



Kate Brown, Governor



775 Summer Street NE, Suite 360  
Salem OR 97301-1290  
[www.oregon.gov/oweb](http://www.oregon.gov/oweb)  
(503) 986-0178

*Agenda Item M supports OWEB's Strategic Plan priority # 5: The value of working lands is fully integrated into watershed health.*

## MEMORANDUM

**TO:** Oregon Watershed Enhancement Board  
**FROM:** Eric Williams, Grant Program Manager  
**SUBJECT:** Agenda Item M – Spring 2020 Open Solicitation Grant Offering  
March 9-10, 2021 Board Meeting

### I. Introduction

This staff report describes the Spring 2020 Open Solicitation Grant Offering and funding recommendations. Staff request the board approve the funding recommendations outlined in Attachment D to the staff report, including funding for 52 restoration grants, 24 technical assistance grants, and 9 stakeholder engagement grants.

### II. Spring 2020 Grant Offering Background and Summary

Due to the pandemic and the subsequent spending plan rebalance, the application deadline was extended from April 27, 2020 to July 27, 2020. A total of 143 applications were received requesting \$18.8 million. Attachment A shows applications submitted by region, project type, and funding request.

### III. Review Process

Staff adapted to a virtual review process where all eligible grant applications were reviewed by the agency's six Regional Review Teams (RRTs). Staff scheduled virtual site visits for as many proposed projects as possible. Per OWEB process, all RRT members were invited to these visits.

OWEB then facilitated RRT meetings in each region for all grant types offered. Reviewers considered the likelihood of success of the proposed project based on evaluation criteria in rule, which are provided in Attachment B. After classifying applications as "Fund" or "Do Not Fund," the RRTs then prioritized the projects recommended for funding by application type.

The RRT evaluations and recommendations, along with staff recommendations, were distributed to all applicants. Attachment C includes the number of applications recommended by RRTs and staff for each region by project type, as well as staff-recommended award totals by application type and region. Prior to the board meeting, staff will forward to the board any written comments received from applicants regarding the RRT and staff recommendations.

#### IV. Sage-grouse Projects

At its April 2015 meeting, the board adopted a policy to make available at least \$10 million through its granting programs over the next ten years in support of projects located in Oregon's sage steppe ecosystem that improve greater sage-grouse habitat. The Spring 2020 Open Solicitation Grant Offering includes 2 projects that meet this criteria, 221-5017, Addressing the Gaps in Sage-grouse Habitat, \$74,876, and 221-5023, Burns/Lakeview Local Implementation Team Coordinator, \$70,802. Total funding awarded to sage-grouse projects in all categories since April 2015 is \$9,396,918.

#### V. Salmon Plate Projects

Using the board's 2015 policy related to projects funded with Salmon License Plate dollars, staff recommend distributing \$253,655 for this offering to projects shown in Table 1.

**Table 1: Salmon Plate Projects**

Project Number and Name	Salmon Plate Funds Recommended
221-1000 Seeley Creek Habitat Project	\$100,000
221-1005 Coal Creek Habitat Enhancement Phase 1	\$49,987
221-2000 Tenmile Lakes Watershed Beaver Analogue Project	\$53,668
221-3004 Sandy River Basin Aquatic Habitat Restoration Project	\$50,000

#### VI. Funding Recommendation

Staff considered the RRT recommendations and funding availability in developing the staff funding recommendations provided in Attachment D, which includes the number of applications recommended for funding by RRTs and staff by region and grant type. The funding recommendations for the Spring Open Solicitation Grant Offering are summarized in Table 2. When the spending plan was rebalanced in June to account for lottery revenue reductions, the board acknowledged that additional funds would likely accrue in sufficient amounts to award one more grant cycle this biennium. In addition to funding recommendations, Table 2 includes recommended additions to the spending plan based on available revenue.

**Table 2: Spending Plan and Funding Recommendations for Spring 2020 Grant Offering**

Grant Type	Current Spending Plan Balance	Additional Spending Plan Funds Requested	New Spending Plan Balance	Staff Recommendation
Restoration	\$3,257,000	\$5,031,000	\$8,288,000	\$8,287,060
Technical Assistance	\$525,000	\$774,000	\$1,299,000	\$1,298,917
Stakeholder Engagement	\$248,000	\$262,000	\$510,000	\$509,704

TOTAL	\$4,030,000	\$6,067,000	\$10,097,000	\$10,095,681
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Staff recommend the board increase the spending plan by the amounts shown in Table 2 and award funds for the staff-recommended projects listed in Attachment D.

**Attachments**

Attachment A. Grant Applications Submitted

Attachment B. Evaluation Criteria

Attachment C. RRT and Staff Funding Recommendations

Attachment D. Regions 1-6 Funding Recommendations

# Oregon Watershed Enhancement Board

## July 27, 2020 Open Solicitation Offering

### Applications Received by Type

	Stakeholder Engagement	Technical Assistance	Restoration	Totals
Region 1	2	11	14	27
Region 2	2	13	13	28
Region 3	4	5	16	25
Region 4	2	5	9	16
Region 5	3	7	16	26
Region 6	2	5	14	21
Totals	15	46	82	143

### Dollar Amounts by Application Type

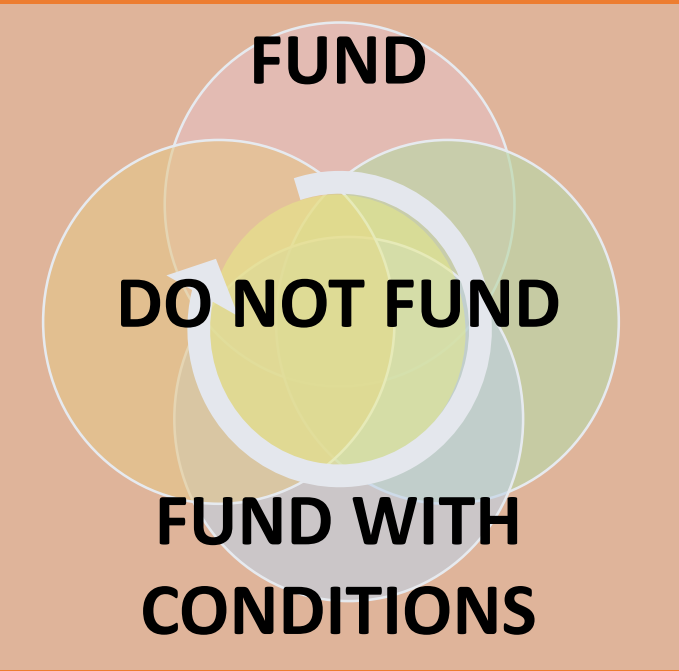
	Stakeholder Engagement	Technical Assistance	Restoration	Totals
Region 1	97,409	558,362	2,287,018	\$2,942,789
Region 2	55,090	740,447	4,178,470	\$4,974,007
Region 3	293,319	266,070	3,903,334	\$4,462,723
Region 4	68,813	286,181	2,466,756	\$2,821,750
Region 5	207,454	300,767	1,563,326	\$2,071,547
Region 6	46,030	237,900	1,214,095	\$1,498,025
Totals	\$768,115	\$2,389,727	\$15,612,999	\$18,770,841



# Open Solicitation – Restoration Grants

PROVIDE PUBLIC BENEFIT FOR WATER QUALITY, NATIVE FISH AND WILDLIFE HABITAT, OR WATERSHED/ECOSYSTEM FUNCTION

Recommend



Regional team reviews & evaluates each project individually based on how well project meets criteria

Prioritize



**CRITERIA**

How well project meets criteria for project evaluation & preferences, including:

- Causes over symptoms of disturbance
- Whole watershed approach over site-specific
- Collaboration over single-party



**CERTAINTY OF SUCCESS**

Certainty of success, based on the organizational capacity of the applicant & the likelihood the project will meet its ecological objectives



**BENEFIT TO OREGON PLAN**

Benefit to the Oregon Plan for Salmon & Watersheds, as evidenced by its expected benefits to watershed functions, fish habitat or water quality



**COST BENEFIT**

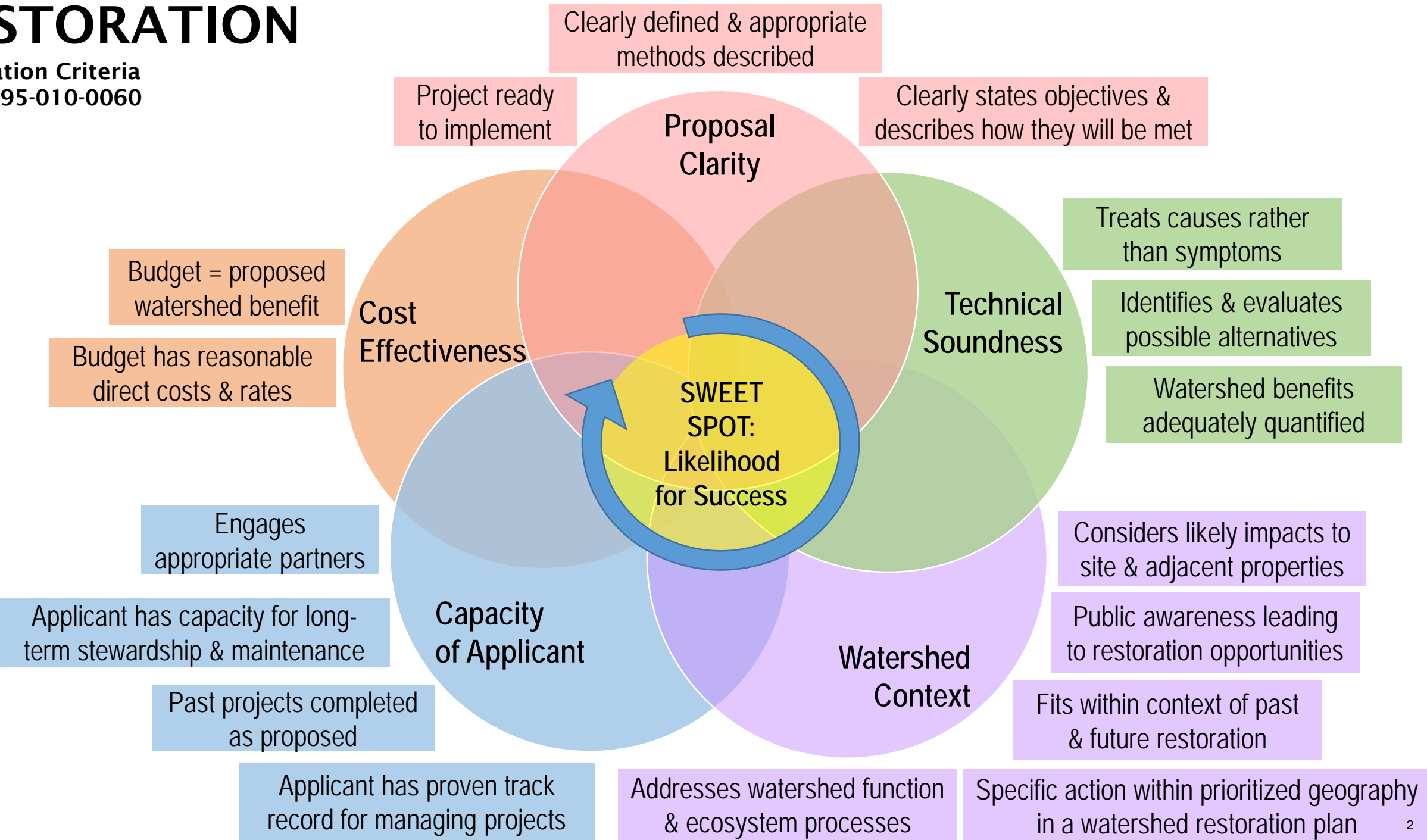
Project costs relative to the anticipated watershed health benefits

Recommendation to Staff

Staff review recommendations from each regional review team & make a statewide funding recommendation to the Board based on available resources for the grant period & type.

# RESTORATION

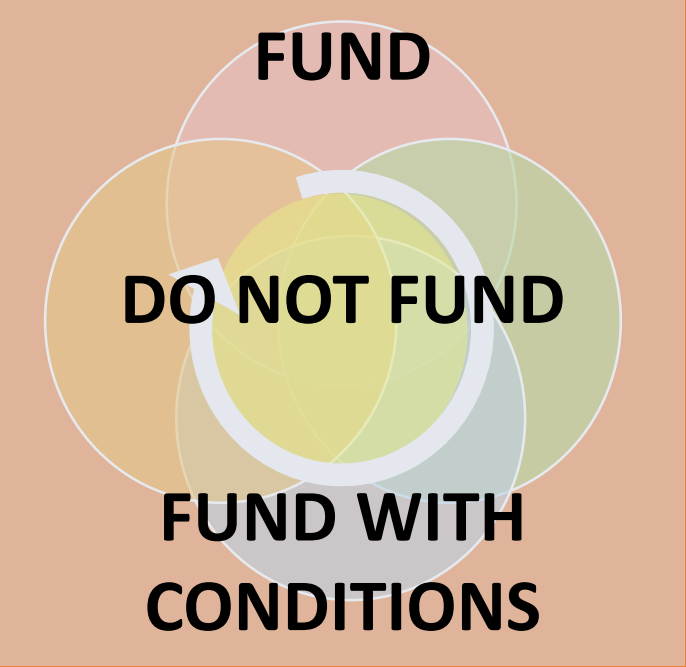
Evaluation Criteria  
OAR 695-010-0060



# Open Solicitation – Technical Assistance Grants

PROVIDE PUBLIC BENEFIT FOR WATER QUALITY, NATIVE FISH AND WILDLIFE HABITAT, OR WATERSHED/ECOSYSTEM FUNCTION

Recommend

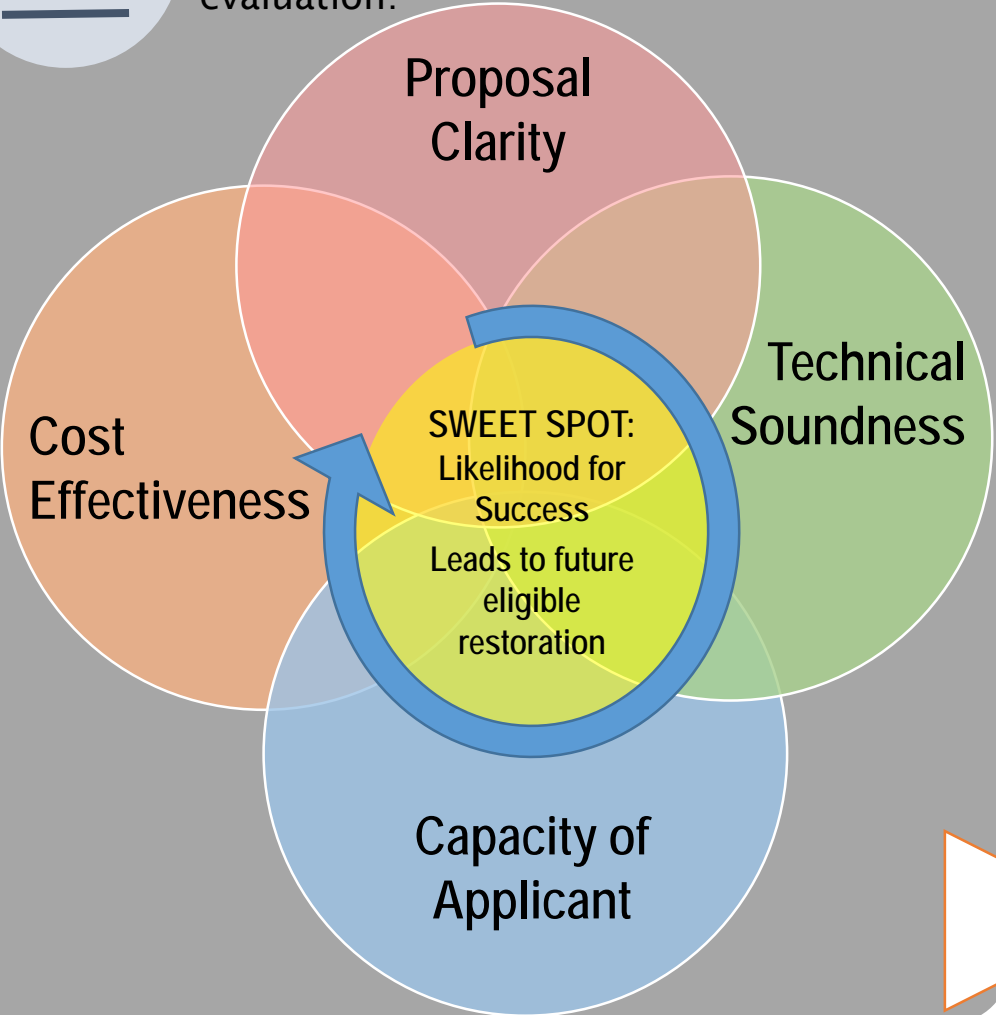


Regional team reviews & evaluates each project individually based on how well project meets criteria

Prioritize



**CRITERIA**  
How well project meets criteria for project evaluation:



Recommendation to Staff

Staff review recommendations from each regional review team & make a statewide funding recommendation to the Board based on available resources for the grant period & type.

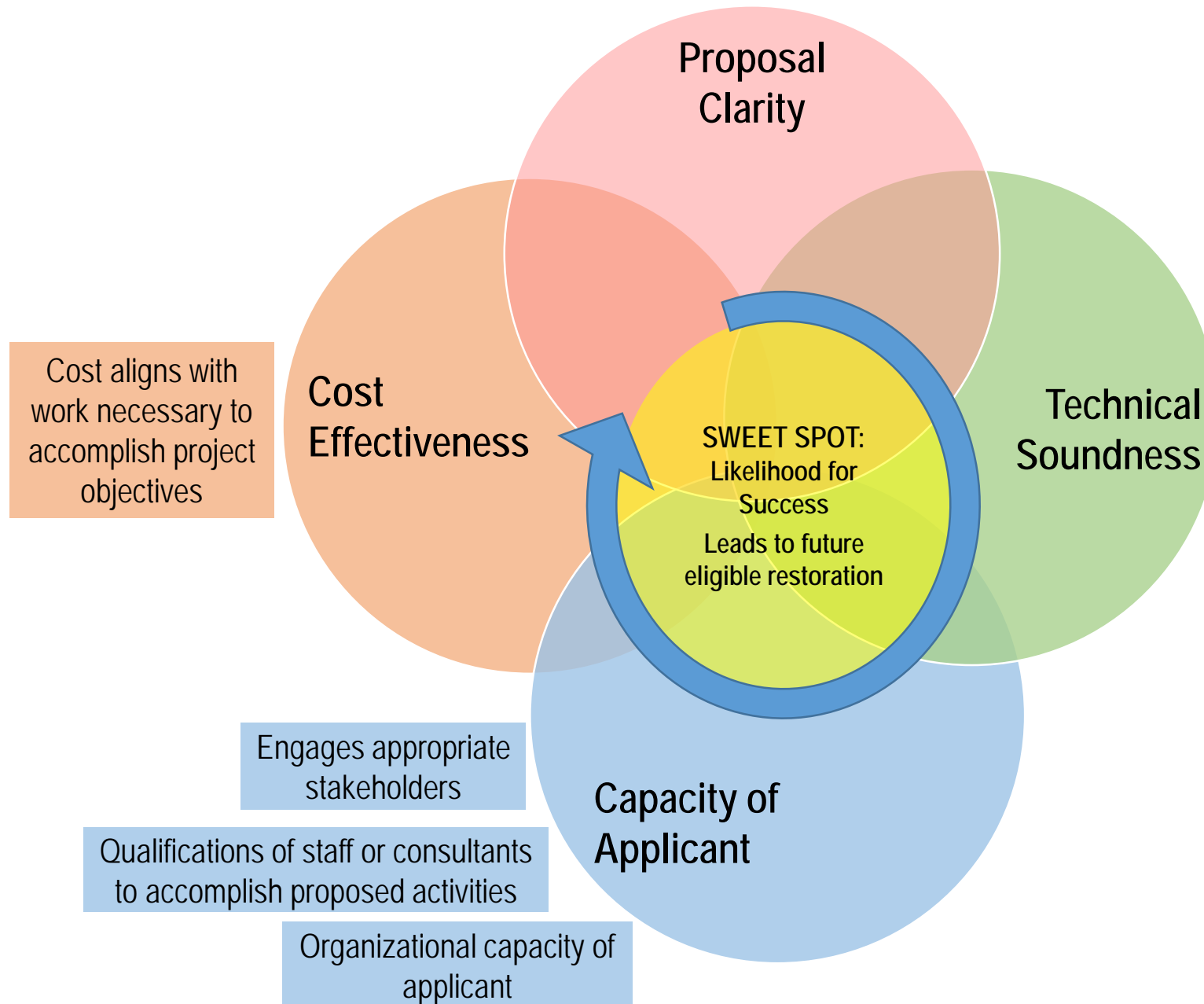
# TECHNICAL ASSISTANCE

Evaluation Criteria  
OAR 695-030-0045

**Technical Design & Engineering** = project feasibility reports, designs, or engineering materials that directly lead to site-specific restoration or acquisition projects within a specified timeframe

**Resource Assessment & Planning** = information about existing water quality or habitat conditions and processes at an identified scale, and relates those conditions and processes to actions that will directly lead to desired future conditions within a specified timeframe

Describes a clear need



## Technical Design & Engineering

- Addresses limiting factors in existing conservation or recovery plan
- Describes alternative analysis that demonstrates a range of options were considered
- Appropriate data will be collected to inform designs
- Professionally accepted technical or engineering approaches will be used

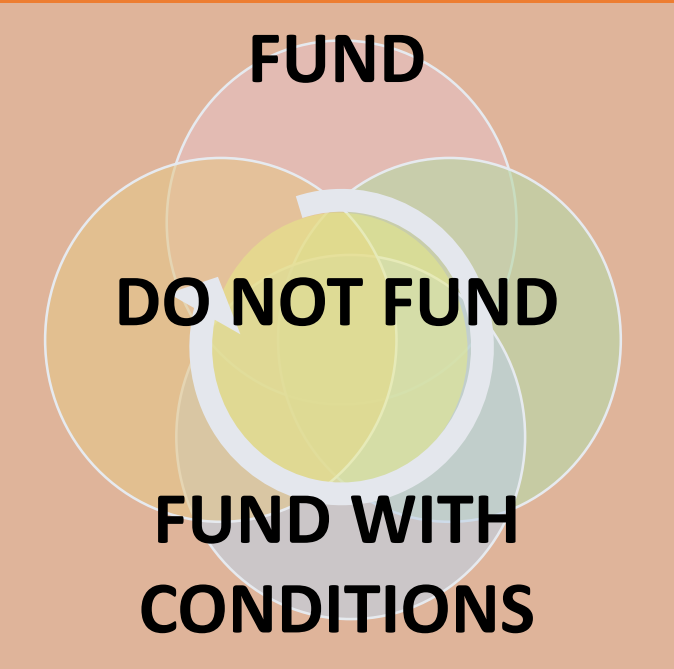
## Resource Assessment & Planning

- Scope & scale is feasible, & partners have demonstrated ability in collaborative work at this scale
- Process by which data will be managed & shared with partners
- Professionally accepted methods & parameters will be used

# Open Solicitation – Stakeholder Engagement Grants

PROVIDE PUBLIC BENEFIT FOR WATER QUALITY, NATIVE FISH AND WILDLIFE HABITAT, OR WATERSHED/ECOSYSTEM FUNCTION

Recommend

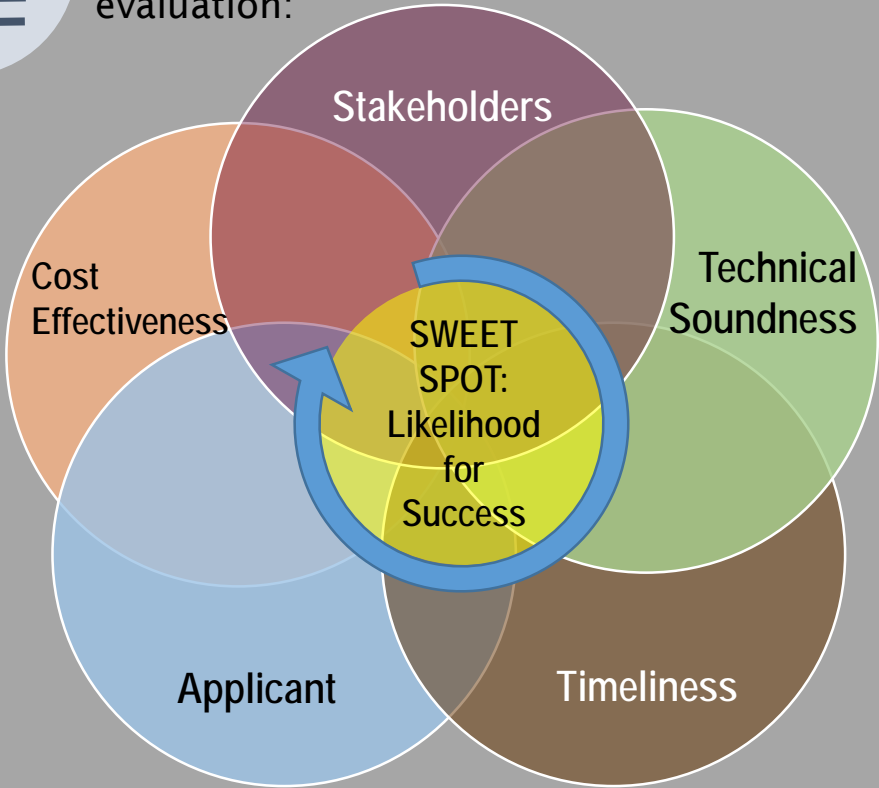


Regional team reviews & evaluates each project individually based on how well project meets criteria

Prioritize



**CRITERIA**  
How well project meets criteria for project evaluation:



**CERTAINTY OF SUCCESS**  
Based on the organizational capacity of the applicant & likelihood the project will meet its stakeholder engagement objectives


Recommendation to Staff

Staff review recommendations from each regional review team & make a statewide funding recommendation to the Board based on available resources for the grant period & type.

# STAKEHOLDER ENGAGEMENT

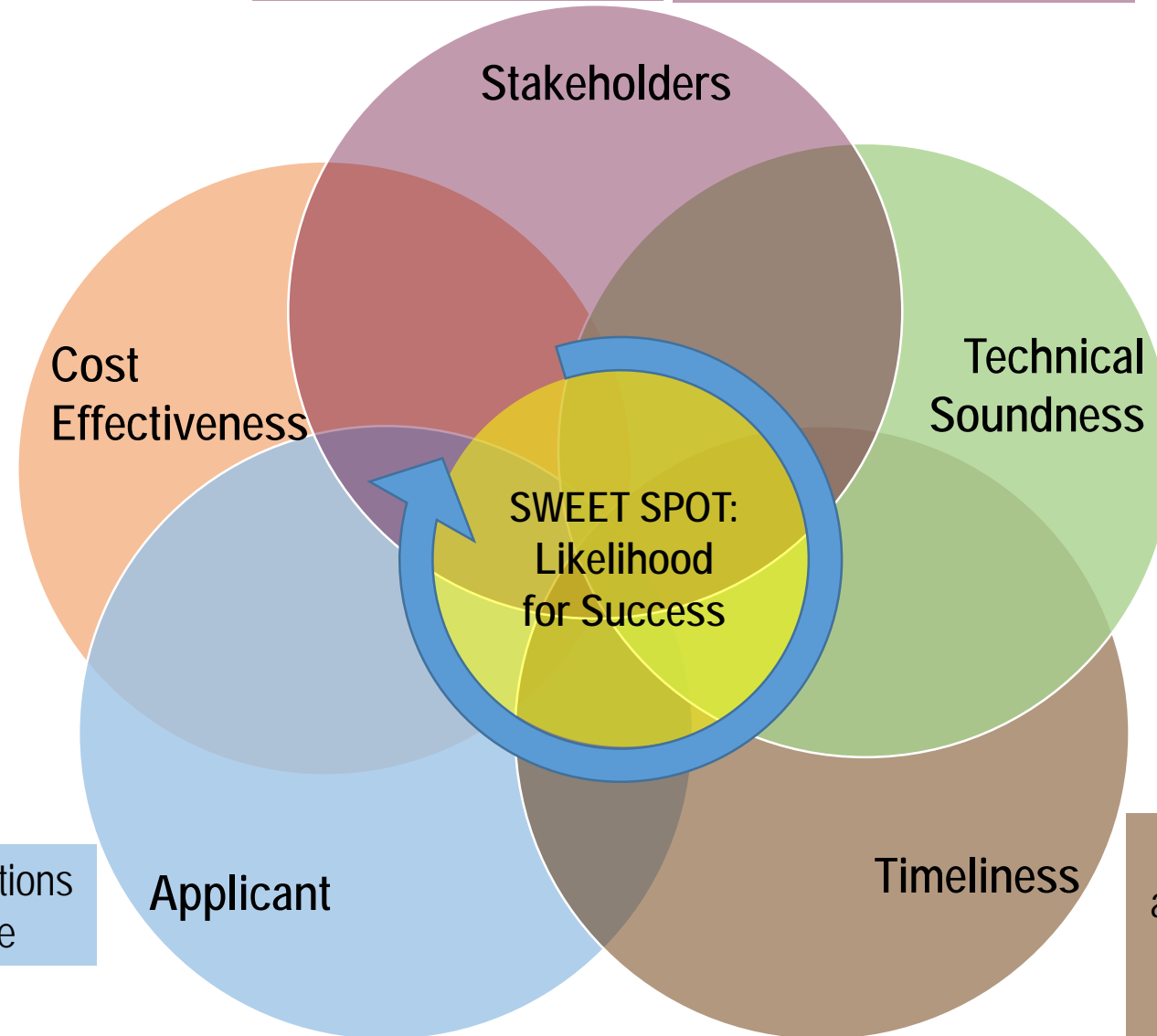
## Evaluation Criteria OAR 695-015-0070

**“Stakeholder Engagement Project”** means a project whose purpose is to communicate and engage with landowners, organizations and the community about the need for, feasibility, and benefit of a specific eligible restoration or acquisitions project or program that leads to development of eligible projects within an identified geography.

Projects whose primary purpose is education are  **NOT ELIGIBLE**

Applicants engage with appropriate stakeholders in the appropriate geography

Likely effectiveness of multidirectional communication among the applicant & stakeholder



Expected outcomes of resulting restoration or acquisitions include protecting or restoring fish or wildlife habitat, watershed function, and or water quality or quantity

Evidence base linking engagement to eligible project types

Shows qualifications & experience

Resulting restoration or acquisition projects, or program will lead to timely development of eligible projects

## RRT and Staff Funding Recommendations for the Spring 2020 Open Solicitation Grant Offering

### Restoration

Region	RRT	Staff	%
1	11	11	100%
2	13	6	46%
3	14	10	71%
4	5	5	100%
5	11	11	100%
6	9	9	100%
<b>Total</b>	<b>63</b>	<b>52</b>	<b>83%</b>

### Technical Assistance

Region	RRT	Staff	%
1	8	8	100%
2	12	3	25%
3	4	4	100%
4	4	4	100%
5	3	2	67%
6	3	3	80%
<b>Total</b>	<b>34</b>	<b>24</b>	<b>71%</b>

### Stakeholder Engagement

Region	RRT	Staff	%
1	2	2	100%
2	2	2	100%
3	2	2	100%
4	1	1	100%
5	3	1	33%
6	2	1	50%
<b>Total</b>	<b>12</b>	<b>9</b>	<b>75%</b>

## ATTACHMENT C

<b>Region</b>	<b>Restoration</b>	<b>Technical Assistance</b>	<b>Stakeholder Engagement</b>
1	\$1,397,072	\$ 395,919	\$ 97,409
2	\$ 1,720,064	\$ 224,339	\$ 55,090
3	\$ 2,004,762	\$229,342	\$ 215,664
4	\$ 1,201,955	\$ 211,700	\$31,513
5	\$ 1,111,694	\$ 102,398	\$70,802
6	\$ 851,513	\$ 135,219	\$39,226
<b>Total</b>	<b>\$8,287,060</b>	<b>\$1,298,917</b>	<b>\$509,704</b>



North Coast

Southwest

Willamette Basin

Central Oregon

Eastern Oregon

Mid-Columbia



# North Coast - Region 1 Spring 2020 Funding Recommendations



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Funding Recommendation

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Staff Recommendation For Funding (SRF)

●

Below Funding Line (BFL)

Previous Grants 1998 - Fall 2019

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Land Acquisition

◆

Restoration

▲

Region 1 Cities

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Region 1 Streams

▭

OWEB Region 1 Boundary



OREGON

WATERSHED

ENHANCEMENT BOARD

775 Summer St, NE Suite 360

Salem, OR 97301-1290

(503) 986-0178

<https://www.Oregon.gov/OWEB/>

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## Region 1 - North Coast

### Restoration Projects Recommended for Funding in Priority Order

Project #	Grantee	Project Title	Brief Description	Project Modification	Amount Recommended	County
221-1002	MidCoast WC	Log Salvage Fund	Large wood material available through salvage activities will be mobilized to staging areas. Salvaged material will be available to local restoration practitioners for use in improving stream habitat for fish populations.		65,076	Lincoln
221-1004	Institute for Applied Ecology	Coastal Native Seed Partnership: Seed Production	The availability and affordability of native seed for restoring coastal habitats that support threatened species, such as the Oregon silverspot butterfly, streaked horned lark, and western snowy plover, will be improved through partnership coordination and the establishment of seed production fields.		187,424	Tillamook
221-1005	Lower Nehalem WC	Coal Creek Habitat Enhancement Phase 1	Native plants will be installed within the riparian area and a fish passage barrier addressed to improve habitat for salmon, including Oregon coast coho, on Coal Creek, a tributary of the North Fork Nehalem River.		49,987	Tillamook
221-1011	North Coast WS Assn	Upper Big Creek Floodplain Restoration	A legacy forest road impacting stream function will be decommissioned, improving floodplain connectivity on Big Creek in the Nikolai-Wikiup watershed. Large wood structures will be added to the stream reach to improve habitat for Lower Columbia River fish species.		172,580	Clatsop
221-1006	Lower Nehalem WC	Grand Rapids Creek Habitat Enhancement Project	Large wood structures and beaver dam analogues will be installed on Grand Rapids Creek, a tributary of the Little North Fork Nehalem River, to improve habitat complexity for salmon, including Oregon coast coho.		23,402	Clatsop
221-1009	Upper Nehalem WC	Upper Nehalem Anchor Habitat Enhancement	Habitat for Oregon coast salmon will be improved by adding large wood and constructing beaver dam analogues within identified anchor habitat reaches through the upper Nehalem watershed.		237,406	Columbia
221-1000	Oregon Wildlife Heritage Foundation	Seeley Creek Habitat Project_CLONE	Large wood structures will be installed and floodplain connectivity to a historic log pond will be restored to promote habitat complexity within Seeley Creek, a tributary to the Alsea River.		177,936	Benton
221-1007	Lower Nehalem WC	Nehalem River Ranch Riparian Enhancement	Riparian habitat along the mainstem Nehalem River will be improved through planting native vegetation and controlling invasive species on an agricultural property. Water quality will be addressed by increasing stream shading and reducing bacteria inputs to the river.	\$3,500 increase	134,865	Tillamook
221-1010	Scappoose Bay WC	Lower Milton Creek Oxbow Reconnection	An historic oxbow channel will be reconnected to the mainstem of Milton Creek, a tributary of Scappoose Bay. Habitat will be restored by installing fence to exclude livestock from the project area, stabilizing a stream bank to prevent erosion, removing invasive species, and planting native vegetation.		76,931	Columbia
221-1001	Columbia SWCD	Carcus Creek Habitat Enhancement	Large wood structures will be added to a reach of Carcus Creek, a tributary of the Clatskanie River, to improve spawning and rearing habitat for lower Columbia River fish.		232,000	Columbia

Region 1 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

221-1008	Lincoln SWCD	Euchre Creek Riparian Buffer Enhancement	The riparian area along Euchre Creek, a tributary of the Siletz River, will be planted with native vegetation and protected from livestock impacts through exclusion fencing.		39,465	Lincoln
<b>Total Restoration Projects Recommended for Funding by RRT and OWEB Staff</b>					<b>1,397,072</b>	
<b>Restoration Projects <i>Recommended but Not Funded</i> in Priority Order</b>						
Project #	Grantee	Project Title	Brief Description		Amount Recommended	County
None						
<b>Total Restoration Projects Recommended for Funding by RRT</b>					<b>1,397,072</b>	
<b>Restoration Applications <i>Not Recommended</i> for Funding by RRT</b>						
Project #	Grantee	Project Title		Amount Requested		County
221-1003	Nestucca-Neskowin Watersheds Council	Nestucca NWR Bay Unit Restoration Project		105,218		Tillamook
221-1012	CREST	West Sand Island Coastal Dune Prairie Restoration Implementation		288,874		Clatsop
221-1013	Upper Nehalem WC	Fishhawk Lake Fish Passage Restoration		499,354		Clatsop

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Technical Assistance (TA) Projects Recommended for Funding in Priority Order						
Project #	Grantee	Project Title	Brief Description		Amount Recommended	County
221-1022	Trout Unlimited Inc	Samson and Green Creek Priority Fish Passage Projects	A 100% design package will be developed to address two high priority fish passage barriers in Tillamook County to restore access to spawning and rearing habitat in Green and Samson Creeks in the Trask River watershed.		46,611	Tillamook
221-1023	Trout Unlimited Inc	Illingsworth Creek Fish Passage Project	A 100% design package will be developed to address a high priority fish passage barrier to restore access to spawning and rearing habitat in Illingsworth Creek in the Miami River watershed.		36,186	Tillamook
221-1016	Columbia SWCD	Natures Acres Restoration Design	Designs will be developed to restore ecological function and process to a site on the Clatskanie River, a tributary to the lower Columbia. Large wood placement, floodplain connection, and wetland and riparian habitat improvement will be considered as possible restoration actions.		66,000	Columbia
221-1024	North Coast WS Assn	Ecola Creek Watershed Beaver Habitat Assessment	Existing and potential beaver habitat in the Ecola Creek watershed will be assessed and analyzed to determine strategies to support, expand, and retain beaver populations as a natural promoter of habitat complexity that benefits salmon and other aquatic species.		20,273	Clatsop
221-1018	Nestucca-Neskowin Watersheds Council	Butte Creek Fish Passage Design Project	Designs will be developed to restore fish passage at Butte Creek in the Neskowin watershed. Access will be restored to spawning and rearing habitat for native migratory fish.		65,612	Tillamook
221-1021	Siuslaw WC	Wren Marsh Tidal Restoration Technical Assistance	A former tidal wetland within the Siuslaw estuary will be assessed and restoration options developed to restore tidal connectivity to the site.		74,891	Lane
221-1015	Upper Nehalem WC	Clear Creek Fish Passage/Anchor Habitat Design	Technical designs will be completed to address a series of five road stream crossings limiting fish passage on Clear Creek in the upper Nehalem watershed. Locations for large wood throughout the stream reaches will also be identified to promote improved habitat complexity.		41,246	Columbia
221-1020	Columbia SWCD	Conyers Confluence Area Enhancement_2	An alternatives analysis and preliminary design sets will be developed for a reach of Conyers Creek, a tributary of the lower Clatskanie River. The resulting restoration project aims to restore floodplain connectivity and improve habitat complexity.		45,100	Columbia
Total TA Projects Recommended for Funding by RRT and OWEB Staff					395,919	
Technical Assistance Projects Recommended but Not Funded in Priority Order						
Project #	Grantee	Project Title	Brief Description		Amount Recommended	County
None						
Total TA Projects Recommended for Funding by RRT					395,919	

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Technical Assistance Applications <i>Not Recommended</i> for Funding by RRT						
Project #	Grantee	Project Title		Amount Requested		County
221-1014	Westwind Stewardship Group	Westwind Invasive Plant Species Action Plan			31,433	Lincoln
221-1017	Nestucca-Neskowin Watersheds Council	Sitka Sedge Tidal Restoration Project			74,910	Tillamook
221-1019	Columbia SWCD	Page Creek, Fish Passage and Habitat Complexity Design_2			56,100	Columbia
Stakeholder Engagement Projects Recommended for Funding in Priority Order						
Project #	Grantee	Project Title	Brief Description		Amount Recommended	County
221-1026	MidCoast WC	Alsea Basin Stakeholder Engagement: from Oaks to the Ocean	Outreach will be conducted in the Alsea River basin to strategically recruit landowners to partner in restoration projects, including large wood placement, floodplain connectivity, riparian planting, beaver enhancement, and estuary restoration.		52,811	Benton
221-1025	The Beaver Coalition	Landowners, Beaver and Salmon on the Oregon Coast	Stakeholders will be engaged in eight coastal counties within the range of Oregon coast coho salmon to develop interest in beaver-based restoration actions.		44,598	Lincoln
Total Stakeholder Engagement Projects Recommended for funding by OWEB Staff					97,409	
Stakeholder Engagement Projects <i>Recommended but Not Funded</i> in Priority Order						
Project #	Grantee	Project Title		Amount Recommended		County
None						
Total Stakeholder Engagement Projects Recommended for funding by RRT					97,409	
Stakeholder Engagement Projects <i>Not Recommended</i> for Funding by RRT						
Project #	Grantee	Project Title		Amount Requested		County

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None				

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1001-18980

**Project Type:** Restoration

**Project Name:** Carcus Creek Habitat Enhancement

**Applicant:** Columbia SWCD

**Region:** North Coast

**County:** Columbia

**OWEB Request:** \$232,000

**Total Cost:** \$311,500

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**Application Description** Carcus Creek is a salmon bearing stream, which is a tributary of the Clatskanie River. It provides critical spawning and rearing habitat for salmonid species including the southwestern Washington/lower Columbia River Coastal Cutthroat Trout DPS (*Oncorhynchus clarki clarki*), federally threatened Southwest Washington Coho Salmon DPS (*Oncorhynchus kisutch*), and the lower Columbia River Winter Steelhead DPS (*Oncorhynchus mykiss*). These populations have persisted within the watershed despite the historical practice of removing large woody debris from the channel prior to the 1960s. While a healthy riparian buffer still exists along Carcus Creek, these historical practices have had the effect of stripping much of the spawning gravel from the river, homogenizing in-stream habitat, reducing the amount of cover available to fisheries, and reducing floodplain connectivity. The absence of large wood has limited salmonid populations to sub-optimum habitat thereby inhibiting their ability to successfully reproduce and negatively impacting juvenile survival through the winter. The proposed project will add large wood to about 2 miles of stream, placing 35 structures in the stream using existing trees and pin logs to keep the structures in place. The structure placements were picked by ODFW Fish Biologists, and will be installed by a licensed and bonded contractor. This project is through a joint management and partnership between the Oregon Department of Fish and Wildlife, Lower Columbia River Watershed Council, and the Columbia SWCD.

### Review Team Evaluation

#### Strengths

- Carcus Creek provides important spawning and rearing habitat for ESA-listed coho and steelhead, as well as cutthroat trout.
- The project design addresses the lack of gravel and large wood in the system and also promotes future large wood recruitment by incorporating planting as a project element.
- The project's goals and objectives are clear.
- The project team has demonstrated capacity to implement the work. The project manager is experienced working in the Lower Columbia watershed and the large wood components of the project will be overseen by ODFW.
- The landowner is engaged in watershed restoration work and has implemented other projects in the past.



## Concerns

- Aspects of the riparian planting plan are unclear. Alders are included on the species list but the application narrative specifies conifers as the priority. A more detailed description of the tree species to be used is not provided. The plan seems limited in scope by focusing only on areas impacted by construction access.
- There is no protection for the conifers planned in the proposal. Tree protection is recommended to prevent extensive damage from wildlife browse.
- The cost for the large wood material may be high based on similar projects. The application would benefit from more detail explaining how the costs in the budget were developed.
- The permitting pathway described may not provide appropriate coverage for ESA-listed species; in addition to the ODF notification, permits are required from the US Army Corps of Engineers in certain waters.
- The application would benefit from more detail about fish populations and habitat in Carcus Creek to help demonstrate why the project reach is a priority for restoration.

## Concluding Analysis

Improving instream habitat complexity within Carcus Creek will have a positive ecological benefit on several anadromous fish species, including ESA-listed coho and Columbia River steelhead. The planting plan could use some additional detail and perhaps refining prior to implementation, but there is confidence that the project team will implement a successful project that achieves the stated goals and objectives.

## Review Team Recommendation to Staff

Fund

## Review Team Priority

10 of 11

## Review Team Recommended Amount

\$232,000

## Review Team Conditions

## Staff Recommendation

### Staff Follow-Up to Review Team

## Staff Recommendation

Fund

**Staff Recommended Amount**

\$232,000

**Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1002-18992

**Project Type:** Restoration

**Project Name:** Log Salvage Fund

**Applicant:** MidCoast WC

**Region:** North Coast

**County:** Lincoln

**OWEB Request:** \$65,076

**Total Cost:** \$165,076

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**Application Description** Large wood is a vital component of most of the MidCoast Watersheds Council's in-stream and floodplain restoration projects, as it provides cover for juvenile fish, sorts spawning gravels, develops deep pools, and helps capture sediment that improves connection of stream channels to their floodplains. However, logs of the proper size for our restoration work is a scarce commodity and hard to come by. To be able to obtain enough wood to meet stream needs, creativity was called for. For nearly two decades, MCWC has successfully utilized an OWEB-funded Log Salvage Fund to facilitate the moving of large wood to restoration projects and storage sites across our working area in Lincoln, Lane, and Benton Counties (and to a lesser extent, in Polk and Tillamook Counties). By re-funding this program, MCWC will continue to be able to salvage trees from private land owners and managers that need them removed for various reasons, and would otherwise have them be cut for firewood if transporting them to restoration projects were not an option. This wood is also provided to other local restoration practitioners when available. Project partners include local private landowners and managers, city and county public works and road departments, Central Lincoln PUD, and ODOT.

### Review Team Evaluation

#### Strengths

- The application provides helpful detail about how the project operates to salvage, transport, and store wood for use in restoration projects.
- The long-running program has grown in recent years and has obtained wood from over 100 donors. Targeted outreach about the program has resulted in securing higher quality logs.
- Funds provided through this program allow restoration practitioners to rapidly take advantage of wood as it becomes available.
- All the material salvaged through the project will go directly to projects that benefit salmonid species.
- The project team and partners strive to meet ODFW and NOAA benchmarks when getting the wood into the streams.
- The applicant has a proven track record in implementing the work and keeps meticulous records of the material acquired and where it is utilized.
- The project is cost effective, with the value of the large wood used to leverage funding. Stockpiling wood in strategic areas also reduces the cost of the resulting restoration projects due to the reduction of material and transportation costs.

## Concerns

- No significant concerns were noted during review.

## Concluding Analysis

Finding wood suitable for use in restoration projects is a major challenge in the MidCoast area. Over the past two decades, this log salvage project has continued to improve its ability to provide restoration practitioners high quality wood material as it becomes opportunistically available. The salvaged material is placed into high priority streams and wetlands to improve habitat complexity for aquatic species, addressing critical limiting factors for Oregon coast coho and other anadromous fish. The project benefits from a strong reputation and relationships with landowners, contractors, and agency partners.

## Review Team Recommendation to Staff

Fund

## Review Team Priority

1 of 11

## Review Team Recommended Amount

\$65,076

## Review Team Conditions

## Staff Recommendation

### Staff Follow-Up to Review Team

## Staff Recommendation

Fund

## Staff Recommended Amount

\$65,076

## Staff Conditions

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1003-18994

**Project Type:** Restoration

**Project Name:** Nestucca NWR Bay Unit  
Restoration Project

**Applicant:** Nestucca-Neskowin Watersheds  
Council

**Region:** North Coast

**County:** Tillamook

**OWEB Request:** \$105,218

**Total Cost:** \$625,166

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**Application Description** This project area is approximately 104 acres, located in the Bay Unit of Nestucca Bay National Wildlife Refuge, 2.75 miles southeast of Pacific City, Tillamook County. The site is bounded by the Little Nestucca River to the west, Nestucca Bay to the north, and Highway 101 to the east. The project proposes to complete and implement an OWEB funded engineered design to improve habitat conditions and water quality for wintering geese and other migratory birds; aquatic species, including anadromous fish including ESA listed coho salmon; and other wildlife utilizing the Bay Unit.

OWEB funds would be used as match towards construction and monitoring components of the site's restoration plan that includes: dike breaching, tidegate replacement, habitat enhancement (large wood and vegetation establishment), enhancing off-channel and juvenile habitat, and comprehensive monitoring actions.

Project partners include: US Fish & Wildlife Service, Ducks Unlimited, Confederated Tribes of Siletz Indians, OR Department of Fish and Wildlife, The Nature Conservancy and NNSL WC.

### Review Team Evaluation

#### Strengths

- Restoration of estuarine habitat is a priority on the Oregon coast. Successfully restoring tidal connectivity will result in benefits to ESA-listed fish, particularly Oregon coast coho salmon.
- If there is sufficient inundation behind the tide gate, a well-designed muted tidal regulator (MTR) could mimic the functions of beaver habitat and provide increased habitat for coho salmon.
- The application presents three alternatives for construction involving MTRs. MTRs can allow for more fish passage at a longer duration than standard top-hinged tide gates.
- The project is located on National Wildlife Refuge property on ground managed for geese forage. The proposed plan strikes a balance between management for species with very different habitat needs: geese and anadromous fish.
- There are many other sites in the estuary in a similar condition. This restoration and proposed monitoring is an opportunity to provide a template for future projects.

#### Concerns

- The designs provided are conceptual and the application did not have information on which alternative was selected for implementation.
- A water management plan is not included with the application and it is unclear how the site will function without knowing the duration of tidal inundation possible behind the gate.
- Data is missing about the planned elevations of water behind the tide gate, as well as planned adaptive management to ensure inundation and passage.
- The specifications on tide gate sizing provided in the application are preliminary and lack site specific detail. Hydraulic modeling and mechanical engineering should be done to demonstrate the effects of flows on the tide gate door in order to ensure that fish passage will be achieved as expected.
- Subsidence within the estuary is likely affecting the structure and continuing sea-level rise will continue to compromise the longevity of the proposed work.
- It is unclear how the management of the site for forage production for wintering geese will interface with management for aquatic species. Geese typically do not want a high level of inundation and these constraints limit the ecological benefit on the site possible for fish.
- The restoration as designed may not be cost-effective given the uncertainty about expected project longevity.

## **Concluding Analysis**

Restoring tidal connectivity at this site on the National Wildlife Refuge could have high ecological benefit considering the importance of estuarine habitat to a wide array of species along the Oregon coast. A successful restoration effort could provide a good example for other similar properties aiming to achieve forage production and quality aquatic habitat. Details on the planned restoration were limited in the application, however, despite the recently funded Technical Assistance grant. The application would be strengthened by providing detail on the tide gates considered, channel location and cross sections, and expected inundation. A final option had not been chosen at the time of application submittal and critical information is missing from the application that makes it challenging to evaluate the ecological benefit expected from the work.

## **Review Team Recommendation to Staff**

Do Not Fund

## **Review Team Priority**

## **Review Team Recommended Amount**

\$0

## **Review Team Conditions**

## **Staff Recommendation**

## **Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1004-18996

**Project Type:** Restoration

**Project Name:** Coastal Native Seed Partnership:  
Seed Production

**Applicant:** Institute for Applied Ecology

**Region:** North Coast

**County:** Tillamook

**OWEB Request:** \$187,424

**Total Cost:** \$248,024

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**Application Description** Coastal ecosystems are among the most rare and impacted ecosystems in the Pacific Northwest. As a result, threatened species like the Oregon silverspot butterfly, Coho salmon, western snowy plover, streaked horned lark, and other plant and animals species that make their home in these habitats are greatly imperiled. A diverse group of partners, including land managers, restoration practitioners, tribes, conservationists, and private landowners, are working together to restore coastal grasslands, dunes, estuaries, and other habitats, and to recover the listed species that depend upon them. One barrier to successful restoration in this ecoregion is a lack of diverse, genetically appropriate, native plant materials available in sufficient quantities to implement large-scale restoration projects. The Coastal Native Seed Partnership was formed in 2020 to increase the availability and affordability of native seed to restore Pacific Northwest coastal habitats including coastal grasslands, dune, and estuaries. The group will establish native seed production fields to establish a dependable and sustainable supply of native seed that is genetically and ecologically appropriate in sufficient quantities needed to accomplish restoration goals on a landscape scale. We will hold partnership meetings, committee meetings, collect seed, and distribute native seed to partners. The CNSP currently has 28 partners which includes Bureau of Land Management, Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians, Coos Watershed Association, Curry Watersheds Partnership, MidCoast Watershed Council, National park Service, Necanicum Watershed Council, North Coast Land Conservancy, Oregon Department of Parks & Recreation, Oregon Military Department, South Slough National Estuarine Research Reserve, Northwest Oregon Restoration Partnership, The Nature Conservancy, U.S. Fish & Wildlife Service, and U.S. Forest Service.

### Review Team Evaluation

#### Strengths

- The application is the result of an OWEB-funded Technical Assistance grant and the work that has occurred to date is well-summarized. The application presents a clear picture of the direction of the project and a clear description of the work plan for 2021-2025.
- Recommendations from the previous review of the TA grant were adopted in the rollout of the project and additional outreach and planning was completed.



- There is a clear need demonstrated for the plant material source. The recent wildfire season in Oregon has made this need even more apparent as entities struggle to find genetically appropriate seed for fire recovery.
- The project approach is comprehensive and builds on the strategic plan for the Partnership.
- The geographic scope covers the entirety of the coastal ecoregion and includes a large group of engaged partners.
- Establishing sources of native coastal seed will address a long-term need for restoration practitioners to have access to genetically appropriate, locally developed seed sources.
- The proposed work complements the Northwest Oregon Partnership and other similar partnerships on the South Coast.
- The applicant has experience implementing similar projects in the Willamette Valley.

### **Concerns**

- The area serviced by the project is large and it may be difficult to manage such an extensive geography and set of partners.

### **Concluding Analysis**

Given the geographic extent of the proposed work, the application was also reviewed by the Southwest Oregon Regional Review Team, whose review is incorporated in this evaluation. The lack of genetically appropriate seed sources for the Oregon coast ecoregion has long been a recognized bottleneck to restoration efforts, especially for coastal prairie habitat. This project will serve to fill this critical gap and will expand the possibilities for restoration on the coast. This large partnership with a broad geography will be a challenge to manage, but the applicant has relevant expertise and has planned carefully for the rollout of the work. The work conducted to date by the applicant's steering committee has demonstrated that the partnership has the capacity to move the seed production forward to fruition.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

2 of 11

### **Review Team Recommended Amount**

\$187,424

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$187,424

**Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1005-19013

**Project Type:** Restoration

**Project Name:** Coal Creek Habitat Enhancement  
Phase 1

**Applicant:** Lower Nehalem WC

**Region:** North Coast

**County:** Tillamook

**OWEB Request:** \$49,987

**Total Cost:** \$71,091

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**Application Description** The Coal Creek Habitat Restoration Phase 1 project is 2.15 acres of riparian planting along 2700 non-contiguous linear feet of Coal Creek with a residential culvert replacement on a tributary to Coal Creek. Coal Creek is located in Tillamook County east of the City of Nehalem. The mouth of Coal Creek enters the North Fork Nehalem River at river mile 1, a confluence that is tidally and saltwater influenced.

The project will occur in 2 project areas with three landowners. The lower project area, the Williams property, begins at Coal Creek river mile 1.3 and extends to river mile 1.8. The riparian habitats vary in condition: one portion has a well-developed riparian habitat, many dominated by invasive Himalayan blackberry, and several areas of active erosion where the riparian habitat is composed of only grasses. This project will plant 2 acres of riparian vegetation along 2500 linear feet of Coal Creek. The riparian buffer will vary between 15 and 60 feet wide. This will necessitate the management of Himalayan blackberry to support plant establishment.

The second project area has two landowners. The Hoffman-Casler project area is owned by Nancy Hoffman, Bruce Casler, and Anthony Simoes. Anthony Simoes owns the riparian area along Coal Creek. Nancy Hoffman and Bruce Casler own a portion of an anadromous fish bearing tributary to Coal Creek. The riparian area along Coal Creek has been managed as lawn (100 ft) or is dominated by reed canary grass (50 ft). The tributary runs under Nancy Hoffman and Bruce Casler's driveway in an undersized culvert. This project will plant riparian vegetation on 150 ft of Coal Creek and replace the undersized culvert on the unnamed tributary providing access to 500 ft of habitat.

The project partners are the Backyard Planting Program and the Northwest Oregon Restoration Partnership managed through Tillamook Estuaries Partnership, Broken Banjo Photography, and the landowners will organize volunteer labor and provide cash match.

### Review Team Evaluation Strengths

- The application is clear with the riparian planting and culvert replacement actions well described.

- The design and construction approach to the culvert replacement is appropriate given the site and stream conditions.
- The species selection of plants and proposed planting densities are suitable for the site and are likely to be successful.
- A myriad of fish species utilize Coal Creek, including Oregon coast coho, steelhead, and chum. The tributary of Coal Creek has both coho and cutthroat use.
- Coho life history is dependent on lower gradient areas that provide cool water such as Coal Creek and tributaries.
- There are water quality concerns in the Nehalem watershed including temperature and bacteria that the proposed riparian planting will help to address.
- The riparian zone along this reach of stream has been degraded by historic agricultural use and will benefit from the proposed planting.
- The landowners' investment in the project indicates capacity for long-term maintenance and stewardship of the project.
- The costs for the proposed work are reasonable.

### **Concerns**

- No significant concerns are noted.

### **Concluding Analysis**

The proposed restoration actions on Coal Creek in the Lower Nehalem watershed will support critical areas of cold water refugia important to fish. As one of the few remaining streams in the area to support chum, providing for additional fish passage and riparian habitat represents a unique opportunity to benefit this species in addition to Oregon coast coho salmon. The project is straightforward, works with engaged and supportive landowners, and addresses several limiting factors including habitat complexity and fish passage in the Lower Nehalem watershed.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

3 of 11

### **Review Team Recommended Amount**

\$49,987

### **Review Team Conditions**

### **Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$49,987

**Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1006-19014

**Project Type:** Restoration

**Project Name:** Grand Rapids Creek Habitat Enhancement Project

**Applicant:** Lower Nehalem WC

**Region:** North Coast

**County:** Clatsop

**OWEB Request:** \$23,402

**Total Cost:** \$38,602

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### Application Description

The proposed project is planned for Grand Rapids Creek (also known as Little North Fork Tributary D), a tributary to the Little North Fork Nehalem River at River Mile 1.9, which is a tributary to the North Fork Nehalem River in Clatsop County. The stream is home to ESA listed coho, winter steelhead, coastal cutthroat trout, Western Brook Lamprey and various cottid species. Large wood is identified in numerous local, state and federal planning documents as a primary limiting factor impacting salmon and their habitat quality and quantity. The Lower Nehalem Watershed Council's 2020 Rapid Bio-Assessment has identified 40 locations as anchor habitats, a high priority for restoring large wood (see project map), including Grand Rapids Creek.

The project is partnering with private timber landowner, GreenWood Resources, to install large wood structures and beaver dam analogs to improve stream habitat. The project proposes to install 5 large wood structures composed of 8 logs each and 2 beaver dam analogs (BDAs) composed of 60 Douglas fir poles (total). Lower Nehalem Watershed Council will provide project management, coordinate partner communication and manage the project grants and schedule. GreenWood will provide all the wood needed for the project as well as construction contracting for the project's implementation. Experienced natural resources professional, Steve Trask will be contracted by LNWC to provide on the ground guidance to the construction contractor installing the large wood structures and beaver dam analogs. Because the project is on industrial timber land, the only permits required are the Oregon Department of Forestry Notification of Operations and the County sign-off on the Land Use Compatibility Statement form.

### Review Team Evaluation

#### Strengths

- The proposal is clear and the proposed actions are well-described.
- The proposed approach is straightforward and utilizes lessons learned from previous projects, including other Beaver Dam Analogue (BDA) projects in the Nehalem watershed.
- Restoring habitats important for beavers and encouraging their use is an important goal for the Oregon coast watersheds due to beaver's innate ability to improve aquatic habitat complexity.

- The geomorphic rationale provided in the application for locating structures and placing BDAs is helpful and clear.
- Snorkel surveys identified key anchor habitat locations in which restoration and enhancement work would best support populations of Oregon coast coho salmon. The selected project location is within one such anchor habitat.
- There are a range of species in addition to Oregon coast coho that will benefit from improved habitat complexity here, including steelhead, cutthroat, and Pacific lamprey.
- The proposed work addresses a primary limiting factor in the watershed for coho by increasing habitat complexity.
- The applicant has established a strong relationship with the timber landowner, who is providing the wood material and overseeing the contracting.
- The costs are reasonable and the budget contains sufficient detail to determine cost effectiveness.

### **Concerns**

- DEQ 401 permitting costs are not referenced in the application and if not covered by the described permitting pathway, may increase the project cost.
- More description of the rationale for the design of the BDAs would have been helpful to evaluate technical soundness.
- A change in the weave height of the beaver dam analogue design is mentioned in the application, but it is unclear how changing the height will affect the hydrologic connection.

### **Concluding Analysis**

This project on Grand Rapids Creek is a relatively straightforward effort to increase habitat complexity and encourage beaver activity within priority anchor habitat for Oregon coast coho salmon. The applicant is experienced with similar work and the ecological benefit will be high for the relatively low cost of the project.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

5 of 11

### **Review Team Recommended Amount**

\$23,402

### **Review Team Conditions**

### **Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$23,402

**Staff Conditions**



## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1007-19017

**Project Type:** Restoration

**Project Name:** Nehalem River Ranch Riparian Enhancement

**Applicant:** Lower Nehalem WC

**Region:** North Coast

**County:** Tillamook

**OWEB Request:** \$131,365

**Total Cost:** \$167,835

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### Application Description

The Nehalem River Ranch Riparian Enhancement Project is located near Mohler in Tillamook County. The site is off of Foss Rd, approximately 3 miles east of the Foss Bridge over the Nehalem River. A substantial amount of the lowland areas within the Lower Nehalem Watershed are privately owned rural properties (agricultural or residential), many of which have severely impaired riparian conditions and do not adequately provide shade, habitat complexity and erosion control benefits to streams. The North Coast Subbasins TMDL (2003) emphasizes the role of riparian vegetation in abating excessive stream temperature, controlling bacteria run-off and erosion and providing habitat for fish and wildlife. The report lists sections of the Nehalem Watershed as water quality limited due to bacteria, temperature and dissolved oxygen. According to the 2007 OWEB Summary of Watershed Health Indicators, limiting factors to instream and riparian health included temperature, water quality, large wood and invasive species. The Lower Nehalem Watershed Council and Tillamook Estuaries Partnership's Backyard Planting Program aim to address these limiting factors through the control of invasive species, vegetative bank stabilization, and the establishment of native trees and shrubs on 6 acres of agricultural land along 7,000 feet of the mainstem Nehalem River in the next five years. In addition, 4 acres of pasture will be converted to silvopasture. The riparian area of the site is largely dominated by Japanese Knotweed, Himalayan blackberry and Reed-canary grass, and generally lacks diversity of native trees and shrubs. Project partners recognize lowland riparian restoration as an achievable strategy to address the root cause of degraded water quality, improve habitat for fish and wildlife and the benefits of working cooperatively with agricultural landowners.

### Review Team Evaluation

#### Strengths

- The application clearly describes current site conditions.
- The restoration plan is innovative and uses grazing techniques as a precision vegetation management tool to enhance biodiversity on the site.
- The proposed project addresses water quality concerns common to the lower Nehalem including stream temperature, dissolved oxygen, and bacteria.
- The proposed planting will address limiting factors by providing complexity and roughness on the streambank and refuge at high flows for fish.

- The plans include establishing a hardwood gallery forest of big leaf maple, alder, and cottonwood. Incorporating hardwood species into pasture plantings can lead to increased wildlife use and promote healthier forage.
- This effort could be an effective demonstration project for the watershed. Planting is much needed on the river mainstem and the site is a visible location.
- The landowner is committed to the project and expressed a desire to improve habitat conditions through farming practices.

