will be available with current ODFW funding.

Project Funding

Funding

Have you applied for OWEB funding for this project?

Yes
OWEB application number: 218-3008
R&E money is needed as matching funds.
Awaiting a decision from the panel.
Project was submitted for funding Spring 2017; decisions will be made in October 2017.

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

[{"source":"ODFW","type":"In-Kind","secured":"Secured","dollarValue":6000,"comments":""},{"source":"Columbia SWCD","type":"In-Kind","secured":"Secured","dollarValue":1000,"comments":""},{"source":"Scappoose Bay Watershed Council's Native Plant Nursery","type":"In-Kind","secured":"Secured","dollarValue":3220,"comments":""},{"source":"Landowners","type":"In-Kind","secured":"Secured","dollarValue":1200,"comments":""},{"source":"OWEB","type":"Cash","secured":"Pending","dollarValue":114623,"comments":"OWEB site visit occurred 6/13/17; project funding will be known late summer to early fall."}]

Other Funding Source	Type	Secured	Dollar Value	Comments
ODFW	In-Kind	Secured	6000	
Columbia SWCD	In-Kind	Secured	1000	
Scappoose Bay Watershed Council's Native Plant Nursery	In-Kind	Secured	3220	
Landowners	In-Kind	Secured	1200	
OWEB	Cash	Pending	114623	OWEB site visit occurred 6/13/17; project funding will be known late summer to early fall.
		Total	126043	

Budget

Item	Unit Number	Unit Cost	In-kind or non-cash contributions	Funding from other sources	R&E Funds	Total Costs
PROJECT MANAGEMENT						
PM - SBWC Coordinator	100	42.00	0	4200	0	4200
		SUBTOTAL	0	4200	0	4200
IN-HOUSE PERSONNEL						
Resource Technician - SBWC Native Plant Nursery Manager	160	31.00	0	4960	0	4960
Landowners	60	20.00	1200	0	0	1200
		SUBTOTAL	1200	4960	0	6160
CONTRACTED SERVICES						
Contract - Design & Construction Supervision	1	20000.00	0	20000	0	20000
Log Placement Contract Services	1	0.00	0	31000	0	31000
Road closure	1	2000.00	0	2000	0	2000
Mobilization	1	15000.00	0	15000	0	15000
ODFW Fish Biologist Support (design, monitoring, placement)	120	50.00	6000	0	0	6000
CYRC Planting Crew	2	500.00	1000	0	0	1000
		SUBTOTAL	7000	68000	0	75000
TRAVEL						
Site visits; SBWC staff	300	0.53	0	161	0	161
		SUBTOTAL	0	161	0	161
SUPPLIES/MATERIALS						
Large wood and boulders - large LWD structure	1	20000.00	0	2000	18000	20000
Large wood and boulders - smaller LWD structures (3)	3	6500.00	0	19500	0	19500
Native vegetation - Trees	1680	4.00	2520	4200	0	6720
Native vegetation - Shrubs	700	2.50	700	1050	0	1750
Vegetation Protectors	300	0.70	0	210	0	210
		SUBTOTAL	3220	26960	18000	48180
EDUCATION/OUTREACH						
			0	0	0	0
		SUBTOTAL	0	0	0	0
EQUIPMENT						
			0	0	0	0
		SUBTOTAL	0	0	0	0
FISCAL ADMINISTRATION						
Fiscal Admin	0	0.00	0	8342	0	8342
Post Project Monitoring / Maintenance	0	0.00	0	2000	0	2000
		SUBTOTAL	0	10342	0	10342
		BUDGET TOTAL	11420	114623	18000	144043

Internal Review Results

Review Score: 1 out of 3

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

Summary of Review Team Comments

While habitat projects can have value to populations and the angler, this application did not make a strong case for either. The applicant left out many key facts and factors that would have allowed a more thorough review. Based on the information submitted the review team believed that this project has not yet been adequately designed and they were not able to adequately review it. That being said, most members of the team agreed that even if this information had been included, this projec would likely have very limited benefits to anglers, especially in the short term. Review team scores included two 0s, six 1s, and two 2 with an overall score of 1 (strengthen proposal).

Specific Review Team Comments

There are few details provided, particular in regards to the R&E funds- how many logs will be purchased, what size, etc. It does not appear this project has even been designed adequately yet. The application should be improved.

No design drawings, plans, or discussion of designs was included. Design plans should be included with the application. The ODFW letter explains more about what is going on than the application.

Only 4 structures, there is not information on how this fits into a larger watershed restoration context, what has been done upstream/downstream, what is the cause of the problem, does this address the cause or the symptoms? While it will help habitat, adding four structures to a small reach may not actually provide a lift to the population but rather allow fish to move from marginal habitat area to this newly upgraded habitat.

Likely very little benefit to anglers, but some increase in habitat quality could occur but at this scale it is very hard to show value to the angler. This may be due to the lack of information on design and alternatives in application.

Very little information about design included. Aside from the statement that the number of structures was chosen based on a relative cost-benefit consideration, it is not clear what the reasoning was for the design. What are the habitat benchmarks they wish to achieve, what is the gap between the desired outcomes and the current condition, and will this project get us there? There is no discussion on the specific priority of this project

The invasive plant removal doesn't seem to directly fit R&E funding goals. The budget doesn't include money towards plant removal from R&E but the proposal states that is what the money will be used for.

The proposal says that the project will be permanent. Large wood placements are not permanent and will need to be replaced unless and until adequate wood sourcing exists to support natural recruitment of wood.

These restoration projects are great however R&E funding is likely not the most appropriate source for this project. There may be long term benefits to anglers however those benefits are not guaranteed or substantial. Benefits may also be immeasurable. There are more appropriate funding sources.

The cost is relatively low and simply provides for purchase of the wood. However, it is difficult to evaluate in terms of cost relative to benefits with so little design information or justification that the

project will be sufficient to a habitat objective.

Specific Review Team Questions

There was no information in the application on the priority of this project or for that matter the priority of this stream reach for LWM enhancements. What are the factors limiting Milton Creek?

How will these project be monitored beyond photos. Why not account for biological monitoring in the project proposal and seek funds to answer they fundamental question(s) of "did it work" and how fish responding to the treatments.

Is there a way to incorporate any public access into this site(easements or other avenue)?

Additional Files

Budget Information

Maps

MCH_Location Map	*Project site location within the watershed*

Photos

MCH_Photos	*Photos taken along project site*

Design Information

MCH_Project Detail Map	*Project elements detail at site with aerial image*

Management Plans and Supporting Documents

Permits and Reviews

Partnerships

MCH_Match Commitment	*Letters of commitment, ODFW, CSWCD*

Public Comment

MCH_LandownerSupport	*Landowner support letters*

Administrative Documents

RE_Racial	*Racial and Ethnic Statement*
RE_SigAuthorization	*Signature Authorization Page*
Tax Exemption	*SBWC Tax Exemption Status Letter*

Completion Report

A completion report has not been submitted for this project.