## **Concerns**

- A grazing plan is not included with the application and would have been helpful in understanding the duration and schedule of planned grazing in order to reduce invasive species and help establish the native plant communities.
- Goats can be challenging to manage effectively and require a lot of hands-on management in order to be an effective vegetation management tool.
- It is unclear how the understory vegetation will be managed. Only willows are identified as a target in the proposal and the plan to generate more diversity is unclear.
- The amount of stream shading produced by this reach is unlikely to have a significant impact on the much larger temperature issues in the watershed.

## **Concluding Analysis**

Targeted grazing as a vegetation management tool is a technique that has not been heavily utilized to date in this region in restoration projects but has promise for use on agricultural ownership. This site has an engaged and committed landowner and a well thought out restoration plan that will result in enhancements to riparian and upland plant communities. The proposed work will have a positive benefit on water quality and could serve as a demonstration project for other landowners interested in employing grazing to promote native vegetation.

## **Review Team Recommendation to Staff**

Fund Increased with Conditions

## **Review Team Priority**

8 of 11

## **Review Team Recommended Amount**

\$134,865

## **Review Team Conditions**

Increase award by \$3500 for effectiveness monitoring to include an evaluation of flash grazing.

## **Staff Recommendation**

## **Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund Increased with Conditions

**Staff Recommended Amount**

\$134,865

**Staff Conditions**

Evaluate the effectiveness of flash grazing on riparian health.

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1008-19029

**Project Type:** Restoration

**Project Name:** Euchre Creek Riparian Buffer  
Enhancement

**Applicant:** Lincoln SWCD

**Region:** North Coast

**County:** Lincoln

**OWEB Request:** \$39,465

**Total Cost:** \$49,705

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**Application Description** This project property is located on agricultural pasture land on Euchre Creek in Lincoln County, north-west of the town of Siletz. Euchre Creek is a major tributary of the Siletz River, an Oregon DEQ 303(d) listed water body for temperature, dissolved oxygen, turbidity, and biological criteria. Euchre Creek's input to the mainstem Siletz is regarded as an important cold-water refuge for fish. Historically, timber harvest in the upper reaches and conversion of floodplains to pasture land in the lower reaches have negatively influenced habitat conditions in Euchre Creek. On the project site, spread of Himalayan blackberry (*Rubus armeniacus*) has become an issue that is currently arresting natural riparian succession, which will degrade riparian functions and stream conditions over time. The proposed planting project will increase biodiversity, improve streambank integrity, and increase stream shading. The planting area spans 0.67 stream miles of lower Euchre Creek with a variable width buffer averaging over 100 feet, approximately 0.25 miles from its mouth at the mainstem Siletz River. The project will enhance 4.9 acres of riparian habitat in the Euchre Creek system.

### Review Team Evaluation Strengths

- The project will increase shade and native vegetation along Euchre Creek and will promote long-term wood recruitment for the stream.
- The planting plan includes an appropriate diversity of native species.
- Euchre Creek is a tributary of the Siletz River, which is 303(d) listed for temperature, sediment, and bacteria.
- The project reach is utilized by Oregon coast coho, Chinook, and steelhead. Euchre Creek is important cold water refugia for fish.
- The areas selected for planting have a significant amount of sun exposure, making them a good choice for areas to establish shade.
- The watershed is an ecological hotspot with significant spawning habitat available for fish.
- The landowner is engaged and committed to the project. Restoration here may lead to other projects in the future in the basin.
- The proposed buffer size is generous at 100' on one side of the stream.

## Concerns

- Mowing is proposed as part of site preparation and maintenance activities, and it is unclear why chemicals are also proposed.
- A plan for herbicide use is not provided in the application and details would be helpful in evaluating the likelihood of success of the site preparation and maintenance plan.
- The improvement to stream temperature overall may be minimal given that there is not much potential for stream heating upstream.
- Three years of maintenance for plantings is included in the budget, which may not be sufficient to get the seedlings to the "free-to-grow" stage in these types of conditions.
- The applicant has struggled with reduced capacity due to staff turnover within the last year.

## Concluding Analysis

Euchre Creek is an important tributary to the mainstem Siletz River and the project site is located just a quarter mile upstream of the confluence. Eradicating invasive species and establishing a native plant community within the riparian area will have benefits on stream water quality and the landowner is allowing for buffer widths that are likely to promote large wood recruitment in the future.

### Review Team Recommendation to Staff

Fund

### Review Team Priority

11 of 11

### Review Team Recommended Amount

\$39,465

### Review Team Conditions

### Staff Recommendation

Staff Follow-Up to Review Team

### Staff Recommendation

Fund

### Staff Recommended Amount

\$39,465

## **Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1009-19045

**Project Type:** Restoration

**Project Name:** Upper Nehalem Anchor Habitat Enhancement

**Applicant:** Upper Nehalem WC

**Region:** North Coast

**County:** Columbia

**OWEB Request:** \$237,406

**Total Cost:** \$398,556

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**Application Description** Upper Nehalem Watershed Council (UNWC) working in partnership with ODFW, ODF, and Columbia County Parks are proposing to strategically improve anadromous fish habitat and natural stream functions within high priority aquatic anchor habitats identified within four productive Coho salmon bearing tributaries of the Upper Nehalem River Basin. Each of the stream reaches are below ODFW habitat benchmarks for Large Wood Debris (LWD) that typify optimal habitat utilized by salmonids. Partners will construct 64 fish habitat structures (55 LWD and 9 Beaver Dam Analogs - BDAs) over the course of 6.1 miles of stream channel to help meet and/or exceed the ODFW habitat benchmarks, specifically focusing on the number of LWD key pieces per 100 meters of habitat and enticing beaver recolonization of legacy habitat areas through the construction of the 9 BDA structures. Beaver forage to be planted in relation to each BDA site.

Project reaches are located on Upper Oak Ranch Creek (Columbia County), Crawford and Northrup Creeks (Clatsop County), and Upper Lousignount Creek (Washington County),

UNWC is in discussion with ODF and Columbia County Parks in preparation for establishing Memorandum of Agreement/s that detail each project and dimension/location donation of forest materials for construction of LWD and BDA structures. UNWC has a long history of successfully working in cooperation with ODF and Columbia County on restoration projects of this nature and anticipate securing MOA's in a timely manner.

### Review Team Evaluation

#### Strengths

- Objectives for the work are clear in the application and the proposed actions are likely to succeed in addressing limiting factors for Oregon coast coho by increasing stream complexity within the stream reaches selected for restoration.
- The locations selected for large wood placements are well considered and sited in places where the floodplain can be connected successfully in order to achieve maximum benefit.
- The Beaver Dam Analogues (BDAs) are being placed at historic beaver occupation sites and will also include food to encourage beavers to repopulate the area.

- The proposed work is based on a strategic action plan for the Nehalem and the project is a top priority for Oregon coast coho production in the basin.
- Increasing stream complexity in the selected stream reaches will also benefit steelhead and cutthroat.
- The project is designed at a meaningful scale that is likely to have significant ecological benefit.

### **Concerns**

- There may be some challenges with the plan to utilize ODF trees. Marbled murrelet survey work will need to be completed which will require multiple years and include extra costs. It is unclear from the application how this will be budgeted for and how the project timeline may be impacted.
- The project component to propagate vine maple from cuttings may not be effective.

### **Concluding Analysis**

This comprehensive habitat complexity project will place large wood structures and BDAs over several stream reaches that have been prioritized as anchor habitat by the Nehalem Strategic Action Plan for coho. The proposed project builds on previous restoration work in the area and is a direct product of the action plan, which strives to identify and restore anchor habitats. The project team has a track record of success with similar types of projects and the restoration has a high likelihood of success.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

6 of 11

### **Review Team Recommended Amount**

\$237,406

### **Review Team Conditions**

### **Staff Recommendation**

Staff Follow-Up to Review Team

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$237,406



## **Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1010-19047

**Project Type:** Restoration

**Project Name:** Lower Milton Creek Oxbow  
Reconnection

**Applicant:** Scappoose Bay WC

**Region:** North Coast

**County:** Columbia

**OWEB Request:** \$76,931

**Total Cost:** \$96,989

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**Application Description** Milton Creek is located in central Columbia County; it contains 17.8 miles of mainstem stream and 6.6 miles of streams within five major tributaries that support Coho, Steelhead, Cutthroat, and Pacific Lamprey. It drains into the north end of Scappoose Bay, less than 2 miles upstream from the Lower Columbia River. Stream habitat function for salmonid production is greatly reduced below historical levels primarily due to loss of summer rearing habitat. Elevated stream temperatures caused by removal of riparian vegetation has made much of the lower watershed unusable to Coho in the summer months. Loss of access to cold-water refuges, channel simplification, lack of large wood, and a lack of diversity in riparian vegetation makes much of the habitat poor quality for salmon. The conversion of the lower watershed for agriculture and residential development has resulted in removal of canopy cover and riparian vegetation, fish barriers in the streams, and removal of large wood from the stream and riparian area to increase conveyance.

This project will reconnect 600 ft of historic oxbow channel to the main-stem of Milton Creek, install fencing to remove livestock from 1.5 acres of riparian area, stabilize 500 ft of stream bank to allow reestablishment of riparian vegetation, enhance the riparian and floodplain area by removing invasive species and planting native vegetation to establish stream canopy cover and diversity. Project partners are ODFW, Columbia SWCD, SBWC and the landowners.

### Review Team Evaluation

#### Strengths

- The objectives are comprehensive and will result in a diversity of restoration actions likely to improve water quality and increase the availability and quality of habitat for aquatic species including Oregon coast coho, steelhead, and Pacific lamprey.
- The selected approach to project design incorporates appropriate techniques to minimize stranding of fish by incorporating egress outflows.
- Aspects of the project will work toward goals in the Willamette TMDL for reducing stream temperature and bacteria.
- The project site is a unique opportunity to work in a relict oxbow.
- The project builds on previous work completed with an OWEB-funded Technical Assistance grant.
- The applicant has engaged several partners including the Columbia SWCD, ODFW, and two landowners.

- There are opportunities to connect the project with the ongoing water quality monitoring efforts conducted by Columbia SWCD and partners which may result in effectiveness monitoring benefits.
- The costs are reasonable considering the ecological benefit of connecting off-channel habitat that will benefit multiple ESA-listed species and address limiting factors within the watershed.

### **Concerns**

- There are power lines crossing the site which may affect planting and the restrictions are unknown. Power companies typically actively maintain vegetation within the corridors and this could impact the proposed planting plan.
- The planting plan lacks clarity on what is being planted where on the site.
- The maintenance plan to utilize herbicide on the blackberry is not well justified.
- The plant stewardship activities proposed may not be enough time to ensure planting success based on the site conditions.
- The budget lacks sufficient detail to determine the cost effectiveness of the bank stabilization components.

### **Concluding Analysis**

This project represents an opportunity to conduct restoration on an entire relict oxbow within the Scappoose Bay watershed. The approach selected by the design team for reconnecting the floodplain is appropriate for the site and is cost effective for the expected benefits. The planting plan would benefit from more detail on the site constraints presented by the power line corridor, and this issue should be understood before the applicant finalizes the planting plan. The partners working together on the project have a proven track record with similar work and the necessary expertise to implement a successful project.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

9 of 11

### **Review Team Recommended Amount**

\$76,931

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$76,931

**Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1011-19049

**Project Type:** Restoration

**Project Name:** Upper Big Creek Floodplain  
Restoration

**Applicant:** North Coast WS Assn

**Region:** North Coast

**County:** Clatsop

**OWEB Request:** \$172,580

**Total Cost:** \$257,190

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**Application Description** The project site is located in the Nicolai-Wikiup watershed on land owned and managed by Hampton Lumber, upstream of the Big Creek Fish Hatchery and the town of Knappa, 15 miles east of Astoria. Our efforts will focus on the Camp 7 Spur Road, a 1.2-mile stretch of road adjacent to Upper Big Creek disconnecting the floodplain from upland habitat and preventing channel migration. This legacy haul-route constricts Big Creek to a narrow stream corridor, removing floodplain habitat. Additionally, industrial logging practices in the watershed have left the channel largely devoid of structural complexity. The location of the project site, upstream from the Oregon Department of Fish and Wildlife (ODFW) fish hatchery, is identified as a priority stream for threatened salmonid species since it is the only section/reach of stream in the watershed that is not accessible by hatchery fish and, therefore, is considered a high-intrinsic-potential stream reach.

This project proposes to 1) obliterate and remove fill in sections of the road that are in the stream's historic floodplain, 2) remove existing cross drains and restore natural drainage, 3) plant conifer seedlings (no OWEB funds will be used), 4) remove two bridges, 5) and install in-stream large wood (LW).

The project has been identified by the North Coast Watershed Association (NCWA) and local residents as a restoration priority. Removing fill and bridges, as well as adding large wood, are high priorities for this reach in order to take advantage of the opportunity to bring in large equipment using both the Camp 7 road before it is removed and a new access road for another Hampton project, to be built in the spring of 2021. Also, stream function will increase by connecting this effort to a previous large wood project completed by Oregon Department of Forestry (ODF) just upstream of the proposed project site.

Project partners include Hampton Lumber and the NCWA.

### Review Team Evaluation Strengths

- The application addresses concerns identified in previous reviews. The cover letter explaining

changes to the application is helpful in understanding how the project has evolved since the previous submittal.

- Big Creek is a high priority area to improve habitat for ESA-listed fish species in the Nikolai-Wikiup watershed.
- The project will remove and alter sections of road in the riparian area, which will decrease its impact on fish and wildlife and reduce the amount of sediment that enters the stream.
- The habitat upstream of the hatchery is of high quality for cutthroat trout. Lamprey also exist in the system and may benefit from the project.
- The stream lacks large wood needed for adequate instream habitat complexity, which is a limiting factor for this watershed.
- The landowner is engaged and supportive of the project and has remained committed to the project throughout the search for funding.

### **Concerns**

- The selected permitting pathway may not insure that the applicant has sufficient ESA coverage; in addition to the ODF notification, permits are required from the US Army Corps of Engineers in certain waters
- The designs are still limited in detail, lacking clarity on the specifics of how project components will be sequenced to achieve the desired stream channel and riparian area configuration.

### **Concluding Analysis**

This project will address limiting factors in the Nicolai-Wikiup watershed and is located within a priority area to improve habitat for lower Columbia fish species. This application is a resubmittal from a previous iteration that was recommended and fell below the funding line, and there is a degree of urgency this round due to the need for the work to intersect with nearby timber management activity in order to be cost-effective. The designs provided are still basic, but there is confidence in the qualified project team to implement a successful project likely to improve habitat significantly for wild fish.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

4 of 11

### **Review Team Recommended Amount**

\$172,580

### **Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Fund

**Staff Recommended Amount**  
\$172,580

**Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1012-19061

**Project Type:** Restoration

**Project Name:** West Sand Island Coastal Dune  
Prairie Restoration Implementation

**Applicant:** CREST

**Region:** North Coast

**County:** Clatsop

**OWEB Request:** \$288,874

**Total Cost:** \$384,334

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**Application Description** The coastal dune prairie restoration will occur on 64 acres of the southern end of West Sand Island, located in Clatsop County, Oregon, within Baker Bay near the mouth of the Columbia River. [Note: OWEB's mapping tool does not allow accurate pin placement - please ignore and see uploaded map]. The island is a former shifting sand shoal that has been expanded by dredge spoil deposits and stabilized by the property owner, the U.S. Army Corps of Engineers.

The project area is rare coastal dune habitat that has been largely lost in Oregon and Washington. This prairie offers potential habitat to several ESA-listed species, including streaked horned lark and western snowy plover. Recent invasion by nonnative species has severely degraded the habitat quality by changing the vegetation community structure and function. The primary culprit species include gorse, Scotch broom, and European beachgrass. Scattered coniferous trees throughout the site discourage use by larks and plovers, who avoid tall woody vegetation and European beachgrass. Without intensive restoration, the remaining native prairie will be lost.

A separate, current restoration project in 2020 will masticate mature Scotch broom and gorse on the east shore of the project site, with limited herbicide treatments and native plantings in spring of 2021.

Tall trees will be cut down and bucked in 2021. Prescribed burns on approximately 45 acres in 2021 (with possible follow-ups) will top-kill European beachgrass, gorse, and Scotch broom through the majority of the site. Foliar treatments of herbicide in subsequent years will prevent recolonization. Native seed and plugs will be used sparingly, to add diversity but maintain desirable bare ground.

The project is a partnership between CREST and the U.S. Army Corps of Engineers, with logistical and technical support from the National Parks Service, U.S. Fish & Wildlife Service, North Coast Land Conservancy, and the Center for Natural Lands Management.

### Review Team Evaluation



## **Strengths**

- The restoration proposal is thorough and well-considered. The approach to preserve the existing high quality plant communities and remove encroaching invasives is appropriate for the site.
- The island provides an opportunity to use prescribed fire to promote coastal prairie habitat that may not be feasible on the mainland.
- The southeastern area of the island contains important coastal prairie habitat that has been documented as one of the best available remaining examples of the habitat.
- Opportunities to restore coastal prairie habitat are limited and this project could benefit numerous pollinators, streaked horned larks, as well as provide overwintering habitat for western snowy plovers.
- The application builds on a previous OWEB-funded Technical Assistance grant that produced a sound action plan for site restoration.

## **Concerns**

- It is unclear what actions will be taken to prevent invasives from returning and how effective stewardship will be conducted over time given the difficult site access.
- The site constraints generated from Army Corps ownership of the site prevent the restoration of natural processes that would help prevent invasive species from continuing to dominate the site. A continued investment will be necessary to maintain the habitat.
- There is a need for a long-term investment on behalf of the partnership in order to maintain benefits and this is not described in the application.
- The project is costly due to the difficult access and necessary ongoing management of this habitat type.
- The approach may be initially overambitious given the unknowns about likelihood of success.

## **Concluding Analysis**

Coastal prairie habitat is a priority for restoration and West Sand Island represents a unique opportunity to enhance conditions for a number of rare and listed plant and wildlife species. The initial plan for restoration when the project was in an earlier stage of development was to coordinate work with the adjacent aquatic habitat improvement project on the island, with the hope that cost efficiencies could be achieved with concurrent work. Unfortunately the timing of the two projects did not align so the applicant is proceeding with completing the coastal prairie work separate from the wetland work. Given that change, it may be more prudent to pursue a scaled-back approach that would help determine the efficacy of some of the coastal prairie restoration methods proposed, including prescribed fire.

There are concerns about the ability to maintain the restoration without being able to rely on natural processes to assist with maintaining the native plant communities. The application is missing details on how the project team will accomplish that task into the future. A resubmittal of the application is recommended that addresses the plan for ongoing maintenance and documents the investment of the partnership into the future for site stewardship.

## **Review Team Recommendation to Staff**

Do Not Fund

**Review Team Priority**

**Review Team Recommended Amount**

\$0

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1013-18981

**Project Type:** Restoration

**Project Name:** Fishhawk Lake Fish Passage  
Restoration

**Applicant:** Upper Nehalem WC

**Region:** North Coast

**County:** Clatsop

**OWEB Request:** \$499,354

**Total Cost:** \$2,949,363

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**Application Description** The fish ladder is located at Fishhawk Lake dam. The ladder is needed to restore and improve fish passage. The Oregon Coastal Coho Salmon Recovery Plan identified blocked/impaired fish passage as a major reason for the extensive reduction in connectivity and access to historical habitats in the Nehalem Basin, and this issue has a direct impact on species survival and abundance. Improved fish passage will substantially improve connectivity and access to the area of Fishhawk Creek upstream of the dam. This area has approximately 34.4 miles of fish habitat, 13.5 miles of which is high quality Coho habitat. The Nehalem River Basin is Salmon Anchor Habitat due to its high quality habitat and importance to salmon populations. According to the Nehalem Strategic Action Plan, Fishhawk Creek is a place for investment in "strategies that enhance complexity with a high degree of confidence that projects are being located in reaches that can deliver the greatest benefit." Expanded access to habitat above the dam is expected to increase abundance and resilience of salmon within the Fishhawk Creek watershed and boost the long-term viability of populations in the greater Nehalem River basin. This will, in turn, strengthen the spatial structure and reduce extinction risk for salmonid species.

Fishhawk Lake dam is ranked 6th in ODFW's North Coast high priority fish passage barrier list, with a rating of 3. The fish most negatively affected by the existing ladder are juvenile Coho and Pacific lamprey. These impacts are caused by the height of each step and the sharp ladder weirs. The new ladder is designed to current fish passage standards to ensure volitional passage. Each step will be limited to a vertical drop of 6" between pools, with extra space for resting and an energy dissipation factor of 4, and with rounded ladder weir edges.

Partners are the Fishhawk Lake & Reserve Community Inc. (FLRC). Funding partners are the ODFW and Bureau of Land Management.

### Review Team Evaluation

#### Strengths

- The proposed fish ladder could provide improved access to 13.5 miles of coho habitat with a high intrinsic potential and a total of 34 miles of habitat for anadromous fish species as a whole.

- The project area is within Nehalem River anchor habitat for coho salmon, as identified in the Nehalem Strategic Action Plan.
- The current fish ladder is a barrier to some life stages of fish and ranks #6 on the ODFW barrier list for the north coast.
- A diversity of partners and funders are participating in the project, and several relevant agencies have been involved to date in reviewing the 30% designs.
- The engineering firm working with the applicants on the project has relevant experience and is qualified.
- The project complements other restoration work occurring in the region.

## Concerns

- The design is currently only at 30% and there is a significant possibility that the final designs will change based on regulatory requirements. There is uncertainty about investing in construction of a project this complex at an early stage of design.
- Uncertainty around the project's regulatory pathway, including ongoing mediation related to a potential enforcement action, creates a lack of clarity around the direction of the project and increases the risk involved with an investment of restoration dollars.
- The design for the fish ladder does not address the significant water quality concerns at Fishhawk Lake. The thermocline of the lake creates lethal temperatures and dissolved oxygen levels for fish that are passed downstream into the Nehalem River.
- It is unlikely that juvenile passage will be significantly improved by the proposed design. Restoration funds may be better spent focusing on the upstream habitat instead of continued focus on the dam. The project may provide marginal improvements to upstream passage for some species, but benefits to downstream passage are unclear.
- Bedload transport is extremely limited due to the presence of the dam and this project does not address that concern. On the site visit, the project team indicated that continued dredging of the lake is planned. Dredging negatively impacts lamprey and also macroinvertebrates that are an important food source for fish.
- Recent dam operations and maintenance activities have raised concerns about the capacity of the project team to effectively operate a new fish ladder.
- The application mentions the overall cost effectiveness of the proposed work, but this benefit is unclear given the uncertainty around the degree to which passage will be improved and the fact that the current fish ladder is providing some passage.

## Concluding Analysis

This is the 5th time that the applicant has applied to OWEB for funding related to the project, with the first 4 Technical Assistance applications not recommended for funding. As identified in past reviews, Fishhawk Creek does contain high quality habitat upstream of the dam and lake, but the degraded biological conditions created by the significant water quality issues of the lake itself mitigate the potential ecological benefit of improved passage. The proposed design for the proposed fish ladder will not address the biological issues that impact not only Fishhawk Lake but also downstream reaches of the Nehalem River.

The existing fish ladder does provide some fish passage and it is unclear whether the proposed design

will successfully pass all life stages and provide for downstream passage, limiting the cost-effectiveness of the project. Given those concerns, and compounded with the unknowns surrounding the regulatory climate and the capacity of the operators to successfully maintain a new fish ladder, the potential ecological benefits and likelihood of success of the project are unclear.

**Review Team Recommendation to Staff**

Do Not Fund

**Review Team Priority**

**Review Team Recommended Amount**

\$0

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1014-18966

**Project Type:** Technical Assistance

**Project Name:** Westwind Invasive Plant Species  
Action Plan

**Applicant:** Westwind Stewardship Group

**Region:** North Coast

**County:** Lincoln

**OWEB Request:** \$31,433

**Total Cost:** \$40,325

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**Application Description** Camp Westwind, found at the mouth of the Salmon River, south of Cascade Head. Otis, Oregon, and Lincoln City are our nearest towns. All adjacent land is managed as a protected open space owned by the US Forest Service, Oregon State Parks (beach), and Lincoln City. The Property is located within the Cascade Head Scenic-Research Area (CHSRA).

The property includes several small streams with lowland riparian woodland draining into the Salmon River estuary from the north – to east trending Sitka spruce forested ridgeline. We have a very diverse landscape with 1 mile of Pacific Ocean shoreline, sand dune/spit, and 2.7 miles bordering the Salmon River and its estuary. Western Oregon Upland Prairie (30 acres) and a 2 acres upland freshwater lake are also found at Westwind.

Westwind is a 529-acre property that has 460 acres managed as a conservation area and a primary human use area restricted to less than 70 acres. The OWEB Conservation Easement Baseline Document 9/2013 identified invasive plants as the only “very high” threat to conservation values at Westwind. Westwind staff, in the past 10 years have organized weed pulling events and used iNaturalist mapping software but lack an effective invasive plant control plan.

The OWEB review of our most recent Management Plan Update highlighted the need for an Invasive Species Management Plan. This Technical Assistance Grant will help us achieve that important assignment. Our partners at the Institute for Applied Ecology will work with Westwind staff and board to develop a target invasive plant species list for the site and implement a site-wide invasive plant species survey, recording invasive plant species locations and densities. IAE and Westwind will review survey results and work with adjacent land managers to identify invasive plant management options. Survey results, site goals, and management options will be integrated into the final invasive plant mitigation action plan and monitoring strategy.

### Review Team Evaluation

#### Strengths

- There is an identified need for an invasive species plan at the Westwind property. Monitoring and

managing invasive species is critical at this site to insure its continued ecological integrity.

- The expected deliverables will provide a framework to begin work on invasive species control.
- The project builds on the recent OWEB-funded coastal prairie technical assistance work by expanding the plant inventory to other habitat types.
- The approach to the invasive species plan includes intensive survey and details on possible control methods.
- The dune habitat at Westwind is a high priority for restoration and is currently in degraded condition due to invasive European beachgrass (*Ammophila arenaria*). This plan could be a start to returning native dune plant communities to the spit and providing habitat for the federally listed western snowy plover.
- The selected consultant has a history of quality work and can provide needed expertise and leadership with regards to managing the invasive plants present on the site.

## Concerns

- There is available information on the presence of invasive species at Westwind and the scope and scale of the proposed work may not be necessary.
- Addressing the European beachgrass and encroaching shore pine on the spit is a high priority need for the site. The proposed work only mentions an inventory of the beach grass but a more comprehensive focus on this habitat type is warranted.
- The applicant's board and staff currently lack natural resource expertise and there is uncertainty about the ability to manage the project given current organizational capacity.
- The commitment to addressing the condition of the sand spit in a meaningful way is unclear; restoration would facilitate natural movement of the spit rather than keeping it in a stable location.
- Beyond the sand spit, the habitats at Westwind are in fairly good condition and a robust invasive species plan may be more than is necessary to manage weeds on the property.

## Concluding Analysis

The project location of Westwind is a site of a high ecological value that was the subject of a previously-funded OWEB acquisition project. An invasive species action plan is an identified need for the property in order to maintain the good condition of the site and the organization has been slow to produce a plan and begin the task of stewardship around invasive species. This application is a welcome step toward accomplishing that goal, recognizing that the continued high value of the dune, forest, wetland, and coastal prairie habitats found at Westwind depend on careful monitoring and control of invasive species.

Most of the habitat types found at Westwind are in relatively good condition with the exception of the degraded dune habitat. Available planning documents and past surveys indicate that the sand dune habitat type has a larger need than the other habitat types slated for survey, but yet receives minimal attention in the proposal. The application would be strengthened by more information about the plan to address the dunes and the organizational commitment to restoration of the sand spit.

## Review Team Recommendation to Staff

Do Not Fund

**Review Team Priority**

**Review Team Recommended Amount**

\$0

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**



## Open Solicitation-2020 Spring Offering

### North Coast (Region 1)

**Application Number:** 221-1015-18976

**Project Type:** Technical Assistance

**Project Name:** Clear Creek Fish Passage/Anchor Habitat Design

**Applicant:** Upper Nehalem WC

**Region:** North Coast

**County:** Columbia

**OWEB Request:** \$41,246

**Total Cost:** \$52,094

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**Application Description** UNWC is working in partnership with Weyerhaeuser and ODFW to strategically improve fish passage and natural stream conditions in the Clear Creek basin (Upper Nehalem River tributary). Fish passage and habitat deficiencies have been identified at 5 road/stream crossings (NCAP analysis) and 4 aquatic anchor habitats (NSAP analysis) within the project footprint area respectively. Weyerhaeuser will contract with McGee Engineering and River Design Group to survey, design, and develop engineered redi-set plans to construct unconditional native migratory fish passage at 5 road stream crossings (sizing the new crossings to a minimal 1.5x active channel width). Each crossing will include stream simulation design where necessary. Project partners will collaborate on the design process to improve aquatic anchor habitat (anadromous winter and summer rearing refuge and spawning habitat, floodplain connectivity, sediment storage and natural valley storage capacity) thru strategic placement of 60 complex large woody debris (LWD) structures (15 per treatment reach). Plan sets developed by this technical assistance work will be used to secure funding, solidify partnerships, and bring these proposed improvements to fruition by the summer of 2022.

### Review Team Evaluation

#### Strengths

- Clear Creek is a priority location for addressing limiting factors for fish in the upper Nehalem watershed, including Oregon coast coho salmon. A resulting restoration project will have benefits to juvenile life stages and restore habitat complexity.
- The applicant is taking a thoughtful approach to improving stream crossings and attaining watershed benefits by pursuing technical assistance prior to restoration. There is a substantial volume of sediment upstream that requires careful design consideration to insure its movement does not impede aquatic habitat.
- Focusing work in upper tributaries will contribute to the restoration of sediment transport processes benefitting downstream habitats.
- Restoring fish passage to the tributaries will provide high flow refuge to Oregon coast coho and other fish.
- There is an effective partnership behind the project and a commitment from an industrial timber partner as well as agency staff.
- The budget is appropriately detailed and reasonable for the proposed scope of work.

## Concerns

- Some of the smaller streams in the project area may not be fish-bearing and the ecological benefit of restoring passage with regards to fish habitat is marginal.
- The application did not address the previous review concern identified about providing more information about future plans for land management to better understand how the proposed work fits with the context of the larger watershed.

## Concluding Analysis

Technical assistance will produce project designs that address the goal of restoring fish passage and habitat complexity in the Clear Creek basin on the upper Nehalem. The sub-basin is managed by one landowner, presenting an opportunity to systematically address limiting factors for fish across the entirety of the Clear Creek watershed. Restoration here could support watershed processes and also provide important refuge habitat for juvenile coho seeking an escape from high velocities or high water temperatures. The ecological benefit may be limited given that some of the crossings may not provide access to fish-bearing streams; however, there is potential for a meaningful restoration project and with the experience of the project team, the project's likelihood of success is high.

## Review Team Recommendation to Staff

Fund

## Review Team Priority

7 of 8

## Review Team Recommended Amount

\$41,246

## Review Team Conditions

## Staff Recommendation

Staff Follow-Up to Review Team

## Staff Recommendation

Fund

## Staff Recommended Amount

\$41,246

## **Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1016-18988

**Project Type:** Technical Assistance

**Project Name:** Natures Acres Restoration Design

**Applicant:** Columbia SWCD

**Region:** North Coast

**County:** Columbia

**OWEB Request:** \$66,000

**Total Cost:** \$84,495

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**Application Description** The project site, identified as Natures Acres, is located on the Clatskanie River between river miles 3 and 4 (approximately) in Columbia County, Oregon. The Clatskanie River provides quality habitat for ESA listed threatened Lower Columbia River ESU Chinook (*Oncorhynchus tshawytscha*), Coho (*O. kisutch*), Chum (*O. keta*) and other significant species such as SW Washington DPS steelhead (*O. mykiss*) and various species of lamprey. Historically, the Clatskanie River supported robust populations of salmonids and other significant species, all of which have declined due to anthropogenic influences that negatively impact riparian and aquatic habitats. The Lower Columbia River Conservation and Recovery Plan for Oregon Populations of Salmon & Steelhead (ODFW 2010) identifies key limiting factors for this watershed as impaired riparian and in-channel habitat complexity and diversity and impaired access to off-channel habitats. The Columbia SWCD is pursuing funding for a design that focuses on restoring ecological functions and processes that create and sustain spawning, refugia, and rearing habitats important to recovery of ESA listed species and the support of other significant species. Using topographic surveying completed by the Columbia SWCD, the project work involves geomorphic assessment, hydraulic modeling, wetland delineation, and an alternatives analysis, that will result in a project design focused on large wood placement, floodplain and off-channel connectivity to the mainstem, and wetland and riparian habitat improvement, particularly reforestation of historically farmed wetland and riparian areas. Columbia SWCD partners in this project include the landowners (an individual entity), NRCS and ODFW.

### Review Team Evaluation

#### Strengths

- The site has high potential for restoration, containing habitat for ESA-listed chum, coho, and Chinook salmon.
- This location is a priority area for chum production.
- The proposed work is based on a 2010 basin plan from ODFW that identified the lack of off-channel and riparian habitat as key limiting factors in the watershed, both of which this project will address.
- The design approach is technically sound and likely to inform a sound restoration project design.
- The technical provider has relevant geomorphology expertise and is qualified to provide technically sound design alternatives for reconnecting the stream with the floodplain.

- The project complements other adjacent floodplain restoration work and has incorporated lessons learned from that work.
- Water quality benefits are expected with the resulting restoration project. The addition of fencing and riparian plantings will improve temperature and dissolved oxygen.
- The landowner is open to further opportunities for restoration, including taking areas out of agricultural production that could lead to wetland restoration.

### **Concerns**

- It is unclear whether the design will be limited by buffer widths that may not be sufficient to allow for channel migration in the floodplain.

### **Concluding Analysis**

Restoration potential at this site is high with the presence of several listed fish species, an adjacent previously completed project, and a landowner who is willing to explore numerous alternatives that allow the river to restore some of its dynamism in interacting with the floodplain. The technical approach to design development is sound and several design alternatives will be evaluated prior to the selection of a chosen design. The technical provider will use modeling to identify locations for restoration actions and will incorporate a robust hydrologic analysis to determine the return interval expected at the site. This technical assistance project is likely to lead to a successful restoration project.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

3 of 8

### **Review Team Recommended Amount**

\$66,000

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

**Staff Recommended Amount**

\$66,000

**Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1017-18999

**Project Type:** Technical Assistance

**Project Name:** Sitka Sedge Tidal Restoration Project

**Applicant:** Nestucca-Neskowin Watersheds Council

**Region:** North Coast

**County:** Tillamook

**OWEB Request:** \$74,910

**Total Cost:** \$281,984

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**Application Description** Nestucca, Neskowin, Sand Lake Watersheds Council (NNSL WC) and Oregon Parks and Recreation Department (OPRD) are requesting funding to implement phase one of the Sitka Sedge Tidal Restoration project located at Sitka Sedge State Natural Area (SSSNA), Sand Lake Estuary, Tillamook County, Oregon. A comprehensive view of the project includes constructing a setback dike with muted tide gate; breaching the existing Beltz Dike; replacing stream crossings at No Name, Beltz, and Reneke Creeks on Sand Lake Road; restoring to Reneke and Beltz Creeks; and redesigning trails and viewpoints to access newly created wildlife habitats.

For this proposal, project elements on the east side of the project area are addressed. The project will develop 60% engineered design plans for (1) the replacement of three undersized culvert crossings that are fish passage barriers on Reneke, Beltz, and No Name Creeks; (2) floodplain restoration and connectivity on lower Reneke Creek; and (3) enhancement of riparian habitat on lower Beltz Creek. Project elements west of Sand Lake Road are being addressed with other funding sources and managed by Tillamook Estuaries Partnership (TEP) and OPRD.

The Sitka Sedge Tidal Restoration project will provide fish passage to 69 acres of estuarine habitat and 3.75 miles of streams for threatened coho salmon and other salmonids; enhance tidal marsh, scrub-shrub, and forested wetland habitats; and increase the site's climate resilience through the restoration of tidal processes.

Project partners include Nestucca, Neskowin and Sand Lake Watersheds Council, Tillamook County Public Works, Siuslaw National Forest, Oregon Department of Fish and Wildlife, Department of Environmental Quality, Tillamook Estuaries Partnership, Department of Land Conservation and Development, Oregon Parks and Recreation Department, and local residents

### Review Team Evaluation Strengths

- Estuarine habitat is a high priority for restoration. This habitat type was once much more prevalent across the coastal landscape and opportunities to restore tidal connectivity are minimal.
- A successful and restored estuary will have a myriad of benefits to water quality including improving sediment transport and nutrient exchange.
- This site is important for Oregon coast coho production in the Sand Lake estuary and the project will address fish passage at a significant tributary.

### **Concerns**

- There is limited information available in the application about the plan for the dike. Without understanding the restoration plan for that aspect of the site, it is difficult to evaluate the ecological benefit of improving fish passage at the crossings behind the dike.
- There is a significant amount of work already completed at this location, with years of hydrologic monitoring, topographic survey, and other geotechnical information. The application is missing a strategy for how the previously collected information will be used as well as a justification for why the collection of additional technical information is needed.
- Costs for a geotechnical investigation and hydrological model for the road are included in the proposal, but not for the dike. It is unclear why the dike is omitted from the modeling, how the proposed work overlaps with the previous work, and if some of that work may be duplicative.

### **Concluding Analysis**

Sitka Sedge Natural Area is recognized as a site with a high potential for restoration. Opportunities to restore estuarine habitat and tidal connectivity are uncommon, and a successful restoration project here would greatly improve conditions for several species of anadromous fish, including Oregon coast coho salmon. This proposal focuses entirely on technical assistance needs for addressing the crossings upstream of the dike that are currently passage barriers to fish, but the fish will first need to pass through a failing tide gate in order to access the crossings in question. While there is a plan to address the tide gate and the state agency landowner is working through a design and outreach effort, details are not available describing the plan. Without understanding the restoration possibilities at the dike it is difficult to evaluate the ecological benefit of this application.

### **Review Team Recommendation to Staff**

Do Not Fund

### **Review Team Priority**

### **Review Team Recommended Amount**

\$0

### **Review Team Conditions**



**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Do Not Fund

**Staff Recommended Amount**  
\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1018-19004

**Project Type:** Technical Assistance

**Project Name:** Butte Creek Fish Passage Design Project

**Applicant:** Nestucca-Neskowin Watersheds Council

**Region:** North Coast

**County:** Tillamook

**OWEB Request:** \$65,612

**Total Cost:** \$85,612

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### Application Description

Butte Creek is a 1.69 sq mile watershed with its headwaters in the Siuslaw National Forest Coast Range foothills east of Neskowin in Tillamook County. The project goal is to secure 60% engineering design for an undersized culvert that creates a partial adult and full juvenile fish passage barrier and impairs stream function. Culvert #2080 is on Sunbow Road, located just to the east of Hwy 101, less than a half mile south of Neskowin. The culvert is undersized, in poor condition and recent County assessments determined it could fail in future storm events.

This project will restore full volitional fish passage to 2.66 miles of native migratory fish habitat including 2.45 miles for ESA listed coho. The project will also benefit Pacific lamprey, Chinook salmon, winter steelhead, chum (historic) and cutthroat trout.

Project partners include: US Forest Service (USFS), US Fish & Wildlife Service (USFWS), Oregon Department of Fish and Wildlife (ODFW), Trout Unlimited (TU), Tillamook County and Nestucca, Neskowin and Sand Lake Watersheds Council (NNSL). NNSL will be the contract officer and manage project communication, manage the project budget and payments and put the project out to competitive bid. Engineering design will be contracted to a private engineering firm with experience design road/stream crossing projects. USFS, USFWS and ODFW will provide review of the proposed project design. Tillamook County Public Works will provide design review and work with NNSL to secure construction easements with affected landowners for the project's construction phase.

### Review Team Evaluation Strengths

- Restoring fish passage at this location will provide access to 2.6 miles of high quality functioning aquatic habitat for numerous fish species including Oregon coast coho, Chinook, steelhead, lamprey, and cutthroat trout.
- The proposed project builds on other nearby restoration efforts in the area and complements nearby fish passage projects and riparian plantings.

- The volume of road fill and a drastically undersized culvert create a challenging design scenario, making a technical assistance grant appropriate prior to seeking restoration funds.
- There are a variety of partners engaged in the project.
- The applicant has a proven track record with similar projects and has extensive experience implementing fish passage projects throughout the Neskowin basin.

### **Concerns**

- No significant concerns were noted during review.

### **Concluding Analysis**

Restoring fish passage on Butte Creek at this location will complement previously implemented and planned future restoration projects. The fish passage projects planned for downstream Butte Creek in 2021 in association with the Neskowin emergency egress project will increase the ecological benefit possible with this effort. This project is affiliated with the Salmon SuperHwy partnership, bringing an effective partnership to the technical design work and restoration planning.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

5 of 8

### **Review Team Recommended Amount**

\$65,612

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$65,612

### **Staff Conditions**



## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1019-19007

**Project Type:** Technical Assistance

**Project Name:** Page Creek, Fish Passage and  
Habitat Complexity Design\_2

**Applicant:** Columbia SWCD

**Region:** North Coast

**County:** Columbia

**OWEB Request:** \$56,100

**Total Cost:** \$71,100

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**Application Description** The Page Creek watershed has undergone a number of restoration treatments to the expand amount of available habitat for needs local salmon and steelhead populations. The proposal solicits resources to expound upon the success of previous restoration efforts to maximize the ecological potential of the Page Creek subwatershed in the Clatskanie Basin (RM 8.8). Funds will be used to procure technical services related to removal of a fish barrier to re-establish access to spawning habitat. Scope of effort also includes design elements that contribute to instream habitat complexity. Pre-design information in the form of topographic and geotechnical surveys necessary for understanding existing condition as well as informing design alternatives. Geomorphic, hydrologic and hydraulic investigation will be conducted to ensure sustainable design to balance both regulatory and local community needs . Scope of engineering services include 30% design sets for new road crossing, instream woody debris placement and climate change resiliency experience. Selected firm will work collaboratively with the watershed council and project partners to incorporate baseline information and local knowledge into feasibility and design process. Firm will also be responsible for assisting the watershed council in vetting design concepts with regulatory community and provide input to permitting applications. Partners will participate in Technical Advisory Committee facilitated by the watershed council that includes ODFW expertise as well as timber companies local knowledge, equipment, and materials to maximize restoration effort and project cost-effectiveness.

### Review Team Evaluation

#### Strengths

- The Clatskanie basin is identified as a high priority for habitat restoration by ODFW for lower Columbia fish species.
- The proposed technical assistance work will lead to the replacement of the last remaining barrier on Page Creek and complement previous fish passage investments downstream.
- The landowner is highly supportive and engaged in the project.
- Technical assistance work upfront is important for a successful restoration project at this site. The culvert is located in a stream reach with a steep gradient and replacement of the structure may be complex. The geotechnical work will be important to ensure the technical soundness of the design approach. The applicant has improved capacity recently with the addition of a staff position.
- The budget in this submittal is appropriately detailed.

## Concerns

- The proposal lacks broader information on Page Creek and existing site conditions. Details on the crossing such as the active channel width and culvert perch height are lacking making it difficult to evaluate the technical soundness of the design approach.
- The cost for the technical work appears high for only 30% designs. It is unclear how the project will get to a further design level necessary for permitting and construction.
- The costs for the geotechnical work have more than doubled since the last submittal and there is no explanation regarding the expected scope of these services. The budget development section of the application is not completed; additional information here would have been helpful to evaluate the project's cost-effectiveness.
- This is a challenging location to design and it is unclear if the technical approach will include sufficient design of the stream channel. The eventual cost of successful fish passage at this crossing will be driven by the plan for a roughened channel and other stabilization design measures incorporated into the design.

## Concluding Analysis

This technical assistance project is a resubmittal, with previous iterations both recommended and not recommended for funding. The capacity of the applicant organization has grown since the last submittal and the security of having staff improves the ability of the design work to come to fruition as a restoration project. Several previous concerns continue to be unresolved, however. There still does not appear to be a clear pathway to bring the designs along to an implementation or permitting level, and the site is complex and likely to need additional design work beyond what is proposed with this application. The Clatskanie basin is a priority for restoration, but the application also lacks landscape level information necessary to determine the overall priority of Page Creek.

## Review Team Recommendation to Staff

Do Not Fund

## Review Team Priority

## Review Team Recommended Amount

\$0

## Review Team Conditions

## Staff Recommendation

## Staff Follow-Up to Review Team

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1020-19009

**Project Type:** Technical Assistance

**Project Name:** Conyers Confluence Area  
Enhancement\_2

**Applicant:** Columbia SWCD

**Region:** North Coast

**County:** Columbia

**OWEB Request:** \$45,100

**Total Cost:** \$56,600

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**Application Description** Project is located near mouth of Conyers Creek and its connection to Clatskanie River (~RM 1). Recent strategic action planning documentation points to the importance of low gradient floodplain habitats such as these for rearing, refuge, and foraging needs of multiple salmon and steelhead populations for Lower Columbia River watersheds. Lower section of Conyers creek is an example of high ecological value restoration opportunity as part of the broader lower Clatskanie river floodplain. It is positioned at the head of tidal influence which is known to play an important transition area for needs of juvenile salmon and steelhead as they enter the estuarine environment. Technical services are needed to support feasibility investigation of project concepts to improve instream habitat complexity and function of adjacent floodplain wetlands. Scope of these services include field data collection, geomorphic and hydrological assessment, flood risk analysis, alternatives analysis, and preliminary design. Effort is meant to compliment previous restoration efforts in the area that have been completed and being planned in the form of fish barrier removal, streambank enhancement, and riparian plantings. Given its location within the City of Clatskanie urban growth boundary, project will also benefit from design elements that examine adaptation strategies in light of increased coastal storm events from climate change. Environmental education and stewardship are components to the project as an example of Watershed Council partnership with high school students stewardship activities in the form native riparian plantings and experiential learning. Project partners include City of Clatskanie, Columbia Soil and Water District, local landowners, and Clatskanie High School environmental education program.

### Review Team Evaluation

#### Strengths

- The project site is a highly visible location in the town of Clatskanie. A restoration project here could serve to raise awareness in the community about watershed health.
- The location at the confluence of Conyers Creek and the Clatskanie River is a high priority area for species recovery of lower Columbia fish species, particularly for juvenile life stages.
- The Lower Columbia River Recovery Plan identifies coho, Chinook, steelhead, and chum populations as a priority.
- There are opportunities for a wide array of restoration actions at the site.
- There are no barriers downstream in the system preventing fish from accessing the project area.



- The objectives have more clarity and detail than in the previous submittal.
- Partnering with the high school provides a community outreach opportunity and could be a cost-effective approach for maintaining the investment.

### **Concerns**

- There is some uncertainty over the participation of one of the major landowners whose property is for sale.
- There is significant erosion happening at the lower end of the project reach. Design alternatives that address the site constraints around the bridge and downstream impacts could be challenging to develop.
- A FEMA Floodplain Analysis is not a part of the proposed work and will likely be necessary to arrive at an implementation ready design. Restoration at this site could have impacts to the localized flooding regime.

### **Concluding Analysis**

This application is a resubmittal of a previously-recommended application that fell below the funding line. This submittal is improved with more details about landowner participation in the project and clarification of the goals and objectives. There is some uncertainty about future ownership of one of the major parcels of land integral to the project and some challenging complexities around developing a design that mitigates flood risk to the adjacent road; however, the ecological benefit of restoration here will be high if the applicant can find a pathway around those hurdles.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

8 of 8

### **Review Team Recommended Amount**

\$45,100

### **Review Team Conditions**

### **Staff Recommendation**

**Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

**Staff Recommended Amount**

\$45,100

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### North Coast (Region 1)

**Application Number:** 221-1021-19031

**Project Type:** Technical Assistance

**Project Name:** Wren Marsh Tidal Restoration  
Technical Assistance

**Applicant:** Siuslaw WC

**Region:** North Coast

**County:** Lane

**OWEB Request:** \$74,891

**Total Cost:** \$98,133

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**Application Description** The Wren Marsh Tidal Restoration Technical Assistance project will investigate baseline site conditions and restoration options for a property on the lower Siuslaw River. The Wren Marsh property is located in the Siuslaw River estuary, east of Florence, Oregon, in Lane County. The former tidal wetland was developed into a home site and pasture in the early 20th century using two levees and a tidegate. Located adjacent to a 150-acre privately owned tidal wetland mitigation bank, and across from the 217-acre Waite Ranch property, Wren Marsh is a lynchpin in restoration efforts that would provide over 500 total acres of restored wetland function and tidal influence. Like Waite Ranch, the Wren property is a segment of the lost tidal wetland habitats in the Siuslaw River estuary owned by McKenzie River Trust (MRT). MRT acquired the property in 2019, securing an important gap in the Siuslaw estuary's network of conserved land. Estuarine habitat quantity and quality are identified as key limiting factors in the health of the Siuslaw watershed and its ability to support healthy populations of species such as Oregon Coast (OC) coho salmon, making restoration of estuarine habitat a high priority for local and regional organizations.

This project includes initial evaluations and modeling that will document existing hydraulic conditions and evaluate the effects of three restoration alternatives at Wren Marsh. If funded by OWEB during this cycle, economy of scale will be created by utilizing data and documentation from the conceptual and preliminary design process being completed across the Siuslaw River on the Waite Ranch property. The multi-purpose work being completed by Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians (CTCLUSI) includes the establishment of survey control points, flow and hydrology estimates, and erosion and avulsion estimates associated with the Waite Ranch project.

### Review Team Evaluation

#### Strengths

- The project location has habitat connectivity with significant nearby tidal lands and conservation properties.
- Restoration at this site could complement efforts on nearby Waite Ranch, which is located directly across the Siuslaw River.

- The technical assistance work is necessary to ensure that a design does not impact neighboring landowners.
- There is an opportunity to incorporate restoration actions to restore Sitka spruce wetlands, a priority habitat on the Oregon coast.
- The resulting restoration work will benefit Oregon coast coho by providing access to rearing habitat in the estuary.
- Opportunities to restore tidal connectivity are limited and the site has high restoration potential. The proposal will focus on restoring estuarine processes.

### **Concerns**

- The site is relatively small at 8 acres and a resulting restoration project may be prohibitively expensive for the overall expected benefit.
- Removing the north-south dike that borders the mitigation site is critical for achieving maximum benefit to fish. It is unclear if this is a preferred alternative.
- It is unclear whether an adjacent landowner will allow management for long-term habitat on the part of the marsh in their ownership. Their support of the project will be important to success.
- Costs are high when compared to similar types of analysis that have occurred on larger properties.
- There is a substantial amount of funding requested for a hydrologic model. The analysis will also utilize data from a model for neighboring Waite Ranch to provide a cost-effective approach. The narrative lacked information to help reviewers evaluate if the previous model is applicable to this site and how the two modeling efforts will be integrated.

### **Concluding Analysis**

The Wren Marsh site, while small in size compared to other estuarine restoration projects, does provide an important link to ongoing restoration in the Siuslaw River estuary. If restoration can be combined with Waite Ranch, this project could represent a cost-effective approach to achieving improved tidal connectivity and increased rearing habitat. The applicant is adopting a careful and cautious approach given past experience and while there are some currently unknown site constraints with surrounding land ownership, this project is likely to produce a realistic path forward for restoration.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

6 of 8

### **Review Team Recommended Amount**

\$74,891

### **Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Fund

**Staff Recommended Amount**  
\$74,891

**Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1022-19051

**Project Type:** Technical Assistance

**Project Name:** Samson and Green Creek Priority  
Fish Passage Projects

**Applicant:** Trout Unlimited Inc

**Region:** North Coast

**County:** Tillamook

**OWEB Request:** \$46,611

**Total Cost:** \$249,576

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**Application Description** Green Creek and Samson Creek are tributaries of the Trask River in the Tillamook Bay Watershed. The Trask River watershed is approximately 175 square miles (112,164 acres) in size and is located primarily within Tillamook County, with small portions in Washington and Yamhill counties. The Trask River drains into Tillamook Bay. Anadromous salmonid fish species occurring in the Trask watershed include spring and fall chinook salmon, coho salmon, chum salmon, summer and winter steelhead, and sea-run cutthroat trout. Resident cutthroat trout also occupy most of the streams. Resident brook lamprey and/or Pacific brook likely occur in the watershed but are not well-documented.

Culverts where Trask River Road crosses Green Creek and Samson Creek are barriers to fish passage, restricting access to spawning and rearing habitat, and their deteriorated condition is a threat to public safety due to potential for road washouts. Both culverts are high on the Salmon SuperHwy strategic prioritization list, and Samson Creek is on the Oregon Department of Fish and Wildlife Fish Passage Priority List.

The goal of this project is to secure final engineering designs for replacement of both culverts with adequately sized structures and streambed simulation design. Once constructed, these projects will restore full volitional passage to three miles of spawning and rearing habitat for native migratory fish, including ESA listed coho.

Engineering designs will be contracted out to a private engineering firm. TU will prepare and release an RFP for engineering designs, manage the engineering contract, and convene the technical team for design review.

Project partners include National Oceanic and Atmospheric Administration (NOAA), US Forest Service (USFS), US Fish and Wildlife Service (USFWS), Oregon Dept. of Fish and Wildlife (ODFW), Tillamook County Public Works (TCPW), and Trout Unlimited (TU).

## **Review Team Evaluation**

### **Strengths**

- The project will address two high priority barriers that together block access to over 3 miles of stream habitat. Both barriers are identified on the Salmon Superhwy priority list.
- Many species of fish will benefit from the project, including Oregon coast coho, chum, steelhead, cutthroat, and Pacific lamprey.
- The two culverts are in poor condition and have a failure risk. If they were to fail, they will be replaced under an emergency permit which may not ensure fish passage is incorporated.
- Restoring connectivity on Samson Creek will help address the temperature-limited Trask River watershed by restoring flow and providing access for fish to cold water refugia.
- The Green Creek project will build on extensive riparian plantings completed in the past.
- There is a diversity of partners involved and the applicant has a proven track record of implementing similar types of projects.
- The project has the potential to serve as a catalyst for future funding by positioning the applicants to receive transportation funds with shovel-ready designs.

### **Concerns**

- The long term capacity of some of the federal partners, particularly USFS, is becoming more limited due to the continuing lack of natural resource staff positions.

### **Concluding Analysis**

These two barriers slated for design work and eventual replacement are well-prioritized projects with a strong partnership supporting the work. Restoring fish passage at these locations will have high ecological benefit, with access restored to high quality habitat for a number of fish species. The project partners are highly experienced with implementing fish passage projects with an extensive portfolio of successfully completed work. The projects have a high likelihood of being implemented successfully in the near term after the technical assistance work is complete.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

1 of 8

### **Review Team Recommended Amount**

\$46,611

### **Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Fund

**Staff Recommended Amount**  
\$46,611

**Staff Conditions**



## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1023-19052

**Project Type:** Technical Assistance

**Project Name:** Illingsworth Creek Fish Passage Project

**Applicant:** Trout Unlimited Inc

**Region:** North Coast

**County:** Tillamook

**OWEB Request:** \$36,186

**Total Cost:** \$128,513

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**Application Description** Illingsworth Creek, near Garibaldi, OR, flows from forested headwaters before passing through an agricultural pasture and emptying into the tidally-influenced lower Miami River in the Tillamook Bay Watershed. It is one of the lowermost tributaries in the Miami Basin and is tidal from the mouth upstream approximately 1,200 feet. The creek is utilized by juvenile salmon for summer and winter rearing and has been determined to be one of the four most important tributary habitats in the Miami Basin for coho salmon production. In 2007, average coho rearing densities for the Miami were the highest on Illingsworth Creek. The creek also supports chum, Chinook, winter steelhead, and coastal cutthroat trout populations. ODFW identifies Illingsworth Creek and the Miami River as 'High Intrinsic Potential' areas, providing important low gradient coho rearing habitats. The Miami River is also one of only three systems to support chum in the Tillamook Bay basin. A healthy beaver population occupies Illingsworth Creek. Illingsworth Creek has upstream spawning areas with abundant spawning gravel and well scoured pools. An extensive 58 acre wetland restoration project was completed by TEP in the lower Miami watershed, including the area where Illingsworth Creek joins the Miami River.

An undersized culvert where Ekroth Rd. crosses Illingsworth Creek impedes passage to 1.6 miles of upstream spawning and rearing habitat and hinders natural stream function. This culvert is identified as a high priority in the Salmon SuperHwy fish passage prioritization, an effort that identified the most cost effective projects with the highest conservation value.

This project seeks to secure engineering designs to replace the undersized culvert with an adequately sized structure (bridge).

Project partners include National Oceanic and Atmospheric Administration, US Forest Service, US Fish and Wildlife Service, Tillamook County Public Works, Oregon Dept. of Fish and Wildlife, and Trout Unlimited.

### Review Team Evaluation

#### Strengths

- The application addresses a priority fish passage barrier that will restore access to 1.6 miles of habitat for a variety of fish species including Oregon coast coho, steelhead, chum, and Pacific lamprey.

- This is one of a few streams in the area that support chum.
- The project is in close proximity to other restoration projects in the area including the tidal restoration of the Miami River wetland site.
- Water quality monitoring is occurring in the project vicinity and could inform the effectiveness of the proposed work.
- There are a diversity of partners supporting the work that bring a breadth of relevant experience implementing similar projects in the watershed.
- The technical assistance approach has a well-planned funding strategy and some of the design work is already underway.

### **Concerns**

- No significant concerns are noted during review.

### **Concluding Analysis**

This is a high priority fish passage project with a strong partnership behind the work. Restoring fish passage at this location on Illingsworth Creek will have a high ecological benefit due to the connectivity with other restoration and monitoring work and the diversity of fish species that utilize the creek. The project partners are highly experienced with implementing fish passage projects with an extensive portfolio of successfully completed work. The project has a high likelihood of successful implementation after the technical assistance work is complete.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

2 of 8

### **Review Team Recommended Amount**

\$36,186

### **Review Team Conditions**

### **Staff Recommendation**

**Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

**Staff Recommended Amount**

\$36,186

**Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1024-19056

**Project Type:** Technical Assistance

**Project Name:** Ecola Creek Watershed Beaver  
Habitat Assessment

**Applicant:** North Coast WS Assn

**Region:** North Coast

**County:** Clatsop

**OWEB Request:** \$20,273

**Total Cost:** \$29,673

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### Application Description

The Ecola Creek Watershed comprises 14,080 acres, including the Ecola Creek Forest Reserve (ECFR), in Clatsop County. Historically, Oregon's coastal watersheds supported an abundance of beavers. Because of trapping and land management practices, however, the number of beavers has drastically decreased, disrupting natural ecosystem processes. Beavers benefit the watershed by creating off-channel pools where depositions of nutrient-rich sediment support a complex food web that includes salmonids and other aquatic life. Water stored from winter runoff allows for a longer lasting water supply during the summer drought period (July through mid-September), providing rearing habitat for salmonids.

The goal of this proposed project is to (a) assess existing and potential beaver habitat in the Ecola Creek Watershed and (b) determine appropriate ways to support, expand and retain beaver populations as a natural promoter of habitat complexity to benefit salmonids and other aquatic species.

The North Coast Watershed Association (NCWA) plans to employ a highly qualified contractor to (a) assess beaver habitat conditions, using established protocols, and (b) develop a beaver habitat plan. The contractor will conduct a habitat survey, identify habitat-recovery sites, and prepare vegetation and restoration plans to attract and support populations of beaver that are struggling to reestablish within the watershed. The project will convene a Technical Team during the analysis process that will include representatives from the Oregon Department of Fish and Wildlife, U.S. Fish and Wildlife Service, surrounding industrial timber landowner GreenWood Resources, and the city of Cannon Beach, which owns the Ecola Creek Forest Reserve.

The desire to support beaver populations in the Ecola Creek Forest Reserve has long been a goal for the Ecola Creek Watershed Council. This project is a grassroots effort inspired and supported by community members, local government and the NCWA.

### Review Team Evaluation

#### Strengths

- Enhancing beaver habitat is a high priority in the North coast. The proposal provides an opportunity

for a low-risk habitat restoration technique at a reasonable cost.

- Beaver activity has been noted in the watershed, indicating potential for successfully attracting the species to settle.
- The project builds on other restoration work in the Ecola Creek watershed, including a recently-implemented large wood placement project.
- The landowner and partners are enthusiastic about beaver restoration. The City of Cannon Beach has worked to conserve the municipal watershed and is eager to accomplish restoration work that benefits watershed health.
- Project timing is ideal with the upcoming management plan update for the Ecola Creek Forest Reserve (ECFR).
- Restoring beaver habitat within the ECFR will improve floodplain connectivity.
- There are opportunities to raise public awareness at this project location given the high public use and visibility.
- The approach to habitat assessment is sound with the proposed use of the Beaver Restoration Assessment Tool (BRAT).
- The applicant has demonstrated capacity to manage the project with qualified staff.

### **Concerns**

- The City infrastructure creates constraints with restoration design approaches at the settling ponds.

### **Concluding Analysis**

This project was originally submitted as a Restoration application that was recommended for funding but fell below the line. In this iteration, the project partners will pursue technical assistance to assess the availability of beaver habitat with the Ecola Creek Forest Reserve, a conservation property that protects the City of Cannon Beach's municipal water supply. The application took into consideration comments from previous reviews and provided additional detail with regard to site conditions and the project approach. The approach is sound, uses appropriate methodology, and is likely to succeed in meeting the objectives of developing 30% designs for two pilot projects.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

4 of 8

### **Review Team Recommended Amount**

\$20,273

### **Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Fund

**Staff Recommended Amount**  
\$20,273

**Staff Conditions**

## Open Solicitation-2020 Spring Offering North Coast (Region 1)

**Application Number:** 221-1025-18998

**Project Type:** Stakeholder Engagement

**Project Name:** Landowners, Beaver and Salmon  
on the Oregon Coast

**Applicant:** The Beaver Coalition

**Region:** North Coast

**County:** Lincoln

**OWEB Request:** \$44,598

**Total Cost:** \$71,598

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**Application Description** This project will engage stakeholders in the eight counties within the range of threatened Oregon Coast Coho Salmon. This species suffers from reduced quality and quantity of rearing habitat – a serious limiting factor caused by past and present land use activities and removal of beaver. While plans by Oregon and NOAA call for more beaver ponds to increase high quality rearing habitat, there has not been a coordinated effort to implement those recommendations and it is common practice to kill beavers and remove their dams.

This project will focus on the strategies and actions in the state and federal Coho Salmon recovery plans relating to restoring coho habitat with beaver and beaver-based restoration. We will develop a strategic framework for implementing these recommendations by facilitating regional planning cohorts and strategic outreach to key landowners in coordination with ODFW and NOAA Fisheries. Following the example of the Tidegate Work Group Project's conversations, we will use virtual and/or in-person workshops and meetings to compile information on the current regional beaver-based restoration actions, planning, local sensitivities, and priority areas. We will also facilitate knowledge transfer on the best available science for partnering with beaver and highlighting regional successes, including the feasibility of obtaining the habitat benefits provided by beaver. We will work closely with NOAA, ODFW, tribes, watershed councils, SWCDs, agencies, landowners, businesses, and other organizations to draft a strategic framework for future efforts.

### Review Team Evaluation

#### Strengths

- The project will address state and federal recovery plans for Oregon coast coho by promoting beaver as a tool to increase habitat complexity.
- The proposed work will result in a strategic plan with identified priority areas to inform strategies and actions for beaver related projects. This work has a strong likelihood of resulting in restoration actions that will improve habitat for juvenile coho.
- The approach to the proposed work incorporates strategic outreach using multi-media tools and includes a participation stipend for other partners involved in the effort.
- The capacity of the applicant is enhanced by relying on the expertise of local watershed councils and SWCDs to inform stakeholder engagement.

- The project team has extensive experience and passion for the proposed work. Project managers have a track record of successfully established partnerships that have shown effective communication with stakeholders.
- Technical expertise is currently concentrated among a small number of people; the proposed approach will help to spread expertise to a wider audience and likely result in timely development of eligible restoration projects.
- The application referenced strategies used successfully in stakeholder engagement for tide gate restoration.

## **Concerns**

- It is unclear whether the identified stakeholders and landowners are ready to engage in the proposed conversation as the promotion of beaver on the landscape has been a controversial topic in recent years.
- It will likely be challenging to get engagement around this issue due to the ongoing covid-19 pandemic.
- The timeframe may be overly ambitious especially given the large geographic area.
- The application indicated that coastal SWCDs and watershed councils were notified shortly before submittal of the application, leaving little time for written responses; therefore, there is some uncertainty whether the identified local partners have the capacity to serve their intended role in the effort.

## **Concluding Analysis**

There is a timely need for engagement around the value of beaver within the range of Oregon coast coho. Beaver have increasingly been identified as an effective and low-cost restoration approach. The assembled project team has the appropriate experience and enthusiasm to tackle engagement on this topic and the inclusion of local watershed councils and SWCDs in the effort is likely to result in a successful outcome.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

2 of 2

## **Review Team Recommended Amount**

\$44,598

## **Review Team Conditions**

## **Staff Recommendation**



**Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$44,598

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### North Coast (Region 1)

**Application Number:** 221-1026-19028

**Project Type:** Stakeholder Engagement

**Project Name:** Alsea Basin Stakeholder  
Engagement: from Oaks to the Ocean

**Applicant:** MidCoast WC

**Region:** North Coast

**County:** Benton

**OWEB Request:** \$52,811

**Total Cost:** \$85,111

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**Application Description** This project in the Alsea River Basin on the central Oregon coast addresses limiting factors identified for the independent coho ESU and other fish and wildlife species. Stream complexity--namely lack of large wood--is the primary limiting factor and water quality is the secondary limiting factor identified in the Federal Recovery Plan for coho for the basin. Without large wood, streams are incised, spawning gravel recruitment and retention is prevented, pools and cover are lacking, and major portions of basin streams have temperature limitations putting them on the ODEQ 303(d) list. Meanwhile, in the estuary, diking and tide-gating has reduced tidal connectivity by 23%. This project will directly engage major federal and industrial timber owners via meetings and site visits to further prioritize work within previously identified priority areas for a more comprehensive, sub-basin approach. Additionally, private landowners will be identified and engaged through one on one conversations, regular meetings, site visits, and workshops/field trips. Active outreach will reach 200 people. Media outreach, mailings, and presentations to schools and service clubs would also be employed. The final outcome will be the scoping of seven projects, including large wood placement, floodplain connectivity, riparian planting and invasive species control, beaver enhancement, and estuary restoration. This outreach project is timely because there will be availability of BLM and USFS large logs for use on private land, it is a focus area for NRCS funding and outreach, and initial interest has already been confirmed from industrial timber groups and the Port of Alsea.

### Review Team Evaluation

#### Strengths

- Stakeholder engagement in the Alsea basin will help fill a gap that has been left by the dissolution of the Alsea Watershed Council.
- The project is timely with upcoming Bureau of Land Management timber sales increasing the availability of trees suitable for use in restoration. The stakeholder engagement effort will generate support among landowners for instream projects that can utilize the material.
- The application clearly identifies the need for engagement of landowners and land managing agencies.
- The timeframe in the application reflects potential impacts due to covid-19 and proposed elements of outreach work for group meetings are designed appropriately.
- Landowners downstream of high-quality habitat are prioritized for engagement work.

- The proposed engagement involves a diversity of partners that bring together considerable experience in the Alsea basin, indicating sufficient capacity for success.
- The project could improve the cost-effectiveness of future restoration projects with the focus on securing logs for restoration.

### **Concerns**

- A significant part of the proposed work includes direct, one-on-one engagement with stakeholders which may be impacted by the continued pandemic.
- The application lacks detail on the potential for oak restoration in the Alsea basin.

### **Concluding Analysis**

Stakeholder engagement in the Alsea basin is timely and the whole-watershed approach planned through this effort is comprehensive and likely to be successful. The project will systematically target landowners associated with priority habitat. Landowners will also be contacted who implemented restoration projects on their properties over a decade ago. This is a unique approach and likely effective tool to re-engage with those likely to participate in more conservation efforts. The applicant has prior experience working in the Alsea watershed and has assembled the right partners to help make this effort a success.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

1 of 2

### **Review Team Recommended Amount**

\$52,811

### **Review Team Conditions**

### **Staff Recommendation**

**Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

**Staff Recommended Amount**

\$52,811

**Staff Conditions**

North Coast

Southwest

Willamette Basin

Central Oregon

Eastern Oregon

Mid-Columbia



# South Coast - Region 2 Spring 2020 Funding Recommendations



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Funding Recommendation

- Staff Recommendation For Funding (SRF)
- Below Funding Line (BFL)

Previous Grants 1998 - Fall 2019

- Land Acquisition
- ◆ Restoration

▲ Region 2 Cities

— Region 2 Streams

▭ OWEB Region 2 Boundary



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775 Summer St, NE Suite 360  
Salem, OR 97301-1290  
(503) 986-0178  
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## Region 2 - Southwest Oregon

### Restoration Projects Recommended for Funding in Priority Order

Project #	Grantee	Project Title	Brief Description	Amount Recommended	County
221-2002	Rogue River WC	South Fork Little Butte Creek RM 6.8 - Ecological Restoration Project	Water quality and instream habitat for salmon will be improved along the South Fork of Little Butte Creek by removing invasive plant species, planting native trees within the riparian area, and installing large wood structures in the creek.	258,755	Jackson
221-2011	Coos Watershed Association	CoosWA Millicoma Confluence Restoration Project	Tidal function will be restored at the confluence of the Millicoma and South Fork Coos Rivers by replacing a failing tidegate and relocating a levee, which will provide conditions for developing the first planting in the Coos River basin of a critically imperiled "Sitka Spruce Swamp" habitat.	405,762	Coos
221-2007	Partnership for the Umpqua Rivers	Rock Creek Mainstem Restoration	Watershed and ecosystem functions will be improved by adding large, engineered log jams and building riffles in the stream to reconnect the floodplain with multiple historic side-channels that provide off-channel habitat for juvenile salmonids in Rock Creek, a major tributary to the North Umpqua River.	265,307	Douglas
221-2005	Coquille Watershed Association	Sandy Creek Whole Watershed Restoration Project - Phase 1	Stream habitat and floodplain connectivity in Sandy Creek, a tributary to the Middle Fork Coquille River, will be restored through placement of log and boulder structures.	577,820	Coos
221-2009	Coos Watershed Association	Williams River Habitat Connectivity Project	Natural processes will be restored to improve water quality and stream complexity on the Williams River by addressing a fish passage barrier that will reconnect 21 miles of stream habitat for salmonids and revegetating the riparian area with native plants to reduce fine sediment and increase shade.	158,752	Douglas
221-2000	Cascade Pacific RC&D	Tenmile Lakes Watershed Beaver Analogue Project	Beaver dam analogues will be installed on Big Creek and Johnson Creek, tributaries of Tenmile Lakes, to improve habitat for salmon, including Oregon coast coho.	53,668	Coos
<b>Total Restoration Projects Recommended for Funding by RRT and OWEB Staff</b>				<b>1,720,064</b>	

### Restoration Projects Recommended but Not Funded in Priority Order

Project #	Grantee	Project Title	Brief Description	Amount Recommended	County
221-2001	Applegate Partnership, Inc.	West Fork Evans Creek Tributaries Enhancement Project	Large wood structures will be placed in Rock, Battle, and Salt Creeks, tributaries of the West Fork of Evans Creek, to improve spawning and rearing habitat for adult and juvenile salmon.	444,363	Jackson

Region 2 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

221-2006	Coos SWCD	North Bank Working Landscape & Tidal Channel Restoration	A failing tide gate in the lower mainstem Coquille River will be replaced to restore fish passage and improve water quality and of tidal floodplain habitat for over-wintering juvenile salmonids.	518,672	Coos
221-2012	Coquille Watershed Association	Dement Creek Whole Watershed Restoration Project	Stream conditions will be restored throughout the Dement Creek Basin by implementing prioritized restoration actions, including constructing instream large wood structures, installing fence, and planting riparian areas to improve habitat conditions and water quality for salmon.	633,558	Coos
221-2004	Elk Creek WC	Ellenburg Creek Instream Restoration	Natural hydrologic processes will be restored on Ellenburg Creek, located in the Elk Creek watershed, through the placement of large wood structures to capture bedload and create pools that will improve spawning and rearing habitat for coho salmon and steelhead.	183,578	Douglas
221-2003	Coquille Watershed Association	Twelvemile Creek Basin Road Improvements for Fish Passage and Water Quality	Top priority culverts will be replaced in the Twelvemile Creek Basin to restore fish passage and reduce sediment from the road system, which will improve spawning and rearing habitat and water quality for native fish and other aquatic species.	310,879	Douglas
221-2010	Coos Watershed Association	North Slough Riparian Restoration Project	Riparian and stream health will be improved through eradication of noxious weed species followed by installing fence and native plants to restore riparian areas along North Slough, a tributary to the Coos River estuary.	145,847	Coos
221-2008	Partnership for the Umpqua Rivers	Olalla Creek and Tributaries Fish Passage and Enhancement Project	Two culverts will be replaced to open fish access to two miles of stream habitat and large wood structures will be placed to improve habitat conditions for coho salmon.	221,509	Douglas
<b>Total Restoration Projects Recommended for Funding by RRT</b>				<b>4,178,470</b>	
<b>Restoration Applications <i>Not Recommended</i> for Funding by RRT</b>					
Project #	Grantee	Project Title		Amount Requested	County
None					



Region 2 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

Technical Assistance (TA) Projects Recommended for Funding in Priority Order					
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County
221-2021	Coquille Watershed Association	Coaledo Drainage District Tidegate Replacement and Fish Passage Project Phase 2 Final Designs	Designs will be finalized for replacing an aging tide gate with a structure that facilitates fish passage and access to valuable over-wintering habitat for juvenile coho in Beaver Slough, a tributary to the lower Coquille River.	74,842	Coos
221-2018	Coquille Watershed Association	Hatchet Slough Tidegate Replacement and Fish Passage Project - Phase 1	Data will be collected to inform an alternatives analysis and select a preferred design approach to address fish passage at aging tidegate infrastructure on Hatchet Slough, which will improve fish access to critical rearing habitat in a high priority sub-watershed in the Coquille Estuary	74,990	Coos
221-2014	Coos Watershed Association	Catching Slough Project Development	Multiple habitat restoration projects will be developed to improve fish passage, riparian habitat, water quality, and flood conveyance in Catching Slough, a tributary to the Coos River estuary.	74,507	Coos
Total TA Projects Recommended for Funding by RRT and OWEB Staff				224,339	
Technical Assistance Projects Recommended but Not Funded in Priority Order					
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County
221-2016	Coos SWCD	Noble Creek Tidal Lands Restoration Phase I Technical Assistance	Technical designs will be created to restore water quality, improve fish access to tidal habitats, and address drainage concerns caused by aging tidegate infrastructure on Noble Creek, a tributary to the Coos River estuary.	75,000	Coos
221-2017	Smith River WC	Concrete Sill Removal/Alteration Design	Engineered plans will be produced to remove or alter concrete structures at five sites to improve juvenile and adult salmonid passage to high quality spawning, rearing, and refuge habitat in Smith River.	70,535	Douglas
221-2024	Siskiyou Field Institute	Siskiyou Field Institute Deer Creek Center Management Plan	A management plan will be developed for the Siskiyou Field Institute Deer Creek Center that provides a clear road map to preserve existing habitat values and implement restoration that will improve water quality and quantity, remove fish barriers, and improve habitat for salmonids in Deer and Squaw Creeks	26,928	Josephine
221-2013	Partnership for the Umpqua Rivers	Yellow Creek Instream Technical Assistance	A comprehensive plan will be developed for the Yellow Creek drainage to address watershed limiting factors impacting coho and enhance instream fish habitat, water quality, and riparian health on 11 miles of stream.	53,432	Douglas
221-2015	Coos Watershed Association	South Fork Coos River Road Assessment and Project Development - Phase I	Restoration projects will be developed and prioritized in the South Fork Coos River to address the effects of forest roads on water quality and aquatic habitat.	35,238	Coos

Region 2 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

221-2023	Coquille Watershed Association	Big Creek Watershed Assessment and Project Development	Watershed conditions will be assessed to identify and prioritize critical fish habitat and water quality restoration projects in the Big Creek Basin, a tributary of the Middle Fork Coquille River.	52,705	Coos
221-2025	Curry SWCD	Donaldson Creek Fish Passage Design_2020	The project will develop alternatives for restoring fish passage between Donaldson Creek and Willow Creek, and improving stream and riparian function.	44,525	Curry
221-2019	The Freshwater Trust	Lower Ashland Creek Habitat Enhancement	A restoration design will be developed for Lower Ashland Creek, a tributary to Bear Creek, to increase native fish habitat and improve water quality in the stream through a combination of instream habitat enhancements and floodplain riparian forest restoration.	49,658	Jackson
221-2022	Applegate Partnership, Inc.	Slate Creek Fish Passage Project_TA	Engineered designs for fish passage improvement at Slate Creek Dam will be developed to address a channel-spanning fish passage barrier impeding salmonid passage to critical rearing habitat on Slate Creek, a tributary to the Applegate River.	33,270	Josephine

<b>Total TA Projects Recommended for Funding by RRT</b>				<b>665,630</b>	
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**Technical Assistance Applications *Not Recommended* for Funding by RRT**

Project #	Grantee	Project Title	Amount Requested	County
221-2020	Partnership for the Umpqua Rivers	South Smith River Wetland Phase 1 (Kennedy Slough) Design	74,817	Douglas

**Stakeholder Engagement Projects Recommended for Funding in Priority Order**

Project #	Grantee	Project Title	Brief Description	Amount Recommended	County
221-2027	Curry SWCD	Tribal and Community Engagement for Ecocultural Watershed Restoration	Project partners will engage with the Coquille Indian Tribe and the Confederated Tribes of the Siletz Indians to integrate ecocultural knowledge of native plant communities into assessment, planning, and subsequent community outreach for restoration and protection projects in the Sixes River watershed.	22,977	Curry
221-2026	Applegate Partnership, Inc.	Cheney Cr Landowner Engagement	Project partners will build on existing fish passage outreach to expand communication with landowners to identify irrigation improvement, fuels reduction, and habitat restoration project opportunities within the Cheney Creek watershed.	32,113	Josephine

<b>Total Stakeholder Engagement Projects Recommended for funding by OWEB Staff</b>				<b>55,090</b>	
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**Stakeholder Engagement Projects *Recommended but Not Funded* in Priority Order**

Region 2 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

Project #	Grantee	Project Title	Amount Recommended	County
None				
Total Stakeholder Engagement Projects Recommended for funding by RRT			55,090	
Stakeholder Engagement Projects <i>Not Recommended</i> for Funding by RRT				
Project #	Grantee	Project Title	Amount Requested	County

Region 2 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

None				

## Open Solicitation-2020 Spring Offering Southwest Oregon (Region 2)

**Application Number:** 221-2000-18896

**Project Type:** Restoration

**Project Name:** Tenmile Lakes Watershed Beaver  
Analogue Project

**Applicant:** Cascade Pacific RC&D

**Region:** Southwest Oregon

**County:** Coos

**OWEB Request:** \$53,668

**Total Cost:** \$68,498

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### Application Description

Historically, the Tenmile Lakes Basin has been an excellent producer of Coho salmon and may have been the largest producer on the coast of Oregon. Commercial seine records compiled by ODFW suggest runs-up to 125,000 Coho returned per year to the system. Big and Johnson Creeks are the two largest tributaries in the Tenmile Lakes Watershed, Coos County. Both streams along with Plum Gulch, a tributary of Big Creek, provide critical spawning and rearing habitats for Coho salmon and other aquatic species such as Pacific Lamprey. These stream reaches have been negatively impacted by historical forestry and agricultural practices. Streams have been channelized, the large wood removed, and Beaver and their dams eliminated. These historic uses to this day have resulted in little to no beaver use in our low forested areas where historically large beaver dam complexes coexisted with large numbers of Coho. Project Partners that include NMFS, ODFW, DSL, and TLBP are seeking funding to construct a total of 9 Beaver Analogue Dams (BDAs), 3 in series, in the above identified tributaries. BDA implementation will follow the successful examples completed in the Upper Nehalem BDA Pilot Project 2018. Restoring Beaver in Coastal lakes is a high priority and important strategy identified in State and Federal Coho recovery plans. The overall goal of the project is to induce beaver activity at each of the nine stream sites with these structures and improve native Coho habitat in these Tenmile Lakes tributaries. OWEB and matching funds will be utilized for contracted services, mileage, and materials. If awarded funding, project materials will be collected and installed from June through August of 2021.

### Review Team Evaluation

#### Strengths

- The project is modeled after BDA examples in the Upper Nehalem watershed.
- BDAs will improve habitat complexity in low gradient streams located in the Tenmile Lakes Basin.
- Installing BDAs will improve summer fish rearing habitat and create high flow refuge for ESA-listed coho.
- The design approach will minimize adverse impacts to the project area by limiting site access for restoration to strictly foot traffic and using hand operated tools to drive in the main BDA poles. This low impact approach will protect the riparian area and stream during project implementation.
- The project builds on completed restoration located below the project reach, including fish passage, riparian planting, fencing, and large wood placements.

- ODFW stream surveys indicate there was historic beaver use in the project reach. If beaver repopulate the project area, it will likely result in minimal conflict with land management activities because the site is located on state lands.
- The applicant has experience implementing restoration projects and has developed relationships within the community that will help with conducting landowner outreach about beaver as necessary.
- NMFS biologists have reviewed project designs.
- The project cost is reasonable for the potential benefits to water quality and fish habitat.

## Concerns

- It is unclear from the application whether design alternatives to BDAs were considered, such as plantings or instream log placements.
- The application lacks details describing how beavers currently use the landscape that would provide helpful context for evaluating the project. Historically, beaver activity in the watershed led to erosion concerns for agricultural landowners and there is currently active beaver trapping in the lake system below.
- Additional detail describing some elements of the design approach would be helpful to aid in evaluating technical soundness. For example, it is unclear whether the BDAs will function like channel spanning weirs or whether posts used to construct BDAs could create plunge issues for fish. The posts will need to be installed as low as possible into the stream profile to avoid scour and potential impacts to fish access to upstream habitat. This may be difficult because the stream substrate depth may not be sufficient to adequately install posts and there is potential for hard sandstone patches to make post installation challenging.

## Concluding Analysis

BDA construction is a relatively new restoration technique for Southwest Oregon. The lower portion of the Tenmile Lakes watershed has higher water temperatures and the lake hosts a multitude of nonnative warm water fish species. Creating rearing opportunities for juvenile ESA-listed coho in cool water areas located higher in the watershed helps to discourage native fish from moving down into the lower reaches of the system where there are mortality risks. The project design is a cost-effective and reasonable approach to encourage beavers to return to the upper parts of the Tenmile Lakes watershed.

## Review Team Recommendation to Staff

Fund

## Review Team Priority

6 of 13

## Review Team Recommended Amount

\$53,668

## Review Team Conditions

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Fund

**Staff Recommended Amount**  
\$53,668

**Staff Conditions**

## Open Solicitation-2020 Spring Offering Southwest Oregon (Region 2)

**Application Number:** 221-2001-18919

**Project Type:** Restoration

**Project Name:** West Fork Evans Creek Tributaries Enhancement Project

**Applicant:** Applegate Partnership, Inc.

**Region:** Southwest Oregon

**County:** Jackson

**OWEB Request:** \$444,363

**Total Cost:** \$582,753

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### Application Description

The West Fork Evans Watershed Tributary Enhancement Project seeks to expand the geographic scope of the West Fork Evans and Sand Creek LWD Project (OWEB grant #219-2032-16692) through additional LWD placements in tributaries to the West Fork Evans Creek sub-basin of the upper Rogue River. Specifically, we aim to improve spawning and rearing habitat for adult and juvenile salmonids along approximately 2.5 miles of Rock, Battle, and Salt Creeks. This project is proposed for lands owned and managed by Lone Rock Resources and the Bureau of Land Management (BLM). West Fork Evans Creek and its tributaries are a component of the Upper Rogue SONCC population within the Interior Rogue stratum and are identified as high priority for restoration under NOAA's Final Recovery Plan for SONCC Coho Salmon. In addition to ESA-listed Coho Salmon, the project will benefit Summer and Winter Steelhead and Cutthroat Trout. Historic land management practices in the West Fork Evans watershed have led to simplified instream habitat. Biologists concur that a reduction in habitat quantity and quality across a variety of habitats types necessary to support salmonid life histories has limited recruitment and recruitment potential into the spawning population. To ameliorate this problem, APWC proposes to enhance instream habitat complexity through installation of approximately 52 large wood structures. Desired project outcomes include: 1) enhanced winter-rearing habitat for juvenile salmonids via improved floodplain connection and off-channel habitat development; 2) enhanced summer-rearing habitat for juvenile salmonids via increased pool development and hiding cover, and; 3) accrual of suitable substrate for adult salmonid spawning. These outcomes will increase spawning success and juvenile survival rates and contribute to long term viability of native fish populations. Project Partners include Lone Rock Resources and BLM.

### Review Team Evaluation

#### Strengths

- All three tributaries in the project area produce coho, steelhead, and coastal cutthroat, and the project sites are located within a focal area in the draft Upper Rogue Coho Strategic Action Plan.
- The project reaches are comprised of bedrock and sand, adding large wood will increase stream channel roughness and complexity that will provide fish habitat benefits.
- Proposed restoration will benefit ESA-listed coho by improving rearing and spawning habitats.
- The proposed low impact approach can be implemented with little disturbance to the riparian zones.



- The project builds on completed restoration in the watershed, including large wood placements and the removal of downstream impediments to fish access.
- Previous work completed to address impacts from ATVs accessing some of the stream reaches appears to be effective.
- The West Fork of Evans Creek produces the majority of stream flow for Evans Creek and provides cool water refugia.
- The applicant has experience implementing similar projects.

### **Concerns**

- Additional details describing the approach for accessing the stream is needed to better understand equipment choices for implementing the project.
- The design approach includes moving downed wood from the floodplain into the channel, which can be counterproductive by limiting floodplain connectivity. There may be more benefit from leaving the large wood in the floodplain.
- Costs for trees seem high compared to similar projects, additional information describing how values for trees were determined is needed to evaluate whether this cost is reasonable.
- The project may be overdesigned for medium and medium-small streams like the West Fork Evans Creek tributaries. The number of wood structures seems high for the project stream reach compared to similar projects.

### **Concluding Analysis**

The project builds on restoration efforts within this watershed and will likely improve habitat for ESA-listed coho in cold water refugia areas. ODFW is crafting a multi-species plan for coastal cutthroat, coho, and other species that targets perennial streams with federal ownership. The proposed project will build on the approach outlined in this conservation plan.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

7 of 13

### **Review Team Recommended Amount**

\$444,363

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Southwest Oregon (Region 2)

**Application Number:** 221-2002-18967

**Project Type:** Restoration

**Project Name:** South Fork Little Butte Creek RM  
6.8 - Ecological Restoration Project

**Applicant:** Rogue River WC

**Region:** Southwest Oregon

**County:** Jackson

**OWEB Request:** \$258,755

**Total Cost:** \$500,222

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### Application Description

The project at South Fork Little Butte Creek River Mile 6.8 is Phase 1 of multi-year actions throughout the sub-basin. Originating in the Cascade Mountains with a drainage area of 140 sq ml, South Fork joins North Fork near the town of Lake Creek to form Little Butte Creek, which flows into the Rogue River. South Fork has degraded water quality, stream processes, and aquatic and terrestrial habitats that negatively affect ecosystems, including plant and animal populations. Riparian forests are reduced, grazed, and infiltrated with noxious weeds, unimpeded livestock access to the creek increases sedimentation and nutrient loading, and simplified channels and large wood removal eliminate channel complexity, aquatic habitat creation, and floodplain interactions. These cumulative impacts also elevate summer water temperatures, threatening cold water fish populations. We propose a combination of restoration actions that will result in significant ecological uplift at this location. This is accomplished by reactivating 0.2 miles of secondary channel in winter; placing large wood at 20 strategic locations throughout the 0.96 mile project length; and rehabilitating 18.6 acres of riparian forest to recover the native plant community through noxious weed control, natural recruitment of native species, 0.64 miles of livestock exclusion fence, and planting of native nursery stock. These actions will restore critical stream processes and improve water quality and habitat conditions with increased floodplain interaction. Public awareness is also an essential component to promote restoration efforts and generate interest through media outlets and project tours. The project location and actions are identified in the Upper Rogue Coho Salmon Strategic Action Plan, developed with many partners to address limiting factors and stressors. This project is a partnership of the Wild Salmon Center, NOAA Restoration Center, and Bureau of Land Management and supported by US Forest Service.

### Review Team Evaluation

#### Strengths

- The proposed restoration actions are consistent with recommendations from the draft Upper Rogue Coho Strategic Action Plan.
- The project will benefit rearing habitats important to ESA-listed coho and help address water quality issues, such as temperature, by installing large wood structures to increase channel complexity, removing invasive plant species, installing livestock exclusion fencing, and reactivating a side-channel.
- The project has significant support as evidenced by letters of support and match contributions from the Wild Salmon Center, NOAA, and BLM.

- Landowner commitment to the project is demonstrated by donated labor and trees. Sourcing trees from the project properties will provide a dual benefit by creating more fire-wise properties and using the trees to restore stream habitat.
- The applicant has experience with riparian restoration and is using lessons learned in their proposed approach for eradicating blackberry and promoting natural regeneration of native riparian species. The approach is likely to reduce the need for extra plantings and supplemental irrigation.
- technical consultants experienced with this type of dynamic stream system will be utilized to finalize designs for the instream structures.
- Beaver present in the watershed could increase benefits from the proposed work.
- The video links provided in the application are helpful to understanding the project.
- The project provided an opportunity to raise public awareness about the benefits of watershed restoration that could catalyze additional landowner participation in future restoration.

### **Concerns**

- It is uncertain whether there will be enough suitable trees on the site for restoration work because a number of the trees that will be placed in the stream channel are already dead or dying and may not be sound.
- The approach for reactivating a 0.2 mile secondary channel by placing large wood in the dry channel bed and installing a structure to deflect water into the channel may require adjustment after seeing how it reacts to winter flows.

### **Concluding Analysis**

Landowner support for large wood projects declined in the South Fork Little Butte Creek area after a flood in the late 1990s. The applicant has been engaging landowners in the area to shift local support for stream restoration and the proposed project provides an opportunity to demonstrate benefits of instream large wood placement. This phase one of a multi-year project dovetails with previously implemented projects in the Little Butte Creek watershed and is likely to improve riparian health, instream habitat, stream function, and water quality.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

1 of 13

### **Review Team Recommended Amount**

\$258,755

### **Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Fund

**Staff Recommended Amount**  
\$258,755

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Southwest Oregon (Region 2)

**Application Number:** 221-2003-18968

**Project Type:** Restoration

**Project Name:** Twelvemile Creek Basin Road Improvements for Fish Passage and Water Quality

**Applicant:** Coquille Watershed Association

**Region:** Southwest Oregon

**County:** Douglas

**OWEB Request:** \$310,879

**Total Cost:** \$405,891

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### Application Description

This project will address water quality and fish passage issues caused by poor road conditions in the Twelvemile Creek Basin, a 24,000-acre drainage to the Middle Fork Coquille River (MFCR) near Camas Valley, Douglas County. The MFCR has the potential to provide year-round rearing habitat for native salmonids and Pacific lamprey but lack of spawning habitat in tributaries continues to be a watershed issue. Primary limiting factors affecting spawning habitat in Twelvemile Creek include a lack of stream complexity and poor water quality. To address these limiting factors, CoqWA, Roseburg BLM, ODFW and Roseburg Resources Co. (RRC) are working towards a shared goal of improving habitat for native fish in the basin through instream restoration and sediment abatement. After completing a full watershed assessment using OWEB TA and BLM funds, restoration prioritization was developed for both instream habitat (Phase 1) and road improvements (Phase 2). Instream habitat restoration, was recently funded through OWEB and is ongoing in 2020 and 2021. This grant application is for Phase 2 and will address the top priority candidates for road improvements that were identified during the assessment.

Specifically, improvements will address fish barriers, maximize sediment abatement, and enhance natural flow regimes. If poor road conditions are left unaddressed, the unnatural transport of nonnative, fine sediment has the potential to suffocate redds, decrease food sources, and fill interstitial spaces within gravel beds. Together with project partners, CoqWA will build on instream restoration work by improving water quality and fish passage by replacing 2 fish barriers (including the installation of a 45' bridge), replacing 3 non-fish bearing culverts, installing 30 drainage culverts, regrading 2.3 miles and decommissioning 0.5 miles of road. Both Roseburg BLM and RRC have provided engineering designs, cost estimates, and will be sharing implementation responsibilities.

### Review Team Evaluation

#### Strengths

- The project will implement a specific action within a geography that is prioritized in a watershed restoration action plan.
- The project design takes a holistic approach that compliments recently completed instream work in the Twelvemile Creek system.
- The project is likely to provide water quality benefits by reducing sediment impacts to downstream locations where coho and other fish species are more abundant.
- Efforts to address fish passage will open access to a significant amount of quality habitat.

- The applicant has relevant experience for completing the project as planned.

### **Concerns**

- The project will provide limited fish passage benefits because there is a barrier affecting passage for coho at a variety of flows that is located on the mainstem Middle Fork Coquille just downstream of the junction with Twelvemile Creek. However, ODFW plans to address the impediment downstream in the near future.
- It is unclear from the application whether the proposed bridge design meets NMFS fish passage criteria.
- It is unclear from the application whether the project budget is reasonable, necessary, and sufficient for implementing the project because designs in the application for the Boulder Creek culvert do not correlate with costs listed in the application budget for streambed material placement.

### **Concluding Analysis**

The restoration project resulted from an assessment and prioritization process that was funded by an OWEB Technical Assistance grant (#219-2013) to create a targeted approach for addressing instream, riparian, and sedimentation issues impacting Twelvemile Creek. The proposed work will address prioritized road drainage problems impacting water quality on private timber land by targeting 30 sediment sources on 2.3 miles of road.

### **Review Team Recommendation to Staff**

Fund with Conditions

### **Review Team Priority**

11 of 13

### **Review Team Recommended Amount**

\$310,879

### **Review Team Conditions**

Final bridge designs shall meet NMFS fish passage criteria where coho are present and not covered in permitting.

### **Staff Recommendation**

#### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**

\$0

**Staff Conditions**



## Open Solicitation-2020 Spring Offering

### Southwest Oregon (Region 2)

**Application Number:** 221-2004-18989

**Project Type:** Restoration

**Project Name:** Ellenburg Creek Instream Restoration

**Applicant:** Elk Creek WC

**Region:** Southwest Oregon

**County:** Douglas

**OWEB Request:** \$183,578

**Total Cost:** \$241,578

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### Application Description

Ellenburg Creek is a tributary to Sand Creek in the Lower Pass Creek sixth-field subwatershed. There are nearly three miles of high intrinsic potential coho spawning and rearing habitat in Ellenburg Creek. [ODFW maps] The lower part of the creek (0.4 miles) is managed for agriculture (grazing); the upper reaches are private and industrial forest land. Past land management practices, such as stream cleaning, removed most of the large wood from the channel, increased water velocities, and eroded much of the streambed to bedrock. Though there is ample gravel, there are few pieces of large wood to retain gravel, aggrade the channel, or create deep pools, all essential for juvenile coho survival. [Ellenburg Creek Restoration Action Plan, Cascade Environmental Group/Elk Creek Watershed Council, 2016] The Ellenburg Creek Instream Restoration project will place 213 key logs (all conforming to Guide to Placing Large Wood in Streams, ODFW, 1995) at 28 sites in 1.5 miles of Ellenburg Creek. LWD structures will slow water, capture bedload, and create complex pools that will improve both winter and summer rearing habitat for juvenile salmonids. In addition, approximately 100 whole trees with root wads will be used to augment these structures to create added complexity and trap sediment. 5,000 willow stakes will secure accumulated sediment and stabilize streambanks. Three cross sections will be established monitor project effectiveness. Increased bedload retention will enhance hyporheic flows and improve both water quality (reducing summer water temperatures) and water quantity (increasing water storage and release into the summer). Project partners include Eric Himmelreich, ODFW Habitat Biologist (project design), Jim Muck, NOAA Fisheries (design review), Aaron Beavers, Hydrologist, NOAA Fisheries (fish passage design), Seneca Jones Timber Company (whole tree donation), Roseburg BLM (funding for bioassessment and action planning), and two private landowners.

### Review Team Evaluation

#### Strengths

- Previous project evaluation concerns related to project management costs and application presentation are addressed.
- The application clearly describes the need for the project, and the project design format that includes photos and drawings provides details needed to understand the technical soundness of the proposed restoration.

- Ellenburg Creek contains habitat for ESA-listed coho with a high intrinsic potential. This creek currently lacks large wood important for fish habitat, and stream reaches below the project site has water temperatures that exceed standards for fish. The proposed instream placement of wood material and willow planting along Ellenburg Creek will help to increase water retention, improve spawning and rearing habitat, and lower summer water temperatures. The cool water refugia in the project reach will provide summer rearing habitat for ESA-listed coho.
- Partnership support is demonstrated by letters of support and in-kind contributions.
- The applicant incorporated actions to minimize road runoff into the stream.
- The applicant involved relevant agencies during the design process, including early coordination with NOAA for the boulder structures, and ODFW will oversee project installation.

## Concerns

- It is unclear whether the design approach is site appropriate for Site 21 because the design for this site is different from designs provided for Site 28, which has similar site conditions with a bedrock step. It is unclear why a different design approach is proposed for sites with similar site conditions.
- Trees donated to the project may not provide long-term benefits because they are fairly small and have already been staged on the project site for a few years so they will likely decay easily. However, these trees will not serve as key pieces for the instream structures.
- It was unclear whether potential impacts on adjacent properties were considered and the downstream landowner is supportive of the restoration work.

## Concluding Analysis

The project resulted from a collaborative working relationship between the applicant, agency partners, and the landowners. The project approach is technically sound and will benefit habitat for ESA-listed coho.

## Review Team Recommendation to Staff

Fund

## Review Team Priority

10 of 13

## Review Team Recommended Amount

\$183,578

## Review Team Conditions

## Staff Recommendation

## Staff Follow-Up to Review Team

**Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering Southwest Oregon (Region 2)

**Application Number:** 221-2005-18995

**Project Type:** Restoration

**Project Name:** Sandy Creek Whole Watershed  
Restoration Project - Phase 1

**Applicant:** Coquille Watershed Association

**Region:** Southwest Oregon

**County:** Coos

**OWEB Request:** \$577,820

**Total Cost:** \$974,114

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### Application Description

This project will restore channel complexity and floodplain connection in Sandy Creek, a 12,000-acre drainage to the Middle Fork Coquille River (MFCR) near Remote, OR in Coos County (See Uploads: Project Location Map). The MFCR has the potential to provide year-round rearing habitat for coho and Chinook salmon, steelhead, coastal cutthroat trout, and Pacific lamprey but lack of spawning and rearing habitat in tributaries continues to be a critical watershed issue. Historically, Sandy Creek was clear-cut and subjected to stream cleaning. As a result, most of Sandy Creek and its major fish bearing tributaries have large sections of bedrock substrate, disconnected floodplains, lack sufficient large wood structures (LWD), and spawning gravel. To address these limiting factors, CoqWA, Coos Bay BLM, ODFW, Weyerhaeuser, Coos County Roads Dept., and a private landowner are working towards a shared goal of improving spawning and rearing habitat for native fish in the Sandy Creek Basin. Phase 1 project components include placing large wood (LWD) and boulders in constructed formations into Sandy Creek in high priority reaches as determined from stream surveys that were funded from an OWEB TA grant. Specifically, we propose a total of 42 sites for habitat enhancement in the mainstem of Sandy Creek and one tributary on BLM and private property. Log and boulder structures will be placed at 37 sites and 5 sites will be just log jams. As match, phase 1 will be complemented with fish passage improvements in the basin: two culvert replacements by the Coos County Roads Department and one culvert replacement on BLM road 29-10-14.2. Phase 2 components, to be funded with future sources, will address additional road improvements, culvert replacements, and sediment abatement actions identified during the GRAIP road analysis (funded by the OWEB TA grant) to improve water quality by reducing sediment loading into Sandy Creek from the road networks.

### Review Team Evaluation

#### Strengths

- The application has a clear description for the phased project approach. The current phase one proposal focuses on instream log and boulder placements and a future phase two will focus on sediment abatement and road improvements.
- The project was identified in a prioritized list of actions that was developed from an assessment of instream, riparian, fish passage, and sediment abatement issues in the Sandy Creek watershed.
- Video links provided in the application provide helpful context for understanding the proposal.

- The stream provides important habitat for a host of aquatic species, including ESA-listed coho. The instream work is likely to address limiting factors to fish rearing habitat by adding instream large wood structures.
- The stream is listed on the 303(d) list for water quality impaired waterbodies. The project activities are likely to reduce sediment loading and improve water quality.
- The proposed restoration footprint is extensive by improving 3.1 miles of stream habitat and addressing three culverts that are fish passage barriers.
- The applicant has experience implementing prioritized on-the-ground restoration work that is based on previous assessment work.
- The project provides an opportunity to raise public awareness about restoration that could lead to additional landowner interest in watershed projects on adjacent properties.

## **Concerns**

- The designs for instream log and boulder structures provided in the application are not site specific but instead are examples showing the type of structures that will be installed
- Incorporating consideration for adding riparian shading into the project design would improve the whole watershed approach.
- The level of landowner commitment to the project is unclear for timber properties in the project area that have recently changed ownership.

## **Concluding Analysis**

The Sandy Creek basin provides important spawning and rearing habitat for ESA-listed coho, Chinook, steelhead, cutthroat, and lamprey, which is demonstrated by the fish distributed throughout the project area. There is a high potential for the proposed project to benefit a number of fish species given the biological diversity present within the watershed.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

4 of 13

## **Review Team Recommended Amount**

\$577,820

## **Review Team Conditions**

## **Staff Recommendation**

## **Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$577,820

**Staff Conditions**

# Open Solicitation-2020 Spring Offering

## Southwest Oregon (Region 2)

**Application Number:** 221-2006-19011

**Project Type:** Restoration

**Project Name:** North Bank Working Landscape & Tidal Channel Restoration

**Applicant:** Coos SWCD

**Region:** Southwest Oregon

**County:** Coos

**OWEB Request:** \$518,672

**Total Cost:** \$658,717

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### Application Description

The North Bank Working Landscapes (NBWL) project area consists of 30.0 acres of floodplain pasture located upstream from Randolph Island, River Mile (RM) 7.5 on the Coquille River, near Bandon, Coos County. The site was historically tidal saltmarsh prairie (Benner, 1992). Diking and draining to convert the site for agricultural use occurred in the early 1900s. This was facilitated by construction of a 0.5mi berm along the river, and installation of linear drainage channel network with 1ft diameter culvert and tide gate. Tidal influence on these channels is currently near zero as the single tide gate servicing the property is a top-hinged “flapper” gate which does not allow for tidal inflow. Flooding still occurs on the project area when the main Coquille River reaches flood stage. The dike has suffered from erosion in multiple locations. Site conditions currently result in poor water quality, little or no fish access to channels, and both ecological and agricultural productivity has been reduced. Previously awarded OWEB technical assistance funds have been used to develop and refine a restoration proposal for this site. Restoration project actions include installation of a new culvert and Muted Tidal Regulator (MTR) tide gate to restore and maximize fish passage; reconstruction of 4,466 ft of sinuous, on-grade, tidal channel network to provide greatly improved tidal floodplain habitat and hay production; riparian fencing along both sides of the primary reconstructed channel; re-establishment of native riparian vegetation along the banks of the primary channel for direct improvements to water quality over current conditions; installation of large woody debris to increase hiding cover and complexity; and repair to damaged segments of the dike. This project is led by Coos SWCD in partnership with the Stalley/Young families and the Oregon Department of Fish and Wildlife, and has received invaluable technical contributions from the Coquille Indian Tribe.

### Review Team Evaluation

#### Strengths

- Tidally influenced habitat within the saline zone is a rare and valuable habitat type in the lower Coquille River that is important to ESA-listed coho and life histories of other native species.
- The proposed project will address fish passage to improve access to habitat, increase channel complexity, increase the productive area for salmonids with 4,500 feet of sinuous channels, and improve water quality shade by restoring native plant community to increase shade.
- The project will complement off-channel habitat restoration work occurring in tidally influenced areas near the project site.
- The project provides a learning opportunity to better understand how tide gate projects on working lands function in the landscape.

- The ODFW biologist involved in the project has experience with large-scale tide gate projects.
- The applicant has experience working with agricultural landowners.
- The costs for tide gate structures are appropriate and comparable to similar projects.

### **Concerns**

- The application lacks information, such as a grazing and water management plans, that describes how the project site will be managed after project implementation to maintain restoration investments in a working landscape.
- It is unclear from the application whether there was consideration for potential impacts to pasture quality from salt water intrusion caused by the new tide gate structure.

### **Concluding Analysis**

The project resulted from an OWEB Technical Assistance project (#218-2036). The proposed restoration has potential to provide tidally influenced off-channel rearing habitat for juvenile coho and other native species. Land management activities have significantly reduced the extent of this habitat type compared to historic conditions. The project provides an opportunity to demonstrate a working landscape model with a supportive landowner interested in increasing their capacity to manage the land balanced with restored habitats that support ESA-listed fish.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

8 of 13

### **Review Team Recommended Amount**

\$518,672

### **Review Team Conditions**

### **Staff Recommendation**

Staff Follow-Up to Review Team

### **Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line

### **Staff Recommended Amount**



\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Southwest Oregon (Region 2)

**Application Number:** 221-2007-19012

**Project Type:** Restoration

**Project Name:** Rock Creek Mainstem Restoration

**Applicant:** Partnership for the Umpqua Rivers

**Region:** Southwest Oregon

**County:** Douglas

**OWEB Request:** \$265,307

**Total Cost:** \$470,307

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### Application Description

Rock Creek is a major tributary to the North Umpqua River. The Rock Creek watershed encompasses 62,600 acres and provides habitat for one of the most diverse assemblages of native fish in the Umpqua Basin, making Rock Creek a priority for restoration. The Rock Creek Watershed Restoration project is a multi-year, multi-phase watershed scale restoration project. The work proposed in this grant will be Phase I of the Rock Creek Mainstem restoration. The lower Rock Creek watershed is one of five Priority Watersheds identified in the BLM Western Oregon Aquatic Restoration Strategy (2015) on the Roseburg District. Partnership for the Umpqua Rivers (PUR), Roseburg Bureau of Land Management (BLM) and the USFS Forest Service Enterprise Unit have teamed up to restore the Rock Creek Mainstem on BLM Land. This project will restore watershed and ecosystem functions by accelerating the recovery of naturally functioning floodplains, wetlands, stream channels and riparian areas. This will be done by aggrading spawning gravels (which are severely lacking in Rock Creek) and reconnecting the large floodplains with multiple historic side channels. We will do this by adding large, engineered log jams in the main channel on meander bends and apex bars (where they would occur naturally). We will also be building constructed riffles to raise water elevation, connect floodplains, and aggrade spawning gravels. Constructed riffles will use a combination of boulders, cobble, and gravel to raise the stream bed. We will also be accelerating habitat development in the floodplains by excavating groundwater pools and channels in their historic locations. These habitats will provide instant off-channel habitat for juvenile salmonids in both summer and winter totaling 1.5 miles of side-channel access and restoring 30 acres of floodplain habitat. OWEB funds will be used for project management costs for PUR employees and contracted services to install the project.

### Review Team Evaluation

#### Strengths

- The project is timely for stabilizing the stream after the 2020 Archie Creek Wildfire burned extensive areas in the Rock Creek watershed.
- The project is phase one of a multi-phased approach. During the current phase, 1.75 stream miles historically affected by stream cleaning, channel straightening, and road construction will be treated with large wood placements designed to restore floodplain connectivity.
- The proposed design approach has been extensively used across the Northwest. Log jams will be placed in meander bend areas to stabilize the channel and create side-channels that will provide additional habitat. These structures could also help capture material released from the burned areas during winter flows.

- The project will improve stream function and create rearing habitats for ESA-listed coho.
- The wood supply for the project may be less expensive and larger in size because the trees will be provided by salvage logging and hazard tree removal from areas affected by recent fires.
- The proposed work will complement mitigation investments that occurred over the years and targeted instream habitat in the project area.
- The project team is working closely with USFS staff with expertise in implementing similar projects.
- The applicant has a proven track record implementing similar projects.

### **Concerns**

- The project may be premature because the recent severely hot fires in the project reach could produce a considerable amount of gravel and wood that could move into the stream and significantly change the channel in coming months. There may be merit to waiting to see how the area is impacted by these fires before implementing restoration actions.

### **Concluding Analysis**

Rock Creek has been simplified and disconnected from its floodplain. The project design approach will mimic natural processes by placing wood structures at locations in a stream system where wood naturally accumulates, such as meander bends. This will improve stream function and habitat conditions by providing summer rearing habitat in newly formed channels. Impacts from recent fires will not affect the project design approach, and the project has a high likelihood of success in achieving restoration objectives.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

3 of 13

### **Review Team Recommended Amount**

\$265,307

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

**Staff Recommended Amount**

\$265,307

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Southwest Oregon (Region 2)

**Application Number:** 221-2008-19018

**Project Type:** Restoration

**Project Name:** Olalla Creek and Tributaries Fish Passage and Enhancement Project

**Applicant:** Partnership for the Umpqua Rivers

**Region:** Southwest Oregon

**County:** Douglas

**OWEB Request:** \$221,509

**Total Cost:** \$294,852

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### Application Description

Olalla Creek and three tributaries, located in the southern part of the 103,000-acre Olalla-Lookingglass Creek Watershed, are identified as needing improved fish passage and fish habitat enhancement. According to Oregon Department of Fish and Wildlife (ODFW) High Intrinsic Potential (HIP) maps, Olalla Creek, Byron Creek and Bushnell Creek have high potential to provide quality spawning and rearing habitat for coho salmon and steelhead. Old Lane Creek was not surveyed for HIP, but it does have spawning surveys that ODFW conducts and the ODFW Habitat Restoration Biologist confirmed that the creek is suitable for coho salmon. Gordon Hanek, Byron Creek Estates Road Master, identified two deteriorating culverts maintained by his rural homeowner's association. PUR and ODFW staff designed instream habitat enhancement and riparian enhancement on Gordon's property and BLM staff designed enhancement work on Byron Creek. After completing a Technical Assistance grant to design the two culvert replacements and instream restoration, we are seeking a restoration grant to replace these culverts and implement the instream restoration on Olalla and Byron Creek. Our project partners include Oregon Department of Fish and Wildlife, Bureau of Land Management (BLM) and the Byron Creek Estates. OWEB funds will be used to 1) replace two failing culverts (one on Old Lane Creek and one on Bushnell Creek) to open up two miles of fish habitat, 2) Place 36 logs and 25 trees into 0.5 miles of Byron Creek on private and BLM land, 3) plant wattles of willows along Olalla Creek on private property.

### Review Team Evaluation

#### Strengths

- Olalla Creek, Byron Creek, and Bushnell Creek have high intrinsic potential for providing habitat for ESA-listed coho.
- Planting willow along a two mile stream reach is likely to help address water quality concerns on Olalla Creek, including temperature, high turbidity, E. coli, and low dissolved oxygen.
- The proposed instream large wood placement will improve stream function and fish rearing habitat conditions.
- The fish passage work will provide access to the two miles of cool water refugia in Byron Creek, and road crossings located downstream of the project site already have adequate fish passage.
- The proposed project costs are based on contractor quotes and are reasonable for the proposed work activities.
- The applicant has relevant experience working with landowners, and developing and implementing similar projects.

## Concerns

- It is unclear from the application whether proposed designs for replacing the crossings meet NMFS fish passage criteria.
- The application lacks details for some of the project elements that would have been helpful for evaluating the project. For example, it is unclear where willow wattles will be used on the project site and whether there are plans to treat invasive blackberry identified as a concern. Also, the design includes felling trees from the riparian area to add large wood to the stream, however, it is unclear from the application whether the trees are hardwood or conifers and which properties trees will be sourced.
- The ODFW support letter included in the application is written for another project.

## Concluding Analysis

The proposed project activities are likely to improve water quality conditions and salmonid access to cool water refugia located upstream of the project site. The project demonstrates the strong working relationship with landowners that the applicant works hard to achieve and maintain.

## Review Team Recommendation to Staff

Fund

## Review Team Priority

13 of 13

## Review Team Recommended Amount

\$221,509

## Review Team Conditions

## Staff Recommendation

### Staff Follow-Up to Review Team

## Staff Recommendation

Do Not Fund; falls below staff-recommended funding line

## Staff Recommended Amount

\$0

## Staff Conditions



## Open Solicitation-2020 Spring Offering Southwest Oregon (Region 2)

**Application Number:** 221-2009-19020

**Project Type:** Restoration

**Project Name:** Williams River Habitat Connectivity Project

**Applicant:** Coos Watershed Association

**Region:** Southwest Oregon

**County:** Douglas

**OWEB Request:** \$158,752

**Total Cost:** \$573,637

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### Application Description

The Williams River is the largest tributary to the S Fork Coos River in the Coos basin, providing critical spawning and rearing habitat for coho and other important aquatic species. In the 1960's, anthropogenic activities constrained the channel against bedrock, increasing the stream gradient to create the artificial Williams Falls and restricting salmonid access to 21 miles of rearing and spawning habitat. The falls is the highest ranking ODFW priority passage barrier remaining in the Coos basin. The Federal Recovery Plan for Oregon Coast Coho identified access to high quality habitats supporting winter rearing of juveniles as a primary limiting factor. This project addresses limiting factors by reconnecting salmonids to 21 miles of habitat and restoring natural processes to improve water quality and stream complexity. CoosWA proposes a multi-faceted approach including: 1) widen the channel of the falls to reduce velocities to restore salmonid access to 21 miles of critical habitat, 2) place rootwads to increase stability and stream complexity; 3) move the road to increase the distance between the road and stream and 4) revegetate the riparian area with native plants to reduce fine sediments inputs and increase shade. This project will restore natural processes that currently restrict salmonid access to the critical upstream habitat and ultimately the productivity within this subbasin. The upper Williams River habitat is rare in the Coos basin and critical for the resiliency of salmonids as climates and ocean conditions begin to shift. Increasing the quality, quantity, and diversity of instream habitats and ensuring the connectivity between them as this project does is the best way to improve the resiliency of OC coho. OWEB funds will be used for project management, travel, supplies, contracted services, and indirect costs. Weyerhaeuser, WSC, NWWF, ODFW, and OYC will provide match to cover project designs, permitting, contracted services, and technical assistance.

### Review Team Evaluation

#### Strengths

- The application has a clear description of the project objectives and proposed actions.
- ODFW prioritized the project site as the number one fish passage barrier in the Coos River system.
- Previous project evaluation concerns are addressed by reducing the amount of grout to be used on the rock bank and modifying the grout to a site appropriate texture.
- Adult and juvenile fish passage is impeded at all stream flows by a waterfall that formed from historic land uses, limiting fish access to upstream habitats that received significant OWEB investment in habitat restoration.



- Increased habitat complexity will reduce fine sediments moving through the stream.
- The Williams Creek provides important cool water habitat that will be increasingly important for native aquatic species given climate change projections.
- The design approach will remedy the cause of the fish passage problem at the project site rather than mitigating symptoms.
- The Wild Salmon Center and NOAA are providing funding and support and ODFW is providing technical assistance.
- The applicant organization has capacity to implement the project and long-term employees with experience implementing similar fish passage projects.
- The applicant has worked closely with federal permitting agencies to review and approve designs to ensure the project is ready for implementation.

### **Concerns**

- The Oregon Coast Coho Recovery Plan does not identify fish passage as a top limiting factor for coho in the Williams River watershed.

### **Concluding Analysis**

In the 1960s, quarry operations pinned the Smith River against a rock slope, creating a waterfall barrier that is impeding access to 21 miles of anadromous fish habitat. The proposed project will complete fish passage restoration efforts in the watershed. Addressing the fish passage barrier will provide significant ecological benefits by connecting downstream reaches with cool water habitats located in the upstream portions of the Smith River where significant restoration work has been completed.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

5 of 13

### **Review Team Recommended Amount**

\$158,752

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

**Staff Recommended Amount**

\$158,752

**Staff Conditions**

## Open Solicitation-2020 Spring Offering Southwest Oregon (Region 2)

**Application Number:** 221-2010-19043

**Project Type:** Restoration

**Project Name:** North Slough Riparian Restoration Project

**Applicant:** Coos Watershed Association

**Region:** Southwest Oregon

**County:** Coos

**OWEB Request:** \$145,847

**Total Cost:** \$183,974

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### Application Description

The North Slough Creek and tributaries are located near North Bend, Or. in Coos County. This subbasin drains approximately 52 miles of stream from mainstem to small headwaters and is unique in that it contains a 2.5 mile area of tidal estuarine salt marsh below the tide gate at Highway 101. This project proposes to restore riparian functionality through fencing 0.8 stream miles and planting 1.3 acres of native plants along the North Slough waterways. These activities will greatly improve water quality, fish habitat and plant and animal biodiversity in the area. The North Slough Creek is a high priority for restoration as it supports fall Chinook, ESA listed coho salmon, winter steelhead, cutthroat trout and Pacific lamprey. However, the North Slough Creek is a DEQ 303(d) listed stream for bacteria loads threatening productive salmon habitat in its lower and upper reaches and limiting the estuarine nursery habitats for salmonids and other aquatic species. The North Slough has been heavily impacted by past and current land management practices which have resulted in stream channelization, dredging, removal of riparian vegetation and subsequent introduction and establishment of invasive plant species. The project proposes to install 2429' of livestock exclusion fencing along the mainstem of the North Slough Creek with a 16 foot setback and 2851' of tributary with a 12' setback. Prior to planting, invasive blackberry and reed canary grass and will be cut and mulched in the 1.3 acre riparian planting zone. Plant establishment activities will occur for 5 years after the planting to insure a goal of 80% plant survival. OWEB funds will be used for project management, fencing and plant establishment, travel, project materials, and indirect costs. Matching funds include landowner match as well as funds from the US Forest Service for invasive species control and Oregon Department of Fish and Wildlife for consultation, project planning, and implementation.

### Review Team Evaluation

#### Strengths

- The application includes useful visuals, including a stream temperature and shade map, that are helpful in understanding the project.
- The North Slough Creek has been channelized and relocated to one side of a narrow valley. The stream is listed on the 303(d) list of water quality impaired waterbodies for bacteria and temperature. The proposed riparian restoration efforts will help address these water quality issues.
- The restoration approach is technically sound and targets upstream agricultural lands first with the intention to work downstream as opportunities develop in the future.

- Previous project evaluation concerns are addressed by providing information regarding policeman's helmet noxious weed population impacting fish passage. There is urgency for managing invasive species to build on the recent progress in arresting the policeman's helmet infestation.
- The landowners were actively involved in the project design.
- The applicant has in-house staff with experience implementing similar riparian restoration projects requiring long-term plant stewardship on agricultural land.
- The project engages appropriate partners for the proposed work, including ODFW, the USFS, and five landowners.

## Concerns

- The application lacks information describing current livestock use on the project properties that would provide helpful context for understand the proposed work.
- The restoration design approach addresses symptoms of watershed health issues at the project site rather than causes. For example, stream channelization is one of the main watershed limiting factors, however, stream meandering alternatives have not been discussed with the landowners.
- The distance for the proposed fencing setback is reduced to 12-16 feet compared to previous application submissions which described buffers of 30-35 feet. This reduction is to allow for land management activities. Reducing the distance of fencing setbacks from the stream and planting a narrow riparian buffer may have limited long-term project effectiveness due to the potential for tree and bank instability leading to erosion.
- It is unclear from the project design whether the fence will be wildlife-friendly.
- The riparian corridor is constricted by a road. Trees planted within this corridor may impact the roadway as the trees grow, which could require long-term maintenance or even result in future tree removal.

## Concluding Analysis

The project approach balances addressing watershed needs in a challenging landscape by establishing riparian corridors within an active agricultural landscape constrained by a narrow valley. The project will also help address an invasive species issue before it spreads to other areas in the watershed. The applicant developed a thoughtful approach to effectively address water quality concerns within a highly constrained landscape.

## Review Team Recommendation to Staff

Fund

## Review Team Priority

12 of 13

## Review Team Recommended Amount

\$145,847

## Review Team Conditions

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**  
\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Southwest Oregon (Region 2)

**Application Number:** 221-2011-19054

**Project Type:** Restoration

**Project Name:** CoosWA Millicoma Confluence  
Restoration Project

**Applicant:** Coos Watershed Association

**Region:** Southwest Oregon

**County:** Coos

**OWEB Request:** \$405,762

**Total Cost:** \$569,406

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### Application Description

The Millicoma Confluence Wetland lies at the junction of the Millicoma and South Fork Coos Rivers near Coos Bay, Oregon. Positioned at the confluence of the two salmon-producing streams, this site has a high potential to provide off-channel refugia for juvenile salmonids, including the federally threatened Oregon Coast coho salmon. However, in its current state, the site is entirely cut off from tidal influence by a levee and failing tide gate. Further, the existing drainage pathways have been ditched and straightened. With the advent of restoration work, however, the ecological value of the property acres would be greatly augmented. The Coos Watershed Association proposes to set back the levee in such a way that it allows full tidal influence across the site's 10.83 acres, while still protecting neighboring properties. A new tide gate, which complies with state and federal fish passage requirements, would be installed as well. We also propose that a network of channels and hummocks be created to support complex, heterogeneous habitat that will shelter juvenile salmonids. A lack of off-channel refugia is recognized as one of the most significant impediments to salmon recovery in this basin. This channel-and-hummock structure will also provide the necessary conditions to recreate critically imperiled "Sitka Spruce Swamp" habitat - the first restoration of its kind in the Coos River watershed. Though once common, these tideland forests have all but disappeared from the region. Their revival would provide a tremendous benefit to the plethora of species that historically thrived there. To implement this project, the CoosWA will partner with Weyerhaeuser Company and Wild Salmon Center. These organizations will provide match funding to ensure that the project is completed in a thorough and timely manner. The funds requested from OWEB will be used primarily to cover the costs of construction, plant establishment, and five years of monitoring and maintenance.

### Review Team Evaluation

#### Strengths

- The project is innovative by targeting Sitka spruce swamp restoration, which is a habitat type that has not been actively restored in the Coos River watershed.
- The majority of tidally influenced habitat has been lost in the Coos estuary. The 10.83 acres of habitat expected to be restored and reconnected will improve tidal floodplain function and habitats and provide significant benefit to ESA-listed coho as well as a myriad of other species.
- The applicant considered alternatives to the proposed design and chose an approach likely to result in the highest ecological benefit.

- The project complements work ODOT is planning to improve fish passage upstream of the project site and upgrade 12 tide gates located downstream of the project site.
- The applicant is discussing the option of developing a long-term conservation easement with the landowner that would provide long-term protection of restoration investments.
- The project approach is thoughtful and considers likely impacts to neighboring properties.
- The applicant has staff with long-term experience in developing and implementing restoration projects and has been a pioneer in plant establishment work in coastal habitats.

## **Concerns**

- Additional information describing the logic for the design approach to the constructed log cribs would be helpful for evaluating whether the method is site appropriate and likely to succeed in achieving restoration objectives.
- The application lacks details describing the type and scope of post-project monitoring needed to understand whether monitoring activities will include effectiveness monitoring or only focus on implementation monitoring. Effectiveness monitoring would provide information to better understand how these types of projects function in the long-term.

## **Concluding Analysis**

The project provides a rare opportunity to restore a Sitka Spruce swamp in a watershed where this type of tidal influenced habitat has been reduced to a small fraction of its historic extent. This habitat type is vital to ESA-listed coho and many other native species. The applicant effectively evaluated the project site, examined alternatives, and proposed a technically sound approach with a high likelihood of success.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

2 of 13

## **Review Team Recommended Amount**

\$405,762

## **Review Team Conditions**

## **Staff Recommendation**

## **Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$405,762

**Staff Conditions**



## Open Solicitation-2020 Spring Offering

### Southwest Oregon (Region 2)

**Application Number:** 221-2012-19072

**Project Type:** Restoration

**Project Name:** Dement Creek Whole Watershed  
Restoration Project

**Applicant:** Coquille Watershed Association

**Region:** Southwest Oregon

**County:** Coos

**OWEB Request:** \$633,558

**Total Cost:** \$823,959

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### Application Description

Dement Creek is a 9,700-acre tributary to the South Fork Coquille River (SFCR) located near Broadbent, OR in Coos County. As one of the major tributaries to the SFCR, Dement Creek has been prioritized for restoration because it has reaches with high intrinsic potential for coho and provides spawning and rearing habitat for coho, fall Chinook, winter steelhead, coastal cutthroat trout, and Pacific lamprey. Currently, Dement Creek is impacted from the legacy of past land use practices such as splash dams, stream cleaning, timber harvesting in the riparian area, clear cutting, extensive road building, and conversion of the lower watershed to pastures for livestock grazing. These actions have exacerbated limiting factors including high levels of sediment loading, high summer water temperatures, and lack of habitat complexity for native fish. A watershed assessment was completed in 2020 and has allowed CoqWA to prioritize stream reaches, riparian reaches, road sections and failing infrastructure for effective habitat and sediment abatement restoration actions. Together with the BLM, ODFW, Coos Curry CREP technician, and private landowners, CoqWA will address all prioritized actions identified in the watershed assessment. Specifically, we will improve instream habitat by constructing 16 large woody debris (LWD) structures, 17 LWD and boulder structures, increase riparian buffers on pastures through planting 9.5 acres and fence setbacks (70 ft. average), and decrease sediment loading by installing over 50 cross drains with rock outfalls, cleaning ditches, installing a sediment trap, creating a stormwater swale, and creating berm notches and lead off ditches into the forest floor on 4.2 miles of roads in the basin. These whole watershed restoration actions will optimally address the site specific limiting factors identified in the basin, providing improved habitat complexity and water quality for anadromous fish in Dement Creek through a win-win approach.

### Review Team Evaluation

#### Strengths

- The project is based on restoration priorities identified in a recent watershed assessment.
- The project will take a phased approach to address poor instream habitat conditions and impaired water quality. Dement Creek has a history of splash dams, stream cleaning, and road building and the lower portion of the stream is significantly impacted by livestock grazing.
- The sediment reduction is a priority action for Dement Creek and the proposed project will address the most significant sources of sediment impacting water quality.
- The project will help the applicant to continue building relationships with agricultural producers, which could lead to additional restoration opportunities.

- Multiple state and federal agencies, Coos County, industrial timber, and the participating agricultural landowners were involved in developing the project.
- Water quality monitoring data is collected for turbidity and water temperature, and continued monitoring is likely to document sediment reduction after project implementation.
- The majority of instream large wood structures are proposed to be placed higher up in the watershed and not on the agricultural lands where there would be concerns about the potential for erosion.
- The applicant has experience implementing similar projects.

## **Concerns**

- The likelihood of success for the riparian planting project objective is uncertain because the majority of plantings will occur in the lower reaches of Dement Creek watershed in areas with high heat and dry, porous soils and the application lacks plans for irrigating planted trees.
- The application includes typical designs for placing instream wood structures instead of site-specific designs. It is unclear whether the design approach will be effective in addressing the steeper banks and erosion concerns in the lower reaches of the project area based on the general design concepts provided.
- Additional information about the processes that drive and impact the Dement Creek sub-basin would provide helpful context for evaluating whether the technical approach will address root causes of watershed health problems instead of symptoms. For example, the application lacks details describing a “major event” noted in objective one that caused bank erosion.

## **Concluding Analysis**

The applicant has developed a sound approach for conducting watershed assessments and then working with landowners and stakeholders to implement prioritized on-the-ground projects. The phased project approach presented is reasonable, logical, and incorporates restoration techniques the applicant is well versed in using. Project activities will improve water quality and habitat complexity for ESA-listed coho on a small basin scale.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

9 of 13

## **Review Team Recommended Amount**

\$633,558

## **Review Team Conditions**

## **Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Southwest Oregon (Region 2)

**Application Number:** 221-2013-19015

**Project Type:** Technical Assistance

**Project Name:** Yellow Creek Instream Technical Assistance

**Applicant:** Partnership for the Umpqua Rivers

**Region:** Southwest Oregon

**County:** Douglas

**OWEB Request:** \$53,432

**Total Cost:** \$73,932

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### Application Description

Yellow Creek, located South of Elkton, Oregon, flows through a patchwork of private timber and Bureau of Land Management (BLM) property. The Partnership for the Umpqua Rivers (PUR), Roseburg District BLM, Oregon Department of Fish and Wildlife (ODFW), Roseburg Resources Company (RRCO) and Lone Rock Resources (LRR) plan to collaborate to design instream habitat structures that will benefit Oregon Coast (OC) Coho salmon, steelhead, cutthroat trout and other various aquatic species. According to ODFW High Intrinsic Maps, Yellow Creek has highest, higher and medium potential areas throughout it and its major tributaries (Bear Creek and Doe Creek). In 2005 PUR and BLM placed structures in the lower reaches of Yellow Creek and in the upper reaches of Bear Creek. We have grown and understand more since this project has been completed and want to finish design for untreated reaches of the Yellow Creek drainage. The untreated reaches of all three creeks lack large wood and habitat is simple and lacking in complexity. To address the limiting factors in the Yellow Creek drainage we are seeking OWEB TA funds to 1) design instream fish habitat structures that will enhance the habitat in a total of 11 miles of the Yellow Creek drainage, 2) work with all the partners involved to produce an instream placement and funding strategy, 3) work with all the partners/landowners on selecting materials for the instream placement, 4) prepare an OWEB restoration grant application for submission.

### Review Team Evaluation

#### Strengths

- The design products will incorporate lessons learned from previously implemented projects in the area.
- The resulting restoration activities will improve instream habitat conditions important to ESA-listed coho.
- The design approach will factor in activities to improve water quality conditions in Yellow Creek, which failed to meet DEQ water temperature criteria for fish rearing and migration.
- The design approach will emulate other nearby successful projects and includes consideration for how downstream movement of wood could impact the project site.
- The applicant has engaged a qualified team with experience in working with landowners.
- Landowners of the larger project properties are actively engaged in project development.
- The project team has a proven track record in implementing similar projects.

## Concerns

- It is unclear from the application why the Yellow Creek sub-watershed is prioritized for a restoration focus at this time.
- The application lacks details describing design activities for the riparian work listed in objective two.
- The application lacks an adequate description demonstrating an alternative analyses will be used to consider a range of options.
- Invasive species are identified as a problem in the project area, however, it is unclear how the design approach incorporates considerations for addressing this concern.
- The budget groups costs into lump sums. Additional budget details and information on how costs were developed would be helpful for evaluating whether costs are reasonable and necessary for the proposed work. For example, project management time appears higher compared to similar projects and information is needed to understand how that time will be spent.

## Concluding Analysis

The project will build on previous restoration efforts and incorporate lessons learned from that work. While the application lacks some detail, the main project components are sufficiently described to determine likelihood for the project to succeed. The work will likely result in site specific restoration that will help improve water quality and instream habitats important to spawning and rearing of ESA-listed coho.

## Review Team Recommendation to Staff

Fund

## Review Team Priority

7 of 12

## Review Team Recommended Amount

\$53,432

## Review Team Conditions

## Staff Recommendation

### Staff Follow-Up to Review Team

## Staff Recommendation

Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Southwest Oregon (Region 2)

**Application Number:** 221-2014-19033

**Project Type:** Technical Assistance

**Project Name:** Catching Slough Project Development

**Applicant:** Coos Watershed Association

**Region:** Southwest Oregon

**County:** Coos

**OWEB Request:** \$74,507

**Total Cost:** \$105,812

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### Application Description

This grant proposes to develop multiple habitat restoration projects in 3 identified focal areas of the Catching Slough and surrounding area, by monitoring/assessing/evaluating current watershed conditions and developing restoration treatments that will restore watershed function and improve water quality through fish passage, access to off-channel habitat, riparian planting/fencing, and cattle exclusion fencing. Each of our proposed focal areas are DEQ 303(d) (bacteria, dissolved oxygen, and temperature) listed streams that drain into Catching Slough and eventually into the Coos Estuary. Situated along narrow agricultural valleys these streams have been heavily impacted by past land management practices, resulting in stream channelization, outdated/undersized infrastructure, removal of riparian trees/shrubs, which have negatively impacted water quality and aquatic species for decades. This project proposes to evaluate restoration potential across ~8 miles of high intrinsic potential and critical anchor habitats in 3 main focal areas of Catching Slough; Sumner and Sealander (~3.4 miles, 7 crossings, and 3 tidegates), Anchor/Alderwood/Old Wagon (~1.0 miles, 4 county crossings, and 2 tidegates), and Vogel/Lillian (~3.4 miles, 3 culverts, and 3 tidegates). OWEB funds will be used for project management, tidal monitoring, RTK elevation mapping, permit scoping, hydrologic review, preliminary conceptual designs, travel, project materials, and indirect costs. Private lowland landowners (Messerle, Elliott, Pich, Wright, and Knox), Coos County Road Department, NRCS-CREP, SWCD, CTCLUSI, TNC, Tetra Tech, and ODFW will provide In-kind match contributions and/or technical expertise during the duration of this project. Additionally, the County will provide 100% designs for all county infrastructures and the Tribal Historical Preservation Office (THPO) at CTCLUSI's is committed to assisting with preliminary site visits for archaeology evaluation at all 3 focal areas.

### Review Team Evaluation

#### Strengths

- The application describes a clear need for the work. The project will address watershed limiting factors impacting fish habitat, including water quality and access to habitat in the Catching Slough sub-watershed. The project also offers opportunities to restore stream processes by reintroducing channel re-meanders into the design approach.
- The project area is prioritized in the draft Coos River Coho Strategic Action Plan and future restoration work resulting from this technical assistance is consistent with recommendations from that plan.
- The recently replaced tide gate located downstream of the project site will create an optimum control for aiding with the design of the future restoration work to occur upstream.

- The applicant balances constraints associated with designing restoration on working lands in an agricultural landscape into the project approach.
- Data collection is clearly described in the application and appropriate for the proposed project.
- Partner and private landowner support for the project is demonstrated by letters of support and match.
- The Confederated Tribes of Coos and Lower Umpqua and Siuslaw Indians are active partners in the project, and consideration for cultural resources will be incorporated into the planning process by including archeology surveys.
- The application describes plans for addressing potential impacts from Covid-19 on implementing the technical assistance project and the budget narrative explains how this affects project costs.

### **Concerns**

- The application does not clearly describe an alternatives analysis demonstrating a range of options were considered.
- Incorporating considerations for potential long-term impacts to the project site from climate change would strengthen the design approach.
- The application lacks information describing how the data will be managed.

### **Concluding Analysis**

The applicant has an experienced team that works effectively with landowners and agencies to develop design products that address limiting factors while incorporating land management needs. The work has a high likelihood of resulting in future restoration projects that will benefit water quality and ESA-listed coho as well as enhance the ability of property owners to balance managing their lands with protecting watershed health.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

3 of 12

### **Review Team Recommended Amount**

\$74,507

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**



**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$74,507

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Southwest Oregon (Region 2)

**Application Number:** 221-2015-19048

**Project Type:** Technical Assistance

**Project Name:** South Fork Coos River Road  
Assessment and Project Development - Phase I

**Applicant:** Coos Watershed Association

**Region:** Southwest Oregon

**County:** Coos

**OWEB Request:** \$35,238

**Total Cost:** \$69,224

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### Application Description

The South Fork Coos River is the largest river draining to Coos Bay. It is an important artery between the uplands habitat and the estuary. The Coos River and its tributaries support important populations of ESA-listed coho salmon, Chinook and Chum salmon, steelhead, trout and lamprey. The project goals are to address the major limiting factors of the Coos Basin; water quality, summer and winter rearing, and barriers (OWEB 2007). This grant will fund the first phase (160 miles) of a road inventory to evaluate approximately 240 miles of roads that drain directly to the South Fork Coos River and its highly valuable tributary systems. We will use a protocol designed by the US Forest Service, the Geomorphic Road Analysis and Inventory Package (GRAIP). This protocol will help us to identify road conditions and identify problems. This project will provide two tools for reducing the effects of roads on streams: (1) a road features GIS database (2) a Fish Passage and Sediment Reduction Action Plan. These tools will help us to estimate road sediment yield and hydrological connectivity; identify needs, prioritization, and designs for road improvements or decommissions; and be used for tracking sediment reduction actions and long term asset management. The Action Plan will identify the Top 10 sediment reduction actions and all of the fish passage issues in the project area. CoosWA has successfully used this approach to to significantly reduce chronic and catastrophic sediment delivery to streams, effectively designing road projects that are stormproof and resilient to our changing climate. Bureau of Land Management (BLM), Weyerhaeuser, and ODFW will help to develop future restoration projects. US Forest Service will provide training and support. OWEB funds will be used for surveys, data analysis, project management, training, travel, and limited supplies. CoosWA will provide cash and survey supplies. BLM-RAC funding will be sought to supplement assessment efforts.

### Review Team Evaluation

#### Strengths

- The project will identify and prioritize opportunities that address sediment sources from roads and crossings.
- The project builds off past road projects completed by the applicant utilizing the GRAIP methodology to address water quality and stream habitat concerns. The extensive road network contributes sediment that is impacting water quality. The technical assistance approach will likely lead to restoration work that could address this issue.
- Water quality is a primary limiting factor for anadromous species within the project area and addressing sediment inputs from roads will help improve instream conditions.

- The project area is prioritized in the draft Coos River Coho Strategic Action Plan and future restoration work resulting from this technical assistance is consistent with recommendations from that plan.
- The project partners have undertaken extensive survey work in the Coos River watershed and have a history of collaborating to develop and implement projects based on completed assessments.
- The applicant has both the experience and capacity to implement the proposed work.

### **Concerns**

- The application lacks clarity for the actual work planned for the current technical assistance proposal because future phase two objectives are included in the project description.
- The number of stream miles to be surveyed is reduced from previous application submissions without providing a reasoning for scaling back project objectives.
- The project relies on training for in-house staff, including out-of-state training options, and there is no contingency plan described in the application if this is not feasible given Covid-19 restrictions.
- It is unclear whether the project timeline is feasible because surveying three miles a day may be overly ambitious.
- Using interns for survey work may be a more cost-effective approach option.

### **Concluding Analysis**

The project is based on sound science, takes a watershed approach, and uses an established road survey methodology to identify sediment sources. The proposed assessment work builds on upstream road assessments and restoration activities accomplished in the Coos watershed. Restoration work resulting from this project can improve water quality by reducing sediment inputs from roads, which will benefit habitats important to ESA-listed coho and other salmon and trout species utilizing the system.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

8 of 12

### **Review Team Recommended Amount**

\$35,238

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Southwest Oregon (Region 2)

**Application Number:** 221-2016-19068

**Project Type:** Technical Assistance

**Project Name:** Noble Creek Tidal Lands  
Restoration Phase I Technical Assistance

**Applicant:** Coos SWCD

**Region:** Southwest Oregon

**County:** Coos

**OWEB Request:** \$75,000

**Total Cost:** \$166,515

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### Application Description

Lack of slow-water refugia off-channel habitat has been identified as one of the major limiting factors affecting Oregon Coast ESU coho salmon recovery. In the Coos Estuary, these habitats, including tidal wetland habitats, have been converted to pasture using tidegate infrastructure to the extent that only a fraction of the historic acreage of tidally influenced wetlands currently exists. Restoration of floodplain tidal wetlands is a top priority for coho recovery in federal, state, and local action plans. The Noble Creek Tidal Lands Restoration Phase I Technical Assistance (TA) Project (Coos Bay, OR, Coos County) will address limiting factors by creating technical designs to implement restoration of functional fish passage to 6.4 miles of coho habitat and ~90 acres of critical off-channel wetland and tidal habitats. This project is the first step in implementing critical habitat restoration for coho and other anadromous fish while also providing improved pasture infrastructure and water management for the landowners in the Noble Creek Drainage. To achieve this, the Coos SWCD is partnering with ODFW, Coos Watershed Association and the landowners in the area. OWEB TA funds are needed at this phase to 1) complete the initial data collection, cultural resources and geotechnical investigations, and site surveys necessary to develop 1-3 restoration alternative scenarios, 2) Develop the selected restoration alternative to the 60% (structural and geotechnical engineering designs for tidegate replacement/removal to meet State and Federal fish passage requirements); 3) finalize designs for tidal channel restoration, wetland enhancement, and riparian fencing and planting plans to the 60%, 4) coordinate meetings between project partners and stakeholders to ensure adequate input at all stages of the process. Together these actions will result in a restoration project design that is 60% complete, and sufficiently developed to begin Phase II Technical Assistance.

### Review Team Evaluation

#### Strengths

- The project complements a stakeholder engagement effort currently underway in the watershed.
- There is potential for significant habitat benefits to result from this project, including protecting tidally influenced wetland areas and restoration actions that improve water quality and habitat for ESA-listed coho.
- The Noble Creek sub-watershed has multiple tide gates in poor condition and the technical assistance project will help identify where the problems exist and provide alternative solutions.
- Tide gate removal is a potential alternative under consideration, which would increase the expected ecological benefits of future restoration projects.

- The design solution will balance addressing ecological issues with landowner needs and concerns.
- The applicant recently hired an additional staff person and is utilizing partnerships to build up organizational capacity for the proposed work, including a collaborative cooperation between the Soil and Water Conservation District and the local Watershed Council.

### **Concerns**

- The project map included in the application lacks details on land ownership that would provide helpful spatial context needed to understand the project.
- The design approach for the channel re-meander will likely have a limited impact because it will result in a small-scale meander compared to the stream size.
- It is unclear from the application whether CREP is an option for the project properties.
- The application lacks information describing potential water quality benefits from future restoration, and it is unclear whether there are plans for collecting data to document pre-project baseline conditions.
- Information indicating the level of landowner commitment or anticipated involvement in the project would strengthen the application since the ecological benefits expected from this phase one project are tied to future project phases.
- The application lacks details needed to determine whether data collected will be appropriate to inform designs.
- It is difficult to determine from the application budget whether costs are reasonable and necessary for the proposed work because line items do not clearly correlate with project objectives. For example, the breakout of engineering costs is difficult to follow.

### **Concluding Analysis**

The project provides an opportunity to engage landowners in an area with the potential to result in meaningful restoration opportunities. Restoration projects resulting from this technical assistance could provide ecological uplift as well as enhance the ability of landowners to effectively balance managing their lands with protecting watershed health.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

4 of 12

### **Review Team Recommended Amount**

\$75,000

### **Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**  
\$0

**Staff Conditions**

## **Open Solicitation-2020 Spring Offering**

### **Southwest Oregon (Region 2)**

**Application Number:** 221-2017-19026

**Project Type:** Technical Assistance

**Project Name:** Concrete Sill Removal/Alteration Design

**Applicant:** Smith River WC

**Region:** Southwest Oregon

**County:** Douglas

**OWEB Request:** \$70,535

**Total Cost:** \$114,685

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### **Application Description**

This project seeks technical assistance to produce engineered plans for the removal or alteration at five sites with concrete structures in salmon bearing tributaries of the Smith River. These concrete sills or legacy structures are no longer functioning as designed, require regular maintenance and inhibit fish passage for resident and anadromous fish at multiple life-stages. Right angles made by concrete impede lamprey migration. We will also assess four associated culverts for replacement, two of which have been identified by the working group as in need of replacement concurrent with concrete sill removal. Flowing 120 miles from its headwaters near Eugene to its mouth near Reedsport, the Smith River supports multiple anadromous and resident stocks that must cross road networks to access habitat throughout their life history. The Smith River tributary systems of interest for this TA request include Spencer Creek, West Fork Smith River (WFSR) and North Sisters Creek which enter the Smith River at the 19, 31 and 42 mile markers from Reedsport on Lower Smith River Road Deemed high priorities by the Smith River Watershed Council (SRWC), Coos Bay District Bureau of Land Management (BLM) and Oregon Department of Fish and Wildlife (ODFW), these sills pose adult and juvenile passage barriers and are frequently impeded with debris further inhibiting passage. Designs will be created by an experienced engineer to meet all ODFW and NOAA fish passage requirements. Providing uninhibited juvenile and adult fish passage at all life stages will allow access to approximately 58 miles of habitat at all five sites combined. Deliverables will include engineer created longitudinal profiles, hydraulic modeling, grade control structure feasibility and design, for removal or alteration at five sites where concrete structures impede fish passage. Assessments of all four associated culverts and engineered designs for the replacement of at least two of these culverts.

### **Review Team Evaluation**

#### **Strengths**

- The technical design work is needed to ensure that restoration project designs can adequately address the complexity of passage issues at the project locations.
- The resulting restoration projects will provide access to a significant amount of upstream habitat for ESA-listed coho as well as facilitate passage for other anadromous and resident aquatic species.
- The applicant is aware that invasive fish species are present in the watershed and is considering the complexities associated with opening passage to native fish that will also expand the distribution of non-native fish by providing new access to stream habitat.
- The applicant will hire qualified out-of-house expertise to design the project.



- Project partners have invested in quantifying fish passage issues at Spencer Creek Falls to better understand and address the problem at the site.

### **Concerns**

- The extent to which the project will address a clear need is uncertain because fish passage currently exists to some degree at the project sites.
- The application lacks details describing watershed limiting factors for the Smith River tributaries and lamprey habitat use.
- It is unclear how the project was prioritized because the sills are not listed in the ODFW barrier database as a priority and the application lacks information indicating whether limiting factors identified in a watershed plan will be addressed.
- The application lacks water quality information that would provide context for understanding current habitat conditions.
- There are a lot of moving parts with the project and more information about the expected alternatives to be considered would be helpful to evaluate project technical soundness.
- Engineering costs are grouped into a lump sum in the application budget, it is difficult to evaluate whether costs are reasonable and necessary for the proposed work without a detailed break out describing how engineering costs will be spent.

### **Concluding Analysis**

The technical assistance project resulted from a previous application review recommendation for a proposed fish passage restoration project at one of the sites included in this application. This project builds on an ongoing large-scale multi-partner effort in the Smith River watershed to restore instream habitat and improve fish access. The resulting design work will inform options to successfully restore passage at the sites to provide more consistent access for salmonids, including ESA-list coho, to the habitats above.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

5 of 12

### **Review Team Recommended Amount**

\$70,535

### **Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Southwest Oregon (Region 2)

**Application Number:** 221-2018-18965

**Project Type:** Technical Assistance

**Project Name:** Hatchet Slough Tidegate Replacement and Fish Passage Project - Phase 1

**Applicant:** Coquille Watershed Association

**Region:** Southwest Oregon

**County:** Coos

**OWEB Request:** \$74,990

**Total Cost:** \$97,598

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### Application Description

Lack of slow-water refugia and off-channel habitat has been identified as a critical limiting factor affecting Oregon Coast ESU coho recovery. In the Coquille watershed, these habitats, including tidal wetlands, have been converted to pasture using tidegates to the extent that less than 5% of the historic acreage remains. Restoration of tidal wetlands is a top priority for coho recovery in federal and state plans. This project in Riverton (Coos County), will address this limiting factor by initiating the technical design process to improve fish passage to a 2,500 acre sub-watershed containing 3.1 miles of coho habitat and 70 acres of tidally influenced pasture. The watershed is an actively managed ranch and forest with potential for habitat uplift upstream from the tidegate as well (riparian planting, sediment abatement, etc.). Currently, there is a top-hinged tidegate with a 6ft diameter culvert set 200ft upstream on Hatchet Slough from the Coquille River confluence. Also, 500 feet upstream from the tidegate there is a county culvert that is likely an additional constriction point in lower Hatchet Slough. Prioritized as a high potential restoration project by a tidegate optimization model, this grant is the first step to improve fish passage and water management for landowners. The Coquille Watershed Association is partnering with Coos SWCD, landowners, engineering firm (TBD), Coos County, and ODFW. This grant request will result in: completed cultural resources survey in lower Hatchet Slough, field data collection sufficient to develop an alternatives analysis for tidegate and county culvert upgrades, a selected alternative, a draft water management plan, and identification of upstream habitat restoration priorities. Phase 2 technical assistance (TA) will result in final designs and secured permits for the tidegate replacement and potential county crossing upgrade. Phase 3 TA will be focused on upstream restoration actions to improve habitats.

### Review Team Evaluation

#### Strengths

- The proposed technical assistance resulted from a stakeholder engagement project and is a logical next step for developing this working lands project.
- The resulting restoration project will build habitat connectivity with restoration work completed in the area.
- Future restoration will enhance wetlands and access to tidally influenced habitat important for ESA-listed coho.
- The phased project approach to address limiting factors is likely to succeed by incorporating lessons learned from earlier projects.

- The design approach is technically sound by including consideration of restoration actions on channels leading to tide gates and alternatives to consolidate tide gate structures rather than just fixing existing ones.
- The project falls within a Strategic Implementation Area and was identified by ODA as a priority.
- Existing exclusion fencing is contributing to the protection of water quality by preventing livestock access to the riparian area. Native fish will benefit from existing water quality conditions once fish passage is improved to provide access to this habitat.
- The proposed project utilizes temperature monitoring data collected prior to project development which will help inform project design approaches and provide a baseline to measure improvements to water quality following project implementation.
- The applicant is working with an experienced technical team with a proven track record implementing similar projects.
- Multiple landowners are actively engaged in the project, which is demonstrated by letters of support.
- The application budget is detailed and consistent with the scope of work proposed.

### **Concerns**

- More information about the position and function of the small “pet door” located within the main tide gate door that regulates water at extremely high flows would provide useful context for evaluating the project.

### **Concluding Analysis**

The project will build on existing tide gate and habitat restoration efforts by the applicant and project partners in the Coquille watershed. The work is important for restoring access to habitats that are critical for the overwintering survival of ESA-listed coho. The project has a high likelihood to result in important restoration projects in the future and fish should readily move into the area once barriers are removed.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

2 of 12

### **Review Team Recommended Amount**

\$74,990

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$74,990

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Southwest Oregon (Region 2)

**Application Number:** 221-2019-18975

**Project Type:** Technical Assistance

**Project Name:** Lower Ashland Creek Habitat Enhancement

**Applicant:** The Freshwater Trust

**Region:** Southwest Oregon

**County:** Jackson

**OWEB Request:** \$49,658

**Total Cost:** \$71,213

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### Application Description

The Lower Ashland Creek Habitat Enhancement project is located along Ashland Creek at the confluence of Ashland and Bear Creeks on property owned and managed by the City of Ashland and Ashland Parks and Recreation. Ashland Creek is a 5.4-mile tributary of Bear Creek, which is a tributary of the Rogue River. Ashland Creek joins Bear Creek near Ashland in Jackson County. Rogue River salmon and steelhead populations have declined over the last century due to degradation of habitat and other factors. Ashland Creek provides habitat for coho, Chinook, and steelhead. Habitat conditions limiting these fish include altered thermal regime and lack of habitat complexity and diversity. These conditions are present at the project site and are driven by lack of riparian vegetation, lack of LWD, and lack of floodplain connectivity/off-channel habitat. The Freshwater Trust (TFT) seeks funding from OWEB to develop restoration alternatives, risk assessment, and 60% design drawings at the project site to advance anticipated applied restoration work at the site to benefit Ashland Creek salmon and steelhead, as well as water quality. The City of Ashland and TFT are partnering on a multi-year effort to improve water quality at the sub-watershed scale via riparian restoration on Ashland Creek. This project site is a component of this larger work. Additionally, the City of Ashland is relocating their water treatment outfall at the project site from Ashland Creek to Bear Creek. This change will complement the work proposed herein by reducing summer water temperatures in lower Ashland Creek. Project partners at this site include TFT, the City of Ashland and Ashland Parks and Recreation.

### Review Team Evaluation

#### Strengths

- A clear need to address the lack of riparian vegetation and habitat connectivity is described in the application.
- Ashland Creek provides habitat important to ESA-listed coho and is one of the few cool water streams in the Bear Creek drainage.
- The ecological benefits resulting from future restoration investments will likely be maintained for the long-term because the project property is owned by a public municipality and designated as a natural area.
- The applicant is experienced working within the Bear Creek stream system and has implemented similar projects in the area.

## Concerns

- It is unclear from the application whether the project site is prioritized for restoration in a local watershed planning document.
- The application lacks some details describing the site that would provide context for understanding site dynamics and evaluating whether the design approach is appropriate. For example, the application lacks descriptions of the existing berms and adjacent floodplain.
- Bedload material transport and adequate gravels and cobbles may be limited due to upstream dams interrupting the transportation of this material. Gravel augmentation may need to be considered because gravel is needed for fish to return to this stream system.
- The application lacks letters of support from landowners that would demonstrate a commitment to the project.
- Developing partnerships with parks and the city would strengthen the project.
- Engaging additional partners, such as ODFW, in a technical team approach could prove useful for analyzing alternatives and developing designs.

## Concluding Analysis

The project will build on existing restoration efforts in the upper Bear Creek watershed area. The project approach is reasonable and has a likelihood of resulting in meaningful restoration actions that benefit water quality and support ESA-listed coho.

## Review Team Recommendation to Staff

Fund

## Review Team Priority

11 of 12

## Review Team Recommended Amount

\$49,658

## Review Team Conditions

## Staff Recommendation

### Staff Follow-Up to Review Team

## Staff Recommendation

Do Not Fund; falls below staff-recommended funding line

## Staff Recommended Amount

\$0

**Staff Conditions**



# Open Solicitation-2020 Spring Offering

## Southwest Oregon (Region 2)

**Application Number:** 221-2020-19019

**Project Type:** Technical Assistance

**Project Name:** South Smith River Wetland Phase 1  
(Kennedy Slough) Design

**Applicant:** Partnership for the Umpqua Rivers

**Region:** Southwest Oregon

**County:** Douglas

**OWEB Request:** \$74,817

**Total Cost:** \$119,600

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### Application Description

Partnership for the Umpqua Rivers and our partners are working collaboratively to restore the health of the Umpqua Estuary by working with owners of tidal wetlands to protect functional habitat, restore degraded habitat, educate the public and evaluate project effects. The goal of this project is to complete designs for fish passage, tidal channel, and dike work needed to improve the ecological conditions of Kennedy Slough, a tidally influenced wetland located in the lower Smith River. Tidal wetlands along the lower Smith River have been significantly altered for urban and agricultural use by clearing, filling in, diking and draining. This habitat is critical feeding and refuge for many aquatic species including steelhead, salmonids, eulachon and Pacific lamprey. Preliminary designs (30%) for tidegate replacement, channel reconstruction, and dike work have been completed for the Kennedy Slough (Phase 1) project. To create a final design for the Kennedy Slough project, work is needed to 1) finalize the tidegate design, 2) finalize the channel designs, 3) finalize the dike designs and 4) continue outreach meetings with neighboring owners. Project partners include Oregon Department of Fish and Wildlife, Umpqua Soil and Water Conservation District, National Marine Fisheries Service, Natural Resources Conservation Service, the Port of Umpqua, Smith River Watershed Council and private landowners.

### Review Team Evaluation

#### Strengths

- The resulting restoration actions will address the fish passage issue at a tide gate and add ten acres of critical refuge habitat for ESA-listed coho juveniles.
- The project will build on upstream restoration investments in instream habitat restoration and fish passage, and could help with continued outreach to neighboring landowners.
- The project team is capable of achieving the goals described in the proposal.
- The travel costs are reasonable given the distance of the project site from the applicant's office.

#### Concerns

- The application lacks details on the current infrastructure and potential future infrastructure needs. Providing more information, such as including the number and sizing of tide gate structures that will be addressed, would provide information needed to understand restoration alternatives considered and evaluate the proposed project.

- It is unclear from the application why the proposed project and location was prioritized for a watershed project.
- The application lacks information describing how water quality concerns may be addressed by future restoration work.
- It is uncertain that resulting restoration will provide long-term ecological benefit without evidence indicating there are plans for preserving and maintaining restoration investments. It is unclear whether the primary driver for the project is to improve habitat or address failing infrastructure.
- The applicant may want to consider waiting until their Glover tide gate project is completed so that lessons learned from that project can be incorporated into the South Smith River Wetland Phase 1 Design.
- The application lacks information describing a vision for future land management strategies integrating conservation and active agricultural operations to effectively support both functions.
- The application lacks information indicating a range of alternatives will be considered.
- Additional detail on how the budget was developed is needed to understand whether costs are reasonable and necessary for the proposed work. For example, line items for project management and contracted services seem high considering a portion of the design is completed and the project was previously described as "ready to go".

## **Concluding Analysis**

The application is a resubmitted proposal that has only one of the three project sites included in previous submissions in response to recommendations provided in evaluation comments. The lack of details describing the project site, design approach, information used to prioritize the project location, and ecological uplift expected from future restoration may indicate that the application is premature. The project could lead to restoration work with significant ecological uplift as well as supporting the landowner in effectively balancing property management with habitat restoration. If the application is resubmitted, the applicant is encouraged to provide additional details describing the project site, design approach, how the site was prioritized for watershed restoration, and ecological benefits that could be realized from resulting restoration work.

## **Review Team Recommendation to Staff**

Do Not Fund

## **Review Team Priority**

## **Review Team Recommended Amount**

\$0

## **Review Team Conditions**

## **Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering Southwest Oregon (Region 2)

**Application Number:** 221-2021-18959

**Project Type:** Technical Assistance

**Project Name:** Coaledo Drainage District Tidegate Replacement and Fish Passage Project Phase 2 Final Designs

**Applicant:** Coquille Watershed Association

**Region:** Southwest Oregon

**County:** Coos

**OWEB Request:** \$74,842

**Total Cost:** \$134,842

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### Application Description

Lack of slow-water refugia and off-channel habitat is as a critical limiting factor affecting Oregon Coast coho populations with the restoration of tidal wetlands being a top priority action for recovery. In the Coquille watershed, these habitats have been converted to pasture using tidegate infrastructure to the extent that less than 5% of the historic acreage of wetlands currently exists. This project in Coquille, Coos County will address this limiting factor by finalizing designs to restore fish passage to a 9,100 acre sub-watershed containing 11.4 miles of coho habitat and 490 acres of tidal wetland habitat, of which 289 acres are a natural wetland managed by ODFW. Prioritized as a high potential restoration project by a tidegate optimization model, this phase is a key step in implementing critical habitat restoration for anadromous fish. CoqWA is partnering with the Coaledo Drainage District (CDD), ODFW, and the CoosSWCD, with the assistance of River Design Group to develop designs and cost estimates. To date, funding has been provided by OWEB and The Nature Conservancy to reach 60% level designs, begin permitting, and develop a draft water management plan. Field data collection, geotechnical exploration, permitting meetings, and an alternatives analysis for tidegate replacement and downstream channel enhancement have been completed. Additionally, landowner engagement meetings are ongoing and productive. This TA request will result in: final designs for the tidegate and downstream channel enhancement based on a selected alternative, an approved water management plan, submitted permits, and continued coordination among stakeholders to ensure input at all stages of the design process. The outcome of this TA will result in a fish passage project and working landscapes initiative that is 100% ready for implementation. Additionally, this project is serving as a catalyst for the development of additional restoration and working lands projects within the CDD.

### Review Team Evaluation

#### Strengths

- The application clearly describes the project opportunity and likelihood for future conservation work.
- The ecological benefit for the proposed costs will be high because the resulting restoration work will open access of up to 11.4 miles of stream habitat to native aquatic species.
- The tide gate survey and OptiPass prioritization model lists the Coaledo Drainage District as one of top three restoration priorities in the watershed.
- The application has a very thorough description of design alternatives that demonstrate an array of options and approaches to the problem were considered.

- The project has potential for realizing a larger landscape benefit because it expands on restoration located on adjacent working lands projects.
- The applicant has previous experience with similar working lands projects and is effectively engaging with landowners.
- The applicant incorporates lessons learned from previous projects into this proposal.
- The budget incorporates cost considerations for Covid-19 related uncertainties.

### **Concerns**

- The water quality concerns impacting the project site and potential benefits expected from future restoration work are not described in the application.
- Project objective three in the application indicates a water management plan will be developed, however, a water management plan was a condition of the previous technical assistance project and it is not clear why the plan is a product of this proposed work as well.
- The use of lump sums in the budget for engineering made it hard to determine tasks and costs associated with those activities.

### **Concluding Analysis**

The applicant is engaged and well versed in tide gate projects and has effective working relations with agencies, stakeholders, and landowners. The proposed work has a high likelihood of success as demonstrated from previously completed projects and the considerations to project alternatives provided in the application. The applicant is very thoughtful in their approach and strives to stay within their staff capacity in order to continue to be successful in their restoration goals. The work will benefit habitats critical to ESA-listed coho as well as numerous other species. The resulting restoration work combined with the applicant's other nearby projects will result in a large restoration footprint with high ecological uplift potential.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

1 of 12

### **Review Team Recommended Amount**

\$74,842

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$74,842

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Southwest Oregon (Region 2)

**Application Number:** 221-2022-18951

**Project Type:** Technical Assistance

**Project Name:** Slate Creek Fish Passage  
Project\_TA

**Applicant:** Applegate Partnership, Inc.

**Region:** Southwest Oregon

**County:** Josephine

**OWEB Request:** \$33,270

**Total Cost:** \$43,138

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### Application Description

This project will develop engineered designs for fish passage improvement at Slate Creek Dam, a channel-spanning, fish passage barrier at river mile 9 on Slate Creek in Josephine County. Slate Creek Dam impedes adult passage during low flows to high quality spawning habitat and completely blocks juvenile access to critical rearing habitat including habitat designated as core cold water habitat and high intrinsic potential habitat. The dam suppresses access to over 3.5 miles of habitat for ESA-listed threatened SONCC Coho salmon, 7.6 miles of habitat for steelhead, habitat for cutthroat trout, and Pacific lamprey. Slate Creek Dam is listed on the 2019 ODFW Statewide Fish Passage Priority list and Slate Creek is listed as a priority for the Rogue Basin Partnership. The dam blocks critical access for Coho salmon to spawning and rearing habitat in Upper Slate Creek. This proposal will provide engineered designs to improve access to miles of high quality fish habitat thereby supporting fish population recovery for ESA-listed and state-listed species. Project partners include the landowners, Bureau of Land Management, Oregon Department of Fish & Wildlife, Oregon Water Resources Department, Rogue Basin Partnership, and Middle Rogue Steelheaders.

### Review Team Evaluation

#### Strengths

- The application provides a clear description of the data to be collected.
- Future restoration resulting from the technical assistance project will facilitate juvenile fish movement and access to cold water refugia.
- The applicant has capacity to implement the project and relevant experience with similar fish passage projects.
- The applicant has engaged landowners in the project area to build support for restoration.
- Previous project evaluation concerns are addressed by describing the eDNA sampling and providing additional budget detail.

#### Concerns

- The application focuses on fish passage and lacks information describing the other watershed limiting factors affecting native fish.

- The application narrative is difficult to understand because it appears to include elements from other projects, which is most likely a cut and paste error.
- The application lacks a description indicating a range of alternatives under consideration, such as dam removal.
- Landowner commitment to the project is unclear without a letter of support included in the application.
- The project benefits will be limited by a downstream fish passage barrier that impedes access.
- More information about the water right associated with the project would provide helpful context for evaluating the project.

## **Concluding Analysis**

The project site is one of two remaining barriers on Slate Creek. ODFW ranks the barrier targeted for the proposed technical assistance as a lower priority than the downstream barrier because it is located higher in the watershed. While the lower barrier impedes juvenile passage, this barrier is not completely blocking fish passage. The upper barrier was selected for the proposed work because it blocks access to critical cold water refugia. The applicant has considerable experience engaging landowners in similar work and implementing technically sound watershed projects. Future restoration resulting from the proposed technical assistance will complement other fish passage work in the sub-basin.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

12 of 12

## **Review Team Recommended Amount**

\$33,270

## **Review Team Conditions**

## **Staff Recommendation**

### **Staff Follow-Up to Review Team**

## **Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line

## **Staff Recommended Amount**

\$0



## **Staff Conditions**

## Open Solicitation-2020 Spring Offering Southwest Oregon (Region 2)

**Application Number:** 221-2023-18952

**Project Type:** Technical Assistance

**Project Name:** Big Creek Watershed Assessment and Project Development

**Applicant:** Coquille Watershed Association

**Region:** Southwest Oregon

**County:** Coos

**OWEB Request:** \$52,705

**Total Cost:** \$71,061

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### Application Description

The 16,600-acre Big Creek basin is a tributary of the Middle Fork Coquille River (MFCR), in the community of Bridge (Coos County). Big Creek provides spawning and rearing habitat for coho, fall Chinook, winter steelhead, coastal cutthroat trout and Pacific lamprey. The primary limiting factors in Big Creek are lack of stream habitat complexity and impaired water quality. Timber harvesting has been the leading activity to occur within the watershed and although logging practices have changed the legacy of splash dams, riparian cutting and stream cleaning have remained. These historical practices led to smaller sized riparian conifers and insufficient quantities of instream LWD. In addition, there is an extensive road network throughout the basin that contributes to high rates of sediment loading. We will review watershed conditions in order to develop, prioritize, and design habitat and water quality projects in the sub-watershed. Assessments include surveying anthropogenic fish passage impediments, road network surveys (Geomorphic Road Analysis and Inventory Package), and analyze existing ODFW Aquatic Habitat Inventory data to evaluate current watershed conditions and prioritize reaches for treatment. This assessment is timely as landowners in the watershed are anticipating land use activities in the next 2-4 years and we can coordinate and partner on road improvement and in-stream/riparian habitat projects in conjunction with those planned activities. This project is a seamless successor to the county road culvert replacements and LWD restoration occurring on Big Creek tributaries in 2019. This assessment and initial surveying will ensure a systematic, strategic approach to addressing the priority reaches of the watershed. We anticipate developing designs for a minimum of 3 anadromous stream culvert replacements, placement of ~50 LWD components, addressing the largest 8-10 sediment loading road issues and enhancing the conifer understory riparian corridor.

### Review Team Evaluation

#### Strengths

- The proposed work will compliment restoration completed in the Big Creek watershed to improve stream conditions and fish access to habitat.
- The assessment effort is timely and will help inform land manager planning future activities in watershed.
- The proposed activities address limiting factors identified in the coho recovery plan.

- The application addresses previous evaluation concerns by describing how the Geomorphic Road Analysis and Inventory Package data will be extrapolated to other areas, providing additional detail on the Aquatic Habitat Inventories, and removing the macroinvertebrate monitoring.
- The applicant has established a proven track record for assessing sub-basin conditions and developing prioritized actions to design and implement meaningful restoration projects.

### **Concerns**

- The full ODFW Aquatic Habitat Inventory survey protocols may not be necessary to inform project design. There are other simpler approaches to assessing habitat that may be more appropriate and cost effective; for example, DEQ's shade mapping tool.
- The likelihood of success for the project is difficult to assess without evidence indicating a commitment from some of the landowners. Additional stakeholder engagement may be needed to secure support for the project.
- It is unclear from the proposal whether road decommissioning is a potential alternative under consideration, which could be an effective tool in addressing sediment issues in the Big Creek basin.

### **Concluding Analysis**

The scope and scale of the project is feasible and will result in identifying priority locations for targeted restoration. The project is likely to succeed because the project partners have extensive experience implementing similar work.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

9 of 12

### **Review Team Recommended Amount**

\$52,705

### **Review Team Conditions**

### **Staff Recommendation**

#### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Southwest Oregon (Region 2)

**Application Number:** 221-2024-18984

**Project Type:** Technical Assistance

**Project Name:** Siskiyou Field Institute Deer Creek  
Center Management Plan

**Applicant:** Siskiyou Field Institute

**Region:** Southwest Oregon

**County:** Josephine

**OWEB Request:** \$26,928

**Total Cost:** \$38,408

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### Application Description

The project is located at the Siskiyou Field Institute in Josephine County, Selma, Oregon, approximately 2.5 miles upstream from the confluence of Deer Creek and the Illinois River. The property spans 850 acres and includes nearly one mile of frontage with Deer Creek and nearly 20% of the Squaw Creek watershed. In order to address a variety of natural resources issues, the current outdated management plan needs to be revised and resources reassessed. Some of the issues the updated plan needs to address are fish passage barriers on Squaw Creek and impaired water quality and compromised riparian function in Deer Creek; an important Coho bearing tributary of the Illinois and Rogue River systems. The location, size, water rights, unique plant communities, and riparian restoration potential make the SFI a key property for conservation, habitat connectivity, and potential positive impact on Deer Creek summer flows and temperature regulation. The plan revision and expansion will include priorities for baseline studies of stream, riparian and upland vegetation conditions, and prioritization and planning of key restoration projects to be accomplished in the next 5 to 20 years. Proposed Technical Assistance deliverables include: 1) an updated comprehensive management plan for the SFI property, 2) current habitat, riparian, botanical, rare & endemic plant, and noxious weed mapping and assessments, 3) prioritized restoration projects and revised timetable. Sound management and restoration directives and committed partners set the stage for future restoration implementation. Project supporters include: Siskiyou Research Group, Siskiyou Biosurvey, Rogue Basin Partnership, United States Fish and Wildlife Service (USFWS) Partners Program, Bureau of Land Management (BLM), United States Forest Service (USFS), Illinois Valley Soil and Water Conservation District, Illinois Valley Watershed Council, Trout Unlimited, and Oregon Department of Forestry.

### Review Team Evaluation

#### Strengths

- The project property contains important habitat for ESA-listed coho, oak savannah habitat, and serpentine soils habitats that support rare plants.
- Squaw Creek is a source of cold water and the federal lands located upstream in the upper watershed provides water quality protection that will help maintain cooler water temperatures. Addressing fish passage barriers and improving habitat complexity will benefit native fish by providing access to cool water stream habitat.
- A technical advisory team is participating in the project, and a wide range of relevant stakeholders are engaged in the design process.

- The applicant is addressing limited organizational capacity by engaging appropriate outside expertise that are qualified to produce technical assistance products.
- While the existing property management plan is outdated, it can be used as a template.

### **Concerns**

- Additional information is needed in the application describing watershed priorities in the project area to clarify the need for the project.
- The application lacks comprehensive maps that provide information about the limiting factor priorities in the Deer Creek watershed.
- Additional information describing the assessment and monitoring methods that will be used, along with an explanation of the processes for how data will be managed, is needed to evaluate technical soundness of the project approach.
- The application lacks letters of support documenting project partner support and commitments.
- It is difficult to evaluate whether the project budget is reasonable and sufficient to accomplish the project objectives because the project budget is significantly reduced from the previous application and the current application lacks an explanation describing how this impacts the proposed scope of work.

### **Concluding Analysis**

The proposed project will develop a property management plan, which is critical for the landowner to move forward in developing and implementing long-term restorative and protective actions across the property. The applicant has assembled expertise needed to develop the document that will lead to future restoration and result in important ecological benefits.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

6 of 12

### **Review Team Recommended Amount**

\$26,928

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**

\$0

**Staff Conditions**

# Open Solicitation-2020 Spring Offering

## Southwest Oregon (Region 2)

**Application Number:** 221-2025-19062

**Project Type:** Technical Assistance

**Project Name:** Donaldson Creek Fish Passage Design\_2020

**Applicant:** Curry SWCD

**Region:** Southwest Oregon

**County:** Curry

**OWEB Request:** \$44,525

**Total Cost:** \$77,411

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### Application Description

This project is on Donaldson Creek; a tributary to Willow Creek (Floras Creek watershed) that is located in northern Curry County near the town of Langlois. When Highway 101 was constructed in the early 20th century the downstream end of Donaldson Creek was filled, and the stream was diverted into Willow Creek via a road ditch along Highway 101. Over time Willow Creek downcut ~13 feet in response to hydrologic and geomorphic changes in the watershed, and that in turn caused Donaldson Creek to downcut and erode the Highway fill. The roadside ditch channel was armored with rip rap, in response, and that armoring, coupled with ~13 ft of downcutting in Willow Creek, now impedes juvenile and adult fish passage into Donaldson Creek, at most discharge. Where Donaldson Creek runs into the Highway and routes down the roadside ditch, an abrupt 90-degree turn hydraulically dams the lower end of Donaldson Creek during high flow; causing the channel to backwater into the pasture and create secondary diversions that impair water quality and strand fish. Through this TA project the Curry SWCD will work with partners and contractors to (1) collect topographic, hydrologic, and archaeological data; (2) develop alternative conceptual stream channel designs that restore fish passage between Willow Creek and Donaldson Creek; (3) convene Stakeholders to review those designs and select a preferred alternative; (4) design the preferred alternative to ~60%-completion; (5) develop a livestock management and riparian revegetation plan; (6) develop a project implementation budget; and (7) apply for project permits. The resulting deliverable will be a 60%-complete project design that can be used to seek implementation funding, and secured permits for project implementation. Project partners include the landowner, the South Coast Watershed Council, the Coquille Indian Tribe, ODFW, ODOT, BLM, and ODA.

### Review Team Evaluation

#### Strengths

- Previous project evaluation concerns are addressed, including answering questions about land ownership.
- Donaldson Creek provides critical habitat for ESA-listed coho.
- Factors limiting ESA-listed coho, such as spawning and rearing habitat, will be addressed by the proposed actions.
- The application includes a detailed description of the project reach as well as alternative routes for the new stream channel.



- The project will build on previous restoration actions in the watershed, including exclusion fencing, off-channel watering developments, riparian planting, and culvert replacements.
- There has been a great deal of work done with NRCS's EQIP program in the area, which has potential for leading to additional opportunities.
- A stormwater management plan will be included as a deliverable and will be helpful to the permitting process.
- The applicant has proven to be capable of implementing channel restoration projects.
- The applicant has developed trusted working relationships with landowners and is making headway towards future restoration.

## **Concerns**

- Restoration alternatives at the site are significantly constrained by Highway 101.
- There is a reference to spawning surveys in the application, however, no information from those surveys is provided on the locations and number of redds.

## **Concluding Analysis**

Donaldson Creek is incised and has changed from its historic sinuous channel state, and the options for restoration will likely be costly with uncertainty about the extent of ecological uplift that can be achieved. There may be opportunities to increase the ecological benefits from this project by engaging downstream landowners to open fish passage all the way to Floras Creek and Floras Lake. One of the downstream landowners has already completed extensive riparian planting work and may be willing to pursue additional restoration. A technical assistance investment will serve to outline the restoration possibilities for increasing available habitat in a priority stream system that supports ESA-listed coho.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

10 of 12

## **Review Team Recommended Amount**

\$44,525

## **Review Team Conditions**

## **Staff Recommendation**

## **Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering Southwest Oregon (Region 2)

**Application Number:** 221-2026-18949

**Project Type:** Stakeholder Engagement

**Project Name:** Cheney Cr Landowner Engagement

**Applicant:** Applegate Partnership, Inc.

**Region:** Southwest Oregon

**County:** Josephine

**OWEB Request:** \$32,113

**Total Cost:** \$41,597

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### Application Description

This project proposes to compliment fish passage outreach by expanding communication with landowners regarding riparian, instream, upland habitat & fuels reduction, and restoration and irrigation improvements within the Cheney Creek watershed in Josephine County, Oregon. The focus will be on properties with or adjacent to fish habitat along 6.5 miles of Cheney Creek and Little Cheney Creek. These reaches of Cheney and Little Cheney Creek contain BLM-managed lands, private forest lands, rural residential properties, and agricultural lands. They have been identified in both regional and local aquatic and terrestrial (wildfire) assessments as priority habitat, primed for restoration. The aquatic habitat is limited by fish passage barriers, lack of instream large wood, high temperature, reduced water quality, reduced flows, channel modification, and reduced stream complexity. The terrestrial habitat is ranked as a high priority in the Rogue Valley Integrated Fire Plan with needs to mitigate local and large fire risk to communities, promote landscape resilience, and protect wildlife habitat. We will reach out to the 39 taxlots within the riparian corridors to discuss resource concerns, land stewardship, and restoration opportunities in their ownership. Through the landowner contacts and conversations we will help identify landowner needs and restoration opportunities, and will facilitate the development of an updated strategic habitat assessment and project plan for this reach. Public meetings when appropriate will be available to the entire community, expanding the reach of this engagement project. Project partners include the Bureau of Land Management (BLM), Oregon Dept. of Fish and Wildlife (ODFW), Rogue Basin Partnership (RBP), and the Southern Oregon Forest Restoration Collaborative (SOFRC).

### Review Team Evaluation

#### Strengths

- The application describes a clear need for the project to address aquatic and terrestrial habitat limiting factors, and improving stream health and riparian conditions.
- The “all lands” approach taken by project partners that targets upland and stream issues simultaneously is an effective method for engaging property owners.
- A proposal focusing on upland forest health management is timely given recent catastrophic wildfires in the watershed.
- The applicant has experience engaging landowners, and developing and implementing similar projects.
- The Southern Oregon Forest Restoration Collaborative is an active project partner and has a demonstrated capability for engaging stakeholders in forest health issues. They will contribute critical upland habitat expertise to the effort.

## Concerns

- A more targeted approach than broadcast postcard mailings may be more effective in engaging private land owners.
- It will be challenging to measure an uptick in communication between private landowners and land management agencies as described in objective three.
- The application erroneously states that the stream provides spawning habitat for fall Chinook.
- The in-kind match from landowners participating in site visits at all 39 locations may not be feasible given the ongoing pandemic restrictions.

## Concluding Analysis

The project is timely because recent wildfires in the project area may have elevated the ability to effectively engage landowners in watershed restoration conversations. The project partners are active in the Coordinated Weed Management Area work in the Cheney Creek watershed and are able to build upon an existing repoire with landowners. The proposed stakeholder engagement is likely to succeed in leading to future watershed restoration.

## Review Team Recommendation to Staff

Fund

## Review Team Priority

2 of 2

## Review Team Recommended Amount

\$32,113

## Review Team Conditions

## Staff Recommendation

### Staff Follow-Up to Review Team

## Staff Recommendation

Fund

## Staff Recommended Amount

\$32,113

## **Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Southwest Oregon (Region 2)

**Application Number:** 221-2027-19064

**Project Type:** Stakeholder Engagement

**Project Name:** Tribal and Community Engagement  
for Ecocultural Watershed Restoration

**Applicant:** Curry SWCD

**Region:** Southwest Oregon

**County:** Curry

**OWEB Request:** \$22,977

**Total Cost:** \$31,085

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### Application Description

Indigenous tribes that once lived throughout our southern coastal watersheds have knowledge pertaining to land management and ecosystem functions that existed prior to European settlement. Curry Watersheds Partnership (CWP) works to restore watershed functions and services to desired states similar to these pre-settlement conditions, but we often lack critical information of what that looked like and the land management practices that co-existed with those conditions. Therefore, engagement with indigenous tribes is critical to the restoration of watershed health to pre-settlement conditions. For example, for centuries indigenous people managed native plant communities that contributed to complex and biodiverse habitats and also served many human uses. These plant communities continue to hold cultural and ecological value, but they've been undervalued in modern land management and are often underrepresented on the landscape. We propose to engage with the Coquille Indian Tribe (CIT) and the Confederated Tribes of the Siletz Indians (CTSI) to integrate ecocultural knowledge of native plant communities into the assessment, planning and subsequent community outreach of restoration and protection projects in the Sixes River watershed. We will work with these tribes to: 1. identify and conduct sites assessments of ecoculturally significant plant species and their habitats; 2. integrate assessments into project refinement and planting prescriptions for a subset of project sites selected through ongoing OWEB grant 220-2047-17410 for the Sixes Strategic Action Plan; and 3. create outreach material to share this information with the south coast community. Throughout project planning, we will also work with the tribes to ensure that we are considering the potential for archeological sites. Primary project partners are the CWP, CIT, and CTSI, and we will also partner with OPRD, USFS, and private landowners for assessment, planning, and outreach.

### Review Team Evaluation

#### Strengths

- The broad partner support for the project is demonstrated by letters of support and match, including both the Coquille Indian Tribe and the Confederated Tribes of Siletz Indians.
- The resulting work will positively benefit tribal communities and has potential for complementing native seed collection and propagation efforts that will support efforts to restore native plant communities with tribal significance.
- The applicant is beginning to engage with stakeholders to complete the strategic action plan for the Sixes River watershed and those planning efforts will complement this project.

- The applicant has a proven track record of developing, coordinating, and implementing projects with multiple partnerships and agencies.

### **Concerns**

- No concerns were identified.

### **Concluding Analysis**

Bringing Tribal partners into the project early will strengthen relationships and create new opportunities for engaging and working with Tribal communities on and off of Tribal lands. Based on spatial analyses and field assessments developed in partnership with the Coquille Indian Tribe and the Confederated Tribes of Siletz Indians, the group will select a at least 5 sites to pursue restoration project development specifically for ecocultural plant restoration, enhancement, and/or harvesting. The proposed stakeholder engagement work will help lay a foundation for future collaborative efforts, and the partners involved will benefit from sharing perspectives and experiences.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

1 of 2

### **Review Team Recommended Amount**

\$22,977

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$22,977

## **Staff Conditions**



North Coast

Southwest

Willamette Basin

Central Oregon

Eastern Oregon

Mid-Columbia



# Willamette Basin - Region 3 Spring 2020 Funding Recommendations



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Funding Recommendation

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Staff Recommendation For Funding (SRF)

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Below Funding Line (BFL)

Previous Grants 1998 - Fall 2019

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Land Acquisition

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Restoration

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Region 3 Cities

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Region 3 Streams

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OWEB Region 3 Boundary



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Salem, OR 97301-1290

(503) 986-0178

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## Region 3 - Willamette Basin

### Restoration Projects Recommended for Funding in Priority Order

Project #	Grantee	Project Title	Brief Description	Project Modification	Amount Recommended	County
221-3004	The Freshwater Trust	Sandy River Basin Aquatic Habitat Restoration Project	The recovery of naturally functioning conditions within the stream channels and floodplain areas of Salmon River, Zigzag River, Boulder Creek, and Clear Fork will be accelerated to increase the abundance and productivity of Sandy basin salmon and steelhead populations.		213,582	Clackamas
221-3008	Long Tom WC	Bear Creek Fish Passage Enhancement Phase 2	The final two priority fish passage barriers on Bear Creek will be removed to allow native migratory fish to move between lowland stream reaches and headwater spawning and cold water refuge habitat.		106,690	Lane
221-3001	Confederated Tribes of Grand Ronde	Chahalpam Crossing	The connection of the North Santiam River to Dieckman Creek will be restored by replacing four undersized culverts; ten acres of riparian habitat adjacent to the crossing will be restored to improve floodplain and ecological functions of historic habitat for fish and wildlife.		276,125	Marion
221-3005	Coast Fork Willamette WC	My Brothers' Farm Floodplain Forest Restoration	Habitat for native species will be enhanced across 64 acres in the Coast Fork Willamette watershed by enhancing oak and prairie plant communities, restoring and expanding bottomland hardwood forest buffers, expanding and enhancing wetlands, and installing fencing to protect waterways from livestock.		234,842	Lane
221-3013	Long Tom WC	Northeast Coyote Wetland and Prairie Restoration with the Return of Fire	A mosaic of vernal pool, wet prairie, and upland prairie will be restored in the Long Tom watershed to provide critical habitat for the ESA-listed streaked horned lark and other declining grassland birds, native amphibians, reptiles, raptors, and seasonal waterfowl.		244,527	Lane
221-3000	Yamhill SWCD	Willamette and Yamhill River Confluence Riparian Restoration_resubmit	A native riparian forest buffer will be established on 28 acres at the confluence of the Yamhill and Willamette Rivers, which will provide water quality and habitat benefits.		178,873	Yamhill
221-3009	Cascade Pacific RC&D	Pure Water Partners Riparian Restoration	Riparian habitat will be restored on four private rural residential and agricultural properties in the McKenzie River subbasin to protect water quality and enhance habitat for native fish and wildlife.		149,885	Lane
221-3010	Institute for Applied Ecology	Willamette Valley Native Plant Partnership: High Quality Seed Production for Restoration	The Willamette Valley Native Plant Partnership will increase the availability and affordability of genetically diverse and ecologically appropriate native plant materials critical to restoring and maintaining an interconnected landscape of diverse, resilient prairie and oak habitat that supports native species.		171,238	Marion
221-3012	Calapooia WC	Tub Run Phase II: Horned Lark Prairie and Wetland Restoration	Native prairie, vernal pools, and emergent wetland habitat will be restored on 119 acres in the Calapooia watershed that was formerly agricultural fields to support the recovery of rapidly declining grassland birds and other prairie species, such as the streaked horned lark.		185,978	Linn

Region 3 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle- July 27, 2020

221-3007	Institute for Applied Ecology	Plants for People Phase 3	Willamette prairie and oak savanna habitat will be restored at seven sites, and culturally significant plants will be made available for restoration. Partnerships between the Confederated Tribes of Grand Ronde and public land managers will incorporate traditional ecological knowledge into restoration, increase tribal resources to grow plants, and facilitate tribal access to gathering sites		243,022	Yamhill
<b>Total Restoration Projects Recommended for Funding by RRT and OWEB Staff</b>					<b>2,004,762</b>	

**Restoration Projects *Recommended but Not Funded* in Priority Order**

Project #	Grantee	Project Title	Brief Description	Project Modification	Amount Recommended	County
221-3003	Tualatin River WC	Clear Creek Large Woody Debris Installation Phase II	Large wood structures will be placed on Clear Creek, a tributary of Gales Creek in the Tualatin basin, to aggrade bedload and provide deep pool scour, which will expand habitat for four salmonid species.		83,615	
221-3006	McKenzie River Trust	Finn Rock "Stage-8" Floodplain Habitat Restoration Project	Ecological processes that create and maintain complex, diverse, and resilient aquatic, wetland, and riparian habitats for native species, including Chinook and Pacific lamprey, will be restored at Finn Rock on the McKenzie River.		750,145	
221-3015	Molalla River Watch Inc	Woodcock Creek & Grimm Road Fish-Passage Project	A box culvert on Woodcock Creek in the Molalla River watershed will be replaced with a bridge to restore natural streambed processes and will open more than 11 miles of stream habitat to native aquatic species.		358,351	
221-3011	Long Tom WC	Urban Stormwater Improvements for Healthy Human, Ecological, & Aquatic Communities	Urban stormwater impacts on water quality will be addressed at three locations in Eugene and Springfield by installing retrofits, including rain gardens, that reduce the amount of sediment and pollutants reaching Amazon Creek and Upper Willamette River.	\$11,552 decrease	332,399	
<b>Total Restoration Projects Recommended for Funding by RRT</b>					<b>3,529,272</b>	

**Restoration Applications *Not Recommended* for Funding by RRT**

Project #	Grantee	Project Title	Amount Requested	County
221-3002	Sandy River Basin WC	Sandy River Delta Cold Water Refuge Restoration	54,972	Multnomah
221-3014	Molalla River Watch Inc	Molalla Confluence Floodplain Phase 1	307,538	Clackamas

Region 3 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle- July 27, 2020

Technical Assistance (TA) Projects Recommended for Funding in Priority Order						
Project #	Grantee	Project Title	Brief Description	Project Modification	Amount Recommended	County
221-3019	Middle Fork Willamette WC	Jasper Prairie Assessment and Planning	An assessment of habitat quality, key native plant and wildlife species present, habitat threats, and restoration opportunities will be completed on Jasper Prairie, located in the Middle Fork Willamette watershed, to develop habitat restoration projects and options for long-term conservation of the property.	\$8,405 Increase	50,076	Lane
221-3017	Confederated Tribes of Grand Ronde	Chankawan Restoration Alternatives Analysis	Restoration projects will be identified and prioritized for a 425-acre property on the North Santiam River to improve habitat quantity, quality, and complexity necessary for native fish and wildlife species, including ESA-listed fish and State listed sensitive species.		31,850	Marion
221-3018	North Clackamas Watershed Council	Kellogg Dam Fish Passage Barrier Removal: Channel & Floodplain Design	Restoration designs for restoring the Kellogg Creek channel will be developed to accompany existing designs to remove the Kellogg Dam, which blocks fish passage to the entire Kellogg-Mt. Scott watershed.		74,998	Clackamas
221-3020	Luckiamute WC	Mid-Willamette Beaver Partnership: Habitat Assessment and Prioritization	Areas with the highest potential to support beavers and their dam complexes will be identified and prioritized for developing beaver management plans and restoration strategies that improve conditions for beavers to build dams that will restore hydrologic and aquatic habitat conditions.		72,418	Polk
<b>Total TA Projects Recommended for Funding by RRT and OWEB Staff</b>					<b>229,342</b>	
Technical Assistance Projects <i>Recommended but Not Funded</i> in Priority Order						
Project #	Grantee	Project Title	Brief Description		Amount Recommended	County
None						
<b>Total TA Projects Recommended for Funding by RRT</b>					<b>229,342</b>	
Technical Assistance Applications <i>Not Recommended</i> for Funding by RRT						
Project #	Grantee	Project Title		Amount Requested		County
221-3016	Friends of West Salem Watersheds	Mid-Willamette Floodplain Restoration Opportunity Evaluation		45,133		Polk
Stakeholder Engagement Projects Recommended for Funding in Priority Order						
Project #	Grantee	Project Title	Brief Description		Amount Recommended	County
221-3021	Institute for Applied Ecology	Willamette Valley Native Plant Materials Stakeholder Engagement	Stakeholder engagement will promote and increase the use of genetically diverse and ecologically appropriate native plant materials in Willamette Valley projects that reduce the decline of native species, recover listed species, and create an interconnected landscape of prairie and oak habitat.		38,895	Benton

Region 3 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle- July 27, 2020

221-3022	Luckiamute WC	Mid-Willamette Beaver Partnership: Stakeholder Input and Engagement, Phase I	A socio-ecological road map will be developed to promote beaver populations, implement mitigation strategies where conflict with beaver occurs, and implement restoration that mimics dam-building activities to address legacy impacts to watersheds while providing a cascade of ecosystem benefits.		176,769	Polk	
Total Stakeholder Engagement Projects Recommended for funding by OWEB Staff					215,664		
Stakeholder Engagement Projects <i>Recommended but Not Funded</i> in Priority Order							
Project #	Grantee	Project Title			Amount Recommended		County
None							
Total Stakeholder Engagement Projects Recommended for funding by RRT					215,664		
Stakeholder Engagement Projects <i>Not Recommended</i> for Funding by RRT							
Project #	Grantee	Project Title			Amount Requested		County
221-3023	Cascade Pacific RC&D	Willamette Hazelnut Stakeholder Engagement Project			44,440		Marion

Region 3 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle- July 27, 2020

000-0000	Columbia Slough WC	Healthy Industrial Land Initiative	NA	Multnomah
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# Open Solicitation-2020 Spring Offering

## Willamette Basin (Region 3)

**Application Number:** 000-0000

**Project Type:** Stakeholder Engagement

**Project Name:** Healthy Industrial Lands Initiative

**Applicant:** Columbia Slough WC

**Region:** Willamette Basin

**County:**

**OWEB Request:** \$

**Total Cost:** \$

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### Application Description

This project creates a pathway for increased voluntary habitat enhancement on industrial lands in the Columbia Slough floodplain, a critical missing piece in the watershed enhancement puzzle of the Portland metro area.

The Columbia Slough Watershed Council (Council) is conducting a survey in the Middle Columbia Slough (Phase 1) with Bullitt Foundation funds to learn about the private sector's motivations for, and barriers to, voluntarily investing in stormwater management and native habitat on their properties. A second Bullitt grant this winter will allow us to extend the survey (Phase 2) to remaining industrial lands and collect further property owner data. Phase 1 has shown that we need additional time for deeper one-on-one conversations with property owners. Phase 2 is an opportune time to start building the relationships that will lead to property owners committing to enhancement projects. Thus, we are seeking OWEB funding as match to expand our online surveys to also include phone and in-person site visits.

At the close of the project, we will have a strong understanding of who makes up the industrial sector in our watershed, their interests and how those align with conservation priorities. We will also have built more and stronger relationships to enlist early adopters in our Healthy Industrial Lands Initiative. As a trusted environmental leader in the community, the Council is well-positioned to drive the private sector toward higher investment in watershed health, creating more resilient ecosystems for people, fish, and wildlife in the watershed.

### Review Team Evaluation

#### Strengths

- The proposed stakeholder engagement project targets outreach to industrial landowners, which are a non-traditional partner in watershed restoration.
- The proposed one-on-one approach to build new relationships is technically sound for industrial landowners that typically do not work with the public.
- The applicant will utilize the Industrial Lands Advisory Committee to assist with a project prioritization process.
- The stakeholder engagement effort is timely for leveraging grant opportunities that will be offered by Metro.
- The project is supported by other funding partners.

#### Concerns

- The application lacks detail necessary to understand and evaluate the project.
- The map provided in the application has limited detail, and is not sufficient for understanding the project.
- Information on past successes, conservation goals driving the project, and the project prioritization process that will be used would strengthen the application.



- The application lacks letters of support or other evidence indicating that appropriate partners are engaged in the project
- The application budget is provided as an attachment instead of within the OWEB form. It is difficult to understand project costs and align them with the objectives to determine whether costs are reasonable and necessary for the proposed work.

### **Concluding Analysis**

While the virtual site visit provided some clarity about the proposed stakeholder engagement project, the application lacks enough details necessary to understand and evaluate the project scope of work. If the application is resubmitted, the applicant is encouraged to provide budget details in the application form, letters of support, description of conservation goals and the prioritization process that will be used for selecting projects, and detailed maps of the project area and surrounding watershed landscape.

### **Review Team Recommendation to Staff**

Do Not Fund

**Review Team Priority**

**Review Team Recommended Amount**

\$0

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Willamette Basin (Region 3)

**Application Number:** 221-3000-18907

**Project Type:** Restoration

**Project Name:** Willamette and Yamhill River  
Confluence Riparian Restoration\_resubmit

**Applicant:** Yamhill SWCD

**Region:** Willamette Basin

**County:** Yamhill

**OWEB Request:** \$178,873

**Total Cost:** \$357,241

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### Application Description

The project location is on a 320 acre property, which is about 3 miles outside of the City of Dundee, Oregon in Yamhill County. This proposed 28 acre riparian restoration project would occur at the confluence of the Yamhill and Willamette Rivers and is within the Middle Willamette River Floodplain Conservation Opportunity Area. Within this conservation opportunity area recommended actions include restoring or expanding riparian habitat. This project will leverage funds from the Farm Service Agency's Conservation Reserve Enhancement Program (CREP) to establish an average of 180 foot buffer along 3500 feet of the Willamette River and 100 foot buffer along 4500 feet of the Yamhill River. A small back channel along the Willamette that is approximately 600 feet in length is also included in the CREP contract. This contract is active and is already in year one of initial site preparation. OWEB funds will be used to fund additional site preparation and maintenance treatments not eligible for CREP cost share and to increase the planting density to 2400 stems/acre. These additional actions would greatly increase the probability of restoration success. Partners include US Fish and Wildlife Service, Greater Yamhill Watershed Council, the Farm Service Agency and the Oregon Department of Fish and Wildlife.

### Review Team Evaluation

#### Strengths

- The proposed Rapid Riparian Revegetation (R3) method is appropriate for the project site and is a proven method for restoring riparian buffers in the Willamette basin.
- The project is ready to implement and will leverage the Conservation Reserve Enhancement Program (CREP). The CREP process is underway for the project site and the applicant has consulted the tribes on cultural resources.
- Generously sized riparian buffers will be installed on both the Willamette and Yamhill Rivers.
- The landowner is willing to allow flooding to occur on their property. There is currently a lack of floodplain connection to the Willamette River in the project reach. Any opportunity to open and extend this connection by allowing flooding will benefit native fish by providing refuge habitat.
- The project is located in a priority area identified in the Oregon Conservation Strategy, and implements actions recommended in other relevant plans for the watershed.
- ESA-listed Chinook salmon and steelhead, along with other native fish, will benefit from the proposed restoration in the Willamette floodplain.

- Restoring the riparian buffer will protect water quality by reducing potential sediment transport into the stream; and the landowner's significant investment in fencing will prevent bacteria impacting water quality by excluding cattle from the riparian area. This addresses recommendations in ODA's water quality plans for protecting riparian areas and will also provide positive public health and drinking water benefits.
- Weed treatment best management practices and herbicide protocols will be correctly applied to limit potential impacts from this chemical use.
- The landowner's long-term plans for the property to continue integrating conservation with land management indicate a commitment to a restoration vision, and capacity for long-term stewardship and maintenance.
- The project site provides an opportunity to raise awareness that could lead to future restoration because of the landowner's interest in sharing their work in voluntary conservation.
- The applicant has a proven track record in implementing similar projects.

### **Concerns**

- R3 is designed to account for mortality by planting a high number of stems per acre. Since irrigation is available for maintaining the planting, the high density of 2,400 stems per acre may not be necessary to achieve an effective plant survival rate for restoring the riparian area. The 2,400 stems per acre may be appropriate if trees will be spaced farther apart and only shrub species are planted closer together.
- Project maintenance may need to extend beyond five years to assess whether thinning is needed to ensure long-term plant survival is not impacted by crowding caused by a higher than expected plant survival rate that may occur from combining high density plantings and irrigation.
- The cost per acre is high for the expected watershed benefit; however, project costs align with typical rates for successful implementation of the R3 approach. The use of a vetted planting approach to increase the likelihood for achieving target restored plant community goals justifies a higher per acre cost.

### **Concluding Analysis**

OWEB funds are needed to leverage CREP and achieve restoration goals for restoring riparian plant buffers to a free-to-grow state. The project is likely to succeed in improving floodplain and riparian habitat at the confluence of the Yamhill and Willamette Rivers.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

6 of 14

### **Review Team Recommended Amount**

\$178,873

### **Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Fund

**Staff Recommended Amount**  
\$178,873

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Willamette Basin (Region 3)

**Application Number:** 221-3001-18955

**Project Type:** Restoration

**Project Name:** Chahalpam Crossing

**Applicant:** Confederated Tribes of Grand Ronde

**Region:** Willamette Basin

**County:** Marion

**OWEB Request:** \$276,125

**Total Cost:** \$363,093

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### Application Description

This project will reconnect the North Santiam River to Dieckman Creek on Chahalpam to restore floodplain function through 1) enhancing in-channel connection to improve fish passage, flow and hydrology while reducing conditions that favor invasive species; and 2) restoring the ecological function of historic habitat to increase the complexity necessary for fish and wildlife. Chahalpam is a 462-acre conservation parcel located near Stayton along the North Santiam River. The Tribe re-acquired Chahalpam in phases during 2013 – 2019 through the Willamette Wildlife Mitigation Program. Restoration dollars are in critical need to improve habitat quantity, quality, and complexity necessary for significant populations of Chinook salmon and steelhead as well as many other sensitive species. The Chahalpam Crossing will replace four undersized culverts currently limiting fish passage and will restore 10 acres of riparian habitat adjacent to the crossing. Proposed actions include removing invasive species, developing an engineered design to replace the existing structure with a bridge or arch/box culvert, seeking Sections 7 and 106 compliance, securing a contractor to implement the design, implementing construction, and replanting floodplain forest vegetation. This project initiates floodplain connectivity by implementing one of the projects identified in the floodplain restoration analysis developed by the River Design Group. Key project partners include the North Santiam Watershed Council, Marion County Soil and Water Conservation District, Oregon Department of Fish and Wildlife, and United States Fish and Wildlife Service.

### Review Team Evaluation

#### Strengths

- The application has clearly stated project objectives and actions to restore 10 acres of a riparian native plant community and replace a culvert that is currently a velocity barrier to fish passage.
- The project site is located within a dynamic floodplain environment and presents an opportunity to restore high value habitat for multiple native species, including ESA-listed Upper Willamette spring Chinook salmon and winter steelhead along with several State sensitive species, such as Pacific lamprey, western pond turtle, and northern red-legged frog.
- Alternatives, including a bridge, pipe arch and box culvert, were evaluated as part of a technical analysis conducted by the North Santiam Watershed Council. An alternative to completely remove the crossing is not feasible because the road is a major access road for adjacent properties.
- The project implements an action within a prioritized geography in a watershed restoration plan, and is located within a Conservation Opportunity Area.

- As applicant and landowner, the Confederated Tribes of Grand Ronde brings Traditional Ecological Knowledge to the project and long-term commitment to maintaining restoration investments. The Tribe has plans for a large-scale phased restoration approach for the property that includes converting agricultural leases to restore native habitats.
- The overall project cost is reasonable for the watershed health benefits.

### **Concerns**

- The project is currently only at 30% design and the final design is contingent on results from an engineering study.
- The application has costs grouped into lump sums. Additional detail is needed to better understand whether costs are reasonable, necessary, and sufficient for the proposed work. The Tribes, however, indicated a commitment to fund any remaining construction costs if grant funds are not adequate to implement the final project design.

### **Concluding Analysis**

The proposed project is a design-build culvert replacement project to restore fish passage and hydrologic connectivity in a dynamic floodplain. Since there are not additional feasible alternatives beyond those considered in the alternatives analysis, the level of design information provided in the application is reasonable for determining project technical soundness. The applicant has a pathway that is likely to succeed for finalizing designs and implementing the project that includes contingencies that might arise with final design and permit processes. This project is the first of a long-term plan for restoration on a property located near a number of other voluntary restoration projects and in a priority location for restoring floodplain habitat for native fish and wildlife species in the North Santiam Watershed.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

3 of 14

### **Review Team Recommended Amount**

\$276,125

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$276,125

**Staff Conditions**



## Open Solicitation-2020 Spring Offering

### Willamette Basin (Region 3)

**Application Number:** 221-3002-18961

**Project Type:** Restoration

**Project Name:** Sandy River Delta Cold Water  
Refuge Restoration

**Applicant:** Sandy River Basin WC

**Region:** Willamette Basin

**County:** Multnomah

**OWEB Request:** \$54,972

**Total Cost:** \$126,880

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### Application Description

Lower Sandy River, Sandy - Columbia River confluence, Beaver Creek Troutdale, Oregon Exit 18 off Interstate 84 We will be the first organization to implement EPA's Cold Refuge Report recommendations to maintain Sandy River temperatures at their current 18.78 C. summer temperatures levels through removing invasive blackberry and planting riparian shade trees within the EPA mapped Sandy River cold water refuge (CWR) area. Columbia River temperatures average 21.30. The EPA report identified the Sandy River as one of "12 key cold water refuge (CWR) tributaries," and charted a course to keep tributary temperatures below those of the Columbia River. EPA's recommended Sandy River CWR proposals included water quality modeling data by Oregon's Department of Environmental Quality to "Increase riparian shade to reduce sedimentation and maintain CWR temperatures." The EPA Plan also called for "continuing collaboration in the watershed among multiple parties for restoration, and implement actions in the Portland Water Bureau's Habitat Conservation Plan to maintain higher flows, cooler temperatures, and habitat creation." Sandy River CWR also include "Supporting education and outreach opportunities for habitat and riparian restoration." Project Partners: US Forest Service landowner Native Ecosystems NW Project Contractor National Forest Foundation Wisdom of the Elders Friends of Trees Weyerhaeuser Family Foundation River Net Works/National Park Service Friends of the Sandy River Delta

### Review Team Evaluation

#### Strengths

- The project is located in an area that will benefit from riparian restoration.
- Applicant staff have appropriate experience for watershed restoration.

#### Concerns

- The application lacks sufficient information necessary to understand and evaluate the project.
- The project objectives are unclear and wide-ranging, and lack specificity needed to understand how these objectives will be met and come together to result in expected watershed restoration outcomes. For example, it is unclear how chemical analysis of wapato, surveying western painted and pond turtles, and tribal engagement coordinate with riparian, wetland, and oak restoration to benefit stream temperature and cold-water refugia for ESA-listed fish.

- The application lacks a map and narrative details describing existing and expected future conditions that will result from restoration.
- It is unclear how water temperature is identified as a limiting factor for Beaver Creek without temperature data to provide a baseline or evidence for proposing restoration.
- Upstream of Beaver Creek, on the mainstem Sandy River, there are a number of watershed concerns contributing to water temperature issues in the Sandy Basin that are impacting cold-water refugia. While there may be some localized benefits, it is unclear how the proposed project actions will impact water temperature at the proposed large project scale.
- Erosion is cited as a problem in the application and was referenced on the virtual site visit; however, it is unclear how erosion can be the most significant limiting factor in the Sandy River Delta.
- It is difficult to evaluate the cost benefit ratio of the project without a clear description of the proposed work.

### **Concluding Analysis**

While the virtual site visit provided some clarity about the proposed restoration objectives, the application lacks enough details necessary to understand what, where, and how restoration actions will be implemented. Additional information is also needed to understand how limiting factors were identified and prioritized for selecting project sites and restoration treatments. As a result, there are too many unknowns about the project to evaluate its likelihood to succeed.

### **Review Team Recommendation to Staff**

Do Not Fund

### **Review Team Priority**

### **Review Team Recommended Amount**

\$0

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Do Not Fund

### **Staff Recommended Amount**

\$0

## **Staff Conditions**

# Open Solicitation-2020 Spring Offering

## Willamette Basin (Region 3)

**Application Number:** 221-3003-18963

**Project Type:** Restoration

**Project Name:** Clear Creek Large Woody Debris  
Installation Phase II

**Applicant:** Tualatin River WC

**Region:** Willamette Basin

**County:** Washington

**OWEB Request:** \$83,615

**Total Cost:** \$162,772

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### Application Description

This project is located on Clear Creek, a 4th order tributary of Gales Cr in the Tualatin basin. The site is in Washington County and approximately 4 miles west of the Forest Grove city limits. Clear Cr has been identified as containing the highest priority restoration actions in the Gales Cr subbasin in 2 planning documents (2014 RBA Final Report, 2015 Gales Creek Action Plan) for the recovery of 4 species of salmonids (winter steelhead, Coho, fall chinook and cutthroat trout). This high priority designation is related to its importance as thermal refugia from the temperature limited Gales Cr and its juxtaposition just 2.1 miles below the Balm Grove dam that terminates all upstream temperature dependent migrations of juvenile salmonids during low summer flows. Clear Cr above the project reach traverses the City of Forest Grove's Municipal Watershed. The city has maintained their upslope forests in Late Successional Reserve that has resulted in the provision of some of the highest water quality in the Tualatin basin. Water temperatures begin to degrade below the City's ownership because Clear Cr traverses a 1 mile section of private property where removal of large wood has resulted in low retention of mobile bedload. This historic land use legacy has created a stream channel frequently scoured to bedrock with a limited ability to protect summer flows from exposure to sun and air. Our project intends to address this reduction in water quality by installing 28 LWD structures that will either aggrade bedload or provide deep pool scour in places where bedload exists. The objective is to build a continuous layer of mobile bedload that will protect a percentage of the summer flow by sequestering it deep in stream bed gravels and cobbles. This final treatment phase for Clear Cr involves participation from 7 private landowners, Stimson Lumber Co, the City of Forest Grove, Bureau Of Reclamation, Tualatin Soil and Water Conservation Dist, and Tualatin River Watershed Council.

### Review Team Evaluation

#### Strengths

- The application has clearly stated objectives and descriptions of actions for successfully meeting those objectives.
- The project will build on previous phases of restoration on Clear Creek.
- Clear Creek is a prioritized geography for the Tualatin basin in several assessments and watershed plans.
- The project site is located in a stream reach that has high densities of native fish species. The proposed restoration will benefit lamprey, steelhead, cutthroat, and coho.

- Primary limiting factors for native fish in the Clear Creek watershed will be addressed by providing additional pool habitat that will increase the surface area where juvenile fish can rear.
- The project design includes 4.5 acres of riparian interplanting along the stream adjacent to the proposed instream large wood placement.
- The upper watershed is mostly protected.
- The applicant has capacity to complete the proposed work, and a proven track record implementing past projects.
- A diversity of partners are engaged in the project, which is demonstrated by letters of support and match.
- The contractor selected for implementing the stream work has extensive experience implementing similar projects.
- The overall project cost is reasonable for the expected watershed benefit.

### **Concerns**

- Stream temperature data is not provided in the application and the study referenced by the applicant has limited information specific to the project area. It is unclear the extent to which the project will benefit stream temperatures without water temperature data verifying it is a priority limiting factor.
- The proposed project may be treating symptoms of limiting factors affecting water quality rather than causes. Low summer stream flow after water withdrawals for municipal drinking water is likely influencing stream temperature on Clear Creek to a greater extent than the proposed restoration treatments can address. There is a low probability for resulting pools and gravel beds that will form with large wood placement to influence stream flows and stream temperature commensurate with the impact from low water flows. A monitoring plan for stream flow and temperature would strengthen the project by providing information to better understand the extent to which stream temperature is a limiting factor. The monitoring data could also assist in identifying solutions for effectively addressing causes of potential temperature concerns, and document potential changes in water temperature as a result of the proposed restoration.

### **Concluding Analysis**

While it is uncertain the extent to which the proposed restoration will influence stream temperature without data to confirm that water temperature is a significant limiting factor, restoration actions will effectively increase fish rearing habitat. The applicant is encouraged to work with appropriate partners, such as OSU Extension, to develop a monitoring plan to better understand water temperature conditions in Clear Creek. The project design for placing large wood has a high likelihood for success for expanding and enhancing habitat complexity for fish in Clear Creek, which is one of two primary spawning areas in the Tualatin Basin.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

11 of 14

### **Review Team Recommended Amount**

\$83,615

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Willamette Basin (Region 3)

**Application Number:** 221-3004-18974

**Project Type:** Restoration

**Project Name:** Sandy River Basin Aquatic Habitat Restoration Project

**Applicant:** The Freshwater Trust

**Region:** Willamette Basin

**County:** Clackamas

**OWEB Request:** \$213,582

**Total Cost:** \$1,300,683

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### Application Description

The Freshwater Trust (TFT), US Forest Service (USFS) and Bureau of Land Management (BLM) are taking the lead on the Upper Sandy River Basin Habitat Restoration Project on behalf of the Sandy River Basin Partners (the Partners). The Sandy River originates on Mt. Hood and flows 56 miles northwest before entering the Columbia River, near Portland, Oregon. The proposed project will address primary limiting factors by increasing off channel habitat/floodplain connectivity and large wood abundance in high priority tributaries of the Sandy, including the mainstem Salmon River, Boulder Creek (both in the Salmon River sub-watershed) and the Clear Fork and Zigzag River (located within the upper Sandy sub-watershed). Proposed work is on public land managed by the USFS and BLM located near Zigzag, Oregon in Clackamas County. Sandy River salmon and steelhead populations have declined over the last century due to degradation of habitat and other factors. The Partners have identified the Salmon River and upper Sandy sub-watersheds among the top areas providing high quality habitat for the basin's native fish. The Partners are aligned on a near term goal of restoring these priority watersheds to advance Sandy basin-scale restoration. Restoration actions to be undertaken as part of the proposed project include: reactivation of flow to historic side channels and floodplain habitat, construction of large wood habitat structures, and placement of additional large wood in side channels and on stream margins. This project is part of a larger, multi-year, watershed-scale restoration effort and builds on similar successful projects completed in the basin by TFT and the Partners since 2008. OWEB funding will support TFT staff time for project design/permitting, project management, construction, travel, administration and reporting.

### Review Team Evaluation

#### Strengths

- The project will address key limiting factors in a priority watershed with known use by ESA-listed Chinook, coho, and steelhead. The proposed work also implements prioritized actions recommended in multiple planning documents for the Sandy Basin.
- Results from post-project monitoring of previous restoration projects in the Sandy Basin implemented by the applicant team indicate the same project design approach is likely to succeed. Both adult and juvenile fish response is positive in these restored areas where side-channels were re-activated and additional large wood is accumulating on strategically placed large wood structures.
- The project will expand completed restoration located in adjacent areas and provide a large area of newly reconnected stream and floodplain habitat.

- Alternative restoration approaches were identified and evaluated to determine the best approach for effectively addressing watershed limiting factors in the project area.
- The project team has a proven track record as a successful partnership implementing similar projects for the last ten years, and is among the most experienced in the region implementing the proposed design approach.
- Costs are reasonable for the proposed work and the high ecological benefit expected from the project.

### **Concerns**

- The application lacks details for removing the dike on Zigzag River. The applicant provided clarity for this project objective in response to questions during the virtual site visit.
- The application includes only one map that covers a large geographic area. Additional maps that include details about the position of the proposed work relative to previous restoration efforts would provide helpful context for evaluating the project.
- Some of the stream reaches in the project area are in relatively good condition; restoration may not be as imperative compared to other proposed projects.

### **Concluding Analysis**

The Sandy watershed provides habitat to numerous ESA-listed fish species, making it a priority area for instream habitat restoration. The project has a high ecological benefit-cost ratio and certainty of success, which is documented by monitoring data from previous phases of restoration.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

1 of 14

### **Review Team Recommended Amount**

\$213,582

### **Review Team Conditions**

### **Staff Recommendation**

**Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund



**Staff Recommended Amount**

\$213,582

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Willamette Basin (Region 3)

**Application Number:** 221-3005-18993

**Project Type:** Restoration

**Project Name:** My Brothers' Farm Floodplain  
Forest Restoration

**Applicant:** Coast Fork Willamette WC

**Region:** Willamette Basin

**County:** Lane

**OWEB Request:** \$234,842

**Total Cost:** \$307,029

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### Application Description

The project is in Lane County, north of Creswell on the lower mainstem of the Coast Fork Willamette River and Bear Creek. My Brothers' Farm is a 336-acre multigenerational farm owned by the Larson Family. This property is within the floodplain of the Coast Fork Willamette River and Bear Creek, contains bottomland hardwood floodplain forests interspersed with oak woodlands, wet and upland prairie, and forested, shrub and marsh wetlands. The project site has been affected through past agricultural activities and changes in hydrology from both upstream flood control dams and bank armoring. Historic changes in the hydrology and disturbance regimes on the mainstem CF Willamette and on the property have led to loss of native habitat reducing biodiversity. These changes affect important species that rely on these habitats including Yellow Warbler, Western pond turtle, coastal cutthroat trout, and northern red-legged frog. Degradation of these systems has continued by the establishment of invasive plants and the consequent reduction of habitat suitability for wildlife. This 64.4 acre project will enhance habitat for native species through (1) releasing legacy oaks and enhancing oak woodland understory and upland prairie; (2) restoring and expanding bottomland hardwood forest buffers; (3) expanding and enhancing forested, shrub/scrub, marsh and wet prairie wetlands; and installing 1.6 miles of electric fencing to protect waterways from livestock. Project partners include My Brothers' Farm, Coast Fork Willamette Watershed Council, and Natural Resource Conservation Service EQIP.

### Review Team Evaluation

#### Strengths

- The proposed project builds on two previous phases of work and incorporates lessons learned resulting from completed restoration.
- Watershed benefits expected from implementing the project are adequately quantified in the application.
- Restoration methods are appropriate for the site. The applicant utilized LiDAR data and historic maps to determine target habitats and guide restoration plans for a mosaic approach that more closely mimics natural habitats. This will enhance a variety of habitat types for a diversity of native species, including Yellow Warbler, Western pond turtle, coastal cutthroat trout, and northern red-legged frog.
- The application includes a description of plans for the entire property and a draft forest management plan that was created as part of the landowner's involvement in NRCS's EQIP, which provide helpful context for evaluating how the proposed project fits in with the overall restoration strategy on the site.
- Pacific lamprey were identified in the project area, which provides evidence confirming the value of the site for providing habitat benefits to this priority species.

- The project is located within a Conservation Opportunity Area and TNC anchor habitat, and is in close proximity to a number of properties with conservation efforts underway.
- The project site is in a highly visible location and offers a demonstration opportunity for integrating restoration into a productive agricultural area.
- Partnerships are demonstrated by match contributions.
- The applicant and landowner have a proven track record implementing similar restoration activities during previous project phases, and will be utilizing knowledgeable contractors.
- Landowner commitment to restoration is demonstrated by long-term involvement in maintaining previous restoration investments, and plans that balance the protection and enhancement of natural ecological value with a productive working farm.

### **Concerns**

- Some budget details are unclear and may not have been finalized at the time of application submission.

### **Concluding Analysis**

The proposed project will connect restoration across a large geography within an agricultural landscape. Phased restoration on this site is restoring a diversity of watershed habitats that benefit a wide range of native species. The large restoration footprint at My Brother's Farm is leveraged by its connection to several properties in the area with conversation work underway, which results in a high benefit for the investment in restoration.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

4 of 14

### **Review Team Recommended Amount**

\$234,842

### **Review Team Conditions**

### **Staff Recommendation**

Staff Follow-Up to Review Team

### **Staff Recommendation**

Fund

**Staff Recommended Amount**

\$234,842

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Willamette Basin (Region 3)

**Application Number:** 221-3006-19000

**Project Type:** Restoration

**Project Name:** Finn Rock "Stage-8" Floodplain  
Habitat Restoration Project

**Applicant:** McKenzie River Trust

**Region:** Willamette Basin

**County:** Lane

**OWEB Request:** \$750,145

**Total Cost:** \$2,683,753

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### Application Description

The Finn Rock Reach Floodplain Restoration Project will provide floodplain reconnection and habitat restoration to 85 acres along the McKenzie River, near the town of Blue River, Lane County. McKenzie River Trust (MRT) acquired the 278-acre Finn Rock Reach (FRR) in 2016. The property contains extensive side channel habitat that provides habitat for spring Chinook salmon and other native species but has also been significantly altered by historic gravel extraction, and tree harvest. Decreased habitat complexity caused by the depletion of large woody debris and lack of lateral floodplain connectivity will be addressed by this project. The construction of the gravel pits, and their attendant access road, have created large berms of overburden within the floodplain and effectively channelized a primary side channel. These manipulations inhibited lateral connectivity with the McKenzie River and disrupted the flow regime and habitat complexity within the side channel. Recent bathymetry shows this side channel is incising up to a failed access road contributing to increased flow velocities, sediment transport, and loss of connectivity. The goal of the proposed restoration project is to restore the natural processes on the site that create and maintain diverse and resilient habitat. Project components include: (1) harvest, and transport of large wood, (2) removal of the gravel access road and areas of overburden, (3) aggradation of incised channels, including the gravel extraction ponds and The project seeks to restore a depositional environment with increased wetted surface area at base flow, floodplain connection, and habitat complexity. Project partners include the MRT, McKenzie Watershed Council and USFS. Other partners, that comprise a Technical Advisory Group, include the ODFW, The Nature Conservancy, BLM, and the University of Oregon Geography Department.

### Review Team Evaluation

#### Strengths

- The application includes a clear definition of the watershed problems that will be addressed, including a lack of complex floodplain habitat and limited fish rearing habitat.
- The proposed project fits within the context of past restoration completed across the McKenzie watershed.
- The project is moving towards being ready to implement with permitting processes underway.
- The project will implement actions recommended in several watershed assessments and recovery plans.
- The design is appropriate for the hydraulic conditions at the site.

- Proposed restoration will significantly benefit native fish, especially Chinook salmon and Pacific lamprey.
- The applicant is utilizing a qualified consultant and a USFS team to design the project.
- The project partnership has extensive experience with successfully implementing similar projects.
- While the project has a high overall cost, the proposed restoration approach at the project site is likely to provide high ecological uplift.

### **Concerns**

- It is challenging to evaluate the proposed actions within the larger watershed context due to the high degree of uncertainty related to how the upper McKenzie basin will respond to the recent Holiday Farm Fire and influence the project site conditions. A phased approach may be more appropriate to sequence work over time and accommodate uncertainty related to site changes that are likely to occur due to the high severity of the fire.
- While the potential ecological uplift is likely to be high for this project, it is challenging to evaluate whether the high project cost for the watershed benefit outweighs other restoration opportunities proposed in the Willamette region.

### **Concluding Analysis**

The project site was impacted by the recent Holiday Farm Fire and the applicant effectively explained during the virtual site visit how they are adapting restoration accordingly. The proposed restoration is a valley bottom reset project and the recent fire started this process. The design approach is likely to succeed in building ideal rearing habitat for juvenile salmonids in a basin that is a priority for ESA-listed fish species habitat restoration.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

12 of 14

### **Review Team Recommended Amount**

\$750,145

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Willamette Basin (Region 3)

**Application Number:** 221-3007-19001

**Project Type:** Restoration

**Project Name:** Plants for People Phase 3

**Applicant:** Institute for Applied Ecology

**Region:** Willamette Basin

**County:** Yamhill

**OWEB Request:** \$243,022

**Total Cost:** \$780,791

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### Application Description

The purpose of “Plants for People Phase III” is to restore prairie and oak savanna habitat at seven sites in the Willamette Valley in order to improve ecosystem functionality and increase abundance of culturally significant plants while establishing mutually beneficial partnerships between Confederated Tribes of Grand Ronde (CTGR) and public land managers engaged in restoration and conservation. Needs to be addressed include the loss of Willamette Valley prairie and oak habitat, failure to incorporate traditional ecological knowledge into habitat restoration, lack of commercial availability of culturally significant plant materials, developing tribal infrastructure and resources to grow plants and conduct restoration, and minimal tribal access to appropriate gathering sites. Project components include restoring oak savanna and prairie habitat at seven sites throughout the Willamette Valley, including five CTGR-owned sites and two culturally important publicly-owned sites. Project locations include: Herbert Farm & Natural Area (near Marys River and Corvallis, Benton County), Champoeg State Heritage Area (near Willamette River and Newberg, Marion County), Rattlesnake Butte (near Long Tom River and Monroe, Lane County) and four other CTGR sites (near South Yamhill River and Grand Ronde, Polk and Yamhill Counties). Tribal staff and community will engage in plant production and restoration and the tribal native plant nursery will grow culturally important species for restoration. Native plant production will be expanded and the production plan updated. A plan for traditional harvest will be implemented at Champoeg. The main project partners include CTGR, City of Corvallis, Oregon Department of Fish and Wildlife, Oregon Parks and Recreation Department, U.S. Fish and Wildlife Service and Long Tom Watershed Council.

### Review Team Evaluation

#### Strengths

- Previous application evaluation concerns are addressed.
- The application has clearly stated project objectives, tasks, and timeline, and has a description of appropriate restoration actions tailored to identified sites.
- The proposed project builds on work completed through previous OWEB grants.
- Tribal knowledge will be integrated to ensure culturally significant native plants are available for future restoration. This provides a unique social and cultural engagement opportunity among watershed restoration practitioners.
- The plant species that will be grown will likely provide indirect benefits to native fish and wildlife, including ESA-listed species, because they will be used at restoration sites.
- The Tribal Native Plant Materials Development Plan will be updated to include cost-recovery mechanisms, such as contracts, to help move the nursery towards sustainability.



- The application references a number of existing watershed plans that informed the proposed actions. The large acreage restoration sites are identified in the Oregon Conservation Strategy.
- Oak savannah habitat will be restored at seven sites that are either tribally or publicly owned, which provides long-term protection of restoration investments.
- The applicant has a proven track record with similar projects.
- Partnership commitment is demonstrated with a variety of leveraged resources.
- Details describing how project costs were calculated provides necessary context information for evaluating project cost-effectiveness.

### **Concerns**

- The project measures of success are vague; however, there are mechanisms for qualitative project assessment.
- A high number of partners adds complexity to a project and it can be challenging to keep partners moving in the same direction.

### **Concluding Analysis**

Developing tribally significant plant resources is imperative for restoration as the Confederated Tribes of Grand Ronde continues to acquire and restore lands. The project integrates Traditional Ecological Knowledge into restoration and builds access to culturally significant native plant material into watershed projects. The project has a high likelihood of success in providing significant restoration benefit to oak and prairie habitats for the cost.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

10 of 14

### **Review Team Recommended Amount**

\$243,022

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

**Staff Recommended Amount**

\$243,022

**Staff Conditions**

# Open Solicitation-2020 Spring Offering

## Willamette Basin (Region 3)

**Application Number:** 221-3008-19022

**Project Type:** Restoration

**Project Name:** Bear Creek Fish Passage Enhancement Phase 2

**Applicant:** Long Tom WC

**Region:** Willamette Basin

**County:** Lane

**OWEB Request:** \$106,690

**Total Cost:** \$133,472

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### Application Description

The proposed fish passage enhancement project is located on Bear Creek, in one of three drainages prioritized by the Long Tom Watershed Council (LTWC) for accelerated restoration as part of the Willamette Model Watershed Program. Bear Creek, along with Ferguson Creek to the north, are priority areas for fish passage improvements for LTWC due to their proximity to the mainstem Willamette River and their potential to provide habitat for juvenile upper Willamette River spring Chinook and Pacific lamprey once fish passage is improved by the US Army Corps of Engineers on the lower Long Tom River. The proposed project is the final of two phases of fish passage improvements on Bear Creek proper and would address two of the final four priority passage barriers in the Bear Creek Sub-watershed (there are two remaining on Jones Creek). Once this project is complete, LTWC will add Bear Creek to the list of entire drainages that we have opened up for fish passage, which includes Owens Creek, a major tributary to Bear Creek, where we have removed 12 barriers since 2006. This project would open up 2.3 miles of spawning and cold-water habitat for native aquatic species by installing roughened channels downstream of two barrier culverts on Bear Creek. The riffles will backwater the culverts to make them passable year-round for native aquatic species. One culvert is privately-owned and the other is located on Highway 36 and managed by the Oregon Department of Transportation (ODOT). The roughened channel designed to improve fish passage at the highway 36 site will be installed downstream of Highway 36 on private property. OWEB funds will be used for supplies, materials, contracted services, project management, travel, and grant administration costs of the roughened channel installations. OWEB funds will leverage significant in-kind contributions from the landowners, ODOT, and Wildish Sand and Gravel.

### Review Team Evaluation

#### Strengths

- Previous application evaluation concerns are addressed. In particular, by deepening engagement with ODOT, the applicant increases the certainty of success for this project to address fish passage on Highway 36.
- The application clearly describes appropriate methods, project objectives, and actions for meeting those objectives.
- The applicant built relationships with landowners and partners in the Bear Creek watershed over time that led to a number of watershed restoration projects, and the proposed work is the final phase for addressing fish passage in a strategic watershed restoration approach for this creek.

- The proposed fish passage project builds on previous restoration work in Bear Creek and will open access to 2.3 miles of stream habitat for native fish.
- The project design is technically sound for the site and will facilitate year-round fish passage.
- Surveys indicate native fish, primarily cutthroat trout, utilize stream habitat in the project area.
- The applicant and contractors have a proven track record completing similar projects.
- The project approach is cost-effective for the site and design, and costs are reasonable for the expected watershed benefits.

### **Concerns**

- No concerns were identified.

### **Concluding Analysis**

Addressing the final phase of fish passage barriers in Bear Creek leverages benefits from previous watershed restoration on this tributary of the Long Tom River. Also, the applicant is making progress in addressing fish passage at the downstream drop structures in Monroe, Oregon. This will provide fish passage from the Willamette River all the way up to Fern Ridge dam that will benefit a number of priority native fish species, including lamprey. Landowners and partners have waited a long time for funding to be secured for the proposed work; implementation is timely in order to maintain their engagement in voluntary conservation and achieve ecological benefits from long-term strategic investments in Bear Creek. The proposed work has a high likelihood of success.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

2 of 14

### **Review Team Recommended Amount**

\$106,690

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

**Staff Recommended Amount**

\$106,690

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Willamette Basin (Region 3)

**Application Number:** 221-3009-19037

**Project Type:** Restoration

**Project Name:** Pure Water Partners Riparian Restoration

**Applicant:** Cascade Pacific RC&D

**Region:** Willamette Basin

**County:** Lane

**OWEB Request:** \$149,885

**Total Cost:** \$288,243

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### Application Description

The McKenzie River is the sole source of drinking water for over 200,000 people in the City of Eugene and surrounding communities and provides critical habitat to native species including Willamette River spring Chinook salmon and bull trout. Riparian areas within the subbasin have been impacted by historic and current land management practices including urban and rural development, forestry, agriculture, and road development. These changes have negatively impacted fish and wildlife habitat and contributed to downward trends in water quality. While most of the land within the upper McKenzie River subbasin is public land managed by the U.S. Forest Service (USFS), much of the floodplain and riparian corridors in the mid- and lower-subbasin, and major tributaries are in private ownership. Beginning in 2011, Eugene Water & Electric Board's (EWEB) Source Water Protection Program convened a collaborative stakeholder group to design and implement an incentive-based strategy to protect existing healthy riparian areas and restore degraded riparian forests along the McKenzie River through voluntary actions in partnership with private landowners. This led to the development of the Pure Water Partners (PWP) program and a pilot project, launched in 2014 with 15 private landowners. The PWP program is currently working with over 80 rural residential landowners and agricultural producers. The proposed project will work with four private landowners along the McKenzie River between the City of Springfield and the community of Vida to restore 26 acres of riparian habitat. The participating landowners have entered into long-term agreements with EWEB to protect riparian areas and restoration investments. Project partners include the Cascade Pacific Resource Conservation Development, EWEB, McKenzie River Trust, McKenzie Watershed Alliance, Metropolitan Wastewater Management Commission, The Freshwater Trust, Upper Willamette Soil and Water Conservation District, and USFS.

### Review Team Evaluation

#### Strengths

- The applicant addressed previous project evaluation comments by strengthening and expanding partnerships.
- The proposed restoration will provide water quality benefits and habitat benefits for ESA-listed fish.
- The project is ready to implement with detailed plans completed for each of the participating landowner sites.
- Restoration methods for site preparation and plantings are clearly defined in the application and appropriate for the project site.

- The integrated vegetation management approach is comprehensive and appropriate for the project sites.
- The project approach treats causes of limiting factors impacting watershed health rather than symptoms.
- Alternatives were considered for each of the project sites and adaptive management is incorporated into the project approach.
- Long-term maintenance and monitoring plans are included in the project design.
- The project is situated within an ODA Strategic Implementation Area (SIA) and addresses priorities in the ODFW Conservation Strategy.
- The project provides opportunities for raising public awareness about watershed restoration through signage.
- The project team has a proven track record implementing projects, and previous planting projects have been successfully maintained.
- The application budget is detailed and costs are appropriate based on similar past projects.

### **Concerns**

- No concerns were identified.

### **Concluding Analysis**

The project partnership has demonstrated significant strength with a rapid, coordinated response to post-Holiday Farm Fire recovery efforts. The skills and momentum gained from this experience indicate a high likelihood of success for this partnership to implement an innovative pilot program that will expand benefits from restored riparian areas across the McKenzie watershed.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

7 of 14

### **Review Team Recommended Amount**

\$149,885

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$149,885

**Staff Conditions**



# Open Solicitation-2020 Spring Offering

## Willamette Basin (Region 3)

**Application Number:** 221-3010-19041

**Project Type:** Restoration

**Project Name:** Willamette Valley Native Plant Partnership: High Quality Seed Production for Restoration

**Applicant:** Institute for Applied Ecology

**Region:** Willamette Basin

**County:** Marion

**OWEB Request:** \$171,238

**Total Cost:** \$290,138

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### Application Description

Willamette Valley (WV) prairie and oak habitats are among the most endangered ecosystems in North America - over ninety percent of upland prairie and oak woodlands and over 99% of historic wet prairies in the valley have been converted to other uses, primarily urban and agricultural. Over the last several decades, government agencies, non-profit organizations, and private landowners in the WV have been working to reduce the decline of native species, recover listed species, and create an interconnected landscape of prairie and oak habitat by implementing restoration projects throughout the region. However, one major limiting factor to the success of these projects is the limited availability of genetically diverse and ecologically appropriate native plant materials for use in these projects. Up until recently, availability of locally sourced native seed for restoration work in the WV suffered from a lack of coordination. This lack of coordination potentially resulted in over-collection from wild native populations, introduction of inappropriate genetic material into existing populations, duplication of plant materials production efforts, scarcity of critical diversity species, instability for commercial native plant growers, and higher costs for restoration projects. In 2012, the Willamette Valley Native Plant Partnership (WVNPP) was formed to increase the availability and affordability of genetically diverse native seed for use in WV restoration, revegetation, and recovery projects. We will be maintaining 15 production fields for native seed for restoration projects in the WV. Some current partners include BLM, Benton SWCD, City of Corvallis, Confederated Tribes of Grand Ronde, Kenagy Family Farm, Long Tom Watershed Council, Metro, NRCS, ODFW, ODOT, OPRD, Polk SWCD, TNC, Triangle Farm, USACE, USFWS, and Yamhill SWCD.

### Review Team Evaluation

#### Strengths

- The application includes detailed objectives, tasks, and timeline.
- The proposed work builds on previous project phases.
- Developing genetically diverse native plant material benefits rare Willamette Valley species in wetland and upland habitat types. The genetic material provided through the Willamette Valley Native Plant Partnership (WVNPP) is well-documented and as genetically close to wild plant populations as possible.
- The complementary stakeholder engagement proposal will help build new markets and products that increases the likelihood for the WVNPP to reach fiscal sustainability.

- The WVNPP is committed to improving access to high-quality seed for habitat restoration and increasing the number of species in production. The partnership has demonstrated previous success with 15 plant species currently in production.
- The project provides necessary capacity to effectively coordinate the WVNPP effort.
- The project engages knowledgeable partners that have demonstrated commitment by their own investments into the WVNPP.
- The partnership is committed to not undercutting or competing with private seed sales.

## **Concerns**

- It is unclear how the timing of work described in the accompanying stakeholder engagement proposal intersects with work described in the restoration application.
- Plant material sales were lower than expected after previously funded OWEB grants. It is unclear how many phases of funding will be needed to successfully achieve fiscal sustainability, or whether sustainability is a feasible outcome. A different type of investment, such as a foundation or donors, may be a more suitable fund source for continued operations if the proposed approach does not achieve a stable model.
- Additional information on how costs were developed for the budget would be helpful for evaluating whether costs are reasonable and necessary for project cost effectiveness.

## **Concluding Analysis**

While WVNPP has had challenges achieving fiscal sustainability, recent receipts for seed sales indicate the partnership could be nearing an independent, stable model. The WVNPP provides a unique role in managing genetics for native seed used in restoration, which significantly increases the likelihood of success in prairie and oak habitats that are among the most endangered ecosystems in North America.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

8 of 14

## **Review Team Recommended Amount**

\$171,238

## **Review Team Conditions**

## **Staff Recommendation**

## **Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$171,238

**Staff Conditions**

# Open Solicitation-2020 Spring Offering

## Willamette Basin (Region 3)

**Application Number:** 221-3011-19046

**Project Type:** Restoration

**Project Name:** Urban Stormwater Improvements  
for Healthy Human, Ecological, & Aquatic  
Communities

**Applicant:** Long Tom WC

**Region:** Willamette Basin

**County:** Lane

**OWEB Request:** \$343,951

**Total Cost:** \$442,489

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### Application Description

Location: 2 locations in Eugene: Willamette Christian Center 2500 W. 18th Avenue, Friends Meeting House 2274 Onyx Street. One in Springfield: Willamalane Adult Activity Center 215 West C Street. Need: All three sites impact the Upper Willamette River (UWR) Chinook evolutionary significant unit (ESU). Together, Eugene and Springfield make up the largest urban area in the Upper Willamette Basin, and is the primary contributor of high temperatures, heavy metals, and petrochemicals - all of which are known to impair fish survival. Pollutants are conveyed through stormwater generated on these sites and enters the UWR both directly and through the Long Tom River (via Amazon Creek), which accepts untreated stormwater from over 70% of Eugene's urban areas. Upper Willamette River, Amazon Creek, the A-3 Drain, the Amazon Diversion Canal, Fern Ridge Reservoir, and the Long Tom River are all 303-D listed Creeks for pollutants including lead, mercury, dissolved oxygen, temperature, and turbidity-all of which are recognized as common urban sourced pollutants. The City of Monroe draws the majority of its drinking water from the surface waters of the Long Tom below the confluence with Amazon Creek, making Amazon Creek a drinking water source protection area. The Springfield site drains to the Island Park Slough then into the UWR right after the confluence of Coast and Middle Fork of the Willamette Rivers' confluence. Proposed Work: Work on all three sites will be to manage the stormwater generated on site. All three sites will treat parking lot areas, and the Friends Meeting House site will manage 100% of all on site generated stormwater as well as several residential sites and the adjacent alley. Please refer to the attached designs and diagrams for each site. Partners: UWUWP, UWSN, Cities of Eugene & Springfield, Middle Fork of the Willamette, McKenzie & Long Tom Watershed Councils, Willamalane, UWSWCD, Friends Meeting House, Willamette Christian Center

### Review Team Evaluation

#### Strengths

- Three of the project sites are ready for implementation with designs at 80% complete.
- A number of national and local level assessments informed the selection and development of an urban stormwater project. Pollutants are a major limiting factor to water quality that is impacting native fish populations, which is documented in a number of references noted in the application. Stormwater is an important opportunity identified for action to address this limiting factor.
- The proposed actions will extend green corridors by adding low impact gardens that will expand habitat patches for birds and pollinators, and provide wildlife benefits.

- Project sites are selected based on a prioritization process completed as part of an OWEB technical assistance grant.
- Proposed methods are appropriate for urban stormwater improvements by increasing residence time in the form of raingardens and landscaping along with removing impervious surfaces, which will encourage infiltration and capture pollutants before they reach local streams.
- The proposed actions will address water quality limited streams and will benefit drinking water.
- The project provides an opportunity for raising public awareness that could lead to future restoration to continue addressing urban stormwater impacts.
- The project builds on existing partnerships and engages a diversity of new partners.
- The applicant has capacity for the proposed work and a proven track record implementing past projects.
- The project team has the technical expertise needed to complete the proposed work.

## **Concerns**

- It is challenging to evaluate planting project elements without information provided in the planting portion of the application.
- Plantings were removed from one of the project site designs to reduce costs, and the design is scaled back to only installing walls around the parking island. While this will reduce sediment runoff, plantings could have provided filtration.
- Relying primarily on volunteer efforts for long-term stewardship and maintenance after the project is completed may have limited success.
- Some budget line items lack detail needed to understand how costs are reasonable and necessary for achieving ecological benefits. For example, it is unclear how the line item for lights and bollards are directly necessary for providing quantified watershed benefits.
- It is unclear the extent to which the proposed work will impact the basin and result in quantified watershed benefits. There is limited effectiveness monitoring planned for the project; a more extensive monitoring plan could lead to a better understanding of the impacts of urban stormwater investments to watershed health.
- Habitat benefits may be overstated in the application based on available information. Working in urban areas is costly and it is challenging to effectively evaluate the watershed benefits for the cost. An alternative phased approach with fewer sites may offer opportunity to pilot restoration investment in urban areas and capture lessons learned about the watershed benefits achieved by the investment in stormwater treatment.

## **Concluding Analysis**

As noted by the applicant, “sediment is the carpool of pollutants to streams,” and those pollutants are a known limiting factor impacting water quality and fish habitat. Addressing stormwater concerns can capture the sediment and intercept these pollutants before they reach streams. The proposed project provides a unique restoration investment opportunity in urban private lands, which are typically significantly underrepresented in restoration, while addressing a known watershed health concern.

## **Review Team Recommendation to Staff**

Fund Reduced with Conditions

**Review Team Priority**

14 of 14

**Review Team Recommended Amount**

\$332,399

**Review Team Conditions**

Remove OWEB funds for costs associated with lights and bollards.

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Willamette Basin (Region 3)

**Application Number:** 221-3012-19057

**Project Type:** Restoration

**Project Name:** Tub Run Phase II: Horned Lark  
Prairie and Wetland Restoration

**Applicant:** Calapooia WC

**Region:** Willamette Basin

**County:** Linn

**OWEB Request:** \$185,978

**Total Cost:** \$286,258

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### Application Description

The Tub Run Phase II: Horned Lark Prairie and Wetland Restoration project seeks to restore 119 acres of native prairie and wetland habitat at the base of the Coburg Hills in the Muddy Creek watershed (Linn Co.). This privately owned property is in an area identified for its high potential for aiding in the recovery of declining grassland birds including the ESA-listed Streaked Horned Lark (*Eremophila alpestris strigata*). Oregon's Willamette Valley once held a mosaic of prairie and wetlands supporting exceptionally high species diversity with many dependent on these complex habitat. With less than 1% of prairie and wetland habitats remaining in the valley, and many associated species imperiled, it is vital to slow the rapid decline of these species by restoring large portions of habitat. The proposed restoration will reestablish 92 acres of wet and dry prairie and 27 acres of vernal pool and emergent wetland habitats. This will be accomplished by 1) constructing pools and berms to increase hydrologic diversity, 2) controlling and eliminating existing ryegrass crop, 3) establishing native wetland and prairie plant communities, and 4) perform routine spot sprays and annual disking to control weeds and maintain a diverse plant community. OWEB funds will be used for project management, herbicide treatments, and native seed purchases. Project partners include the U.S. Fish and Wildlife Service, Ducks Unlimited, Natural Resource Conservation Service, Pacific Birds Joint Habitat Venture, Calapooia Watershed Council and the landowners, Scott and Janice Erion.

### Review Team Evaluation

#### Strengths

- The project is ready for implementation with site preparation already underway.
- The project design incorporates habitat mosaics that more closely mimic natural wetland and prairie systems.
- The proposed work builds on a previous project phase with the same landowner.
- The proposed restoration will support streaked horned lark recovery. There is evidence indicating three pairs are already utilizing the site in response to habitat improvements resulting from initial site preparation efforts.
- Restoration at the project site will expand habitat connectivity because the site is located adjacent to a number of other restored properties.
- The landowner is committed to maintaining bare ground habitat for streaked horned larks in the vernal pools by annual rotational disking. The landowner also has a history of actively participating in restoration implementation and project maintenance.

- The project team and landowner partnership have a proven track record implementing similar restoration on an adjacent property.
- The application includes detailed budget information and reflects reasonable costs for the proposed work.

### **Concerns**

- The application lacks details about the seed mix that will be used and the target plant community expected to result from the proposed restoration actions.
- The project design focuses solely on one species, the streaked horned lark, and does not consider opportunities for benefits to other native species present in the project area that may also be dependent on conservation work. Landscape disturbances necessary for the streaked horned lark habitat can exist in a matrix of perennial vegetation. The restoration approach, therefore, does not need to be limited to benefiting streaked horned lark. Additional information about existing and target plant communities could help explore strategies for expanding restoration to benefit more species.
- Only two years of maintenance is planned for restored plant communities; however, the landowner has demonstrated commitment to maintaining conservation investments on an adjacent project and is likely to continue maintenance as needed on the project site.

### **Concluding Analysis**

More than 20 acres of seasonal wetland habitat will be restored at a site that has already experienced increased use by streaked horned lark. Restoring wetland habitat at this site also leverages benefits from restored habitat on adjacent properties. There is a high likelihood of success for the proposed project to provide significant benefit for the restoration investment.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

9 of 14

### **Review Team Recommended Amount**

\$185,978

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**



Fund

**Staff Recommended Amount**

\$185,978

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Willamette Basin (Region 3)

**Application Number:** 221-3013-19065

**Project Type:** Restoration

**Project Name:** Northeast Coyote Wetland and  
Prairie Restoration with the Return of Fire

**Applicant:** Long Tom WC

**Region:** Willamette Basin

**County:** Lane

**OWEB Request:** \$244,527

**Total Cost:** \$400,416

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### Application Description

An anchor habitat for many listed and at risk wet and upland prairie species, Northeast (NE) Coyote adds an important piece to 8,500+ acres of conserved and managed wetland, prairie, savanna, woodland, and riparian habitats surrounding Fern Ridge Reservoir in Lane County. Homeland of the Kalapuya Indians and currently owned and managed by Oregon Department of Fish and Wildlife (ODFW) as part of the Fern Ridge Wildlife Area (FRWA), NE Coyote once hosted a diverse native wet prairie and upland prairie-savanna habitat that was maintained with frequent low-intensity burning, and has been under agricultural cultivation for at least 75 years. The proposed project will restore 190 acres of grass seed at NE Coyote to a mosaic of vernal pool, wet prairie, and upland prairie, improving hydrologic function through earthworks and re-establishing native vegetation. This site could offer critical habitat for the ESA-listed streaked horned lark and other declining grassland birds, native amphibians, reptiles, raptors, and seasonal waterfowl. As land managers are actively collaborating to build much-needed capacity for prescribed fire in the Valley, the project includes reintroducing ecological burning on up to 335 acres in the ODFW Coyote Units, including Coyote Creek South, recipient of Restoration and Effectiveness Monitoring funds in 2015, as a strategy to maintain and enhance native grassland and wetland habitat conditions with habitat needs of focal at-risk species in mind. Project partners include ODFW, USFWS, Ducks Unlimited, consulting ecologists, and McKenzie River Trust to apply lessons learned during CCS Phase I to NE Coyote and bring back ecological fire as a management tool for these imperilled, historically fire-adapted prairies.

### Review Team Evaluation

#### Strengths

- The application has clearly stated project objectives and descriptions of how those objectives will be met to restore target plant communities identified for the project site.
- Restoration methods are clearly defined in the application and appropriate for the project site.
- The project is ready for implementation.
- The proposed work builds on previous project phases and incorporates lessons learned from past restoration.
- Watershed benefits expected from implementing the project are quantified in the application. The design incorporates consideration of a broad range of native species, including ESA-listed streaked horned lark and other declining grassland birds, along with native amphibians, reptiles, raptors, and seasonal waterfowl.

- Plant and bird effectiveness monitoring are built into the project.
- Specific actions described in a watershed restoration plan will be implemented at a location identified in several plans as an anchor habitat in the south Willamette Valley.
- The project expands connectivity and habitat benefits from more than 8,500 acres of conserved and managed wetland, prairie, savanna, woodland, and riparian habitats located in the surrounding area.
- Returning fire to the landscape will improve ecological function.
- The project provides opportunity for raising public awareness about watershed restoration through public access and outreach that will be developed with tribal participation.
- The project property is owned by ODFW, which provides institutional capacity for long-term stewardship and maintenance of restoration investments.
- The project team has a proven track record and relevant experience with similar projects, and will consult with experts as needed.
- The project budget is reasonable and based on experience with previous restoration on adjacent properties.

## **Concerns**

- The link drawn between prescribed fire and habitat benefits for streaked horned lark may be overstated in the application. Prescribed fire typically occurs in the fall after streaked horned lark breeding season, which has a nesting season that ends in August. It may be possible for a prescribed fire with a diversity of intensities to have benefits that carry over into the subsequent spring and benefit streaked horned lark habitat.
- It is difficult to evaluate technical soundness for the prescribed fire project objective because details on who and how prescribed fire will be implemented were not available for the application. Since prescribed fire has typically been completed by public agencies, contractor-led prescribed fire is a newer approach. Partners in the region are in early stages of developing increased capacity for prescribed fire in restoration as part of an OWEB technical assistance grant.
- Recent catastrophic wildfires in the Willamette may have impacted the degree of social acceptance for the costs and potential liability associated with prescribed fire, which raises uncertainty for success in returning fire to the landscape.

## **Concluding Analysis**

The proposed restoration project on Coyote wetland and prairie is likely to succeed in providing a high ecological value for the investment. A broad range of native species were incorporated into the project design and the project location leverages significant habitat restoration completed in the region. The project also provides a unique public awareness element by incorporating an information kiosk that will have culturally relevant and historically inclusive language developed in consultation with local tribes.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

5 of 14

**Review Team Recommended Amount**

\$244,527

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$244,527

**Staff Conditions**

# Open Solicitation-2020 Spring Offering

## Willamette Basin (Region 3)

**Application Number:** 221-3014-19066

**Project Type:** Restoration

**Project Name:** Molalla Confluence Floodplain  
Phase 1

**Applicant:** Molalla River Watch Inc

**Region:** Willamette Basin

**County:** Clackamas

**OWEB Request:** \$307,538

**Total Cost:** \$692,537

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### Application Description

Molalla River State Park (MRSP) is in Clackamas County just northwest of Canby, Oregon. MRSP encompasses the confluence of the Molalla, Pudding, and Willamette Rivers and includes 450 acres and over 4 river miles of some of the highest potential riverine habitat in the Willamette Valley. This confluence area is a biodiversity hotspot, as evidenced by multiple threatened and endangered fisheries, herptile, and bird species utilizing the network of floodplain sloughs and side channels onsite. Despite some well-functioning natural processes, past human activities within the reach and watershed have decreased habitat access, reduced habitat complexity, and degraded riparian plant communities. Molalla River Watch (MRW) and Oregon Parks and Recreation Dept. (OPRD) have collaborated with consultants to complete site assessments and conceptual restoration design to increase high flow and thermal refuge for listed fish, increase habitat complexity, and preserve the floodplain forest at MRSP. Recognizing the importance of existing habitat elements, all work will seek whole-site resiliency with a “do no harm” and process-based approach. MRW and OPRD have identified restoration opportunities and a preferred alternative design that: 1) Consider watershed limitations at this large site and “do no harm” while prompting the river to recover; 2) Increase connectivity and complexity to improve dynamic habitat and support natural creation of cool-water refuge; & 3) Given the continued knotweed influx, treat existing knotweed patches and take actions in the river that give native riparian species an advantage over additional knotweed germination. We are proposing a phased, adaptive management approach to ensure that restoration actions achieve long-term benefit and are scaled to generate an appropriate response from the river. Therefore, funding will be used to: • Advance Phase 1 project design to 100% (conceptual alternative is attached) • Implement restoration treatments for Phase

### Review Team Evaluation

#### Strengths

- The proposed project will restore over four stream miles in a priority location identified in a number of watershed restoration plans.
- The project targets several limiting factors affecting watershed health.
- The project site is a biodiversity hot spot for native birds, amphibians, and fish.
- A thorough evaluation of the project area was completed through an OWEB technical assistance grant that identified areas where restoration would most likely succeed in increasing high flows and thermal refugia for ESA-listed fish.

- The project design intent is a phased, adaptive management approach that works with the river and is scaled to generate an appropriate stream response that establishes natural processes.
- Design alternatives were identified and evaluated. The project team also incorporated a “do no harm” lens when evaluating alternatives.
- The project team is already engaged in removing invasive species at the project site, and an additional 25 acres of knotweed will be addressed as part of the proposed project.

## Concerns

- Restoration actions are not described in the application with enough detail to understand proposed objectives, methods, and actions, and evaluate the technical soundness of the design approach. Project details had to be found in and interpreted from application attachments.
- There is a lack of evidence indicating the design approach is appropriate for the site and likely to succeed in achieving the project objectives. It is uncertain whether proposed placement of hardened structures will effectively facilitate floodplain connection, stream channel migration, and side-channel dynamism.
- It is uncertain whether the design approach will address causes of watershed health problems rather than symptoms.
- The application has costs grouped into lump sums. Additional detail is needed to better understand whether costs are reasonable, necessary, and sufficient for the proposed work.
- The overall project costs are high for the expected ecological benefit without evidence indicating the design approach is geomorphically appropriate for the site.

## Concluding Analysis

The Molalla River is currently acting as a transport channel within a depositional reach, which is not a natural condition. This results in a single strand stream channel instead of a braided channel, which causes a stream to act like a “fire hose” because the stream is unable to dissipate energy by moving out into its floodplain. The energy instead drives the stream to become incised. The project design approach for placing hardened structures is likely to continue pinching the channel and prevent it from widening into the floodplain. This will increase the fire hose effect and increase the watershed problem by maintaining a deeper, narrow incised stream channel, which is counter to a “do no harm” approach. Creating “blow outs” in the streambank could allow the tributary to widen into its floodplain and more effectively restore stream dynamism that reflects a depositional reach; however, site constraints and land ownership may prevent the feasibility of this option. The concept 3 design alternative provided as an application attachment integrates floodplain grading that would double the stream channel width and promote distribution of stream energy. While this alternative may be cost prohibitive, it incorporates design components that are more likely to succeed for the site conditions.

The Molalla River already appears to be severely incised, which is likely driven by a large-scale watershed concern in the Willamette. The Willamette River is likely incised, which is causing tributaries, such as the Molalla River, to form a head cut up its valley so that the tributary can meet the elevation of the Willamette River. Incised streams are extremely challenging locations for stream restoration work. While it may not be reasonable to target historic site conditions and restore a full alluvial fan due to the

surrounding land use, there still may be opportunities to restore some dynamism to the site. If the application is resubmitted, the applicant is encouraged to: (1) provide more information on stream processes and site conditions in the application or provide a specific reference for where this information can be found in attached materials; (2) describe historic, existing, and natural conditions targeted for restoration and cite evidence used to determine these conditions; (3) cite evidence used to determine whether the Willamette is incised; (4) cite evidence used to determine the extent to which the project site is channelized, stream banks are erodible to facilitate lateral changes at designed locations, and overbank deposition occurs; and (5) provide detail describing proposed actions for achieving project goals and actions in the application narrative.

**Review Team Recommendation to Staff**

Do Not Fund

**Review Team Priority**

**Review Team Recommended Amount**

\$0

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Willamette Basin (Region 3)

**Application Number:** 221-3015-19074

**Project Type:** Restoration

**Project Name:** Woodcock Creek & Grimm Road  
Fish-Passage Project

**Applicant:** Molalla River Watch Inc

**Region:** Willamette Basin

**County:** Clackamas

**OWEB Request:** \$358,351

**Total Cost:** \$673,826

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### Application Description

An existing 10' wide box culvert in Clackamas County between Colton and the City of Molalla carries Woodcock Creek under Grimm Road. Woodcock Creek is a tributary of Milk Creek and Milk Creek flows to the Molalla River. Woodcock Creek drains 12.8 square miles and contains 25.2 miles of anadromous fish habitat. The culvert on Grimm Road is the only remaining complete fish passage barrier on Woodcock Creek and prohibits access to more than 11 miles of high-quality habitat. The existing box culvert is undersized and it is perched approximately 16" on the outfall end, making it a partial or complete barrier to fish passage. Additionally, the culvert includes a concrete floor which creates a sheet flow scenario through the culvert with an average depth of two inches at lower flows and with extreme velocities at higher flows. Upstream aggradation and excessive erosion downstream are a constant problem due to the constricting nature of the narrow culvert. The proposed solution is to replace the box with a modular bridge, 1.5 times the bankfull stream width. Replacing the box culvert will reduce erosion, allow natural streambed processes to occur and will open more than 11 miles of high-quality spawning and rearing habitat for ESA threatened upper Willamette DPS winter steelhead, upper Willamette DPS spring Chinook, coho, cutthroat, brook and Pacific lamprey and fresh water mussels. Present partners include Molalla River Watch, ODFW and Clackamas County Department of Transportation & Development (CCDTD). CCDTD has provided survey work, engineered design development of the preferred replacement alternative, and will provide construction oversight. Molalla River Watch will replant the associated riparian zone. ODFW will continue to provide technical support. Additional partners and funding are being pursued. OWEB funds will be used for construction of the new modular bridge, riparian restoration, project management, grant administration, and community outreach.

### Review Team Evaluation

#### Strengths

- The project is ready to implement with completed designs and the permit processes underway.
- The project site is located in Woodcock Creek, which provides cold water refuge to native fish in the Molalla River. The proposed restoration will benefit resident fish species, especially cutthroat trout known to use the stream at the project location.
- The project design is site-appropriate and will likely improve fluvial processes in addition to fish passage.
- Alternatives were evaluated and the selected design was chosen to ensure long-term maintenance of the restoration investment.



- The upstream habitat is forested and includes an OSU demonstration forest.
- The project could lead to future restoration in the watershed because the upstream landowner is engaged in the proposed project.
- The county is an active and engaged partner, which is demonstrated by match.

### **Concerns**

- The project cost is relatively high for the expected ecological benefit to ESA-listed anadromous fish. Replacing the existing box culvert will provide fish passage to only approximately 0.4 miles of stream habitat for most species, including coho, steelhead, and spring chinook, based on fish use documented in stream net data, although 11 miles of habitat will be made accessible for native resident cutthroat trout.

### **Concluding Analysis**

The proposed restoration is likely to succeed in facilitating fish passage at all stream flows and allowing the stream to restore a closer to normal fluvial process. Native fish species will benefit from improved access to cold water refuge habitat.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

13 of 14

### **Review Team Recommended Amount**

\$358,351

### **Review Team Conditions**

### **Staff Recommendation**

#### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line

### **Staff Recommended Amount**

\$0

### **Staff Conditions**



## Open Solicitation-2020 Spring Offering

### Willamette Basin (Region 3)

**Application Number:** 221-3016-18747

**Project Type:** Technical Assistance

**Project Name:** Mid-Willamette Floodplain  
Restoration Opportunity Evaluation

**Applicant:** Friends of West Salem Watersheds

**Region:** Willamette Basin

**County:** Polk

**OWEB Request:** \$45,133

**Total Cost:** \$60,633

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### Application Description

Broad priorities for anchor habitats have been developed for the Willamette River and floodplain and conservation plans at a regional scale (Willamette Mainstem Anchor Habitats), for State Parks properties (Natural Resource Assessment and Strategic Action Plan for Restoration and Stewardship of OPRD-Managed Properties in the Willamette Basin), and for river access (Willamette River Water Trail: A conceptual Plan). At semi-regional scales priority evaluations have been conducted of the floodplain and river throughout the Mid-Willamette area (A Conservation Concept Map for the Mid-Willamette Valley), for the area north of the Mid-Willamette (Yamhill County Conservation Map) and upstream (Lower Calapooia-Santiam Conservation Strategy) that simply identifies the entire river and floodplain as a priority throughout the reach from the border of Yamhill County to the border of Lane County. None of these broad scale evaluations provide a narrower evaluation of specific priorities within the proposed study reach an approximately 15-mile segment of the river between Willamette Mission/Windsor Island (RM 74) and Hayden Island (RM 89) in Marion and Polk Counties. Priorities for river and floodplain habitat conservation in the Mid-Willamette reach between Hayden Island (Gail Achterman Wildlife Area) and Windsor Island are proposed to be evaluated. The proposed work will analyze river and floodplain habitat and hydrologic conditions and identify restoration opportunities for the Willamette River and floodplain. Data to be analyzed includes revetments / cold water refuges / Fish passage barriers, elevation / slope, vegetation / land cover, soils, active channels, inundation / floodplain, property ownership, previous prioritization efforts, conservation ranking, and habitat value. Project partners include the City of Salem, Rickreall Watershed Council, Marion SWCD and Polk SWCD, OPRD, ODFW DOGMI, Willamette Riverkeeper.

### Review Team Evaluation

#### Strengths

- A clear need is described in the application for a finer scale analysis and an update to existing plans and assessments for the selected reach of the Willamette River.
- A technically sound framework will be used for identifying, prioritizing, and developing restoration opportunities in the mid-Willamette region. The applicant will look at limiting factors identified in multiple watershed plans to identify and prioritize restoration projects. The resulting product will serve as a foundation for developing a multi-funding approach for future restoration implementation.
- The analysis of potential projects will include consideration of gravel pit restoration opportunities, which provide one of the limited options available for floodplain restoration in the mid-Willamette region.

- The proposed technical assistance scope and scale are reasonable.
- Updated information on the Willamette River and floodplain will be used in the City of Salem comprehensive plan update.
- A broad range of partners are identified in the proposal.
- The applicant has capacity to complete the work with the selection of a qualified consultant that has previous experience completing similar technical assistance work.
- Project costs are reasonable.

## **Concerns**

- The potential for identifying new restoration opportunities that are not already known may be uncertain due to the limited opportunities for restoration on the mainstem Willamette, which is in part due to the impacts and constraints from diverse land uses within the project area and artificial regulation of river hydrology in the basin .
- It is unclear whether the proposed technical assistance is duplicative of other similar planning and restoration efforts underway on the Willamette River.
- The project would be strengthened by including consideration for potential floodplain and hardwood forest restoration actions that could benefit wildlife species, such as birds, red-legged frogs, and western pond turtles.
- The Willamette River has widened and formed a new floodplain over time that is at a lower base elevation than historic conditions. It is unclear whether the proposed technical assistance planning will incorporate this new geomorphic grade line when determining restoration options.
- The application references potential use of boulders and other heavily engineered structures. The applicant is encouraged to minimize use of hard structures and instead design for dynamism by focusing on projects that connect surfaces at the new floodplain elevation of the Willamette instead of projects that focus on connecting channels and ponds.
- The extent to which partners and landowners identified in the application are engaged in the project is unclear because the application has a limited number of letters of support.

## **Concluding Analysis**

The proposed technical assistance will identify, prioritize, and develop restoration opportunities in the mid-Willamette region that address limiting factors impacting watershed health. If the application is resubmitted, the applicant is encouraged to include consideration of a broader range of native fish and wildlife species in planning efforts, expand partnerships and collaboration to include other groups planning and implementing projects on the Willamette River, and incorporate planning for dynamism that connects water surfaces instead of limiting focus to connecting channels and ponds with hardened structures.

## **Review Team Recommendation to Staff**

Do Not Fund

## **Review Team Priority**

**Review Team Recommended Amount**

\$0

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

# Open Solicitation-2020 Spring Offering

## Willamette Basin (Region 3)

**Application Number:** 221-3017-18954

**Project Type:** Technical Assistance

**Project Name:** Chankawan Restoration  
Alternatives Analysis

**Applicant:** Confederated Tribes of Grand Ronde

**Region:** Willamette Basin

**County:** Marion

**OWEB Request:** \$31,850

**Total Cost:** \$76,997

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### Application Description

This project will develop the Chankawan Restoration Alternatives Analysis: a document to identify and prioritize restoration projects for historic habitats within the North Santiam Watershed. Chankawan is a 425-acre parcel near Stayton that stretches more than a mile along the North Santiam River. The Tribe re-acquired Chankawan in 2016 through the Willamette Wildlife Mitigation Program and the site is permanently protected by a conservation easement. Chankawan is located within the boundaries of two designated Conservation Opportunity Areas (COA): the Willamette Sub-basin Plan's Conservation Priority Area titled the Willamette Synthesis COA and ODFW's Conservation Strategy titled the Santiam Confluences COA. The Tribe developed a management plan that identifies desired future habitat conditions for the next ten years. Technical assistance dollars are critical to prioritize restoration opportunities to help achieve desired future conditions and improve habitat quantity, quality, and complexity necessary for many fish and wildlife species, including Endangered Species Act (ESA) listed fish and State listed sensitive species. This document will prioritize projects based on feasibility and outline a scope of work, cost estimates, and 90% designs for those priorities. Project objectives include 1) partnering with the North Santiam Watershed Council (NSWC) to develop a technical team comprised of interested parties and stakeholders; and 2) utilizing the River Design Group (RDG) for their technical skills, experience, and history in the watershed. Key project partners include the NSWC, RDG, US Fish and Wildlife Service, Oregon Department of Fish and Wildlife, and Marion County Soil and Water Conservation District. This investment will be leveraged with a Meyer Memorial Trust grant to fully cover project costs (41% OWEB; 46% MMT; 13% Tribe). These investments will be further compounded as leveraged resources for future grant applications to implement priority projects.

### Review Team Evaluation

#### Strengths

- A clear need for the proposed technical assistance work is described in the application.
- Appropriate stakeholders will be engaged in the technical assistance project.
- The project will lead to restoration projects by producing designs at 90% completion.
- The project is located in an area of the North Santiam River with a variety of conservation-related work underway on both sides of the river, and nearby conservation-minded landowners are considering conservation easements and other restoration opportunities.

- The project site provides opportunity for connectivity for fish migration and side-channel habitat, which will improve and increase habitat for a diversity of native fish and wildlife species.
- The application includes references that demonstrate how the proposed work will address conservation plan recommendations.
- The applicant has a proven track record for planning and implementing restoration. The applicant is using the same planning process used on a similar property in the North Santiam Watershed. Progress demonstrated at this other location indicates the proposed work has a high likelihood of success.
- Project partner support and engagement is demonstrated by match.

## **Concerns**

- Based on the aerial photo included in the application, it appears the dominant river side-channels are located on adjacent private lands and there is limited opportunity on the project property for reconnecting side-channels. Without more details on the potential for connecting side-channels on the project property, it is unclear whether the proposed cost for hydrological modeling will lead to feasible restoration opportunities. The real value in potential future restoration may be in the terrestrial habitats on this site, and therefore, planning is more likely to result in desired outcomes if focused on these habitat types.

## **Concluding Analysis**

The project site provides an extremely valuable opportunity for habitat and the Tribe demonstrates a high motivation for restoring lands to the greatest extent possible. Given the synergy for watershed restoration in the surrounding area, future restoration resulting from the proposed technical assistance will build on this work completed in the area and promote continued restoration among landowners. The applicant is encouraged to consider floodplain dynamism when developing projects by focusing on connecting water surface elevations instead of limiting designs to connecting side-channels.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

2 of 4

## **Review Team Recommended Amount**

\$31,850

## **Review Team Conditions**

## **Staff Recommendation**

## **Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$31,850

**Staff Conditions**



## Open Solicitation-2020 Spring Offering

### Willamette Basin (Region 3)

**Application Number:** 221-3018-18990

**Project Type:** Technical Assistance

**Project Name:** Kellogg Dam Fish Passage Barrier  
Removal: Channel & Floodplain Design

**Applicant:** North Clackamas Watershed Council

**Region:** Willamette Basin

**County:** Clackamas

**OWEB Request:** \$74,998

**Total Cost:** \$152,148

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### Application Description

The Council seeks OWEB support to take the process for removal of Kellogg Dam to the next stage. We will design the restored Kellogg Creek channel at and above Kellogg dam in Milwaukie, OR, which blocks fish passage to the entire Kellogg-Mt. Scott watershed. The recent Stakeholder Engagement process identified this design as the critical next step to move the project to agency approval, and readiness for federal, state, private, and ecosystem mitigation credit funding. At stake is a chance to remove a top-priority barrier to fish passage and restore refugia and resting/rearing habitat for the Clackamas ESU-Listed salmon and steelhead populations, Willamette ESUs, and natural production in the Kellogg-Mt. Scott Watershed. We will create a design, cost estimate, and pathway to implementation from above the existing impoundment to the Willamette River. This will accompany the existing design for the dam removal and bridge replacement. The cost estimate and pathway to permits and implementation will render the project sufficiently "shovel-ready" to pursue federal, regional, state, and private funding for final design, permitting, and construction. We have a window of opportunity. The Council has been encouraged by multiple parties to prepare the project for time-sensitive multimillion dollar federal funding. Restoration of the existing impoundment is attractive to ecosystem mitigation credit developers, a potential source of implementation funding. This step is the key ingredient of readiness for millions of dollars in federal and private investment. To accelerate this project, the City of Milwaukie has committed \$25,000 on the condition that the rest is secured by 6/30/21. OWEB funding will fill this condition and move the project forward. Partners: City of Milwaukie, the Governor's Natural Resources Office, NOAA Fisheries, ODF&W, DEQ, DSL, ODOT, GeoEngineers, Cascade Environmental Group, Clackamas WES, NCPRD, Metro, and the Congressional Delegation.

### Review Team Evaluation

#### Strengths

- A clear need for the technical design is described in the application.
- The application provides a clear summary of the current status of the restoration project, and the path that connects the OWEB-funded stakeholder engagement project to the proposed technical assistance project and future eligible restoration implementation.
- Exhaustive outreach was completed through the stakeholder engagement grant and no major concerns were identified by any of the private landowners, indicating there is strong public support for the proposed restoration.

- The resulting restoration project will likely provide rearing and feeding habitat during high water flow events for native fish migrating from the upper Willamette moving downstream, and will provide some minor fish spawning habitat benefits.
- The consultant engaged to accomplish the proposed technical assistance work is qualified and has relevant experience with similar OWEB-funded projects.
- A diversity of partners articulated their support for the resulting restoration project through letters of support.
- Partnership commitment from the City of Milwaukee is demonstrated by match.
- Project costs are reasonable given the complexity of creating a stream channel restoration design in an urban location.

## **Concerns**

- Implementation of the resulting stream channel restoration design is contingent on the Kellogg Dam being removed. There is some uncertainty about the feasibility of future implementation due to the high cost of dam removal; however, developing designs can improve the likelihood of securing funds by demonstrating a shovel ready project.
- The application has costs grouped into lump sums. Additional detail is needed to better understand whether costs are reasonable and necessary for the proposed work.

## **Concluding Analysis**

The stream channel restoration design completed through this technical assistance project will leverage designs for removing Kellogg Dam and replacing an associated bridge. Since the bridge has reached the end of its life expectancy and is not seismically sound, it is likely funds will be secured to implement the dam removal and bridge replacement. Developing a shovel ready design for stream channel restoration will help the applicant to pursue funds for implementation. The applicant is encouraged to consider opportunities for connecting the floodplain and adjacent wetlands in the design approach to facilitate the formation of a sinuous channel, if feasible, instead of a design that is limited to hardened stream channel structures that locks the channel into place.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

3 of 4

## **Review Team Recommended Amount**

\$74,998

## **Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Fund

**Staff Recommended Amount**  
\$74,998

**Staff Conditions**

# Open Solicitation-2020 Spring Offering

## Willamette Basin (Region 3)

**Application Number:** 221-3019-19021

**Project Type:** Technical Assistance

**Project Name:** Jasper Prairie Assessment and Planning

**Applicant:** Middle Fork Willamette WC

**Region:** Willamette Basin

**County:** Lane

**OWEB Request:** \$41,671

**Total Cost:** \$58,278

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### Application Description

Jasper Prairie is a 633-acre tract of undeveloped private property just three miles from the Springfield Urban Growth Boundary in Lane County. It is located above the Middle Fork Willamette River in Jasper between Hills and Wallace Creeks. Oak woodlands and prairies dominate the landscape while wet prairies and cliff meadows make the site especially unique. Hills Creek flows along the edge of the property and a coniferous forest stands on the high ground. The landowners are eager to work with the Middle Fork Willamette Watershed Council (MFWWC) and McKenzie River Trust (MRT) to identify restoration and conservation opportunities in order to avoid the loss of this key piece of oak and prairie habitat. The extent and quality of oak woodlands and prairies have been drastically reduced across the Willamette Valley. In Jasper, rural residential development is increasing due to its proximity to Springfield. Tree farm conversion pressure also exists. Additionally, the siblings who are decision makers for this property are in their 70s and 80s and the next generation lives out of state. Because of the large size of the property, we propose beginning with comprehensive site planning before designing and implementing individual restoration projects. A Resource Assessment & Planning grant will allow us to fully assess habitat across the property, determine if ESA-listed species and Oregon Conservation Strategy species are present (e.g., Kincaid's lupine, Fender's blue butterfly, Oregon vesper sparrow, northern red-legged frog, acorn woodpecker, and others), identify and prioritize restoration projects, and determine land conservation opportunities. Deliverables will include botanical and bird surveys, a fire risk assessment, a property management plan including project prioritization, and at least three restoration projects at 85% design. MFWWC and MRT are partnering on this project and have built a technical advisory team from USFWS, ODF, ODFW, BLM, and Willamalane.

### Review Team Evaluation

#### Strengths

- A clear need is described in the application for developing an assessment and restoration plan for the project property.
- The property is an extremely valuable restoration site because there are limited opportunities for large acreage parcels where oak restoration is possible. It is located in an area with a considerable development and conversion threat, which would diminish the high conservation value of this project site.
- The proposed technical assistance work will take a comprehensive look at the site and a technical team will be utilized to review products.

- Future restoration will benefit several conservation priority species present on the property, including oak, red legged frogs, and vesper sparrows.
- Project support is demonstrated by letters of support.
- The project team has a proven track record with similar projects and is working with a qualified consultant.
- Project costs are reasonable for the proposed technical assistance.

### **Concerns**

- Areas grazed by cattle are not included in the proposed survey work and will be more lightly evaluated in the project site assessment. These grazed acres could potentially provide valuable conservation opportunities and evaluating this area may be needed to develop a comprehensive plan for the property to achieve the greatest conservation outcomes.
- The landowner letter included in the application is vague about the habitats they are willing to restore to maximize conservation value of the property. The technical assistance project, however, provides an opportunity to learn, identify restoration opportunities, and determine conservation goals in partnership with the landowner.

### **Concluding Analysis**

The project provides a rare opportunity for oak restoration across a large acreage located in the mid-elevation Willamette valley fringe, which is a priority area for restoring this habitat type. The technical assistance has a likelihood for success in leading to restoration with high ecological benefit, and potentially will provide the best overall value of investment in oak habitat for the expected outcome.

### **Review Team Recommendation to Staff**

Fund Increased with Conditions

### **Review Team Priority**

1 of 4

### **Review Team Recommended Amount**

\$50,076

### **Review Team Conditions**

Include grazed acres in the area to be surveyed.

### **Staff Recommendation**

#### **Staff Follow-Up to Review Team**

Staff confirmed with applicant the increased cost associated with including grazed acres into the survey area.

**Staff Recommendation**

Fund Increased with Conditions

**Staff Recommended Amount**

\$50,076

**Staff Conditions**

Include grazed acres in the area to be surveyed.

# Open Solicitation-2020 Spring Offering

## Willamette Basin (Region 3)

**Application Number:** 221-3020-19040

**Project Type:** Technical Assistance

**Project Name:** Mid-Willamette Beaver Partnership:  
Habitat Assessment and Prioritization

**Applicant:** Luckiamute WC

**Region:** Willamette Basin

**County:** Polk

**OWEB Request:** \$72,418

**Total Cost:** \$139,289

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### Application Description

Major declines in beaver populations and dams in the 18th and 19th centuries caused extraordinary damage to watershed ecosystems, including aquatic habitats. This damage has been compounded by a host of other anthropogenic impacts, including development and worsening climate conditions. Restoring beaver populations and habitats where appropriate, implementing mitigation strategies where conflict occurs, and mimicking dam-building activities can help address legacy impacts while providing a cascade of ecosystem benefits to prepare against future disturbance. Overwhelming support exists among researchers, agencies, and restoration/conservation organizations to develop a social-ecological road map for promoting beaver and their dams. In response, Bonneville Environmental Foundation (BEF) and the Luckiamute (LWC), Marys River (MWRC), and North Santiam Watershed Councils (NSWC) have formed the Mid-Willamette Beaver Partnership (MWBP) to leverage that support through paired Technical Assistance (TA) and Stakeholder Engagement (SE) proposals. These basins, covering parts of Marion, Linn, Benton, Lincoln, and Polk counties, are host to ESA-listed Chinook and winter steelhead and a wide array of beaver-dependent fish and wildlife species. The TA grant would support: 1) fine-scale beaver habitat assessment and prioritization of key locations for restoration through the Beaver Restoration Assessment Tool (BRAT) and extensive field verification; 2) development of beaver management plans and restoration and conservation strategies for at least two reaches for each watershed council that integrates results from the assessment, SE project, and feedback from regional experts; 3) sharing results and process with partners, stakeholders and other restoration practitioners to advance beaver-focused restoration efforts across Oregon. Project partners beyond the MWBP include Utah State University (USU), NOAA, ODFW, USFWS, BLM and USFS.

### Review Team Evaluation

#### Strengths

- A clear need for the proposed technical assistance is described in the application, and it includes an explanation on the technical soundness of the Beaver Restoration Assessment Tool (BRAT) model that will be used.
- Beavers are a keystone species and reestablishing their presence in the watershed is essential to improving watershed processes and habitats.
- The applicant and partners will ground truth information and not rely only on the GIS and modeling work.

- The project will cover a large geographic area, which is made feasible by having leveraged resources to support the work and a targeted scope that is focused on beavers.
- Alternative approaches were considered before selecting the BRAT methodology.
- The project team has capacity for the work by leveraging partnerships among watershed councils and Utah State as a technical resource.
- The application budget is detailed and costs are reasonable for the resulting refined information that will be provided by BRAT.

## **Concerns**

- There is some overlap in the objectives described in the technical assistance application and the companion stakeholder engagement proposal and it is unclear whether there may also be overlap in costs for the same tasks described in both grants.
- Some of the project objectives describe beaver translocation as a potential option, which may be challenging or not feasible under ODFW rules.

## **Concluding Analysis**

There is currently significant attention on the impact of beavers on the landscape, which may provide a timely opportunity for pursuing conversations and identifying opportunities that lessen conflicts between beaver habitat use and human land uses. The proposed project effectively utilizes available resources while focusing on a clear targeted scope to cover a large geographic area. Clean Water Services is also using BRAT and may be another helpful resource for the applicant. The companion stakeholder engagement project will efficiently integrate complementary actions that together with this technical assistance will have a high likelihood for success in reestablishing beaver to restore watershed processes.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

4 of 4

## **Review Team Recommended Amount**

\$72,418

## **Review Team Conditions**

## **Staff Recommendation**

## **Staff Follow-Up to Review Team**



**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$72,418

**Staff Conditions**

# Open Solicitation-2020 Spring Offering

## Willamette Basin (Region 3)

**Application Number:** 221-3021-19010

**Project Type:** Stakeholder Engagement

**Project Name:** Willamette Valley Native Plant  
Materials Stakeholder Engagement

**Applicant:** Institute for Applied Ecology

**Region:** Willamette Basin

**County:** Benton

**OWEB Request:** \$38,895

**Total Cost:** \$55,052

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### Application Description

Willamette Valley prairie and oak habitats are among the most endangered ecosystems in North America - over ninety percent of upland prairie and oak woodlands and over 99% of historic wet prairies in the valley have been converted to other uses, primarily urban and agricultural. Over the last several decades, government agencies, non-profit organizations, and private landowners in the WV have been working to reduce the decline of native species, recover listed species, and create an interconnected landscape of prairie and oak habitat by implementing restoration projects throughout the region. However, one major limiting factor to the success of these projects is the limited availability of genetically diverse and ecologically appropriate native plant materials for use in these projects. In 2012, the Willamette Valley Native Plant Partnership (WVNPP) was formed to increase the availability and affordability of genetically diverse native seed for use in WV restoration, revegetation, and recovery projects. Despite the initial success of the partnership, practitioners are not always selecting the best quality materials either because they are not aware these seeds are available, or they choose lower quality seed because of initial cost. We will promote and increase the use of genetically diverse and ecologically appropriate native plant materials in WV projects through one-on-one meetings with current and potential partners, create materials such as quarterly newsletters and blog posts, and work with partners to help reduce barriers to meeting plant material needs within their organizations. Some current partners include BLM, Benton SWCD, City of Corvallis, Confederated Tribes of Grand Ronde, Kenagy Family Farm, Long Tom Watershed Council, Metro, NRCS, ODFW, ODOT, OPRD, Polk SWCD, TNC, Triangle Farm, USACE, USFWS, and Yamhill SWCD.

### Review Team Evaluation

#### Strengths

- The application has clearly stated goals and objectives.
- The proposed project will re-engage current partners while increasing the number of new partners, which is vital for the Willamette Valley Native Plant Partnership (WVNPP) to become sustainable.
- The applicant identified appropriate stakeholders and designed an effective outreach and communication strategy for engaging those stakeholders that takes into consideration constraints related to the pandemic.
- The plant materials produced by the WVNPP have a high degree of ecological significance to wet and dry prairie habitat restoration efforts that benefit multiple ESA-listed species and Oregon Conservation Strategy species.

- The applicant has experience implementing previous phases of the WVNPP.
- The overall project cost is reasonable.

### **Concerns**

- Additional information on how costs were developed for the budget would be helpful for evaluating project cost effectiveness. For example, costs associated with the conference are grouped into lump sums.

### **Concluding Analysis**

The project complements work proposed in the companion restoration application by engaging stakeholders to reenergize existing partnerships and expand the WVNPP customer base utilizing seed produced through the restoration project. This stakeholder engagement work is necessary for the partnership to achieve a sustainable model for providing access to genetically diverse seed material for prairie and oak habitat restoration.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

1 of 2

### **Review Team Recommended Amount**

\$38,895

### **Review Team Conditions**

### **Staff Recommendation**

#### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$38,895

### **Staff Conditions**



# Open Solicitation-2020 Spring Offering

## Willamette Basin (Region 3)

**Application Number:** 221-3022-19024

**Project Type:** Stakeholder Engagement

**Project Name:** Mid-Willamette Beaver Partnership:  
Stakeholder Input and Engagement, Phase I

**Applicant:** Luckiamute WC

**Region:** Willamette Basin

**County:** Polk

**OWEB Request:** \$176,769

**Total Cost:** \$233,572

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### Application Description

Major declines in beaver populations and dams in the 18th and 19th centuries caused extraordinary damage to watershed ecosystems, including aquatic habitats. This damage has been compounded by a host of other anthropogenic impacts, including development and worsening climate conditions. Restoring beaver populations and habitats where appropriate, implementing mitigation strategies where conflict occurs, and mimicking dam-building activities can help address legacy impacts while providing a cascade of ecosystem benefits to prepare against future disturbance. Overwhelming support exists among researchers, agencies, and restoration/conservation organizations to develop a socio-ecological road map for promoting beaver and their dams. In response, Bonneville Environmental Foundation (BEF) and the Luckiamute (LWC), Marys River (MWRC), and North Santiam Watershed Councils (NSWC) have formed the Mid-Willamette Beaver Partnership (MWBP) to leverage that support through paired Technical Assistance (TA) and Stakeholder Engagement (SE) proposals. These basins, covering parts of Marion, Linn, Benton, Lincoln, and Polk counties, are host to ESA-listed Chinook salmon and winter steelhead and a wide array of beaver-dependent fish and wildlife species. The SE grant would support: 1) in-depth opinion research about beavers through a survey, interviews, and focus groups to learn from various stakeholder perspectives; 2) development of a “beaver response” protocol and audience-specific messaging, materials, and an engagement plan based on input from the research phase; 3) implementation of the Phase I engagement plan to recruit landowners in priority geographies identified through the TA process; and 4) sharing results and lessons with partners, stakeholders, and other restoration practitioners to advance beaver-focused restoration efforts across Oregon. Additional project partners include ODFW, NOAA, USFWS, BLM, USFS, OSU Extension, Freshwaters Illustrated, and Benton County.

### Review Team Evaluation

#### Strengths

- The application has clearly stated objectives and a description of actions for successfully meeting those objectives.
- The applicant will engage appropriate stakeholders across a large geography.
- The proposed work complements a companion technical assistance grant proposal. There is a logical sequencing of project components between the two applications.

- The stakeholder engagement communication approach and messaging will be developed from research that is designed to understand current land management practices, identify willing landowners who are ready to accept beavers or change their practices, and determine how landowners receive information.
- The proposed work is informed by appropriate watershed restoration plans and species recovery plans.
- Extensive partner support is demonstrated by letters of support and match.
- The applicant and partners have a proven track record implementing past projects.
- The consultant selected is qualified and has relevant experience.
- The applicant researched costs and provided information on how the budget was developed.

### **Concerns**

- The stakeholder research for developing outreach messages could be more focused. The products could potentially not meet the applicant's expectations. It will be challenging to achieve the level of detail for each type of stakeholder given the high number of stakeholders and project timeline. Instead of collecting a wide breadth of information from each stakeholder type, the applicant may want to consider tailoring information collected from specific types of stakeholders.

### **Concluding Analysis**

There is currently significant attention on the role of beavers in the landscape, which may provide a timely opportunity for pursuing conversations and identifying opportunities that lessen conflicts between beaver habitat use and human land uses. While the proposed stakeholder engagement is a large request, the cost is reasonable because the project will span three to four years and engaging landowners in conversations that shift their tolerance of beaver will be time intensive. Reestablishing beaver in the watershed will provide significant habitat benefits by restoring watershed processes.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

2 of 2

### **Review Team Recommended Amount**

\$176,769

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$176,769

**Staff Conditions**

# Open Solicitation-2020 Spring Offering

## Willamette Basin (Region 3)

**Application Number:** 221-3023-19034

**Project Type:** Stakeholder Engagement

**Project Name:** Willamette Hazelnut Stakeholder Engagement Project

**Applicant:** Cascade Pacific RC&D

**Region:** Willamette Basin

**County:** Marion

**OWEB Request:** \$44,440

**Total Cost:** \$120,190

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### Application Description

In the Willamette Basin, conservation districts, drinking water providers, Oregon State University (OSU) extension and the Oregon Hazelnut Commission have identified areas for collaboration that can increase voluntary conservation practices aligned with hazelnut orchard management. A number of timely opportunities are underway: \*The Hazelnut Commission is funded and in the second year of piloting a third party stewardship certification, to include practices that protect water quality, quantity and soil health. The group already sees promise to be able to work with the commission to offer conservation opportunities and incentives to meet or exceed this stewardship certification. \*The McKenzie River Basin has piloted methods to monitor moths that can be timed and controlled to significantly reduce pesticide spraying that can be shared and adapted for broader application in the Willamette Basin and expanded to inform Integrated Pest Management Plans.\*NRCS has developed a conservation implementation strategy to address primary resource issues and strategies to improve soil quality and reduce erosion through conservation cover. The potential to scale up best practices from these efforts are exciting. A facilitated stakeholder engagement process can broaden education and grower buy-in, expand economic beneficiaries and inform research opportunities in order to secure large-scale, targeted funding for multiple years of work. We are seeking funding to conduct a series of facilitated sessions with stakeholders throughout the Willamette Basin to align goals for collaboration and partnerships so that we are able to expand incentive programs for grower stewardship efforts through competitive investments such as the Regional Conservation Partnership Program (RCPP). Since our last application, strategies have been further vetted through the Meyer Memorial Trust Willamette River Network Support Strategies Grant and an Oregon Solutions assessment.

### Review Team Evaluation

#### Strengths

- The project design includes multidirectional communications with stakeholders by providing a venue for facilitated conversations. Forty stakeholder groups will be engaged to solidify commitments among hazelnut growers, drinking water providers, and technical services providers to address conservation concerns related to hazelnut production.
- With the recently increasing number of acres converted to hazelnut production, there may be a high potential for ecological impact caused by hazelnut growing operations.
- There is a clear need articulated in the application for the proposed stakeholder engagement conversation because hazelnut operations do not fit well within the framework of existing stewardship certifications, such as Salmon Safe.



- There are a number of key partners involved in the proposed stakeholder engagement that are already working with hazelnut growers.
- The application describes a thoughtful process for prioritizing Willamette Basin hazelnut grower outreach, technical assistance, and investments.
- Successful implementation of the stakeholder engagement may potentially lead to securing a NRCS Regional Conservation Partnership Program (RCPP) project, which would bring significant funds for conservation actions into the Willamette basin.
- The project will be led by a qualified advisory team with a proven track record in similar work.
- Project costs are reasonable.

## Concerns

- Stakeholder engagement relies on in-person meetings, which can be a challenging approach for successfully engaging farmers. Field tours and peer-to-peer learning is often more effective with an agricultural audience.
- It is unclear whether there is support from NRCS for the stakeholder engagement conversation and what plans are in place for engaging NRCS in developing a viable RCPP application.
- A watershed benefit will need to be identified to apply for RCPP funding. It is unclear whether the applicant has a pathway for defining what restoration will look like and the ecological outcomes expected from that restoration needed to pursue the RCPP application process.
- It is uncertain whether the applicant can successfully implement future restoration actions if RCPP is not awarded.
- The applicant may be missing opportunities to connect with existing resources, such as the ODA and DEQ pesticide stewardship partnerships.
- It is unclear who will provide leadership after the proposed facilitated conversation to maintain momentum and champion efforts towards achieving on-the-ground implementation work.
- It is unclear whether there is evidence indicating how hazelnut farms negatively impact watershed health to ensure future restoration actions identified will effectively address the source of those impacts. It is also unclear whether practices cited in the application, such as herbicide use by hazelnut farms, is causing greater impacts to watershed health compared to other agricultural sectors to merit targeting hazelnut farms.
- The application has costs grouped into lump sums. Additional detail is needed to better understand whether costs are reasonable, necessary, and sufficient for the proposed work.

## Concluding Analysis

With the increasing number of hazelnut farms in the Willamette, there is a clear need to determine potential impacts to watershed health and identify stewardship practices that effectively address these impacts. The applicant has made progress, including engaging non-traditional partners, which has built momentum for the proposed stakeholder conversation; however, it may be too early for a conversation with hazelnut farmers if there is not an information source that provides evidence indicating specific impacts to watershed health caused by hazelnut farms that should be targeted for RCPP. If the primary outcome for the stakeholder engagement work is a RCPP application, the applicant is encouraged to demonstrate NRCS is actively engaged in the stakeholder engagement application and define a pathway for applying to RCPP that includes a clear vision for the ecological outcomes expected from future

restoration.

**Review Team Recommendation to Staff**

Do Not Fund

**Review Team Priority**

**Review Team Recommended Amount**

\$0

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

North Coast

Southwest

Willamette Basin

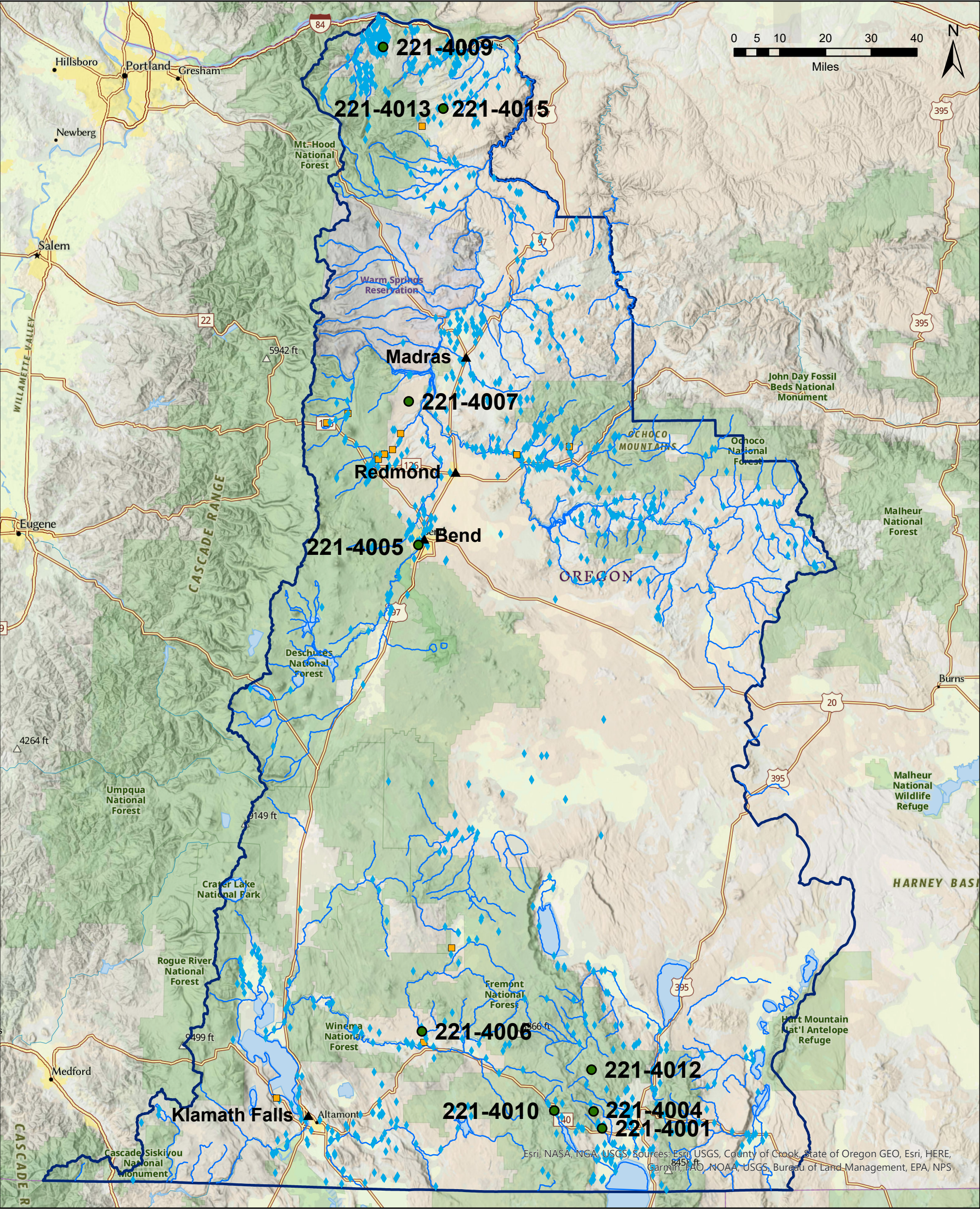
Central Oregon

Eastern Oregon

Mid-Columbia



# Central Oregon - Region 4 Spring 2020 Funding Recommendations



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Funding Recommendation

Staff Recommendation For Funding (SRF)

Below Funding Line (BFL)

Previous Grants 1998 - Fall 2019


Land Acquisition

Restoration

Region 4 Cities

Region 4 Streams

OWEB Region 4 Boundary



OREGON

WATERSHED

ENHANCEMENT BOARD

775 Summer St, NE Suite 360

Salem, OR 97301-1290

(503) 986-0178

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## Region 4 - Central Oregon

### Restoration Projects Recommended for Funding in Priority Order

Project #	Grantee	Project Title	Brief Description	Amount Recommended	County
221-4004	Lake County Umbrella Watershed Council	Lake County All Lands Restoration Initiative Mini FIP	Trees in dry forests will be thinned on private and federal lands to create a healthy, resilient, and functional forest landscape in the North Warner and Thomas Creek focus areas.	366,293	Lake
221-4001	Lake County Umbrella Watershed Council	Muddy Creek Fish Passage (Phase II)	Fish passage will be created at Juniper Reservoir to allow redband trout access to spawning habitat in the upper reaches of Muddy Creek.	331,570	Lake
221-4006	Trout Unlimited Inc	Sycan River and Brown Springs Restoration	Floodplain functions and habitat for native fish will be improved on the Sycan River and Brown Springs by installing beaver dam analogues, removing a fish passage barrier, and restoring the riparian vegetation community.	131,242	Klamath
221-4007	Oregon Wildlife Heritage Foundation	Metolius Winter Range Restoration Project	Terrestrial and riparian habitats will be restored through forest thinning, noxious weed control, native plant establishment, and road decommissioning to improve habitat connectivity for native wildlife.	241,350	Jefferson
221-4005	Upper Deschutes WC	Deschutes Riparian Restoration at Riverbend Park - Phase II	Riparian and wetland habitats will be enhanced along an urbanized section of the Deschutes River as it enters the City of Bend. Interpretive signage will help inform and educate recreation users.	131,500	Deschutes
<b>Total Restoration Projects Recommended for Funding by RRT and OWEB Staff</b>				<b>1,201,955</b>	

### Restoration Projects *Recommended but Not Funded* in Priority Order

Project #	Grantee	Project Title	Brief Description	Amount Recommended	County
None					
<b>Total Restoration Projects Recommended for Funding by RRT</b>				<b>1,201,955</b>	

### Restoration Applications *Not Recommended* for Funding by RRT

Project #	Grantee	Project Title	Amount Requested	County
221-4000	Tumalo Irrigation District	Tumalo Irrigation District Deschutes Basin Flow Restoration Project - Group 3	250,000	Deschutes
221-4003	Klamath SWCD	Upper Klamath Lake Agricultural Water Quality Improvement Projects: Algoma Area	316,959	Klamath
221-4008	Oregon Wildlife Heritage Foundation	Greater Williams Prairie Restoration Project	269,808	Crook

Region 4 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

Technical Assistance (TA) Projects Recommended for Funding in Priority Order					
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County
221-4009	Hood River SWCD	Neal Creek Phase II Instream Habitat Restoration Design	Restoration designs will be developed to restore ecological processes in lower Neal Creek, which will improve instream habitat for ESA-listed salmonids.	40,773	Hood River
221-4012	Lake County Umbrella Watershed Council	Lake County All Lands Restoration Initiative Prescribed Fire Planning	Burn plans will be developed for private lands to assist in the set up and implementation of prescribed fire as a restoration activity.	49,020	Lake
221-4013	Wasco SWCD	Fifteenmile Storage Resource Assessment and Planning 2020	A subsurface storage facility project will be developed to address the primary limiting factors in Fifteenmile Creek for the viability of native fish species by replacing a portion of warmer summer flows diverted for irrigation with cooler water stored during the winter and spring high flow months.	74,910	Wasco
221-4010	Lake County Umbrella Watershed Council	Drews Creek Fish Passage and Stream Restoration	Design plans will be developed to address fish passage and sustainability of irrigation at a water diversion, identify streambank and riparian restoration solutions just below the diversion, and treat the incised creek to protect an adjacent aspen grove.	46,997	Lake
Total TA Projects Recommended for Funding by RRT and OWEB Staff				211,700	
Technical Assistance Projects <i>Recommended but Not Funded</i> in Priority Order					
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County
None					
Total TA Projects Recommended for Funding by RRT				211,700	
Technical Assistance Applications <i>Not Recommended</i> for Funding by RRT					
Project #	Grantee	Project Title		Amount Requested	County
221-4011	Deschutes SWCD	INDIAN FORD COORDINATED RESOURCE MANAGEMENT PLAN		74,481	Deschutes
Stakeholder Engagement Projects Recommended for Funding in Priority Order					
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County
221-4015	Wasco SWCD	Fifteenmile Managed Underground Storage Stakeholder Engagement 2020	Stakeholders will be engaged to build consensus and develop a roadmap for utilizing a managed underground water storage facility designed to improve flow and temperature in Fifteenmile Creek during summer months.	31,513	Wasco

Region 4 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

<b>Total Stakeholder Engagement Projects Recommended for funding by OWEB Staff</b>			<b>31,513</b>	
<b>Stakeholder Engagement Projects <i>Recommended but Not Funded</i> in Priority Order</b>				
<b>Project #</b>	<b>Grantee</b>	<b>Project Title</b>	<b>Amount Recommended</b>	<b>County</b>
None				
<b>Total Stakeholder Engagement Projects Recommended for funding by RRT</b>			<b>31,513</b>	
<b>Stakeholder Engagement Projects <i>Not Recommended</i> for Funding by RRT</b>				
<b>Project #</b>	<b>Grantee</b>	<b>Project Title</b>	<b>Amount Requested</b>	<b>County</b>

Region 4 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

221-4014	Crooked River WC	Ochoco Creek Fish Monitoring Stakeholder Engagement	37,300	Crook



## Open Solicitation-2020 Spring Offering

### Central Oregon (Region 4)

**Application Number:** 221-4000-18978

**Project Type:** Restoration

**Project Name:** Tumalo Irrigation District Deschutes  
Basin Flow Restoration Project - Group 3

**Applicant:** Tumalo Irrigation District

**Region:** Central Oregon

**County:** Deschutes

**OWEB Request:** \$250,000

**Total Cost:** \$5,786,234

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**Application Description** The Deschutes River and its tributaries, including Tumalo Creek, suffer from low summer streamflows that are a major limiting factor for fish habitat and water quality in the basin. Restoring live flow in the basin is a regional and state-wide objective championed by local, state, and federal entities. For nearly three decades, Tumalo Irrigation District (TID) has been pursuing a water conservation program to provide a permanent solution to system-wide water losses caused by porous open irrigation canals. Since the mid-1990s, TID and its funding partners have enclosed over 121,968 feet of open canal into leak-free piping, resulting in 24.2 cfs of return flow to Tumalo Creek and the Deschutes Basin.

This phase of the Project includes enclosing the Allen lateral and its sub laterals as well as all associated turnouts and meters to accurately regulate and deliver water to over 500 acres of farmland. The Project results in 4.2 cfs of water conservation that will be certificated as an instream water right under Oregon's Conserved Water Program to benefit Endangered Species Act (ESA) listed species and other wildlife in both Crescent Creek and Tumalo Creek.

This Project has a direct and immediate impact on water conservation and instream flow restoration. One hundred percent of the publicly funded conserved water through each phase of the SIP will be returned and protected instream; providing substantial water quality and quantity benefits to the Deschutes Basin; with a majority being returned to Tumalo Creek. Tumalo Creek, Crescent Creek, the Little Deschutes River, and the Deschutes River are listed as impaired waterways under Section 303(d) of the Clean Water Act.

This project is supported by the National Resources Conservation Service (NRCS) under their PL-566 program. This project is also sponsored through the Deschutes Basin Board of Control (DBBC.)

### Review Team Evaluation

#### Strengths

- The proposed project will result in 4.2 cfs protected as an instream water right.
- Restoring streamflow will contribute cooler water temperatures and benefit aquatic species.

- Additional flow in Crescent Creek and water storage in Crescent Lake will potentially improve habitat for the Oregon spotted frog.
- The applicant has a successful record for implementing similar types of projects.
- The project is cost effective for restoring streamflow.

### **Concerns**

- The quantified watershed benefits from the project are unclear due to inconsistent descriptions for the expected water savings. The application abstract and objectives identifies 4.2 cfs for restored flow to Tumalo Creek. However, during the site visit the applicant explained that water savings will be split with 60% to Tumalo Creek and 40% to Crescent Creek. According to the application, an additional 1,740 acre feet will be restored at Crescent Lake. Clear details for the water savings expected in each water body and how the applicant intends to secure those protected instream water rights is needed to effectively evaluate the project benefits.
- The application states that 1,740 acre feet of water savings to Crescent Lake will benefit Oregon spotted frog. However, it is unclear how this saved water will lead to habitat benefits for the species without information on how water releases from Crescent Lake will be determined and managed to ensure flow into Crescent Creek is prioritized for spotted frog habitat. For example, it is unclear what seasons water releases will occur from Crescent Lake.
- The timing for instream savings on Tumalo Creek is unclear in the application.
- The USFWS letter of support included in the application is from 2015 and references a different project.

### **Concluding Analysis**

Streamflow restoration in the Upper Deschutes River watershed is a top priority for basin stakeholders. Tumalo Irrigation District has been at the forefront of this effort by implementing projects that made significant contributions in streamflow restoration to Tumalo Creek and Crescent Creek. It is difficult to evaluate the cost benefit for the project due to the lack of clarity around the streamflow savings expected, specifically where and how those saving will be realized. If the application is resubmitted, the applicant is encouraged to (1) clarify restored streamflow for Tumalo Creek and Crescent Creek, (2) explain how conserved water will be managed to benefit Oregon spotted frog, and (3) provide current information specific to this project, such as an updated letter from USFWS.

### **Review Team Recommendation to Staff**

Do Not Fund

### **Review Team Priority**

### **Review Team Recommended Amount**

\$0

### **Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Do Not Fund

**Staff Recommended Amount**  
\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Central Oregon (Region 4)

**Application Number:** 221-4001-18983

**Project Type:** Restoration

**Project Name:** Muddy Creek Fish Passage (Phase II)

**Applicant:** Lake County Umbrella Watershed Council

**Region:** Central Oregon

**County:** Lake

**OWEB Request:** \$331,570

**Total Cost:** \$416,470

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**Application Description** The Muddy Creek Fish Passage Project is located in the Goose Lake Watershed, south-central Oregon. Muddy Creek is a 12 mile stream that connects to Cottonwood Creek, one of Goose Lake's largest tributaries. Muddy Creek begins flow on national forest land where snowpack and springs feed into the creek providing flow year round.

Proposed work for the Muddy Creek Fish Passage Project (Phase II) will focus efforts on construction and implementation of a 75 ft rock ramp/roughened channel fish passage at the spillway of Juniper Reservoir. Phase II will support the Goose Lake nine native fish species, four of which are listed as "species of concern" by the USFWS (Goose Lake Redband trout, Goose Lake lamprey, Goose Lake sucker, and California Pit Roach). The Goose Lake Redband trout is also listed as "sensitive" by the state of Oregon. Planned restoration will expand fish spawning and rearing habitat by 6 additional stream miles bridging the gap between the upper and lower system. Connectivity on Muddy Creek has not been seen since 1965 when the reservoir dam was first constructed.

Project partners include John Shine (landowner), Lake County Umbrella Watershed Council (Project Coordinator), Cascade Stream Solutions (Project Engineer), Oregon Department of Fish and Wildlife (Technical Assistance), US Fish and Wildlife Service (Technical Assistance and Funder), and Ducks Unlimited (Funder).

### Review Team Evaluation

#### Strengths

- The project is ready for implementation with project designs that are at 100% completion and secured permits.
- Providing passage at the dam will connect different habitats along Muddy Creek that will increase the genetic diversity of native aquatic species.
- Upstream habitat above the reservoir is critical cool water refuge for Redband trout.
- The landowner's approach to managing the reservoir is geared towards fisheries enhancement by maintaining a water level that sustains fish and never allowing the reservoir to go completely dry.
- The project will complement phase one work located below Juniper reservoir that focuses on instream and riparian habitat enhancement and fish passage.

- The applicant has a proven track record for implementing similar projects.
- The landowner has implemented previous restoration on his property.

### **Concerns**

- Details describing how spills from the reservoir occur, specifically frequency and water volume or rate, would provide context needed to understand potential fisheries benefits from the project.
- Details related to the irrigation canal are unclear in the application, including the source of water for the irrigation canal, what water right it serves, and why the pipe is currently inadequate.

### **Concluding Analysis**

The project will provide volitional fish passage and improve riparian and instream habitats along Muddy Creek, a tributary to Cottonwood Creek, which releases into Goose Lake. Passage at the Juniper Reservoir was initially scoped to be included in a previous phase one project, however, it was separated out because of higher than expected costs estimated for the final designs. The landowner has a conservation ethic regarding land management and is committed to enhancing fish and wildlife habitat on the property. This phase two project is fully permitted and ready to be implemented, and will broaden the watershed benefits from the phase one project.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

2 of 5

### **Review Team Recommended Amount**

\$331,570

### **Review Team Conditions**

### **Staff Recommendation**

**Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$331,570

## **Staff Conditions**

## Open Solicitation-2020 Spring Offering Central Oregon (Region 4)

**Application Number:** 221-4002-18970

**Project Type:** Restoration

**Project Name:** Little Trout Creek Juniper Removal

**Applicant:** Jefferson SWCD

**Region:** Central Oregon

**County:** Jefferson

**OWEB Request:** \$428,034

**Total Cost:** \$742,049

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**Application Description** This project lies within the Trout Creek Watershed, an east side tributary to the Deschutes River. Located in Jefferson County, the project area is north of Ashwood along Little Trout Creek, a tributary of Trout Creek. This tributary is critical to maintaining perennial flow in Degner Canyon, the longest perennial reach of Trout Creek, and arguably the best summer steelhead habitat in the entire watershed. With water flow being listed as one of the major limiting factors in the East side tributaries of the Deschutes River, Degner Canyon is particularly important to the survival of ESA listed Mid-Columbia Summer Steelhead. Little Trout Creek itself was once a significant producer of summer steelhead and native redband trout. Over the past 20+ years, the flows have been significantly reduced and as a result both populations have suffered. The project area is located on two properties and is comprised of phase one and phase two juniper encroachment. The site has an overabundance of western juniper, but the understory contains diverse perennial bunchgrasses, forbs, and shrubs, lending itself to high upland restoration potential. Removing the junipers will increase the effective precipitation that reaches the soil, restoring hydrologic function that will increase the much-needed surface flow to Little Trout Creek and Degner Canyon. This project will compliment a large stream restoration project to be implemented in 2020, located on the lower mile of Little Trout Creek. The landowners plan to cut the junipers with chainsaws on the steeper slopes and remove the trees on the flatter areas with a tree shear mounted on a skid steer. To invigorate the herbaceous component, and remove the unnaturally large fuel loads, the Ashwood-Antelope Rangeland Fire Protection Association will perform 3 prescribed burns to the area 1-2 years following the juniper cutting. The Jefferson SWCD and ODFW will re-seed constructed fire lines with a proven native grass and forb mix.

### Review Team Evaluation

#### Strengths

- Appropriate actions, including hand and machine cutting and prescribed burning, will be implemented to manage Western juniper and improve upland habitat conditions.
- The project is located in the headwaters of Little Trout Creek, and its large footprint is likely to contribute to improving filtration and understory vegetation vigor once juniper is removed.
- Project costs and rates are reasonable.
- The landowners involved in this project have completed similar projects.

- The project is timely because the understory vegetation condition appears to consist largely of native plants with some non-natives present, moving quickly to remove juniper will prevent displacing this native plant community with woodland encroachment.
- Alternatives were evaluated and the project design incorporates lessons learned from previous projects.
- The applicant has previous experience implementing similar projects and is a pioneer in utilizing prescribed fire for juniper management.

## **Concerns**

- It is unclear how the project objective “restore natural hydrological processes” will be achieved without evidence demonstrating the direct connection between juniper removal and restored hydrologic processes.
- The application lacks an explanation for how limiting factors for instream, riparian, and upland habitats on Trout Creek were prioritized.
- It is difficult to evaluate potential project benefits to water flow stated for Trout Creek and Degner Canyon without information describing the different water rights downstream of the project area.
- Three piezometers will be installed downstream of the project site, however, a monitoring plan explaining how data will be collected and analyzed is not included in the application.
- The application lacks information describing the expected project benefits to wildlife, such as specific species and how their habitats will be impacted by the proposed restoration actions.
- The application lacks a grazing management plan describing strategies that will be used post restoration to sustain the project goals.
- The long term benefit from this project is unclear without information describing plans for stewardship and maintenance to ensure juniper does not re-occupy the site.

## **Concluding Analysis**

The application presents a clear and robust plan for removing Western juniper from the landscape to enhance understory vegetation conditions and improve upland habitat. While the application cites literature that correlates juniper removal with potential benefits to hydrology, it is unclear what those benefits will be for this project site and how impacts to the site hydrology will be measured. If the application is resubmitted, the applicant is encouraged to provide information on how the project approach will result in qualitative hydrologic impacts, explain expected project benefits to wildlife habitat and native plant communities, and describe plans for managing non-native annual grasses present on the project site.

## **Review Team Recommendation to Staff**

Do Not Fund

## **Review Team Priority**

## **Review Team Recommended Amount**



\$0

**Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Do Not Fund

**Staff Recommended Amount**  
\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering Central Oregon (Region 4)

**Application Number:** 221-4003-19071

**Project Type:** Restoration

**Project Name:** Upper Klamath Lake Agricultural  
Water Quality Improvement Projects: Algoma Area

**Applicant:** Klamath SWCD

**Region:** Central Oregon

**County:** Klamath

**OWEB Request:** \$316,959

**Total Cost:** \$535,661

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**Application Description** This project will make significant environmental improvements in an area of interest to federal, state, local and tribal entities. It has the potential to reduce irrigation water withdrawals from Barkley Springs, a culturally important, endangered sucker habitat, by 50%. In addition, it will significantly reduce land erosion near, and nutrient loading to, Upper Klamath Lake. The location of the proposed project is in the lower Algoma area, which is on the south eastern shore of Upper Klamath Lake, between Modoc Point and Shady Pine, along Highway 97. Water quality in Upper Klamath Lake near Klamath Falls, Oregon, is highly degraded due to excessive external phosphorus loading. High phosphorus levels fuel blue green algae blooms, which further impair water quality and diminish the survival and production of native fish populations including the federally endangered species (Lost River Sucker and Shortnose Sucker) and interior redband trout. The Oregon Department of Environmental Quality (ODEQ) designated Upper Klamath Lake as water quality limited for resident fish and aquatic life (ODEQ 303(d) List 1998) and the US Fish and Wildlife Service (USFS) recognized that increased levels of stress and mortality related to severe water quality impairments as primary factors limiting the recovery of endangered sucker populations (USFWS, 2012). The proposed work includes livestock exclusion fencing and livestock watering infrastructure including wells, troughs, and storage. Fencing and off source stock watering via stock water wells and watering facilities will reduce nutrient loading and erosion in waterways. Flood control and water recycling infrastructure will reduce erosion and nutrient loading, as well as demand for water from Barkley Spring, which is important endangered sucker habitat. Our partners are the Natural Resources Conservation Service and three landowners.

### Review Team Evaluation

#### Strengths

- The proposed water quality improvement project will address the highest priority threat to native aquatic species in Upper Klamath Lake.
- Barkley Springs provides priority habitat to ESA-listed Lost River Sucker and Shortnose Sucker, reducing irrigation withdraws from Barkley Springs will benefit these native fish by increasing stream flow.
- The applicant engaged multiple landowners and gained their support for the restoration project as a result of an OWEB-funded technical assistance design process.
- The applicant has engaged appropriate partners to collaborate on this project.

## Concerns

- The application lacks detail that describes quantified ecological and water quality benefits expected from this project.
- It is not clear how the reduction of irrigation withdrawals from Barkley Springs was calculated, exactly how much water will be saved, and what time of year water savings will occur. Additional detail describing irrigation needs and timing of the use of spring water would provide helpful context to evaluate potential project benefits.
- The application lacks details describing how sedimentation into Klamath Lake will be reduced by 100%, it is difficult to evaluate the likelihood of success for this project goal without additional information.
- There is a lack of detail on how water will be managed and recycled throughout the project area, and how this will provide ecological benefit and improvements to water quality in Upper Klamath Lake.
- Additional information on how costs were developed for the budget would be helpful for evaluating project cost effectiveness because some costs, such as the troughs, seem high compared to similar projects.
- The maps included in the application are difficult to interpret because the image quality is poor and some labels are difficult to read.
- Fencing will be installed to exclude cattle from the canal and allow riparian vegetation to colonize the banks. However, project photos show an artificial canal with failing banks and no existing vegetation. It is unlikely riparian vegetation will naturally colonize through passive restoration under the conditions presented in these photos. The ecological value for installing the fence to reduce erosion and improve water quality is uncertain.

## Concluding Analysis

The project resulted from a previously OWEB-funded technical assistance grant. The applicant and partners are working together to improve water quality in Upper Klamath Lake, which is the biggest limiting factor to Lost River and Shortnose sucker species that are listed as threatened. The project also provides an opportunity for engaging landowners in implementing restoration with meaningful ecological benefit to Upper Klamath Lake. The proposal lacks a clear explanation for how the various project components complement one another and are likely to succeed in providing quantified ecological benefits. If the application is resubmitted, the applicant is encouraged to address evaluation concerns, specifically updating project maps that clearly identify water pathways and water management strategies to portray how these components work in unison to provide water quality benefit to Upper Klamath Lake.

## Review Team Recommendation to Staff

Do Not Fund

## Review Team Priority

## Review Team Recommended Amount

\$0

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering Central Oregon (Region 4)

**Application Number:** 221-4004-18982

**Project Type:** Restoration

**Project Name:** Lake County All Lands Restoration Initiative Mini FIP

**Applicant:** Lake County Umbrella Watershed Council

**Region:** Central Oregon

**County:** Lake

**OWEB Request:** \$366,293

**Total Cost:** \$4,472,993

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**Application Description** 1) The Lake County All Lands Restoration Initiative Mini Focused Investment Partnership (FIP) project will focus on the North Warner and Thomas Creek areas located adjacent to each other. These projects combined are referred to as the Lake County All Lands Restoration Initiative. In lieu of submitting a full FIP due to decreases in budgets from COVID-19 impacts to our economy, we are decreasing our original geographic range while still hoping to maintain the forward momentum of forest health improvements through a mini FIP which will echo all the same goals and objectives as the FIP but at a much smaller scale. The original FIP total area covers 402,400 acres, this mini FIP will cover about 278,633 acres (see Map 6, Zone 1 and 2) near the communities of Lakeview and Valley Falls. This project area includes high concentrations of old legacy ponderosa pine forests; and habitat for priority species.

2) Wildfires today are larger and more severe, starting earlier, ending later, and resulting in loss of homes, forests, and other resources. Past and current management practices, including fire exclusion, have left forests in dry regions stressed from drought, overcrowding, and uncharacteristic insect and disease outbreaks. The increase in size and severity of wildland fires is causing ecological, social, and economic damage. The departure from historic fire patterns is also having an impact on water, wildlife habitat, stream function, large and old tree structure, and soil integrity.

3) We plan to complete the thinning treatments of dry ponderosa pine and mixed conifer forests in the North Warner project area and initiate thinning efforts in Thomas Creek project area (666 acres on private land, 6000 acres on USFS). Additionally we will perform conifer encroachment in aspen and meadows on 100 acres of private land and 500 acres of USFS land.

4) LCUWC, KLFHP, USFS, ODF, OSU, ODFW, NRCS, LCRI, LCCWMA, FSG

### Review Team Evaluation

#### Strengths

- The project builds off years of momentum in forest health improvements and will expand upon previous stakeholder engagement, technical assistance, and restoration investments provided by OWEB and others.

- The approach used for identifying priority focus areas for work within the two project geographies is clearly described in the application and project maps show areas ranked high, medium, and low for thinning.
- The strategic action plan included in the application provides a thorough reasoning and background for the proposed work, and describes how restoration goals and objectives will be met and maintained over time.
- Using prescribed fire as a maintenance tool to reduce fire severity is an appropriate method.
- The proposed restoration will enhance habitats for a wide variety of species noted in the Oregon Conservation Strategy.
- Private landowners have been very supportive of work completed to date and additional landowners are signing on to implement forest health projects on their land.
- The project costs are appropriate.

### **Concerns**

- It is difficult to determine the exact habitat types that will be enhanced by the proposed investment because the application lacks a map showing specific sites that are selected for forest health treatments within the large geographic focus.
- The application indicates that sage grouse will benefit from the project, however, no detail is provided explaining how proposed restoration impacts this species. A letter from the USFWS describing potential benefits to sage grouse would strengthen the application.

### **Concluding Analysis**

The Lake County All Lands Restoration Initiative is a cohesive partnership of private, public, and nonprofit conservation groups working collaboratively across a large geographic area to address a critical need for the community and overall watershed health. With the increasing number of landowners interested in participating in this project, there is opportunity for landscape scale treatments resulting in significant benefits for the cost.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

1 of 5

### **Review Team Recommended Amount**

\$366,293

### **Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Fund

**Staff Recommended Amount**  
\$366,293

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Central Oregon (Region 4)

**Application Number:** 221-4005-19060

**Project Type:** Restoration

**Project Name:** Deschutes Riparian Restoration at Riverbend Park - Phase II

**Applicant:** Upper Deschutes WC

**Region:** Central Oregon

**County:** Deschutes

**OWEB Request:** \$131,500

**Total Cost:** \$541,500

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**Application Description** The proposed restoration funding will be used to implement a completed restoration design for approximately 1,600 feet / 0.3 mile of riparian restoration and protection along the Deschutes River in Bend. The site is located along the heavily-used Deschutes River Trail on the west side of the river, immediately downstream of where Reed Market Road crosses the river. Riparian and wetland habitat in this reach has been severely degraded over the past several decades as increased recreational use of the river has resulted in user-created river access points, trampling, erosion and loss of habitat.

The funding will be used to pay equipment and re-vegetation contractors, support staff and engineering consultant time to oversee and implement the restoration and protection design plans for the site, including riparian revegetation, in-stream wood placement, creation of designated river access sites, signage and permanent fencing to protect the restored areas.

The design for this project was partially funded by OWEB Grant 219-4011-16324 to the Upper Deschutes Watershed Council (UDWC) and included public involvement in cooperation with the Bend Park and Recreation District (BPRD). The project is part of a 2018 Memorandum of Understanding between the UDWC and BPRD that calls for restoration and protection of habitat at multiple BPRD-owned sites along the Deschutes River in Bend.

### Review Team Evaluation

#### Strengths

- The application has clear details describing how the project will be implemented.
- The project resulted from an OWEB funded technical assistance grant that incorporated technical review and feedback by ODFW, USFWS, and Bend Parks and Recreation on the proposed restoration design.
- Habitat restoration along a heavily used section of the Deschutes River provides an opportunity for raising public awareness regarding the importance of watershed health, fish and wildlife habitat, water quality, and appropriate recreation access.
- Bend Parks and Recreation identified the project as a high priority based on an inventory, assessment, and project prioritization plan completed for their properties along the Deschutes River through the City of Bend.



- The wetland creation project objective is thoughtfully designed to provide potential Oregon spotted frog habitat.
- The applicant has a long history of successfully completing similar projects.
- Multiple partners that bring technical expertise are engaged in the project.
- Partner support is demonstrated by match.

### **Concerns**

- The ecological benefit for the project cost is low due to the heavy recreation use at the project site and constraints from the surrounding urbanized environment.
- Water quality benefits related to sediment reduction may be overstated in the application because sediment loading from user created recreation access trails to the river is relatively low compared to other sediment inputs in the broader context of the watershed.

### **Concluding Analysis**

The project will enhance riparian and wetland habitats along a modified section of the Deschutes River as it enters the City of Bend. The project site is heavily impacted by the public creating trails and other recreation use. However, off-channel wetland habitat can be built using existing woody vegetation that will provide some benefit to fish and wildlife in an urban landscape. While the ecological return on the investment is relatively low, the public outreach opportunities raising awareness about ecological benefits of investing in watershed restoration will be maximized with interpretive signage in a highly used reach of the Deschutes River.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

5 of 5

### **Review Team Recommended Amount**

\$131,500

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

**Staff Recommended Amount**

\$131,500

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Central Oregon (Region 4)

**Application Number:** 221-4006-18964

**Project Type:** Restoration

**Project Name:** Sycan River and Brown Springs  
Restoration

**Applicant:** Trout Unlimited Inc

**Region:** Central Oregon

**County:** Klamath

**OWEB Request:** \$131,242

**Total Cost:** \$285,316

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**Application Description** 1) Sycan River and Brown Springs, upper Klamath basin, Oregon. 2) Past agricultural and ranching practices have impacted the project reach so that it no longer functions as a healthy ecosystem and many of the processes associated with intact aquatic and riparian systems have been lost. Instead of a dynamic system, the Sycan River and Brown Springs within the project area lack habitat complexity, connectivity with the floodplain except during the highest flow events, year-round volitional fish passage, and established riparian plant communities. These conditions likely lead to increased total phosphorous (P) and total suspended sediment loads to the Sprague River and a paucity of habitat for native fish species, including Redband Trout, Lost River Sucker, and Klamath Largescale Sucker. 3) The proposed project includes a variety of restoration actions: the addition of large wood structures, construction of beaver dam analog complexes, riparian fencing, removal of levee/berm sections, and passage barrier remediation. Importantly, we also plan to develop a robust, hypothesis-driven monitoring program to assess the impact of the restoration actions. 4) Project partners include the U.S. Fish and Wildlife Service, The Klamath Tribes, Oregon Department of Fish and Wildlife, and the private landowner.

### Review Team Evaluation

#### Strengths

- The project approach and methodology to resource enhancement will address underlying causes impacting watershed health from previous livestock overuse and past water management.
- The use of Beaver Dam Analogues (BDA's) is a relatively new tool in the basin, which should spread water out on the floodplain, initiate riparian vegetation establishment, and serve as a good model for future projects utilizing BDA's as a restoration tool in the Upper Klamath Basin.
- Adding spawning gravel to the Sycan River will increase spawning opportunities for native fish. This approach has effectively increased Redband trout spawning along other streams in the Upper Klamath basin.
- Brown Spring delivers cool, clean water that supports native fish and is a priority for protection and enhancement.
- The project builds off reconnaissance work previously conducted to identify site appropriate restoration approaches.
- The landowner demonstrates a conservation ethic towards land management and is fully engaged in the project by committing to excluding livestock from the riparian area.
- The applicant and their partners have implemented similar projects in the same watershed.

## Concerns

- Since a grazing management strategy is not included with the application, additional information describing how livestock grazing will be managed post restoration would be helpful for evaluating plans for long-term maintenance and stewardship.
- It is unclear whether potential impacts of the proposed restoration to downstream landowners were considered.
- It is unclear whether there is flexibility for the location of the livestock exclusion fence to accommodate floodplain inundation and channel meandering that will result from the BDA placement.

## Concluding Analysis

A comprehensive restoration approach will improve fish passage as well as enhance riparian and floodplain habitats. The use of BDAs is a relatively new technique for the basin and the proposed project offers an opportunity to serve as a model for future projects utilizing BDAs as a restoration tool. The applicant is encouraged to re-consider the buffer width of the livestock exclusion fence to accommodate channel migration and floodplain inundation.

## Review Team Recommendation to Staff

Fund

## Review Team Priority

3 of 5

## Review Team Recommended Amount

\$131,242

## Review Team Conditions

## Staff Recommendation

### Staff Follow-Up to Review Team

## Staff Recommendation

Fund

## Staff Recommended Amount

\$131,242

## Staff Conditions



## Open Solicitation-2020 Spring Offering Central Oregon (Region 4)

**Application Number:** 221-4007-19044

**Project Type:** Restoration

**Project Name:** Metolius Winter Range Restoration Project

**Applicant:** Oregon Wildlife Heritage Foundation

**Region:** Central Oregon

**County:** Jefferson

**OWEB Request:** \$241,350

**Total Cost:** \$594,979

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**Application Description** The Metolius Winter Range Restoration Project will be implemented on the Crooked River National Grassland and the Sisters Ranger District, Deschutes National Forest. The project is located in Jefferson County approximately 17 miles north of the town of Sisters, Oregon. Work will include several watershed issues: the reintroduction of anadromous fish into the Crooked, Deschutes and Metolius watersheds; and restoration, enhancement and maintenance of the ecosystem functions and processes of upland and riparian habitats associated with the watersheds and public land within the Metolius Winter Range Restoration Project area.

This project proposes to restore terrestrial and riparian habitats for mule deer, bald and golden eagles, mountain quail, California quail, chukar, neo-tropical migrant birds, and other riparian dependent/associated species; Fly Creek redband trout and federally listed fish (steelhead, bull trout, and bull trout critical habitat).

Work will include control and monitoring of invasive plants; collecting seeds of desirable grasses and forbs; reclaiming areas treated for invasive plants with native seed grasses, forbs, and shrubs; decommissioning 2 miles of forest roads, 0.5 miles of user created routes and maintaining 4 existing gates; managing juniper and ponderosa pine stand densities; developing in-stream structure for the Whychus Canyon Stream Restoration project; hand piling and burning slash generated in conifer removal; restoring 4 guzzlers; and improving interpretative signing on 4 kiosks within the project area.

Portland General Electric, Oregon Department of Fish and Wildlife, Oregon Department of Agriculture, Mule Deer Foundation, and the Confederated Tribes of Warm Springs worked with the Crooked River National Grassland, Deschutes NF, and USFS Region 6 on this high priority project.

### Review Team Evaluation Strengths

- The application provides a clear high-level concept for the project that describes how restoration will be implemented and why the approach is appropriate for the project area.
- The project is a comprehensive approach that will enhance terrestrial habitats by thinning conifers, controlling noxious weeds, and decommissioning roads.
- The project area has priority habitat for Mule deer and other wildlife, serving as key connectivity between winter and summer ranges.
- Installing guzzlers can address the lack of habitat connectivity caused by fragmented habitats interrupting wildlife access to water.
- The activities outlined in the proposal will reduce the potential for stand replacement wildfires, which have affected the surrounding areas.
- Some trees thinned from this project will be incorporated into stream restoration projects along the neighboring Whychus Creek.
- The project is ready for implementation with completed permit processes.

### **Concerns**

- Land ownership in the project area is a mix of public and private, and conservation actions are planned only on public lands. This fragmented approach to restoration will limit the ecological return on the investment.
- The application lacks details on some project objectives, such as the treatment specification and timing for invasive plant control.
- The application budget has costs grouped into lump sums. Additional detail is needed to better understand whether costs are reasonable and necessary, and evaluate cost effectiveness for the proposed work. It is difficult to evaluate the cost benefit for the 2.5 miles of road closure without information on the number of acres impacted by this closure.
- It is unclear who will be responsible for implementing and managing the variety of restoration actions identified in the proposal.

### **Concluding Analysis**

The project partners identified a suite of restoration actions that are likely to succeed in providing meaningful improvements to wildlife habitats that are known to be of high ecological value. The burned area in the surrounding landscape is a stark reminder of the need to act fast to enhance and protect these habitats for wildlife.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

4 of 5

### **Review Team Recommended Amount**

\$241,350

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$241,350

**Staff Conditions**



## Open Solicitation-2020 Spring Offering Central Oregon (Region 4)

**Application Number:** 221-4008-19073

**Project Type:** Restoration

**Project Name:** Greater Williams Prairie Restoration Project

**Applicant:** Oregon Wildlife Heritage Foundation

**Region:** Central Oregon

**County:** Crook

**OWEB Request:** \$269,808

**Total Cost:** \$600,062

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**Application Description** The Greater Williams Prairie Restoration Project (GWPRP) is located 25 miles east of Prineville, OR, in the Ochoco Mountains, on the western edge of the Blue Mountain Range. The project area incorporates the North Fork of the Crooked River with drains to the north and east, eventually flowing into the Crooked River near Post, Oregon. GWPRP incorporates whole-watershed restoration of 17,500 acres on the Ochoco National Forest. The primary goals are to protect and restore whole-watershed processes and increase local landscape resilience to climate change. Projects, from ridge-top to valley-bottom, include work in streams, riparian areas and uplands. Projects focus on protecting, managing and/or restoring hydrologic function (with water table restoration in prairies and meadows), aquatic and terrestrial flora and fauna habitat restoration, travel route improvements including aquatic organism passage restoration, forest health restoration, early detection and rapid response treatments of invasive plants and cattle management. This request for funding support focuses on wet meadow restoration of Williams Prairie, a 560-acre area in the headwaters of the North Fork Crooked River. Proposed actions include filling down-cut gullies to raise the water table elevation to restore the "sponge" capacity of the meadow. This will lead to direct improvements in habitat conditions for aquatic and terrestrial flora and fauna. Through a unique partner initiative referred to as "All Hands, All Brands, For Public Lands" we have secured monetary and in-kind support from the following partners; Western Native Trout Initiative, Blue Mountain Elk Initiative, Rocky Mountain Elk Foundation, National Wild Turkey Federation, Mule Deer Foundation, Oregon Department of Fish and Wildlife, Back Country Hunters and Anglers, and Trout Unlimited, among others.

### Review Team Evaluation

#### Strengths

- The project is part of a large comprehensive strategy that incorporates a ridgetop-to-ridgetop conservation approach targeting aquatic and terrestrial habitats on the Ochoco National Forest.
- The problem statement in the application clearly describes past events that led to current conditions, including impacts from the 1964 flood and lessons learned from previous restoration attempts.
- A fen located adjacent to the proposed restoration site contributes cool clean water to the project area.
- The stage 0 restoration approach is appropriate for the project area.

## Concerns

- The application narrative and maps lack details describing how the project objectives will be met and where restoration actions will be located. For example, maps indicating locations for the proposed actions within the project footprint, including the locations for the borrow pits that will provide material for filling the channel, would provide helpful context for evaluating the project.
- It is unclear how some of the materials attached to the application is relevant to the proposed project.
- Restoration benefits to mid-Columbia Steelhead are overstated in the application because the project site is located upstream of a dam complex that has no fish passage and is blocking steelhead access to the project area.
- The timeline to implement this complex project may be ambitious, it is uncertain whether it is realistic.
- It is unclear whether the schedule for riparian plantings allows time to observe what vegetation establishes naturally after water spreads out onto the floodplain prior to implementing a large-scale revegetation program investment.
- It is unclear whether ground water monitoring is technically sound because control sites for ground water are not identified and there is no indication in the application for plans to hire a licensed well driller.
- The application lacks references that document the project as a priority action in a watershed restoration plan.
- Additional information on how costs were developed for the budget would be helpful for evaluating project cost effectiveness because some costs, such as Forest Service staff time, seem high compared to similar projects.

## Concluding Analysis

The project presents a unique opportunity to restore wet meadow conditions to a stage 0 condition at Williams Prairie on the Ochoco National Forest. The North Fork Crooked River meanders through the meadow and appears degraded and heavily incised and the stage 0 restoration approach may be effective in restoring habitat conditions on the project site. However, the application lacks project details describing work components and their locations needed to evaluate project readiness, technical soundness, and likelihood for success. The applicant is encouraged to work with Forest Service staff to define the restoration approach with more detail and visually articulate how and where project work will be implemented.

## Review Team Recommendation to Staff

Do Not Fund

## Review Team Priority

## Review Team Recommended Amount

\$0

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Central Oregon (Region 4)

**Application Number:** 221-4009-19042

**Project Type:** Technical Assistance

**Project Name:** Neal Creek Phase II Instream  
Habitat Restoration Design

**Applicant:** Hood River SWCD

**Region:** Central Oregon

**County:** Hood River

**OWEB Request:** \$40,773

**Total Cost:** \$98,119

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**Application Description** This project will take place on Neal Creek, located within the Hood River Watershed in Hood River County. The project will include four private properties located up and downstream of Thomsen Road in a reach of Neal Creek that has the highest intrinsic potential for salmon and steelhead due to a relatively low gradient (= 2%) and wide valley bottom.

Neal Creek is one of the few clear water (non-glacial) tributaries of the lower Hood River and contains a viable population of threatened winter steelhead, threatened coho salmon, cutthroat trout, and resident rainbow trout. Based on ODFW sampling and population estimates, Neal Creek is estimated to provide 5-10% of steelhead production in the Hood River Basin. The primary limiting factors that this project will address are habitat diversity and key habitat quantity, particularly spawning and juvenile rearing habitat. On Neal Creek, the combination of channel alterations, fill from private and county roads, and large wood removal has led to entrenched channel segments with limited amounts of large wood.

This project will develop 90% restoration designs for all four properties, which will restore 3/4-mile of instream habitat and reconnect 12 acres of floodplain. Work will include topographic surveying, hydrologic and hydraulic modeling, and 90% design drawings. HRWG will pursue implementation funding with the completed designs.

Project partners include Hood River Watershed Group (project manager), Hood River Soil & Water Conservation District (applicant/fiscal sponsor), Confederated Tribes of the Warm Springs (cash match, materials), and project landowners.

### Review Team Evaluation

#### Strengths

- The application has clearly stated goals and objectives describing a pathway to future restoration.
- Maps, photos, and reports included in the application provide helpful information to understand how the project was selected and why it will benefit ESA-listed salmonids.
- The project site was prioritized for restoration because it has the highest Intrinsic Potential for steelhead spawning and rearing compared to other reaches in Neal Creek.

- The project is identified in multiple plans, including the ESA recovery plans for listed salmonids.
- The project expands previous restoration completed on Neal Creek that has similar outcomes.
- The design approach is likely to succeed because the same contractors that designed the previous restoration will be utilized.
- Landowner and partner engagement in the project is demonstrated by letters of support.
- The applicant and partners have demonstrated success implementing similar type projects.

### **Concerns**

- No concerns were identified.

### **Concluding Analysis**

Instream and floodplain restoration will be designed for Neal Creek, a non-glacial tributary to the Hood River. The project is located in the highest priority areas of Neal Creek and is likely to succeed in achieving significant ecological uplift for ESA-listed salmonids.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

1 of 4

### **Review Team Recommended Amount**

\$40,773

### **Review Team Conditions**

### **Staff Recommendation**

**Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$40,773

### **Staff Conditions**



## Open Solicitation-2020 Spring Offering

### Central Oregon (Region 4)

**Application Number:** 221-4010-19008

**Project Type:** Technical Assistance

**Project Name:** Drews Creek Fish Passage and Stream Restoration

**Applicant:** Lake County Umbrella Watershed Council

**Region:** Central Oregon

**County:** Lake

**OWEB Request:** \$46,997

**Total Cost:** \$61,926

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**Application Description** Drews Valley Ranch is located 21 miles west of Lakeview in Lake County. The 11,400-acre ranch is surrounded by the Fremont-Winema National Forest and includes nine miles of streams, eight tributary creeks, a lake, and grassy wetlands. The ranch is home to more than 185 species of birds, fish, and mammals, including the bald eagle and red-band trout.

The ranch's manager contacted the Lake County Umbrella Watershed Council in the fall of 2019 as they were concerned with the sustainability of an undersized diversion structure on Drews Creek along with a noticeable loss to many of the trees in the aspen grove along the foothill. The project need was apparent as the existing diversion helps deliver water throughout an expanse meadow system, while also acting as a fish passage barrier between Drews Reservoir and upstream habitat. Streambanks and riparian along Drews Creek are in moderate to good conditions in most areas, there is a short segment that would be wise to address. The aspen grove is in jeopardy as high spring flows have incised a the adjacent creek and dropping the ground water elevation.

Proposed work through a technical assistance grant will consist of an alternatives analysis and a 60% design plan to address fish passage and sustainability of irrigation at the diversion, streambank and riparian restoration solutions just below the diversion, and treatment along the incise creeks adjacent to the aspen grove.

Project Partners include Drew Valley Ranch, Lake County Umbrella Watershed Council, Oregon Department of Fish and Wildlife, Intermountain Joint West Adventure, US Fish and Wildlife Service, Natural Resource Conservation District and Water Resources.

### Review Team Evaluation

#### Strengths

- The project complements previous fish passage projects located along Drews Creek.

- There is an urgent need for protecting the aspen stand from further loss caused by stream incision dropping the groundwater level, which leads to tree mortality. Further incision and erosion in Drews Creek may cause additional tree mortality, which will impact wildlife habitat provided by the aspen grove.
- The landowners have a history of land stewardship and integrating a conservation ethic into managing the ranch, which is demonstrated by a conservation easement on the property.
- The proposed project complements restoration completed upstream of the project site that is providing fish habitat benefits at a location with a healthy population of redband trout.
- The applicant and partners have experience implementing similar projects.

## Concerns

- The application lacks details describing how objectives will be implemented.
- It is unclear whether the design approach will address symptoms or root causes leading to channel erosion and incision and effectively protect the aspen stand.
- It is unclear how the applicant calculated 1,500 acres of habitat that will benefit from this project based on the maps provided in the application that identify proposed project components.
- Information describing the multiple conservation projects implemented on the ranch would provide context for understanding how the proposed work fits into the bigger conservation and restoration picture for the ranch.
- Photos included in the application provide helpful context for the project site, however, a map indicating where these photos were taken in the project area is needed to understand the photo locations within the large ranch property.
- The fish passage barrier downstream of the project site at Drew's Reservoir reduces potential benefits to fish from this project.

## Concluding Analysis

The proposed technical assistance effort will design a fish passage solution at a water diversion located on the project property, as well as investigate approaches for protecting an aspen stand adjacent to an eroding streambank on Drew's Creek. The applicant is encouraged to explore the root cause of the erosion and incision impacting the aspen stand rather than addressing the visual symptoms or past channelization.

## Review Team Recommendation to Staff

Fund

## Review Team Priority

4 of 4

## Review Team Recommended Amount

\$46,997

## Review Team Conditions



**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Fund

**Staff Recommended Amount**  
\$46,997

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Central Oregon (Region 4)

**Application Number:** 221-4011-18969

**Project Type:** Technical Assistance

**Project Name:** INDIAN FORD COORDINATED  
RESOURCE MANAGEMENT PLAN

**Applicant:** Deschutes SWCD

**Region:** Central Oregon

**County:** Deschutes

**OWEB Request:** \$74,481

**Total Cost:** \$100,281

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**Application Description** Indian Ford Creek is a spring fed system in the Whychus Watershed, which historically provided important habitat for steelhead, beavers, and other wildlife and connects Indian Ford with the Deschutes River. Its headwaters begin in Black Butte Ranch and flow SE where it meets at the confluence with Whychus Creek downstream of the town of Sisters. The Whychus Watershed continues to receive a large amount of interest due to the rapid growth occurring in Deschutes County. Historically, Indian Ford Creek was a naturally braided system lined with densely vegetated wetlands and large willow and aspen stands. Anthropogenic changes on the landscape altered the diversity of the creek to a single incised channel with minimal floodplain and riparian vegetation and the waters have been disconnected from fish and wildlife habitat downstream in Whychus Creek. Due to these changes, the Indian Ford Watershed health has diminished, and various documents have been written to identify the need to restore diverse components of the watershed. Indian Ford has been identified by the DSWCD long range plan as a focus area. It contains two sensitive fish species (rainbow trout and Indian Ford Dace) and the riparian banks of the creek are lined with the invasive reed canary grass. In 2013, the USFS updated their Whychus Watershed Analysis, which was designed to characterize resource features and provide information to aid in guiding future management and projects. Also, Indian Ford Creek has been listed under the Clean Water Act 303 (d) due to high temperatures and has been identified by ODA as a Strategic Implementation Area due to impacts to water quality. The purpose of this project is to develop a Coordinated Resource Management Plan by partnering with USFS, ODFW, DLT, Black Butte Ranch, and private landowners. It will develop a plan that will prioritize specific resource concern areas and identify restoration activities that will restore the function and health of the watershed.

### Review Team Evaluation

#### Strengths

- Previous project evaluation concerns are addressed.
- Data gaps will be identified by reviewing existing watershed plans and literature.
- The project could potentially assist with the Conservation Implementation Strategy (CIS) NRCS recently initiated for parts of the Indian Creek Basin to address forest health issues.
- The project complements and builds upon the applicant's work with streamside property owners through ODA's Strategic Implementation Area (SIA).

- The applicant has staff with relevant experience in watershed restoration.
- Partner support for the project is demonstrated by letters of support.

### **Concerns**

- The project objectives are ambitious and may not be realistic within the proposed budget and timeline. For example, engaging and tracking 100 private landowners' participation and their varying interest levels in the project may be overwhelming and requires sufficient organizational capacity.
- The application lacks details describing data collection methods, how the data will be used, and the value of the data to achieving the planning objectives.
- Surveying 12 stream miles may be ambitious for the low cost. Additional details is need to determine whether costs are reasonable and sufficient for collecting quality data over a large area.
- The application lacks details describing how the applicant will track and report landowner participation as match.
- It appears that much of the data gathering, analysis, and interpretation will fall upon the technical service provider. More details regarding the type of expertise and time commitment for each activity would have been helpful in the review.

### **Concluding Analysis**

The project will develop a coordinated resource management plan for the Indian Ford Creek subbasin. Developing a plan for all the resources identified is ambitious and will require a significant lift and capacity. The applicant is encouraged to consider phasing the proposed work over time to increase the likelihood for success. For example, the landowner engagement and workshop component could be submitted as a separate stakeholder engagement proposal.

### **Review Team Recommendation to Staff**

Do Not Fund

### **Review Team Priority**

### **Review Team Recommended Amount**

\$0

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering Central Oregon (Region 4)

**Application Number:** 221-4012-19050

**Project Type:** Technical Assistance

**Project Name:** Lake County All Lands Restoration Initiative Prescribed Fire Planning

**Applicant:** Lake County Umbrella Watershed Council

**Region:** Central Oregon

**County:** Lake

**OWEB Request:** \$49,020

**Total Cost:** \$127,770

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**Application Description** 1) The Lake County All Lands Restoration Initiative Prescribed Fire Planning project area will focus on the North Warner Landscape and the Thomas Creek Landscape project areas located adjacent to each other in Lake County. These two project areas will cover 175,159 acres of private land near the communities of Lakeview and Valley Falls. High concentrations of old legacy ponderosa pine forests and habitat for priority species are abundant within each project area. These landscape scale projects are tied directly to the Fremont-Winema NF's Crooked Mud Honey and Thomas Creek Integrated Landscape Restoration Projects, covering a total of 154,000 acres.

2) Resulting from over a century of fire suppression, the forests of this region have increased in density, lost diversity, and have altered the structure and hydrologic function of watersheds. The need is to develop a short- and long-term strategy for the location and frequency of prescribed fire that would maintain the investment in thinning treatments and re-establish the historical fire regime (frequent, low-mixed severity fire), while meeting private and USFS land management objectives.

3) Complete the planning for prescribed burning for private landowners including unit layout, identification of control lines, necessary agreements, burn plans, opportunities to burn with adjacent federal agencies, and other protocols associated with the analysis implementation of prescribed fire. Assist landowners with understanding permitting and liability constraints.

Engage with the private landowners to increase public knowledge and understanding of dry forest restoration principles and restoration techniques, while building public support for increased use of fire as an essential restoration tool through outreach, engagement, and applied fire.

4) Lake County Umbrella Watershed Council, Oregon Department of Forestry, USFS, Oregon State University Forestry Ext., and private landowners within the project areas.

### Review Team Evaluation

## **Strengths**

- The project will build off of years of completed forest health treatments by introducing prescribed fire to maintain these previous investments. Given the recent catastrophic wildfire in Lake County, the timing of this work is essential to promote and define how healthy fire can be beneficial.
- The proposed technical assistance project is the logical next step following an OWEB funded stakeholder engagement project that introduced prescribed fire to landowners as a treatment alternative for forest thinning to address forest health.
- The applicant will be engaging with the right set of expertise, leaning on the appropriate local, state, and federal entities experienced at this type of work.
- Burn plans will be developed for private landowners that could lead to future restoration, these plans carry a long shelf life as long as catastrophic wildfire does not impact the area.
- A diversity of partners are involved in the project, which is demonstrated by letters of support.

## **Concerns**

- It is difficult to evaluate the project cost effectiveness because the application does not provide detail on the number of burn plans that will be developed as part of this project.
- The application includes multiple maps of the larger geographic overview, however, the maps lack details showing the geographic focus for developing burn plans.
- Additional information describing how the project location was prioritized for work would provide helpful context for understanding the need for the proposed work.

## **Concluding Analysis**

The applicant and partners have made forest health and resiliency their top priority in the Thomas Creek and North Warner watersheds. Introducing prescribed fire to lands that have already received thinning treatments is the logical next step in their process to achieve their goals. This project is continuing the momentum from engaging private landowners to achieve effective landscape scale treatments that mirror those on adjacent public lands.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

2 of 4

### **Review Team Recommended Amount**

\$49,020

### **Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Fund

**Staff Recommended Amount**  
\$49,020

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Central Oregon (Region 4)

**Application Number:** 221-4013-19069

**Project Type:** Technical Assistance

**Project Name:** Fifteenmile Storage Resource  
Assessment and Planning 2020

**Applicant:** Wasco SWCD

**Region:** Central Oregon

**County:** Wasco

**OWEB Request:** \$74,910

**Total Cost:** \$99,910

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**Application Description** Located in Wasco County, the Fifteenmile Watershed includes lands drained by Fifteenmile Creek, which discharges into the Columbia River downstream of The Dalles Dam. Fifteenmile Creek flows through the town of Dufur, located 15 miles south of The Dalles. The Fifteenmile watershed is home to federally-listed (threatened) wild Mid-Columbia steelhead, a culturally-significant population of Pacific Lamprey, other native fish species, and a vibrant farm community. The project location is approximately 6 miles upstream from Dufur, near river mile (RM) 35.

Surface flows in Fifteenmile Creek are over-allocated in the summer months, and the Watermaster regulates off junior water right holders to protect senior users during the irrigation season. Low stream flow and associated high temperatures have been identified as primary limiting factors for viable fish populations. Summer low-flow temperatures in reaches of Fifteenmile Creek often exceed temperature thresholds for salmon and trout rearing, migration and spawning.

Subsurface storage of cool water has been identified through previous studies as a feasible approach to enhance summer streamflows, and improve temperature conditions for migration and rearing. The concept is to divert and treat cool water from Fifteenmile Creek during higher flow winter/spring months, store it in a deep, confined aquifer in the Columbia River Basalt Group (CRBG) and return the water during low flow periods.

The first phase of this grant application, is to permit and construct a small-scale infiltration basin for pilot testing. The results of the pilot testing will be used to verify and refine the design parameters for a full-scale diversion and treatment system to produce a source water quality that meets standards for injection and storage. A technical report will document the permitting, pilot testing and design refinements.

Project partners include the Wasco County SWCD, Fifteenmile Watershed Council, ODA, OWRD, OWRD and ODFW

### Review Team Evaluation

#### Strengths

- The applicant has worked on this project for multiple years to build confidence in the design and expected ecological outcomes.



- The project will address stream flow and water temperature, which are priority limiting factors affecting ESA-listed salmonids on Fifteenmile Creek.
- The project builds off past efforts that increased streamflow during critical summer months, including the Fifteenmile Action to Stabilize Temperatures (FAST) program. The proposed technical assistance will pilot a potentially longer term, more reliable solution to over-appropriation of water in Fifteenmile mile Creek.
- The proposed water diversion site is located in the upper watershed where the potential for agricultural run-off to impact water quality of stored water is not a concern.
- The applicant has engaged qualified consultants with relevant expertise for developing this technical assistance project.
- The applicant has engaged the appropriate partners, and has a landowner interested in exploring the aquifer recharge option on their land.

## **Concerns**

- It is not clear from the application whether water that is stored and later returned to the creek will be permanently protected instream to prevent the potential for downstream irrigation use minimizing the benefits of this project to streamflow and water temperature.
- The application lacks details describing the potential impacts of interrupting natural stream processes that may occur when diverting streamflow to storage during high flows.
- It is unclear whether the applicant and partners have reached out to other entities implementing this type of work. Since the design approach is new for the area, gaining insight and lessons learned from other entities may be beneficial and increase the likelihood of success for the project.
- It is difficult to determine whether the proposed project timeline is feasible without details in the application describing any necessary permitting processes.

## **Concluding Analysis**

The project continues the exploration of aquifer storage recovery to address streamflow and water temperature concerns along Fifteenmile Creek, an important stream for Mid-Columbia summer Steelhead. The proposed approach to develop a smaller pilot project and test the design is appropriate prior to embarking on an expensive, larger project build out. This bold and innovative approach to restore streamflow could prove to be an effective solution for restoring flow during critical summer timeframes.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

3 of 4

## **Review Team Recommended Amount**

\$74,910

## **Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Fund

**Staff Recommended Amount**  
\$74,910

**Staff Conditions**

## Open Solicitation-2020 Spring Offering Central Oregon (Region 4)

**Application Number:** 221-4014-18986

**Project Type:** Stakeholder Engagement

**Project Name:** Ochoco Creek Fish Monitoring  
Stakeholder Engagement

**Applicant:** Crooked River WC

**Region:** Central Oregon

**County:** Crook

**OWEB Request:** \$37,300

**Total Cost:** \$73,372

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### Application Description OWEB SE Grant Solicitation, CRWC 7/27/2020

1) Project is located in a 22-mile river reach of Ochoco Creek that begins at the inflow of Ochoco Creek into Ochoco Reservoir 44.31066 N -120.659630 W City of Prineville, Crook County Oregon and ends at Ochoco Springs, Ochoco National Forest 44.265338 N -120.19485 W. It will include all 15 named tributaries and/or any waterway fish can potentially swim up within the 127,360-acre Drainage Basin defined by the USGS.

2) This project will focus on fish passage barriers, temperature, and the volitional movement of redband trout (*Oncorhynchus mykiss gairdnerii*) in the upper reaches of the Ochoco Creek System. The limiting factors are defined by ODFW, USFS, CRWC, and DEQ in several reports (see citations) and basin plans as fish passage barriers, temperature, incised channels, turbidity and poor or lacking riparian zones. Additionally, fish radio tracking/monitoring is a useful tool in highlighting habitat needs for shade, structure, temperature, water quality, and habitat usage. Project need will build on activities currently planned and funded by the Crook County Soil and Water District to remove fish passage barriers on the Upper Ochoco Creek.

3) We aim with this SE to design methods and an implementation plan for radio-tracking the fish population, taking genetic samples of these tagged fish, and recording water temperatures at fixed stations along the waterway defined in (1).

4) Collaboration will be with Oregon State University, who will provide a graduate student to conduct the monitoring study; Oregon Department of Fish and Wildlife, who will approve methodology, and assist with genetic sampling and fish collection; United States Forest Service, who will need to support operations on public lands; and the Crook County Soil and Water Conservation District, who are removing fish passage barriers in the Ochoco and collaborating with private landowners.

### Review Team Evaluation Strengths

- The project could be informative by identifying the severity of barriers listed in an existing ODFW fish barriers list.
- The applicant is engaging with a university to provide fisheries expertise.
- The proposed work will build upon an existing project by the Crook SWCD that is designing fish passage solutions for a handful of barriers just upstream of Ochoco Reservoir.

### **Concerns**

- The application lacks clarity needed to effectively understand and evaluate the project.
- The application lacks a clear description of a problem this project will solve. The ODFW barrier database already has a data set for streams upstream of Ochoco Reservoir, and other partners in the basin are working to solve those issues starting at the reservoir and moving upstream.
- The pathway leading to on-the-ground restoration is not clear. The outcome of the project appears to be engaging technical expertise to develop a research monitoring program rather than engaging stakeholders to foster restoration.
- It is unclear whether agencies responsible for managing fisheries in this geography support the project approach.
- The application includes letters of support from the Forest Service and OSU that are for a different proposal with different outcomes.

### **Concluding Analysis**

The proposed stakeholder engagement project seeks to better understand fish movement and impacts from fish passage barriers along streams that drain into Ochoco Reservoir. The need for this effort is not clearly articulated in the application since there is already an existing list of known barriers in the project geography. This project could help to build partnerships for future conservation work in this geography, however, the structure of the proposed actions and their outcomes do not align with the definition for OWEB's stakeholder engagement offering.

### **Review Team Recommendation to Staff**

Do Not Fund

### **Review Team Priority**

### **Review Team Recommended Amount**

\$0

### **Review Team Conditions**

### **Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Central Oregon (Region 4)

**Application Number:** 221-4015-19058

**Project Type:** Stakeholder Engagement

**Project Name:** Fifteenmile Managed Underground Storage Stakeholder Engagement 2020

**Applicant:** Wasco SWCD

**Region:** Central Oregon

**County:** Wasco

**OWEB Request:** \$31,513

**Total Cost:** \$41,661

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**Application Description** The Fifteenmile Watershed includes all lands drained by Fifteenmile Creek, which discharges into the Columbia River just downstream of The Dalles Dam. Major tributaries to Fifteenmile Creek include Fivemile, Eightmile, Ramsey, Pine and Dry Creeks. Fifteenmile Creek flows through the small town of Dufur located 15 miles south of The Dalles. The project location is on Fifteenmile Creek, approximately 6 miles upstream from Dufur. The Fifteenmile watershed is home to Federally-listed threatened steelhead, other native fish species, and a vibrant farm community. Fifteenmile Creek's surface water flows have been over-allocated to irrigation rights. As stream flows decline each summer, the Oregon Water Resources Department (OWRD) Watermaster regulates back junior water right holders in order to protect senior users, including some instream rights, during the irrigation season. Low stream flow, and associated higher temperatures, have been identified as primary limiting factors for viable fish populations.

The overall goal of this project is to utilize a managed underground storage facility to successfully divert winter water to be stored in a deep basalt well and then recovered and put back in Fifteenmile Creek during summer months, which will meet the dual goal of benefiting both farms and fish. In order for this project to be successful, it is necessary to identify an owner and operator. The project will require routine monitoring, reporting, and ongoing operational upkeep. The owner/operator should be familiar with managed underground storage, the needs of the community, and the ecological requirements of the creek. Project partners will include GSI Water Solutions, GeoSystems Analysis, Oregon Department of Fish and Wildlife (ODFW), Wy'East Resource Conservation & Development Council (RC&D), Fifteenmile Watershed Council, and OWRD. We will invite all interested parties to the discussion including Tribes, State & Federal agencies, and NGO's such as Freshwater Trust.

### Review Team Evaluation

#### Strengths

- The stakeholder engagement project will coordinate with a complementary technical assistance design project by facilitating stakeholder conversations to build a roadmap for implementing a managed underground storage facility pilot project.
- The proposed work is essential for the aquifer storage and recovery restoration project to be implemented, and later successfully and safely operated.

- Creating a governance document will increase the likelihood of success for the subsequent complex restoration project.
- The application provides sufficient detail describing the need for facilitation time to effectively engage a diverse set of stakeholders.

### **Concerns**

- The proposed effort to develop governance could be pre-mature because the restoration project is still in early development.

### **Concluding Analysis**

The proposed work will engage all stakeholders involved in an aquifer storage and recovery project along Fifteenmile Creek. This complex approach to restore stream flows will require a governance document that clearly identifies an owner and operator, and communicates with water users on the creek about how the future project will be implemented and managed. The applicant is encouraged to consider legal assistance to aid in the process.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

1 of 1

### **Review Team Recommended Amount**

\$31,513

### **Review Team Conditions**

### **Staff Recommendation**

#### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$31,513

### **Staff Conditions**





North Coast

Southwest

Willamette Basin

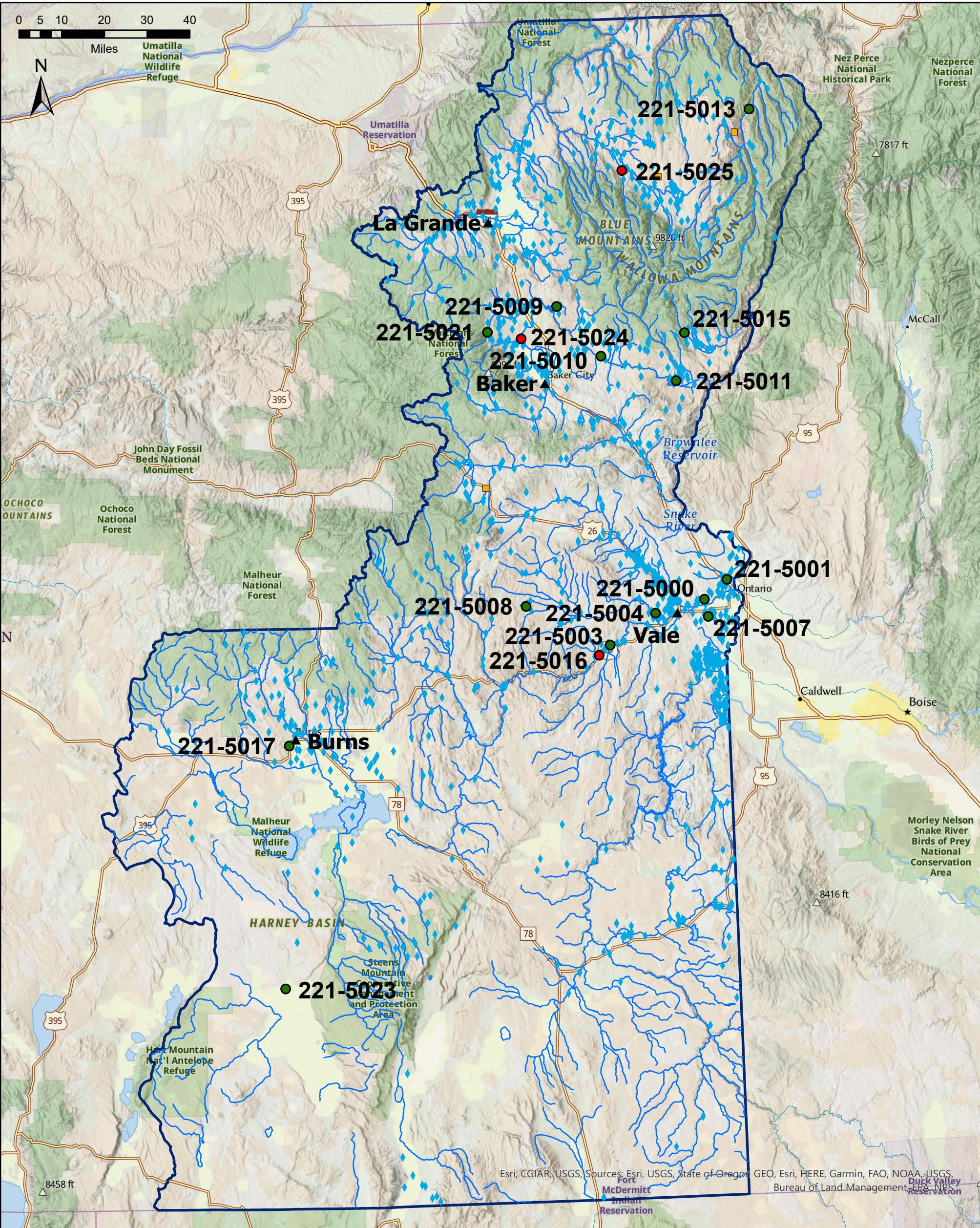
Central Oregon

Eastern Oregon

Mid-Columbia



# Eastern Oregon - Region 5 Spring 2020 Funding Recommendations



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## Funding Recommendation

● Staff Recommendation  
For Funding (SRF)

● Below Funding Line (BFL)

Previous Grants 1998 - Fall 2019

■ Land Acquisition

◆ Restoration

▲ Region 5 Cities

— Region 5 Streams

▭ OWEB Region 5 Boundary

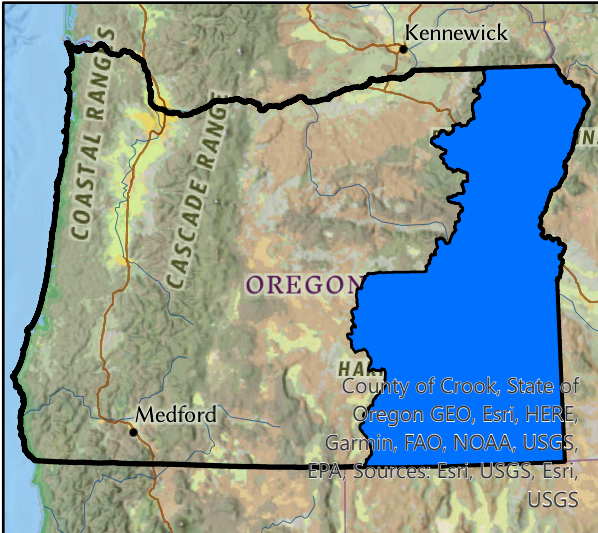


OREGON  
**WATERSHED**  
ENHANCEMENT BOARD

775 Summer St, NE Suite 360  
Salem, OR 97301-1290  
(503) 986-0178

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## Region 5 - Eastern Oregon

### Restoration Projects Recommended for Funding in Priority Order

Project #	Grantee	Project Title	Brief Description	Project Modification	Amount Recommended	County
221-5015	Eagle Valley SWCD	Tarter Slough Fish Passage and Screening Project	A fish-friendly water diversion and fish screen will be installed to address a major fish passage barrier and improve migratory conditions for bull trout moving between the upper main Pine Creek subbasin and the Snake River.		112,051	Baker
221-5010	Keating SWCD	Restoring The Powder	Water quality on Powder River will be improved by installing fence to exclude livestock from riparian areas, and stabilizing eroding streambanks through a combination of placing large wood structures and planting willow whips.		65,806	Baker
221-5013	Wallowa Resources	Imnaha River Watershed Integrated Noxious Weed Management	Integrated weed management strategies will be used to detect and control high priority weeds through an "Early Detection and Rapid Response" approach focused on reducing negative impacts of noxious weeds on the ecological, cultural, and economic values of the Imnaha River watershed.		47,567	Wallowa
221-5007	Malheur SWCD	Wrangling Horses	Water quality will be improved in the Malheur River by installing irrigation improvement projects that will reduce runoff and erosion, increase on-farm irrigation efficiencies, and improve soil health.		40,161	Malheur
221-5008	Malheur WC	Mile and a Half From Nowhere Spring Development and Wet	Wet meadow habitat in the headwaters of Indian Creek will be restored by fencing out livestock while providing water sources to improve the distribution of animals.		46,505	Malheur
221-5001	Malheur WC	Cow Pony Water Quality Improvement	Water quality will be improved in Jacobson Gulch, a drainage that flows directly into the Snake River, by installing irrigation improvements to reduce erosion and polluted runoff containing sediment, nutrients, and bacteria.		109,230	Malheur
221-5004	Malheur WC	How Now Brown Cow	Water quality in Bully Creek will be improved by converting flood irrigation to a pivot delivery system to reduce erosion and polluted runoff containing sediment, nutrients, and bacteria.		67,235	Malheur
221-5011	Eagle Valley SWCD	New Barn Irrigation	Converting flood irrigation to a pivot delivery system will improve water quality in the Powder River by eliminating polluted runoff containing sediment, nutrients, and bacteria.		53,659	Baker
221-5000	Malheur SWCD	Double Whammy II	Converting flood irrigation to a pivot delivery system will improve water quality in the Malheur River by eliminating polluted runoff containing sediment, nutrients, and bacteria.		194,206	Malheur
221-5009	Powder Basin WC	Cusick Creek Restoration Phase II:The Restoration Continues	Fish and wildlife habitat will be improved on Cusick Creek by increasing floodplain connectivity with the creek, creating wet meadows, and restoring riparian vegetation.		188,531	Union
221-5003	Malheur WC	Trying to Stand in High Cotton in the Harper Valley Phase I	Water quality and riparian habitat will be improved in the mainstem Malheur River and Cottonwood Creek by converting flood irrigation to a pivot delivery system to eliminate runoff, protecting riparian areas and vegetation from unrestricted livestock access, and improving grazing management.	\$1,828 Increase	\$186,743	Malheur
<b>Total Restoration Projects Recommended for Funding by RRT and OWEB Staff</b>					<b>1,111,694</b>	

Region 5 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

Restoration Projects <i>Recommended but Not Funded</i> in Priority Order						
Project #	Grantee	Project Title	Brief Description		Amount Recommended	County
None						
Total Restoration Projects Recommended for Funding by RRT					1,111,694	
Restoration Applications <i>Not Recommended</i> for Funding by RRT						
Project #	Grantee	Project Title		Amount Requested		County
221-5002	Malheur WC	A Butte-E-Full Idea		56,982		Malheur
221-5005	Owyhee WC	Birds Eye Water Quality Improvement		36,224		Malheur
221-5006	Malheur WC	Assisting in the Evolution of Summit Creek: Stage 0 Restoration		173,160		Grant
221-5012	Nez Perce Tribe	Lostine Wetland and Side Channel Complex		149,460		Wallowa
221-5014	Powder Basin WC	Pine Creek Fish Habitat Enhancement		37,634		Baker

Region 5 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

Technical Assistance (TA) Projects Recommended for Funding in Priority Order						
Project #	Grantee	Project Title	Brief Description		Amount Recommended	County
221-5021	Baker Valley SWCD	Piping Bulger	Design plans will be developed for consolidating two irrigation diversions in the North Powder River to one permanent fish friendly diversion, and to convert two miles of an earthen ditch conveyance system to a closed piped system.		27,522	Baker
221-5017	Harney SWCD	Addressing The Gaps in Sage-Grouse Habitat	Sage-grouse habitat will be assessed and prioritized through the development of site specific plans (SSP) on private lands enrolled in candidate conservation agreements with assurances (CCAA) program.		74,876	Harney
Total TA Projects Recommended for Funding by RRT and OWEB Staff					102,398	
Technical Assistance Projects <i>Recommended but Not Funded</i> in Priority Order						
Project #	Grantee	Project Title	Brief Description		Amount Recommended	County
221-5016	Malheur WC	Creating Habitat in the Southside Neighborhood of the Malheur: Technical Assistance	A plan will be developed for a one-mile reach of the Malheur River to improve aquatic, butterfly, and wildlife habitats and water quality by reducing erosion and restoring riparian vegetation.		38,352	Malheur
Total TA Projects Recommended for Funding by RRT					140,750	
Technical Assistance Applications <i>Not Recommended</i> for Funding by RRT						
Project #	Grantee	Project Title		Amount Requested		County
221-5018	Malheur WC	Drewsey Reclamation Ditch: Can We Pipe it? Revised		26,015		Harney
221-5019	Harney County Watershed Council	Silvies River Watershed Riparian Assessment Resubmit		21,670		Harney
221-5020	Malheur SWCD	Gone to Lek and back monitoring		74,717		Malheur
221-5022	Tri-State Steelheaders	Mottet Creek Passage Design		37,615		Union
Stakeholder Engagement Projects Recommended for Funding in Priority Order						
Project #	Grantee	Project Title	Brief Description		Amount Recommended	County
221-5023	Pheasants Forever Inc	Burns/Lakeview Local Implementation Team Coordinator	Local stakeholders within the Burns and Lakeview community will be engaged to develop unique long-term conservation strategies that address threats to sage-grouse in a coordinated effort across jurisdictional boundaries.		70,802	Harney
Total Stakeholder Engagement Projects Recommended for funding by OWEB Staff					70,802	
Stakeholder Engagement Projects <i>Recommended but Not Funded</i> in Priority Order						

Region 5 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

Project #	Grantee	Project Title	Brief Description	Amount Recommended		County
221-5024	Powder Basin WC	Beaver Damage Mitigation Demonstration Projects	Outreach to landowners in the Powder Basin will focus on the benefits of beaver on the landscape and strategies to effectively coexistence with beaver. Landowners will also be recruited to pilot restoration projects that demonstrate methods to alleviate pond flooding, damage to trees, and plugging of culverts or irrigation ditches by resident beavers.		23,936	Baker
221-5025	Wallowa Resources	South Fork Water Resources	Irrigators, municipalities, and interest groups in the Wallowa River basin will be engaged in discussions about water management and conservation opportunities that could result in increased stream flow that benefit ESA-listed fish and economic resiliency for the community.		112,716	Wallowa
<b>Total Stakeholder Engagement Projects Recommended for funding by RRT</b>					<b>207,454</b>	
<b>Stakeholder Engagement Projects <i>Not Recommended</i> for Funding by RRT</b>						
Project #	Grantee	Project Title		Amount Requested		County

Region 5 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

None				

## Open Solicitation-2020 Spring Offering

### Eastern Oregon (Region 5)

**Application Number:** 221-5000-19016

**Project Type:** Restoration

**Project Name:** Double Whammy II

**Applicant:** Malheur SWCD

**Region:** Eastern Oregon

**County:** Malheur

**OWEB Request:** \$194,206

**Total Cost:** \$399,583

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**Application Description** 1. The Double Whammy project is located about 8 miles west of Ontario, Oregon and consists of approximately 76 acres of irrigable cropland. The Double Whammy project drains into the Butte Drain to be used by other farmers or spilled into the Malheur River and then into the Snake River. Sediments and nutrients that wash off fields are passed onto the downstream users and contribute to overall water quality impairments.

2. This project is irrigated with waters from two (2) different irrigation districts and will require a water right transfer between the districts as both have agreed. This ground has very steep sandy soils where soil erosion is significant so pivot irrigation seems to be the solution. Most of the sediment, nutrients and bacteria in the Butte Drain come from polluted irrigation return flows or livestock access to surface water. Historically, farmers in the area fertilize their land and a residual amount of chemicals, e-coli and nutrients can be carried off the field with the runoff from flood irrigation

3. By installing two (2) center pivots, trash screen, pipeline, pump and flow meters, the landowner will be able to achieve a zero water runoff practice that will enhance the downstream water quality. 3200 feet of open ditch irrigation canal will be converted to a pipeline as part of the Warm Springs Irrigation District cooperation. The pipeline will also serve downstream users.

4. Project partners include the landowner, the Malheur SWCD, Warm Springs Irrigation District (WID), Owyhee Irrigation District (OID), U S Bureau of Reclamation (BOR) (approval of water right transfer).

### Review Team Evaluation

#### Strengths

- Previous project evaluation concerns are addressed by including a description of alternatives considered and adjusting the design approach for the field corners. The adjusted design approach will increase the project cost effectiveness for the watershed benefit.
- The project will directly address the Malheur River TMDL by eliminating water runoff from the fields, which reduces water quality pollutants entering the river.
- The project team has effectively coordinated to create a feasible plan for completing the water right transfers needed to implement the irrigation conversion. This is a complicated process because the project site receives water from two different irrigation districts.



- The project is ready for implementation with committed partners and landowners working together with a shared vision.
- Downstream water users have expressed interest in connecting with the pipeline, which could generate interest for additional irrigation efficiency projects that result in water quality benefits.

### **Concerns**

- The map provided in the application is missing details, such as locations for power sources, pipe layout, and survey points. A more detailed map with the entire project layout and placement of components would provide detail needed for a comprehensive application review.
- The application lacks details describing quantified water quality benefits expected from implementing the project. A description of the existing water quality sampling plan would provide information needed to understand plans for measuring ecological benefits from the project.

### **Concluding Analysis**

The Malheur River TMDL identified water quality pollutants, including sediment, bacteria and phosphorus, as derivatives from legacy erosive agricultural practices such as flood irrigation. The proposed project will reduce runoff containing these pollutants by converting flood irrigation to pivot irrigation to create a zero waste operation. Previous water quality sampling and analysis has shown these types of projects can have a positive impact on water quality. Future applications for this project type should include how the ecological benefits will be quantified.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

9 of 11

### **Review Team Recommended Amount**

\$194,206

### **Review Team Conditions**

### **Staff Recommendation**

**Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

**Staff Recommended Amount**

\$194,206

**Staff Conditions**

## **Open Solicitation-2020 Spring Offering**

### **Eastern Oregon (Region 5)**

**Application Number:** 221-5001-19005

**Project Type:** Restoration

**Project Name:** Cow Pony Water Quality Improvement

**Applicant:** Malheur WC

**Region:** Eastern Oregon

**County:** Malheur

**OWEB Request:** \$109,230

**Total Cost:** \$238,465

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**Application Description** 1. The Cow Pony WQ Improvement project is located approximately 6 miles NW of Ontario in the Jacobsen Gulch Water Quality Improvement Area.

2. Water quality improvement in the Malheur Basin is one of the top restoration priorities. Water quality improvement is achieved through on-farm irrigation infrastructure improvements and management. Malheur Watershed Council in cooperation with irrigation districts, NRCS, and private landowners have been systematically improving water quality through irrigation system conversions over the past 19 years across the Malheur Basin.

3. The Cow Pony Quality Improvement project will implement 2 pivot systems and related conveyance infrastructure to convert approximately 88 Acres from flood to sprinkler irrigation and improve water quality in the Jacobsen Gulch drainage and Snake River.

4. Project partners include Owyhee Irrigation District, NRCS, private landowner and Malheur Watershed Council.

### **Review Team Evaluation**

#### **Strengths**

- A variety of irrigation alternatives were considered, such as wheel lines and big guns. These options are not viable due to the crop type and rotation.
- The project site has a steep gradient, which tends to be more erosive under flood irrigation. Irrigation conversion to pivots will create a zero waste runoff operation and reduce sediment, nutrient, and bacteria inputs into Jacobsen Gulch and the Snake River.
- Water quality monitoring sites located on Jacobsen Gulch downstream of the project site are actively sampled and could provide data to quantify measurable ecological benefits from this project.
- The proposed project location in close proximity to Highway 84 provides an opportunity for raising public awareness about irrigation conversion projects that could lead to future restoration opportunities.
- The applicant provided a thorough and reasonable explanation for providing only one vendor bid for this project.
- The applicant and partners have implemented similar projects.

#### **Concerns**

- The application lacks details describing plans for the corners of the field after project implementation,

such as establishing vegetation breaks to mitigate wind erosion or enhancing pollinator habitat.

- It is unclear whether NRCS or the vendor is leading the project design. If the vendor is leading the design effort, NRCS final review and approval may result in unexpected budget revisions.

### **Concluding Analysis**

The Jacobsen Gulch area is monitored for water quality pollutants by the Malheur SWCD. This data collection effort provides an opportunity to quantify project impacts on water quality by comparing pre- and post- project data. The proposed irrigation conversion complements other projects implemented in the area, addresses TMDL priorities, and is likely to result in measurable water quality improvements in the Jacobsen Gulch and the Snake River.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

6 or 11

### **Review Team Recommended Amount**

\$109,230

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$109,230

### **Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Eastern Oregon (Region 5)

**Application Number:** 221-5002-19025

**Project Type:** Restoration

**Project Name:** A Butte-E-Full Idea

**Applicant:** Malheur SWCD

**Region:** Eastern Oregon

**County:** Malheur

**OWEB Request:** \$56,982

**Total Cost:** \$105,023

---

**Application Description** 1) This project is located 7.5 miles west of Ontario between Malheur Butte and the Malheur River. Water is conveyed to the site through an open ditch known as Butte Drain.

2) Runoff from flood irrigation on this project (A Butte-E-Full Idea) 28.6-acre farm is transported directly to the Malheur River before ending up in the Snake River, compounding the already increased sediment and nutrient levels within the system.

3) The proposed project at Butte-E-Full Idea will reduce the above concerns by implementing 1 pivot system and related conveyance infrastructure to convert 28.6 acres from flood to sprinkler irrigation and improve water quality in the Malheur River. To achieve near zero runoff 1- Pivot with 3 spans and a 44 ft overhang end gun will be connected to a Cornell pump to irrigate the 28.6 acres. . We will replace the existing 8-inch pvc pipe that runs through an open culvert beneath Butte Road and exchange it for a buried 6" steel pipe that will meet NRCS specs, a pump station system that includes an electrical panel, Z pipe, flow meter and a Clemons screen. we will bury 1140 feet of 100# PIP Pipe and 1200 feet of #4 Cablecon electrical from a new power drop on Butte Drive to the pivot pad.

4) Landowner, Warm Springs Irrigation, and Idaho Power.

### Review Team Evaluation

#### Strengths

- Water quality in the Malheur River will be directly impacted by the proposed irrigation conversion because the project is located adjacent to the river.
- The project will provide water quality benefits by implementing high priority irrigation improvements that eliminate irrigation run-off carrying sediment, nutrients, and bacteria to the Malheur River and the Snake River.
- Water quality data provided in the application indicates irrigation improvement projects, such as the proposed project, are positively impacting water quality in the Malheur basin.
- The project provides an opportunity to raise awareness about the benefits of irrigation conversation projects that could lead to adjacent landowners implementing similar restoration projects in the future.
- The application narrative and budget includes considerations for a water right transfer needed to implement the project.

## Concerns

- The maps included in the application show irrigation directly up to the river's edge, which could lead to removal of existing riparian vegetation along the river. Removing riparian vegetation could result in a direct violation of water quality rules.
- The project google map and the map included in the vendor bid provided in the application have conflicting information by outlining different proposed project footprints.

## Concluding Analysis

This project is located directly adjacent to the Malheur River. The project area is currently not in a priority area for NRCS, but irrigation improvement projects adjacent to natural water bodies are important due to their direct impacts on water quality. While irrigation improvement projects can reduce the amount of pollutants entering the river, the potential for the project to encroach into the riparian area and lead to vegetation removal could have damaging impacts to water quality and wildlife habitat. If the application is resubmitted, the applicant is encouraged to clarify the agricultural irrigation footprint and plans for ensuring there will be no damage to trees in the riparian area.

## Review Team Recommendation to Staff

Do Not Fund

## Review Team Priority

## Review Team Recommended Amount

\$0

## Review Team Conditions

## Staff Recommendation

### Staff Follow-Up to Review Team

## Staff Recommendation

Do Not Fund

## Staff Recommended Amount

\$0

## Staff Conditions



## Open Solicitation-2020 Spring Offering

### Eastern Oregon (Region 5)

**Application Number:** 221-5003-18972

**Project Type:** Restoration

**Project Name:** Trying to Stand in High Cotton in the Harper Valley Phase I

**Applicant:** Malheur WC

**Region:** Eastern Oregon

**County:** Malheur

**OWEB Request:** \$184,915

**Total Cost:** \$264,722

---

### Application Description

1. The project is directly adjacent to the Malheur River about 3 miles from downtown Harper, OR.

2. Water quality improvement in the Malheur Basin is one of the top restoration priorities. DEQ lists the Malheur River as having 2nd worst water quality in the state. Sediment, nutrient enrichment and bacteria are the primary problems. Water quality improvement is achieved through on-farm irrigation infrastructure improvements and management. Malheur Watershed Council (MWC), in cooperation with irrigation districts, NRC, and private landowners, has been systematically improving water quality through irrigation system conversions over the past 18 years across the Malheur Basin.

3. This will be a multi-phased project. In Phase I, we propose to install:

One pivot covering 100 acres eliminating irrigation-induced erosion and contaminated tailwater from entering Cottonwood Creek and the Malheur River. Also:

- one 4-HP pump

- screens

- 2,460 feet of 10-inch mainline

- 2,520 feet of wire

- flow meter

- electrical hook up

Protect Riparian Area

- Install 3,000 feet of fence protecting 20 acres

- Plant 600 willow clumps or cluster planting along 3,000 feet of bank

- Spray weeds and re-seed with NRCS-specified species

Eliminate Livestock Waste

- 1,760 feet of 8-inch perforated pipe to bury a drain ditch to prevent livestock trampling and transportation of waste and sediment to the streams.

- 3 troughs

- 3,100 feet of 2-inch HDPE pipe to supply water to the troughs

- Solar pump

Apply for Phase II

Two more pivots



6,000 feet of cross-fencing  
Bury a second drain ditch ~2,400 feet

This project fits well into MWC's irrigation priority system since tailwater drains directly into Cottonwood Creek and the Malheur River. Harper is also an area where MWC is concentrating more restoration efforts.

4. Project partners include the landowner, NRCS and MWC.

## **Review Team Evaluation**

### **Strengths**

- The application includes clearly defined and appropriate methods for grazing management, weed management, and subsequent re-seeding.
- The proposed irrigation improvements will directly benefit the Malheur River by eliminating polluted tail water runoff into the river.
- Installing water troughs will improve livestock distribution and management, which will lead to positive impacts to wildlife forage and habitat.
- Exclusion fencing will protect riparian habitat and promote native vegetation growth long-term.
- Re-planting willow clumps dug out of the irrigation ditches while installing pipe is a thoughtful and effective approach for re-establishing vegetation in the riparian area.
- There are water quality monitoring sites located above and below the project site that will provide an opportunity for measuring quantifiable ecological benefits of water quality improvements.

### **Concerns**

- Project phasing and plans for future restoration are unclear in the application. It is uncertain whether restoration actions completed for phase one could impact effective implementation of future phases. For example, it is unclear whether fencing installed during phase one could hinder plans for phase two work. The project benefits for the cost may be limited if future restoration work is not implemented. Additional details describing how various project components for each phase are sequenced to effectively fit together would be helpful for evaluating likelihood for success.
- The proposed approach to treat weeds and broadcast seeds with only one application may not be effective given the diversity and abundance of noxious weeds on the project site. The applicant is encouraged to consider additional weed treatment and increasing the rate for broadcast seeding.
- It is unclear from the application whether the spring source for livestock use is exempt from needing a water right.
- Additional information describing plans for the corners of the fields where pivots will be installed would provide useful context for evaluating project benefits.

## **Concluding Analysis**

The project phasing is appropriate given the scope and scale of the restoration opportunities across a variety of land uses on the project site, including hay production and livestock grazing. Converting 100

acres from flood to sprinkler irrigation will eliminate irrigation-induced erosion and contaminated tail water from entering Cottonwood Creek and the Malheur River. The project provides a comprehensive approach to improve water quality and wildlife habitat through irrigation improvements, livestock distribution and management, and riparian habitat enhancements.

#### **Review Team Recommendation to Staff**

Fund

#### **Review Team Priority**

11 of 11

#### **Review Team Recommended Amount**

\$184,915

#### **Review Team Conditions**

Review Team Conditions: Increase broadcast seeding rate to 18-23 pounds per acre.

#### **Staff Recommendation**

##### **Staff Follow-Up to Review Team**

Staff followed up with applicant and collectively agreed to increase the seeding rate to 23 lbs. per acre. This will increase the seed mix budget by \$1,662 (from \$2,047 to \$3,709). This increase will automatically increase the 10% indirect costs by \$166 (from \$16,756 to \$16,922). The overall budget will increase by \$1,828 (from \$184,915 to \$186,743).

#### **Staff Recommendation**

Fund

#### **Staff Recommended Amount**

\$186,743

#### **Staff Conditions**

This increase in seeding rate is appropriate for two reasons. First, the existing conditions are heavily degraded with noxious weeds. An increase seeding rate will allow for better competition during the establishment period. Second, the seeding mechanism of utilizing a broadcast seeding tool (e.g belly hopper or ATV spreader) as opposed to a range drill require a denser coverage to make up for poorer seed to soil contact and consumption from wildlife. Utilizing a range drill is not an option for this project.

## Open Solicitation-2020 Spring Offering Eastern Oregon (Region 5)

**Application Number:** 221-5004-18953

**Project Type:** Restoration

**Project Name:** How Now Brown Cow

**Applicant:** Malheur WC

**Region:** Eastern Oregon

**County:** Malheur

**OWEB Request:** \$67,235

**Total Cost:** \$168,591

- 
- Application Description**
1. The How Now Brown Cow project is located approximately 6 miles west of Vale, along Bully Creek.
  2. Water quality improvement in the Malheur Basin is one of the top restoration priorities. Water quality improvement is achieved through on-farm irrigation infrastructure improvements and management. Malheur Watershed Council in cooperation with irrigation districts and private landowners have been systematically improving water quality through irrigation system conversions over the past 18 years across the Malheur Basin.
  3. The How Now Brown Cow project is the second phase in a three-phase project to convert 85 acres from flood to sprinkler irrigation. This proposal (phase II) will convert 30 acres from flood to sprinkler irrigation through the installation of 2 pivot systems, handlines, irripods, and related irrigation infrastructure. This project will also convert 7 acres from flood to gated pipe irrigation in irregular shaped fields the pivots do not cover.
  4. Project partners include Vale Irrigation District, landowner and Malheur Watershed Council.

### Review Team Evaluation

#### Strengths

- The project builds off phase one restoration completed with the same landowner and vendor.
- Bully Creek is identified as a significant source of sediment and bacteria, the proposed irrigation improvements will help reduce these pollutants from entering Bully Creek.
- Previous project evaluation concerns are addressed.
- The project will provide upland habitat benefits for wildlife during times of non-irrigation.
- There is a DEQ monitoring station located downstream of the project property that could provide data to quantify ecological outcomes resulting from irrigation improvements.

#### Concerns

- It is unclear why gated pipe was the chosen alternative to convert flood irrigation instead of sprinklers on the five acres located in the southeast portion of the project area without information describing whether other alternatives were evaluated.
- The applicant is encouraged to provide maps in future applications that show topography to illustrate the variance in slope and gradient given that these parameters provide context for understanding water flow and are the main drivers for prioritizing these types of water quality improvement projects.

## **Concluding Analysis**

The revised application provides clarity on the approach to irrigation improvements on Bully Creek. This project is part of a multi-phase approach to improve water quality in Bully Creek through a variety of irrigation improvements.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

7 of 11

## **Review Team Recommended Amount**

\$67,235

## **Review Team Conditions**

## **Staff Recommendation**

Staff Follow-Up to Review Team

## **Staff Recommendation**

Fund

## **Staff Recommended Amount**

\$67,235

## **Staff Conditions**

## Open Solicitation-2020 Spring Offering Eastern Oregon (Region 5)

**Application Number:** 221-5005-18973

**Project Type:** Restoration

**Project Name:** Birds Eye Water Quality Improvement

**Applicant:** Owyhee WC

**Region:** Eastern Oregon

**County:** Malheur

**OWEB Request:** \$36,224

**Total Cost:** \$53,319

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**Application Description** The Birds Eye Water Quality Improvement Project is located approximately 5 miles NW of Adrian on East Cow Hollow Creek. The project area consists of 20 pasture and hay acres currently irrigated with flood irrigation. The upper project area sits above East Cow Hollow Creek and has many steep slopes which direct irrigation tailwater containing sediment, nutrients and bacteria directly into East Cow Hollow Creek. Steep slopes combined with current flood irrigation methods are also causing severe erosion in multiple areas of the fields. East Cow Hollow Creek is a tributary to Cow Hollow Creek and the Lower Owyhee River. The proposed work includes converting 20 acres from flood to sprinkler irrigation through the installation of 1 wheelline, 7 big gun sprinklers on carts and all required pressurized conveyance infrastructure. Project partners include the landowner, Owyhee Irrigation District, Owyhee Watershed Council, and Romans Precision Irrigation.

### Review Team Evaluation

#### Strengths

- The project site has steep slopes and erodible soils. Current flood irrigation under these landscape conditions delivers pollutants into nearby East Cow Hollow creek. The irrigation improvements described in the application will significantly reduce this pollutant loading.
- The applicant has a proven track record implementing similar projects.
- Three bids from different vendors are included in the application demonstrating various options for the landowner and applicant to consider.

#### Concerns

- The status of current water rights and whether a water right transfer is necessary to implement the project is unclear from the application. Additional information would be helpful to better understand the design approach and implementation timeline to evaluate project likelihood for success.
- The pictures provided in the application for "Field #2" show dry, upland weed species and not productive, irrigated fields. It is unclear from these photos whether "Field 2" has a water right. The ecological benefit expected from the proposed project is unclear without information regarding the history of "Field #2", whether there is a water right for these acres, and where the water is sourced.
- A map showing all acres under irrigation would be helpful for understanding the project.

## **Concluding Analysis**

The proposed project will improve water quality through a variety of irrigation improvements. The irrigation conversion approach is appropriate and known to have beneficial impacts to water quality by limiting soil erosion. However, the project benefits for the cost is unclear without additional information to understand the value for implementing improvements on "Field #2". If the application is resubmitted, the applicant is encouraged to provide detailed maps with irrigated acres denoted by polygons and evidence there are current water rights for all acres proposed for irrigation.

### **Review Team Recommendation to Staff**

Do Not Fund

### **Review Team Priority**

### **Review Team Recommended Amount**

\$0

### **Review Team Conditions**

### **Staff Recommendation**

#### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Do Not Fund

### **Staff Recommended Amount**

\$0

### **Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Eastern Oregon (Region 5)

**Application Number:** 221-5006-19027

**Project Type:** Restoration

**Project Name:** Assisting in the Evolution of Summit Creek: Stage 0 Restoration

**Applicant:** Malheur WC

**Region:** Eastern Oregon

**County:** Grant

**OWEB Request:** \$173,160

**Total Cost:** \$318,360

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### Application Description

1) Project Location: Near the confluence of Summit Creek and the Malheur River. About 28 air miles to John Day.

2) Project Need: Three reaches of Summit Creek have been deemed impaired by Forest Service Aquatics specialists due to large sections of incised, single-thread channel, inadequate riparian vegetation and cover, and limited groundwater storage. The reaches of Summit Creek are critical habitat for Bull Trout and Redband Trout.

3) Proposed work: We are proposing to implement a Stage 0 restoration design to achieve maximum valley bottom connectivity and restore historic bed elevation where feasible along 1.5 miles of Summit Creek. Using LIDAR and GIS we have created a relative elevation model, which predicts the pre-disturbance base elevation of the valley bottom and identifies areas of channel incision. This model drives the design process and allows resource specialist to 'balance' the cut and fill material needed to restore an intact valley surface.

Fill material will be taken from abandoned constructed features, as well as natural areas of deposition and adjacent hillslopes, and staged adjacent to fill sites using heavy machinery. The "fill" sections of channel identified as no longer at historic (low valley) elevation will be filled with the staged material to as close to "zero" as possible. The filled channel will be compacted through heavy machinery traffic across the surface and large wood added as needed to prevent future erosion.

We estimate the total volume of earth moving will be about 15,000 cubic yards.

Approximately 650 pieces of large woody material will be acquired from within the valley bottom and on adjacent toe slopes, and placed in strategic areas for use as added roughness within the stream network.

This work will benefit about 47 acres of adjacent wet meadow and riparian areas.

4) Project partners include the Prairie City Ranger District USFS, Burns Paiute Tribe and the Malheur WSC.

### Review Team Evaluation

#### Strengths

- The application provides context for understanding why the stage 0 restoration approach is preferred and describes how lessons learned from similar projects were incorporated into the proposed project.
- The project was reviewed by a qualified USFS stream restoration team.
- The stage 0 approach is likely to improve stream temperatures by increasing hyporheic exchange, and will also expand wetted areas for meadow and riparian vegetation to establish.
- The planting approach is appropriate and includes an adaptive management strategy by limiting plantings to only some areas within the project site and monitoring natural regeneration in other areas as an experiment. Vegetation will be monitored in year one following project implementation to determine if additional plantings are needed if there is not an increase in natural regeneration of native plant communities.
- The project area supports a healthy population of Redband trout, and Bull trout have been seen directly upstream of the project area.
- The project cost is reasonable for the expected ecological benefit over a large-scale restoration footprint.

## **Concerns**

- It is unclear how the project footprint was delineated. Given that stage 0 projects are based on geomorphic processes, a better understanding of those processes and how the start and end points were determined to ensure success would be useful for the project review.
- It is unclear whether the project is ready to implement because it is currently not permitted. Additional information describing the expected permitting pathway would provide helpful context for determining the feasibility for securing permits for the proposed design approach.
- It is unclear from the application whether ODFW has been consulted regarding any potential fish passage permit requirements.
- The mobilization costs seem high compared to similar projects. Additional information on how this cost was estimated is needed to determine whether it is reasonable and necessary. For example, mobilization costs can be higher for specialized equipment or accessing remote project locations.
- The application lacks information describing how fish passage will be addressed during construction.
- It is unclear from the application whether the project approach includes consideration of likely impacts to the site and downstream areas during and after project implementation.

## **Concluding Analysis**

The proposed stage 0 restoration approach will likely improve aquatic habitat and wet meadow conditions. The project area provides important habitat to Redband and Bull trout and the project is a priority for the USFS. The restoration approach has proven to provide significant ecological value for the cost in certain landscapes. While the project could offer significant watershed health benefits, the application lacks technical details needed to evaluate whether the project is likely to succeed.

## **Review Team Recommendation to Staff**

Do Not Fund

## **Review Team Priority**



**Review Team Recommended Amount**

\$0

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Eastern Oregon (Region 5)

**Application Number:** 221-5007-18977

**Project Type:** Restoration

**Project Name:** Wrangling Horses

**Applicant:** Malheur SWCD

**Region:** Eastern Oregon

**County:** Malheur

**OWEB Request:** \$40,161

**Total Cost:** \$104,285

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**Application Description** 1) 8 miles west of Ontario located between Ontario and Vale in the NRCS Valley View Priority Area, which is encompassed by the Morgan Bench Priority Area. NRCS Valley View Priority Area fits inside the Morgan Bench FAAP of Oregon Department of Agriculture and Malheur SWCD. Malheur SWCD samples 4 drains in the Morgan Bench Priority Area with ODA .

2) Conversion of 31.5 acres from gated pipe (furrow) to sprinkler irrigation of farm 36 acres . Currently runoff contributes directly to increased sediment loads within the Malheur River, before ending up in the Snake River. The Snake River has a TMDL for sediment, phosphorus, and temperature. The Malheur River is also listed for temperature.

3) Wrangling Horses proposed project will implement 1 pivot system and keep the wheel line in the north west corner adjacent to the homesite that will cover 4.5 acres. This will convert his farm from furrow to sprinkler irrigation and improve water quality in the Malheur River. The Landowner will install 1- Pivot with 4 towers and a 23 feet overhang with an end gun to irrigate 31.5 acres. Contractor will install 500 feet of 6" 125 # PIP Pipe from his takeout point to the center of the pivot pad and 1 Cornell 2.5WH 715 HP 3 phase pump next to road with electrical panel. The contractor will bury 920 feet of electrical wire to a new power drop on Arabian Ave. NRCS, Owyhee Irrigation District will pipe the Arabian Lateral that runs through the landowner's place. As this open lateral divide his property in half, the landowner would have to bridge the lateral for the pivot to cross, as well as relocate a neighboring landowners weir box. The box is in the middle of the farm that would be moved up to delivery point where this project has a take out.

Adjacent to this project site is grant 220-5035 Horses on the Corner. This grant is also on the same lateral (Arabian Lateral) that will be piped next fall after irrigation season.

4) Landowner, NRCS, Owyhee Irrigation District.

### Review Team Evaluation

#### Strengths

- The application clearly describes appropriate methods, project objectives, and actions for meeting the objectives.
- The project will provide water quality benefits by implementing high priority irrigation improvements that eliminate irrigation run-off carrying sediment, nutrients, and bacteria to the Malheur and Snake Rivers.
- Maps included in the application provide context for understanding the project location in relation to water quality monitoring stations in the drain network, which eventually releases into the Malheur River.
- This project builds off previous restoration work, and is located in a priority area for NRCS, ODA, and DEQ.
- The applicant and partners have a proven track record implementing similar projects

### **Concerns**

- The application lacks details describing plans and funding for lateral piping.
- It is unclear whether future restoration measures will be taken to address the poor water quality noted in the application in reaches upstream of the project.

### **Concluding Analysis**

The project will improve water quality in a priority area by converting gated pipe to sprinkler irrigation. The applicant is encouraged to continue analyzing water quality data related to irrigation improvement projects in the Malheur basin to demonstrate water quality benefits from these types of OWEB investments.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

4 of 11

### **Review Team Recommended Amount**

\$40,161

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

**Staff Recommended Amount**

\$40,161

**Staff Conditions**

## Open Solicitation-2020 Spring Offering Eastern Oregon (Region 5)

**Application Number:** 221-5008-18979

**Project Type:** Restoration

**Project Name:** Mile and a Half From Nowhere  
Spring Development and Wet Meadow Protection

**Applicant:** Malheur WC

**Region:** Eastern Oregon

**County:** Malheur

**OWEB Request:** \$46,505

**Total Cost:** \$59,605

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### Application Description

- 1) Project Location: The project is 13 air miles from downtown Westfall near the North Fork of Indian Creek.
- 2) Project Need:/Watershed Issues: Livestock are congregating around wet meadows , trampling the area and degrading the vegetation. This is causing water quality problems (sedimentation, contamination by animal waste) and degrades sage grouse brood rearing habitat. (The project area is within ODFW designated High Density Core Sage Grouse habitat.) This proposed project complements previous conservation efforts. Juniper surrounding the wet meadow was cut a few years ago to improve conditions for the grouse.
- 3) Proposed work: We are proposing to fence 12.5 acres of wet meadow using 6,000 feet of NRCS specified Wildlife Friendly Fencing methods and anti-strike markers. We will develop two springs, install a 1,200 gallon storage tank to ensure water supply during the hottest months, bury 4,500 feet of 2-inch pipe at least 30 inches deep to deliver water to four 1,000 gallon tire troughs.
- 4) Project partners: Becker Ranch, RSI Engineering and the Malheur WSC.

### Review Team Evaluation

#### Strengths

- The application clearly describes appropriate methods to enhance meadow conditions, including fencing and off-site watering to prevent livestock access to the stream.
- The project provides an opportunity to work with a new landowner, which could catalyze future restoration opportunities on the property to improve wet meadow habitat and water quality.
- Enhancing wet meadows could provide enhanced summer brood rearing opportunities for sage grouse inhabiting adjacent upland areas.

## Concerns

- The designs provided in the application are conceptual and final designs could lead to budget revisions. Complete engineering details regarding the pipeline, wells, and water storage would be helpful for evaluating whether costs are reasonable and sufficient to implement the project
- It is not clear why Crested wheatgrass was chosen for seeding over the pipeline ditch and whether alternative grass species were considered.
- It is unclear from the application whether the water storage tank size is large enough to accommodate the livestock herd size. Additional information describing the water demand and supply is needed to determine whether water storage is sufficient to achieve project goals and objectives for grazing management.
- The spring output of 20 gallons per minute seems high for the project geography. Additional information on how this rate was determined would provide helpful context for understanding the water supply.

## Concluding Analysis

The project provides a new opportunity to enhance resources in the upper reaches of Indian Creek, a tributary to Bully Creek. The project is located in ODFW designated High Density Core habitat for sage grouse. The applicant is encouraged to work closely with this new landowner to develop a grazing management plan prior to project implementation to ensure water storage specifications are accurate.

### Review Team Recommendation to Staff

Fund

### Review Team Priority

5 of 11

### Review Team Recommended Amount

\$46,505

### Review Team Conditions

### Staff Recommendation

Staff Follow-Up to Review Team

### Staff Recommendation

Fund

### Staff Recommended Amount

\$46,505

## Staff Conditions

## Open Solicitation-2020 Spring Offering Eastern Oregon (Region 5)

**Application Number:** 221-5009-18948

**Project Type:** Restoration

**Project Name:** Cusick Creek Restoration Phase  
II: The Restoration Continues

**Applicant:** Powder Basin WC

**Region:** Eastern Oregon

**County:** Union

**OWEB Request:** \$188,531

**Total Cost:** \$392,114

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### Application Description

1) Cusick Creek is located approx 30 miles North of Baker City and approx 10 miles from North Powder. The Cusick Creek watershed drains approximately 14 square miles and flows into Thief Valley Reservoir on the Powder River. 2) The upper reaches (~6,000 feet stream length) of Cusick Creek are confined to a moderately narrow canyon and due to past land management practices has become more incised with moderate to severe bank erosion. Fish habitat and the properly functioning condition of the stream have been greatly compromised in these reaches. The lower reach has been restored to a functioning stream. 3) We are proposing to:

- Pull the banks back at 11 locations to a stable 3:1 ratio.
- Protect the toe of pulled back banks with: o 27 whole tree logs and o 31 (3'x3'x3') ballast rocks
- o 200 willow clump plantings behind the revetments/rootwad
- Re-direct the thalweg away from vulnerable banks
- o Install 17 VPS J-hook
- o Install 22 rootwads
- Increase flood plain capture/create new wet meadow habitat
- Install 28 Vertical Post Structures to: o slow water and spread it out onto the flood plain
- o capture fine sediments and enable it to be deposited on the flood plain
- Remove 1,300 feet of road that is impinging on the flood plain. Re-locate the road to an uphill site.
- Grade 11 areas along 3,003 linear feet (total of about 1 acre) to increase flood plain connection by removing about 4-6 inches of topsoil above ordinary high-water mark. Selected areas will not impact existing sedge/rush mats
- Plant 4,000 willow cuttings in trenches where pull backs/riparian cuts occur
- Plant 500 willow whips as part of the VPS and VPS J-Hook Barbs
- Plant the bank pull backs with cottonwood, aspen, alder, current, rose and dogwood. All plantings will be caged
- Rehabilitate approximately 1,000 feet of the old ditch to create a grassed swale

4) Partners are the Powder WSC, Diebel Contracting LLC, RSI engineering, NRCS, and the land owners Bruce and Carol Hummel.

### Review Team Evaluation

#### Strengths

- The link to drone footage provided in the application is helpful to better understand the scope of the project.
- The application clearly describes appropriate methods and actions to achieve project goals and objectives.
- The proposed work will improve water quality by reducing sediment input into Cusick Creek and increase riparian and wet meadow habitat for numerous native species, including sage grouse.
- Installing multiple upland water sources will draw livestock away from the riparian area.



- The proposed project builds on restoration completed during the previous phase one project.
- The landowner is enrolling in CREP, which will exclude livestock from a portion of the creek reach.
- The landowners are actively engaged in restoration.
- The project budget is reasonable for the proposed work.
- The design team has a proven track record implementing similar restoration projects.

### **Concerns**

- More detail on the map showing landscape-scale restoration efforts would provide helpful context to understand the proposed project and determine the overall likelihood of success.
- The application lacks information needed to determine whether the design approach will move enough cattle out of the riparian area to result in improved water quality.
- It is unclear whether the upland water sources will be sufficient to exclude livestock from the lower riparian and meadow areas. Additional information on the costs and design approach, including the location of the cross fences in the upland pasture units, is needed to understand proposed actions to achieve grazing management project objectives.
- Additional information on the swale design is needed to understand the expected watershed benefits for this project objective.

### **Concluding Analysis**

Previous restoration projects on the project property show some emerging ecological benefit in both increased riparian vegetation and reduced erosion. The proposed project builds on previous efforts and will provide ecological benefits at a reasonable cost.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

10 of 11

### **Review Team Recommended Amount**

\$188,531

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$188,531

**Staff Conditions**

## Open Solicitation-2020 Spring Offering Eastern Oregon (Region 5)

**Application Number:** 221-5010-18871

**Project Type:** Restoration

**Project Name:** Restoring The Powder

**Applicant:** Keating SWCD

**Region:** Eastern Oregon

**County:** Baker

**OWEB Request:** \$65,806

**Total Cost:** \$115,254

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### Application Description

Located within the Keating Soil and Water Conservation District near Keating, Oregon, the Restoring the Powder project will address 1,400 feet of severely eroded bank on the Powder River. The erosion and revegetation occurring on the Powder River spans the entire 1.5 mile reach of the landowner's property. This has left river banks unanchored and unstable contributing large amounts of sediment each year through the lateral movement of the banks. LiDAR has shown that within the past 2.5 years, approximately 15 feet of bank erosion has occurred at the project site making it difficult for large riparian vegetation to become established; riparian vegetation is essential in providing long term bank stability and shading. The erosion occurring at the project site contributes sediment and debris into the Powder River in addition to preventing vegetation growth along the banks on the Powder River. This project aims to address these issues by strategically placing large trees, rootwads and willow whips at the location of highest erosion site #1 and site #2 totaling 1,400 feet of bank stabilization. The entire 1.5 mile reach of the Powder River will be fenced and excluded from livestock grazing with a 50 foot buffer on both sides of the stream. A 60% design has already been completed and provided to the Keating SWCD from Idaho Power Company (IPC). The provided 60% project design and proposed project match will be made possible through IPC's Snake River Stewardship Program (SRSP) to help reduce stream temperatures below Hells Canyon Dam. After this project has been completed in its entirety, including the bank restoration and riparian fence installation, through SRSP the landowner and IPC will install 400 trees per acre as well as 1,000 shrubs per acre in the newly created riparian area to provide future bank stabilization as well as reducing the future stream temperatures in the Powder River Watershed. Project partners include IPC, Keating SWCD and the landowner's.

### Review Team Evaluation

#### Strengths

- The landowner agreements included in the application indicate the project is ready for implementation.
- The application clearly describes restoration objectives and actions to address erosion, including exclusion fencing and riparian planting.
- There is minimal vegetation on the streambanks, fencing the riparian area to exclude livestock will give the streambanks a chance to recover.
- The partnership with Idaho Power increases the likelihood for the project to result in significant ecological benefit because it provides for the development of a grazing plan and a planting protocol with three years of irrigation to maintain plants.

- The project builds on other restoration efforts underway in the area.
- The project site is located within an ODA SIA, is adjacent to the local NRCS Focus Area, and is located in the Baker Sage Grouse PAC.
- The proposed actions will address water quality concerns, including phosphorus and bacteria.
- The project provides an opportunity to work with a landowner that is new to restoration and committed to see improvements along the Powder River.
- The project is a reasonable investment for achieving high ecological benefit.

### **Concerns**

- The benefits from the proposed water quality improvements may be limited by the fencing approach allowing cattle to continue accessing the oxbows in the stream.
- It is unclear from the application and project designs whether the water gaps will include rocking to prevent further impacts from sedimentation.

### **Concluding Analysis**

The Powder River in the project reach has extreme erosion and very little vegetation, leading to high levels of sediment inputs into the river. The project, with a new landowner, offers an opportunity for leading to similar projects that will multiply the ecological benefits from increased riparian vegetation and clean water.

### **Review Team Recommendation to Staff**

Fund with Conditions

### **Review Team Priority**

2 of 11

### **Review Team Recommended Amount**

\$65,806

### **Review Team Conditions**

Add rocking the three water gaps for the livestock stream crossings to mitigate further sedimentation of the stream.

### **Staff Recommendation**

**Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund with Conditions

**Staff Recommended Amount**

\$65,806

**Staff Conditions**

Add rocking the three water gaps for the livestock stream crossings to mitigate further sedimentation of the stream.

## Open Solicitation-2020 Spring Offering Eastern Oregon (Region 5)

**Application Number:** 221-5011-18870

**Project Type:** Restoration

**Project Name:** New Barn Irrigation

**Applicant:** Eagle Valley SWCD

**Region:** Eastern Oregon

**County:** Baker

**OWEB Request:** \$53,659

**Total Cost:** \$94,759

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### Application Description

Located within the Eagle Valley Soil and Water Conservation District, near Richland Oregon the New Barn Irrigation project will address 36 acres of flood irrigated hay and pasture ground. Sourced from the crisp waters of Eagle Creek, the Waterbury ditch transports irrigation water to the project site where it is then diverted into a series of earthen ditches that flood irrigate the property. As flood irrigation is “pushed” across the field it collects sediment, debris, organic and inorganic material adding it to the Powder River Watershed. In addition, flood irrigation requires more water than what is necessary to refill the soil profile in comparison to a pivot system that allows the landowner to apply water only when and where it is needed. The completion of this project will convert 36 acres from flood irrigation to sprinkler irrigation under the installation of one center pivot. Project partners include the landowner and Eagle Valley SWCD.

### Review Team Evaluation

#### Strengths

- Converting from flood to a pivot irrigation delivery system will provide benefits by reducing tail water contaminants into the Powder River and potentially leaving more water in Eagle Creek by increasing irrigation efficiency.
- The project site is located near the Powder River, which is on the TMDL list of water quality impaired waterbodies for temperature, phosphorus, and bacteria.
- The project property has an older 1891 water right.
- The project builds on the momentum from other restoration projects in the project area.
- The landowner is proactively working with OWRD and open to trying new technology. This landowner could serve as a resource for outreach to the community about ways to improve water quality through irrigation efficiency projects.
- The applicant has a proven track record for implementing similar projects.

#### Concerns

- Including a topographic map in the application would provide helpful context for understanding how steep and erodible the landscape is in the project area, and why the proposed irrigation conversion is a priority for protecting water quality.

## **Concluding Analysis**

The number of irrigation efficiency projects are increasing in the Powder Basin area. Working with landowners to convert irrigation delivery systems continues to be an effective outreach tool for recruiting additional projects that can significantly improve water quality.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

8 of 11

### **Review Team Recommended Amount**

\$53,659

### **Review Team Conditions**

### **Staff Recommendation**

#### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$53,659

### **Staff Conditions**

# Open Solicitation-2020 Spring Offering

## Eastern Oregon (Region 5)

**Application Number:** 221-5012-19039

**Project Type:** Restoration

**Project Name:** Lostine Wetland and Side Channel Complex

**Applicant:** Nez Perce Tribe

**Region:** Eastern Oregon

**County:** Wallowa

**OWEB Request:** \$149,460

**Total Cost:** \$446,059

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### Application Description

The Lostine River is a tributary to the Wallowa River entering at River Mile (RM) 26. The project site is located just less than 2 miles southeast of Wallowa, Oregon on a private ranch that encompasses approximately 6,000 feet of the Lostine River and an estimated 1,500 feet of the Wallowa River and the associated left bank floodplain of both rivers. Like many rivers in the region, the Lostine River has been channelized and leveed to accommodate agricultural and residential infrastructure. At this site, past modifications and land use management activities have included levee construction, floodplain grading, cattle grazing, irrigation development and riparian clearing. Consequently, this has resulted in ecosystem-scale degradation, which includes a simplified river channel, disconnected floodplain, narrowed riparian extent, reduction of off-channel rearing areas and reduced wetland area and function. This project seeks to promote natural river and floodplain conditions by removing levees; reconnecting floodplain channels; and enhancing floodplain wetlands. Key site features will improve habitat and water quality including increased pool abundance; increased low-velocity off-channel alcoves and side channels; increased Large Woody Material (LWM) for mainstem habitat complexity; and a diverse mosaic of floodplain wetlands. These proposed enhancements will benefit existing populations of ESA listed Chinook, Steelhead, and Bull Trout, as well as reintroduced Coho Salmon, Pacific Lamprey, and a variety of other aquatic and terrestrial species. Project partners include the Grande Ronde Model Watershed, Wallowa Land Trust and BPA.

### Review Team Evaluation

#### Strengths

- The proposed restoration actions are likely to result in a diversity of ecological benefits.
- The project builds on an OWEB funded technical assistance grant for the project design.
- The project will multiply benefits realized by prior restoration projects completed on the Lostine River.
- The proposed restoration will improve stream habitat for a number of ESA-listed species, including both fish and amphibians.
- The project is supported by a diversity of partners.

#### Concerns

- Specific design details are needed to understand complex instream projects. The application lacks



project designs needed to evaluate the technical soundness of the design approach and the likelihood of success in achieving the expected ecological impact.

### **Concluding Analysis**

There has been significant investment in restoration along the Lostine River, and the proposed project is likely to provide additional ecological benefits. If the project is resubmitted, the applicant is encouraged to include project designs once completed through the OWEB technical assistance grant.

### **Review Team Recommendation to Staff**

Do Not Fund

### **Review Team Priority**

### **Review Team Recommended Amount**

\$0

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

### **Staff Recommended Amount**

\$0

### **Staff Conditions**

## Open Solicitation-2020 Spring Offering Eastern Oregon (Region 5)

**Application Number:** 221-5013-19023

**Project Type:** Restoration

**Project Name:** Imnaha River Watershed Integrated  
Noxious Weed Management

**Applicant:** Wallowa Resources

**Region:** Eastern Oregon

**County:** Wallowa

**OWEB Request:** \$47,567

**Total Cost:** \$87,851

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### Application Description

The Wallowa Canyonlands Partnership (WCP) is a cooperative weed management area that works with state, federal, and private entities in Northeast Oregon. This project focuses on the Imnaha River watershed, an important salmonid stream surrounded by vast and rugged canyon grasslands. The riparian and uplands grassland habitats found in the Imnaha watershed are home to rare species such as Spalding's catchfly and MacFarlane's Four-O-Clock, and support a vast array of birds and mammals as well as economic livelihoods such as ranching and recreation. Noxious weeds threaten the unique habitats found in the Imnaha country. We have worked with private landowners and the Forest Service in this area for 15 years, and while funding has fluctuated during this time, the COVID-19 crisis, unlike any other fluctuation, will significantly impact our years of effort. Some noxious weeds produce so much seed that even a year of rest will greatly increase the infestation. In this project we are targeting species listed as high priority "A" and "T" in Wallowa County- such as common bugloss and rush skeletonweed, but we are also targeting two species that are of great concern to the area. Perennial pepperweed, widespread in much of Oregon, is found in only a few spots on the Lower Imnaha. Turkish thistle is a new plant species in North America and is currently found only in the Imnaha and Snake River canyons. If funded, we intend to a) reduce populations of high priority weeds in the entire Imnaha drainage, b) eradicate perennial pepperweed from the Imnaha drainage and c) conduct intense surveys for Turkish thistle, and eradicating any individuals we find. Without support from OWEB, and due to the lack of Oregon State Weed Board funding for 2021, this project would not happen. Our partners include private landowners with whom we've worked for 15 years, Wallowa-Whitman National Forest, Wallowa County Vegetation Department, and Oregon Department of Agriculture.

### Review Team Evaluation

#### Strengths

- Previous project evaluation concerns are addressed by focusing work on a priority area, providing a monitoring protocol, and describing how cost per acre is estimated for the project.
- The application has a detailed description on how the weed inventory is managed.
- The treatment methodologies are appropriate for the types of weeds in the Imnaha River watershed.
- Early action to address Turkish thistle outbreaks could prevent a larger infestation that would be difficult and costly to control.
- Multiple partners and landowners continue to support and be involved in weed reduction efforts.

- The project will fund ongoing capacity to continue weed inventory and control necessary for early tracking and action to address weed populations.

## **Concerns**

- The seed mix that will be used to revegetate treated areas includes Sheep fescue, which has a tendency to outcompete native plant species and form a dominant monoculture.

## **Concluding Analysis**

The Imnaha River watershed is host to several rare plant species, and provides important habitat to wildlife in a challenging and rough terrain. This project continues the collaborative work to reduce target weeds in the Wallowa basin. After 15 years of work, improvements to treatment techniques and monitoring have shown positive results. Tackling early detection and eradication of both Turkish thistle and perennial pepperweed is critical to keeping these weeds out of the watershed. Once established, these weeds will be costly to treat and control to prevent future spreading.

## **Review Team Recommendation to Staff**

Fund with Conditions

## **Review Team Priority**

3 of 11

## **Review Team Recommended Amount**

\$47,567

## **Review Team Conditions**

Remove Sheep fescue from the seed mix. Consult with NRCS to replace with a more suitable variety.

## **Staff Recommendation**

### **Staff Follow-Up to Review Team**

## **Staff Recommendation**

Fund with Conditions

## **Staff Recommended Amount**

\$47,567

## **Staff Conditions**

Remove Sheep fescue from the seed mix. Consult with NRCS to replace with a more suitable variety.

# Open Solicitation-2020 Spring Offering

## Eastern Oregon (Region 5)

**Application Number:** 221-5014-19003

**Project Type:** Restoration

**Project Name:** Pine Creek Fish Habitat Enhancement

**Applicant:** Powder Basin WC

**Region:** Eastern Oregon

**County:** Baker

**OWEB Request:** \$37,634

**Total Cost:** \$47,584

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### Application Description

This project is located on the Corrigan property within and adjacent to Pine Creek, approximately six miles upstream from the town of Halfway, OR in the eastern portion of Baker County. Pine Creek has been the focus of attention for fish recovery during the past decade due to efforts by Idaho Power Co. to re-establish migratory bull trout from the current population that resides high in the headwaters of Pine Creek year-round. In addition, redband trout, which are considered a species of concern in Oregon, reside throughout the Pine Creek system year-round. In 2010, Pine Creek experienced a 30-year flood event, which highlighted to many landowners the poor health that the system is in. Because of this, landowners have been interested in working with us to improve function of the watershed. The goal of this project is to enhance fish habitat, while addressing the concerns of landowners regarding damage from past and future flooding. By using engineered log structures to deflect high flows and stabilize approximately 220 feet of eroding banks, there will be multiple benefits to Pine Creek. These include reduced sediment inputs, increased shade to lower water temperatures, more overhanging vegetation to provide hiding cover for fish and an increase in the diversity of fish habitats through pool formation and establishment of backwater. Partners on this project include the landowner, who is providing logs from her property and several private foundations who have been solicited for partial funding.

### Review Team Evaluation

#### Strengths

- The project will increase stream habitat and cover for fish by installing engineered log structures.
- Bioengineered bank stabilization will help reduce sediment loading into Pine Creek during high flows.
- The design team has a history of bringing a technically sound approach to instream restoration.
- The project is a result of an OWEB funded technical assistance grant.

#### Concerns

- It is unclear whether the proposed planting approach can be effective without details describing plans for excluding or managing livestock in the project site, such as using riparian fencing, to ensure livestock will not impact planted areas. Restoring streamside native vegetation is necessary to support the long-term integrity of the stream structures.

- Including details in the application that describe grazing management strategies would provide information needed to understand plans for long-term stewardship to sustain the restoration investment.
- It is unclear from the application whether the logs and rootwads offered by the landowner for the engineered log structures will be sourced from the adjacent riparian area, which would reduce riparian shade.
- Capacity of the applicant is uncertain due to recent staff turnover.

### **Concluding Analysis**

Pine Creek has experienced several recent high flow events that impacted the stream and adjacent landowner infrastructure. The project has potential for improving conditions on Pine Creek, however, additional information describing future livestock management plans on the property is needed to determine the likelihood of success for achieving expected ecological benefits for the investment.

### **Review Team Recommendation to Staff**

Do Not Fund

### **Review Team Priority**

### **Review Team Recommended Amount**

\$0

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

### **Staff Recommended Amount**

\$0

### **Staff Conditions**

# Open Solicitation-2020 Spring Offering

## Eastern Oregon (Region 5)

**Application Number:** 221-5015-18991

**Project Type:** Restoration

**Project Name:** Tarter Slough Fish Passage and Screening Project

**Applicant:** Eagle Valley SWCD

**Region:** Eastern Oregon

**County:** Baker

**OWEB Request:** \$112,051

**Total Cost:** \$479,441

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### Application Description

1) Located in Eastern Oregon, Pine Creek originates in the Eagle Cap Wilderness, flows south to agricultural land surrounding the city of Halfway, and then flows east/northeast for about 20 miles into Hells Canyon Reservoir on the Snake River just downstream of Oxbow Dam. The project is located on Pine Creek at the takeoff location for Tarter Slough, 4 miles N-NW of Halfway. 2) The previous diversion structure was destroyed during a high flow event in 2010. The ditch users re-established grade control using concrete highway barriers and large boulders and the current configuration produces a significant fish passage barrier in designated critical habitat for Bull Trout. There are two proximate areas of significant bank erosion and the diversion is not screened. 3) This project proposes to replace the existing diversion structure with a fish friendly rock riffle secured with an embedded channel spanning concrete wall with headgate control. A 15 CFS rotary drum fish screen will be installed to prevent fish entrainment in the ditch. Two areas of bank erosion will be stabilized with engineered log jams and bank structures. 4) This project is a joint effort between the Eagle Valley SWCD and Idaho Power Company (IPC) with additional assistance provided by Oregon Water Resources Department (OWRD), U.S. Fish and Wildlife Service (USFWS), and Trout Unlimited (TU). The project has full participation from landowners and ditch users with 16 signatures on landowner agreement (attached).

### Review Team Evaluation

#### Strengths

- The application provides a clear, appropriate plan for restoration; and the design approach is technically sound for the site conditions to sustain fish passage and mitigate possible streambed scour.
- Multiple design alternatives were evaluated.
- The ODFW fish passage coordinator has visited the site and provided feedback on initial design concerns.
- Partners with the appropriate technical expertise are involved in the project.
- The water diversion is the highest priority barrier on Pine Creek, addressing fish passage will improve Bull trout migration.
- The largest population of Bull trout in Pine Creek is located upstream of the project site. The proposed restoration will benefit both Bull trout and Redband trout.
- The design team has a proven track record for implementing similar projects.
- The project includes a fish screen to eliminate fish entrapment in the irrigation ditch.

## Concerns

- There are no significant concerns.

## Concluding Analysis

Pine Creek is a flashy, erosive stream that challenges landowners living streamside by impacting infrastructure, which can also affect fish passage and habitat conditions. The proposed project will remove the highest priority barrier to Bull trout in the Pine Creek watershed. The project will meet both ecological and landowner objectives by incorporating bioengineered bank stabilization with instream habitat structures.

## Review Team Recommendation to Staff

Fund with Conditions

## Review Team Priority

1 of 11

## Review Team Recommended Amount

\$112,051

## Review Team Conditions

## Staff Recommendation

### Staff Follow-Up to Review Team

## Staff Recommendation

Fund with Conditions

## Staff Recommended Amount

\$112,051

## Staff Conditions

As a condition of the grant agreement, a water measuring device will be installed as described and required in the Tarter Slough Fish Passage/Screening Project Agreement signed by participating landowners, Idaho Power Company, and ditch users [page 1, bullet 2, sub-bullet 5 of the project agreement] uploaded as a component of the OWEB grant application.





## Open Solicitation-2020 Spring Offering Eastern Oregon (Region 5)

**Application Number:** 221-5016-18971

**Project Type:** Technical Assistance

**Project Name:** Creating Habitat in the Southside  
Neighborhood of the Malheur: Technical Assistance

**Applicant:** Malheur WC

**Region:** Eastern Oregon

**County:** Malheur

**OWEB Request:** \$38,352

**Total Cost:** \$55,952

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### Application Description

1) Location: Malheur River. River Mile 55. 1 3/4 air miles to downtown Harper.

2) Several banks in the project reach are 8-10 feet high and unstable. The channel is migrating several feet at a time with each high flow event. The 2017 spring runoff was particularly damaging. There was a record amount of snow fall in 2016-17, which lead to record high levels of run-off.

Riparian vegetation is inadequate along most the project reach and the aquatic habitat is is very simple, no pools, hiding cover or woody debris. The river does not meet water quality standards for temperature, sediment and nutrients. Invasive species such as Russian Olive is encroaching everywhere.

The owner is interested in controlling weeds and improving wildlife habitat along the 1.45 mile reach. Right now much of the non-crop area is a weedy waste land. Weeds include whitetop, thistle, bind weed and many other species.

3) We are applying for funds to hire an engineer to complete a survey, hydrologic analysis, develop alternatives, and to develop a 60% design from the selected alternatives. Although the owners of the north side of the river are not interested in participating in this project, the final design will take into account conditions on that side of the river that may have an effect on the subject property.

In addition to the stream habitat work, we will develop a plan for controlling weeds, and planting desirable riparian vegetation that will attract all forms of wildlife, including the Monarch Butterfly.

The butterfly is in trouble. According to the Xerces Society (2018) the number of monarchs has declined by 95% in North America since the 1980s. Their risk of extinction is between 72 and 86% (Shultz et al., 2017). According to the USFWS' Monarch Mapper the insect does frequent

the area.

4) Partners are the landowner, Malheur WSC, RSI engineering, and design reviewers.

## **Review Team Evaluation**

### **Strengths**

- The applicant addressed previous review comments, including re-evaluating the site's potential by incorporating a larger footprint, and addressing concerns around livestock grazing management.
- The incorporation of Monarch butterfly habitat into the project design elements adds ecological value.
- The design process includes multiple opportunities for review by the landowners and agency partners, resulting in a 60% design.
- The project's technical review committee (DEQ, NRCS, and ODFW) includes the appropriate expertise given the goals of the project.
- The selected engineer has designed similar projects in this geography and has the confidence of landowners and agency partners.

### **Concerns**

- The property owner to the north on the opposite side of the river is not participating at this time, which could limit future restoration opportunities.
- The floodplain reconnection opportunity is limited given the lack of participation of the landowner to the north, creating design challenges and potentially limiting the range of design alternatives.

## **Concluding Analysis**

This project is located along 1.5 miles of the Malheur River, providing considerable opportunity for habitat improvements. The drone imagery and video links were extremely helpful in understanding the project's context within the surrounding landscape. Restoration along only one side of the river has its limitations and carries potential risk to successful restoration. The applicant is encouraged to engage with the landowner to the north to gain support for this project.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

3 of 3

## **Review Team Recommended Amount**

\$38,352

## **Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Do Not Fund

**Staff Recommended Amount**  
\$0

**Staff Conditions**

Falls below staff-recommended funding line.

## Open Solicitation-2020 Spring Offering

### Eastern Oregon (Region 5)

**Application Number:** 221-5017-18997

**Project Type:** Technical Assistance

**Project Name:** Addressing The Gaps in Sage-Grouse Habitat

**Applicant:** Harney SWCD

**Region:** Eastern Oregon

**County:** Harney

**OWEB Request:** \$74,876

**Total Cost:** \$105,168

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**Application Description** 1) The project location is within Harney County and is focused on Greater sage-grouse habitat restoration outside of the current Focused Investment Partnership (FIP) areas. It is comprised of multiple private properties which border federally owned lands. These properties have signed letters of intent to enroll in the Harney Greater Sage-Grouse CCAA, or are currently enrolled in a CCAA.

2) Harney county landowners have been waiting since 2014 to have their Site Specific Plans developed in order to be enrolled in the Greater Sage-Grouse CCAA. The limiting factor is lack of funding outside of the FIP boundaries. Another restricting element is the lengthy process that exists for CCAA, Site Specific Plan (SSP), development. Additional capacity is needed in order to complete SSP's in a timely manner. CCAA's are the keystone for landowners to obtain needed financial support for conservation measure implementation. The most limiting factor is that HSWCD lacks the resources to fund the positions that will inventory land, consult with landowners, and write the many SSPs for private landowners to enroll in the programmatic CCAA. HSWCD seeks to obtain funding for one existing CCAA Coordinator/Rangeland Specialist and one additional CCAA Planner/Rangeland Specialist to continue developing SSPs that will expand sage grouse habitat conservation efforts.

3) HSWCD employees will work with participating landowners to develop an individual Site Specific Plan that is intended to promote good land stewardship and sage grouse survival. Within the grant time frame, these employees will work with landowners and other partners to gather data, develop maps, write plans, plan treatments, and manage CCAA's. The primary sage-steppe ecosystem threats being addressed are juniper encroachment, annual grass invasion and wildfire.

4.) Harney County Landowners, USFWS, BLM, ODFW, ODA and NRCS will assist as partners.

### Review Team Evaluation

#### Strengths

- This project's geographic focus is carefully crafted based on consultations with ODFW and BLM while building connectivity between two sage-grouse PAC's (Drewsey and Burns). This allows the applicant to build on existing efforts and fill necessary gaps in planning.

- The applicant has demonstrated success in developing high quality, well-written Site Specific Plans (SSPs) to facilitate conservation actions aiding habitat enhancement for sage-grouse.
- The SSPs to be developed under this proposal are working with landowners who have already signed onto a CCAA, making this project ready to implement.
- A database is currently being developed amongst partners and will be utilized for the data storage and analysis, allowing for consistency in data collection and sharing.

### **Concerns**

- It is unclear whether the new landowners are located within the highest priority areas for sage-grouse conservation. The scale of the maps provided is too coarse to discern this level of detail.

### **Concluding Analysis**

The applicant continues efforts in sage-grouse conservation by proposing more SSP development in sage-grouse habitat, fulfilling landowners' obligations under signed CCAAs. The applicant is highly skilled and proficient in understanding the necessary field parameters to characterize resource concerns and opportunities. This project has the benefit of local steering committees to help build local confidence and prioritize restoration actions for habitat recovery.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

2 of 3

### **Review Team Recommended Amount**

\$74,876

### **Review Team Conditions**

### **Staff Recommendation**

**Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$74,876

## **Staff Conditions**

## Open Solicitation-2020 Spring Offering Eastern Oregon (Region 5)

**Application Number:** 221-5019-18745

**Project Type:** Technical Assistance

**Project Name:** Silvies River Watershed Riparian Assessment Resubmit

**Applicant:** Harney County Watershed Council

**Region:** Eastern Oregon

**County:** Harney

**OWEB Request:** \$21,670

**Total Cost:** \$29,670

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**Application Description** The purpose of the technical assistance is to provide dedicated staff to compile existing agency and private landowner information on riparian conditions for the purpose of providing a uniform assessment of conditions across the Silvies River watershed using existing assessments of approximately 200 miles of stream using different methods. There has been significant discussion among the public agencies and private landowners about current evaluations and a Calibration Group made up of Bureau of Land Management (BLM), U.S. Forest Service(USFS), Oregon State University Extension Service Rangeland Specialist (OSU) and Harney Soil and Water Conservation District (SWCD) riparian specialists have developed a method to use different forms of information to provide a common evaluation of riparian conditions as it affects water resource conditions. The evaluation will use existing photographic records and other common data that can be applied to a basin wide evaluation where information exists. This effort will provide a test of a uniform evaluation usable to identify restoration opportunities and management options. Project partners include OSU Extension, USFS, BLM, ODFW, Harney SWCD and private landowners as they are willing to share information.

The primary purpose of the project is to compile information from existing assessments to be used to develop a common understanding of riparian conditions that could affect water resource planning.

### Review Team Evaluation

#### Strengths

- The resubmitted application adequately addressed previous concerns around clarity of proposed methodologies.
- Permission has been obtained to assemble photographic images of riparian areas from federal and state partners working in the Silvies River watershed.
- The proposed streamlined protocol has been successful at a smaller scale; this application seeks to expand to cover a much broader landscape.
- The applicant is working with the OWRD Place Based Planning group, along with engaging the appropriate partners for the project.



## Concerns

- It is unclear how the resulting characterization of the resource conditions will be described based on the scope and scale of this proposal.
- The date range of the images proposed for analysis date back to 2006. It is likely that resource conditions have changed in some areas of the project footprint. Proposal clarity would have been improved by including site reconnaissance in areas of known change (e.g. wildfire areas, land use changes) to reflect current conditions.
- The acquisition of images on private lands is not well articulated. The application discusses working with the local SWCD, but does not describe the pathway to access images from private lands nor any private landowner engagement to collect photos.
- The scale of the data collection described may be too large based on the budget provided. The application budget is in lump sums, making it challenging to understand the costs of the various activities in the proposal.
- Given the scope, scale, and complexity of interpreting images, it is advisable to include peer review from local partners.

## Concluding Analysis

This project presents an opportunity to assemble images of riparian areas from a variety of federal and state entities to build an extensive database and clearinghouse for conservation planning. The pathway to on-the-ground conservation was not well articulated. While images can depict riparian conditions fairly well, conditions can change due to natural and un-natural disturbances. The scale of this project is ambitious and it is unclear whether the proposed deliverables can be achieved.

## Review Team Recommendation to Staff

Do Not Fund

## Review Team Priority

## Review Team Recommended Amount

\$0

## Review Team Conditions

## Staff Recommendation

## Staff Follow-Up to Review Team

## Staff Recommendation

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Eastern Oregon (Region 5)

**Application Number:** 221-5020-19030

**Project Type:** Technical Assistance

**Project Name:** Gone to Lek and back monitoring

**Applicant:** Malheur SWCD

**Region:** Eastern Oregon

**County:** Malheur

**OWEB Request:** \$74,717

**Total Cost:** \$93,592

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**Application Description** 1)The new area that the Rangeland Specialists will be working on the map uses the red outline. The working area uses Hwy. 20 as the Northern border and Hwy 95 as the Southern border. The county line serves as the borders for the East and West sides. With the exception of the Northeast corner which is bordered by Hwy 201.

2) Malheur SWCD hired a new Rangeland Specialist in July 2019 to replace an employee who resigned to work on his family ranch. At that time grant 218-8203-16863 Lending a Helping Hand only had funds for one employee. With our new hire, the SWCD has two Rangeland Specialists that will work on development of four SSP plans outside the current FIP area as well as continue to work with landowners in the new FIP area. The entire area totals 2,539,059 acres and contains 863,400 acres of PPH, 1,303,340 acres of PGH, and 372,318 of non- acres . This grant will cover over 134,267 acres and over 50 miles of stream and effect 5 pacs . By developing SSP's and implementing projects to control invasive vegetation and juniper, this will implement large expanses of landscape conducive to sage grouse habitat needs. We need staff to work with landowners that have a LOI, that need their SSP developed, and to work with the Oregon All Counties CCAA Steering Committee, US Fish & Wildlife Service Oregon Sage-Grouse Action Plan (State Action Plan) and the Oregon Department of Fish & Wildlife Service.

3) 4 Plans will be developed within this geography as well as continued monitoring of enrolled SSP within the area. Immediately north of Hwy 20 to the surrounding county line is the previous FIP area for Malheur county. Range specialist will be required to reevaluate the sites on enrolled lands as well as the continuation of New SSP's as L/O enrollment is continuous

4) US Fish, NRCS

### Review Team Evaluation

#### Strengths

- The proposal seeks to develop Site Specific Plans (SSPs) in high priority geographies for sage-grouse conservation.
- The SSPs will be developed with landowners who already have a signed letter of intent, indicating a high level of readiness.

- In addition to SSP development, five current SSPs would be monitored and updated as required by the CCAA.
- The applicant is working closely with NRCS and USFWS regarding the development and monitoring needs of SSPs in Malheur County.

### **Concerns**

- It is unclear which properties would be a focus of this grant; the maps provided are at too coarse a scale to discern the potential ecological value of this project.
- Previous SSPs from Malheur County have been slow to be submitted for review, making it unclear whether the deliverables outlined in the application can be achieved in the proposed timeline.
- The quality of previous SSPs from Malheur County have caused delays in review and approval due to revisions being required. The applicant possesses the necessary range expertise; however, the capacity to translate this expertise into plan writing is not always clear.
- It is challenging to understand how the budget was developed, due to the lack of detail on various costs associated with SSP development. SSP development is a detailed and extensive exercise. Proposal clarity would have been improved by articulating budget details relating to staff time required to address over 134,000 acres, which is a substantial effort.
- It is unclear whether the applicant has engaged with either ODFW or BLM, which would help project partners determine the highest priority geographies for SSP development.

### **Concluding Analysis**

This project continues the SWCD's focus in developing SSPs for landowners with signed CCAAs to improve and protect sage-grouse habitat. There is a substantial need for plan development in Malheur County that spans across a large landscape with significant private land. Based on past performance, there is concern with the applicant's capacity to deliver high quality, thorough SSPs in a timely manner. The applicant is encouraged to fulfill previous commitments of SSP development and submission prior to requesting additional funding.

### **Review Team Recommendation to Staff**

Do Not Fund

### **Review Team Priority**

### **Review Team Recommended Amount**

\$0

### **Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Do Not Fund

**Staff Recommended Amount**  
\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering Eastern Oregon (Region 5)

**Application Number:** 221-5021-18894

**Project Type:** Technical Assistance

**Project Name:** Piping Bulger

**Applicant:** Baker Valley SWCD

**Region:** Eastern Oregon

**County:** Baker

**OWEB Request:** \$27,522

**Total Cost:** \$34,722

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**Application Description** The Upper Bulger and Mansfield ditch companies manage two irrigation ditches diverted out of the North Powder River located outside of Haines, Oregon serving 6,056 acres within the Northern corner of the Baker Valley. These ditches run parallel to each other for the first two miles and at times will share the same diversion to get diverted water out of the North Powder River to the valley floor. These two ditch companies are seeking to develop a 90% design to replace and combine their current diversions approximately one mile downstream from the Mansfield diversion to the Bulger diversion and to replace the first two miles of their current earthen ditches with buried mainline serving both ditch companies. Installed in the early 1900's, the current diversions for the two ditches are antiquated and require costly repairs yearly as well as posing as a fish passage barrier in the North Powder River. The first two miles of shared ditches for the two ditch companies is also experiencing severe erosion and down cutting in addition to increased water loss due to the degraded nature of the ditches. Requiring additional water to be diverted out of the North Powder River and submitting additional sediment and debris back into the Powder River Watershed as it makes its way across the Baker Valley.

Realizing these watershed issues, the ditch companies as well as the landowners receiving water from these ditches, have come together and approached the Baker Valley SWCD to begin the process for the much needed restoration of their irrigation systems. Project partners include the Upper Bulger and Mansfield ditch companies and the Baker Valley SWCD.

### Review Team Evaluation

#### Strengths

- The proposal will impact over one mile of stream by consolidating two points of diversion, leaving water instream longer and providing significant ecological benefits.
- The photos provided with the application show the impacts of extreme erosion.
- This technical assistance request will fund the development of a 90% design set for both the diversion and ditch converted to pipe.
- Redband trout and bull trout are both impacted by the passage barrier and bank erosion in the project area.

- Deliverables will include a full easement for the pipelines allowing future access for maintenance and repairs.
- The ditch companies have senior water rights (1874-1875), and are not likely to get shut off.
- This work could facilitate additional restoration in the vicinity, including pressurized systems allowing for conversion from flood to sprinkler, improving both water quantity and quality.
- Both ditch companies and members are actively engaged in the project and had representatives on the virtual site visit. They are currently working on merging the two ditch companies into one.
- Landowners effectively work with OWRD in water right regulation.
- This project builds on other restoration work done in the area.

### **Concerns**

- Alternatives discussed in the application were limited, leaving only the one option.

### **Concluding Analysis**

The strong collaboration of partners on this proposal indicates a high likelihood of success, backed up by an applicant with a history of implementing successful restoration projects. Significant planning has already occurred, as shown in the details of the application. The designs will incorporate a fish screen and increase irrigation efficiency by reducing seepage through converting the ditches to mainline pipe.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

1 of 3

### **Review Team Recommended Amount**

\$27,522

### **Review Team Conditions**

### **Staff Recommendation**

#### **Staff Follow-Up to Review Team**

n/a

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$27,522

**Staff Conditions**

The design shall include a flow measuring device.



## Open Solicitation-2020 Spring Offering

### Eastern Oregon (Region 5)

**Application Number:** 221-5022-19070

**Project Type:** Technical Assistance

**Project Name:** Mottet Creek Passage Design

**Applicant:** Tri-State Steelheaders

**Region:** Eastern Oregon

**County:** Union

**OWEB Request:** \$37,615

**Total Cost:** \$47,879

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**Application Description** Mottet Creek flows under Forest Road 63 in Union County, about 16 miles by road east of Tollgate. Mottet Creek is a tributary of Little Lookingglass Creek, which flows to Lookingglass Creek, which is a tributary of the Grande Ronde River.

The culvert at Forest Road 63 and Mottet Creek is undersized and over-steepened, leading to passage problems for steelhead and bull trout. Further, the culvert is being undermined by scour, which will eventually lead to a road failure. In addition, seven step-logs were installed below the culvert, presumably to improve passage, but they now present low flow passage barriers. Correction of this situation is cited in the The Little Lookingglass Creek Watershed Restoration Action Plan.

The Tri-State Steelheaders propose to partner with the US Forest Service, Walla Walla Ranger District, to complete an alternatives assessment for replacement of the failing culvert, identify a preferred alternative, and complete a preliminary design report with cost estimate.

### Review Team Evaluation

#### Strengths

- The proposal addresses fish passage barriers caused by an undersized and failing culvert and seven historic log weirs.
- The resultant design will provide alternatives and conceptual designs.
- Mottett Creek provides habitat for both bull trout and steelhead.
- The USFS design team will assure the resulting restoration project will have sound designs and a focus on ecological benefit.

#### Concerns

- The application lacked clarity on habitat conditions above this site, fish use, and whether the deliverable is a 60% design or a "low-design level preliminary plan," indicating the project may be premature.
- There is a natural barrier one mile upstream that was identified ~20 years ago; current passage status is unclear.

- The Tri-State Steelheaders and USFS have not yet initiated a MOU for this project, but it was stated during the virtual site visit that the process should only take 45 days to complete.
- Neither ODFW nor CTUIR were consulted on the project, but the grantee planned to do so if the project was funded.
- The applicant is new to the OWEB application process and the application lacked sufficient clarity to provide a comprehensive review.
- The budget is based on available funding rather than a project cost estimate.
- Lump sums in the budget made it difficult to determine whether costs align with work necessary to accomplish proposed objectives.

### **Concluding Analysis**

The project scope has merit; however, the application lacks sufficient detail to provide a recommendation to fund. If the applicant decides to resubmit the application, it is important to respond to all of the concerns noted above, by providing more detail, and to break out the budget by task rather than providing lump sums.

### **Review Team Recommendation to Staff**

Do Not Fund

### **Review Team Priority**

### **Review Team Recommended Amount**

\$0

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Do Not Fund

### **Staff Recommended Amount**

\$0

### **Staff Conditions**



## Open Solicitation-2020 Spring Offering Eastern Oregon (Region 5)

**Application Number:** 221-5023-18987

**Project Type:** Stakeholder Engagement

**Project Name:** Burns/Lakeview Local  
Implementation Team Coordinator

**Applicant:** Pheasants Forever Inc

**Region:** Eastern Oregon

**County:** Harney

**OWEB Request:** \$70,802

**Total Cost:** \$287,229

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**Application Description** Pheasants Forever seeks funding for a position to oversee coordination for two Sage-grouse Local Implementation Teams (LIT) located within Harney and Lake Counties (Burns and Lakeview, Oregon). LITs are locally driven, collaborative groups, convened by ODFW and use local input to meet objectives identified within the Sage-grouse State Action Plan. Partners targeted for involvement include BLM, USFWS, NRCS, ODFW, DSL, CWMA's, SWCDs, local tribes, ONDA, TNC, landowners and livestock producers, and others with an interest and/or investment in shrub-steppe conservation within each area.

The purpose of the LIT in each community is threefold: 1) provide a central platform to increase communication among stakeholders; 2) identify existing efforts with regard to sage-grouse and shrub-steppe conservation and develop a strategic plan moving forward to streamline future efforts; and, 3) procure funding for project implementation.

Threats to sage-grouse – i.e., invasion of annual grasses/increased wildfire intervals; juniper encroachment; degraded mesic systems, occur at landscape-scales, across public and private land; therefore, utilizing local input and collaboration to address threats is fundamental to ensure long-term viability of sage-grouse populations in Oregon.

The coordinator is essential to LIT development. The coordinator will foster effective collaboration among the various stakeholder groups at each local level by hosting one-on-one meetings, small focus groups, and other outreach events with groups listed above. The coordinator will help each LIT establish a collaborative forum to develop landscape-scale strategies that address threats to sage-grouse; work with each LIT to procure funding to implement each strategy; and host field tours to encourage future conservation-minded collaborations.

### Review Team Evaluation

#### Strengths

- The LIT coordinator will serve as a key communication nexus amongst all parties interested and responsible for sage-grouse conservation, indicating sufficient capacity for successful project implementation.

- This application builds on a successful model employed in Baker, Vale, and Prineville, where LIT coordinators thrive at bringing the right suite of partners together, resulting in positive impacts on conservation planning and implementation.
- Local partners have built strong support within the community for the LIT coordinator to be successful in these geographies.
- The employee for this position will be housed with ODFW in Burns, allowing for interconnectivity with other resource agency staff working on sage-grouse conservation.
- The application was well-written and comprehensive, clearly outlining the role, impact, and value the LIT coordinator has for sage grouse conservation.

### **Concerns**

- It was unclear how the travel and office supply costs were derived; the unit costs are unclear.

### **Concluding Analysis**

The fulfillment of the LIT coordinator in Burns and Lakeview will ensure communication among landowners, agencies, and other stakeholders engaged in sage-grouse conservation. These positions are uniquely derived from local need, which varies greatly across Eastern Oregon. Pheasants Forever is well positioned to provide the necessary engagement, collaboration, and trust among partners to further sage-grouse conservation in the Burns and Lakeview community.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

1 of 3

### **Review Team Recommended Amount**

\$70,802

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$70,802

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Eastern Oregon (Region 5)

**Application Number:** 221-5024-19002

**Project Type:** Stakeholder Engagement

**Project Name:** Beaver Damage Mitigation  
Demonstration Projects

**Applicant:** Powder Basin WC

**Region:** Eastern Oregon

**County:** Baker

**OWEB Request:** \$23,936

**Total Cost:** \$29,936

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**Application Description** In eastern Oregon, precipitation primarily occurs during winter in the form of snow and is mostly lost from a watershed during spring snow melt and runoff. Stream flow later in the summer depends almost entirely on water stored behind impoundments or that has soaked into the soil. Historically, beaver would have contributed to both of these conditions, but due to conflicts with human infrastructure from beaver activity, they are not welcomed by many landowners. Therefore, there is a need to educate landowners and the public about the benefits that beaver provide to the watersheds where they live and about the technology that has been developed to reduce and prevent damage from beaver activity. Climate change is projected to decrease summer stream flow even more than current conditions, so any methods to offset those impacts needs to be considered.

This project will take place throughout the Powder Basin and will engage the general public, but focus on landowners who currently have beaver on their property or whose property lies near potential beaver habitat. PBWC will use a combination of directed mailings and a variety of methods for general public education to recruit landowners to host projects on their property that demonstrate the effectiveness of beaver mitigation technology. PBWC will contract with a qualified wildlife damage consultant to develop designs for the installation of beaver damage mitigation structures at the 100% level, so they can be submitted for implementation funding. Partners will include landowners and outside funders.

### Review Team Evaluation

#### Strengths

- In this basin, beavers are thought of as pests. This stakeholder engagement proposal will present restoration options available to help landowners successfully co-exist with beavers.
- Pilot restoration projects will showcase the benefits of having beaver on the landscape, as well as use the rural peer-to-peer communication culture to increase future opportunities.
- Outreach materials in the local paper will reach over 4,000 residents.
- Targeted outreach will go to landowners who either have contacted the watershed council or ODFW about nuisance beavers, or live in an area with identified potential beaver habitat. ODFW currently has a list of ~15 landowners that have expressed interest in restoring beaver habitat on their land.
- The watershed council participated in the Beaver Restoration Assessment Tool (BRAT) in the basin to locate areas, such as urban interfaces, with potential for conflict.

- The application described how beaver on the landscape could mitigate issues of climate change impacts and reduced stream flows.
- The capacity of the applicant is improved by working with a well-known expert on beaver mitigation structures.
- The budget appears reasonable for the initial outreach efforts and the development of six plans/conceptual designs.

### **Concerns**

- More detail on ODFW's role as a partner would have increased reviewers' understanding of the effectiveness of proposed communication among stakeholders.
- The extent of the problem to address is unclear; more information about the level of trapping of nuisance beavers in the area would have been helpful.
- Including irrigation districts in the conversation could increase engagement of appropriate stakeholders, since diversions and ditches often have negative beaver impacts.

### **Concluding Analysis**

Beaver restoration is a relatively new concept to this area, but beaver are a fairly common wildlife concern, especially for road departments, irrigation districts, and private landowners living close to or on a historic floodplain. With the advent of climate change, reaching out to landowners to provide options for improving beaver habitat to attract beavers; or installing structures to be able to successfully co-exist with resident beavers, is timely.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

2 of 3

### **Review Team Recommended Amount**

\$23,936

### **Review Team Conditions**

n/a

### **Staff Recommendation**

#### **Staff Follow-Up to Review Team**

n/a

### **Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line



**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Eastern Oregon (Region 5)

**Application Number:** 221-5025-19063

**Project Type:** Stakeholder Engagement

**Project Name:** South Fork Water Resources

**Applicant:** Wallowa Resources

**Region:** Eastern Oregon

**County:** Wallowa

**OWEB Request:** \$112,716

**Total Cost:** \$166,414

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**Application Description** South Fork Water Resources' (SFWR) stakeholder engagement initiative will focus on the Wallowa River and its tributaries in Wallowa County. The Wallowa basin is home to ESU populations of indigenous Spring/Summer Chinook, Steelhead, Bull Trout and recently reintroduced Coho. Irrigation withdrawals, coupled with declining snowpack and earlier spring runoff events, often result in extreme low flow conditions during critical periods of spawning and migration for ESA listed species. These low flow periods can cause significant passage and water quality issues. Several documents including the ESA Recovery Plan for Snake River Spring/Summer Chinook Salmon (*Oncorhynchus tshawytscha*) & Snake River Basin Steelhead (*Oncorhynchus mykiss*) suggest a high likelihood of recovering listed anadromous fish species in the Wallowa Basin through restoration actions that address limiting factors including low stream flow. SFWR's outreach initiative will engage key irrigators, municipalities and interest groups in discussions about water management and conservation opportunities that benefit instream flow and increase economic resiliency for the community. Additionally, SFWR will organize opportunities for water users to participate in workshops with local experts who have successfully engaged in water conservation programs resulting in economic and ecological sustainability. SFWR is under the fiscal management of Wallowa Resources and partners with The Nez Perce Tribe on water conservation efforts. SFWR also works closely with local restoration partners in order to align and leverage the benefits of water conservation projects with habitat restoration.

### Review Team Evaluation

#### Strengths

- The project will engage landowners for potential instream water projects and water leases.
- The Board of Directors includes appropriate and diverse stakeholders, increasing the likelihood of project success.
- The streams identified as priorities show a need for instream flow improvements and are streams identified as priority areas for anadromous fish.
- ODFW is working on establishing instream goals on these same reaches. This project would help assist in that effort.
- Appropriate stakeholders, including Freshwater Trust, Nez Perce Tribe, and numerous landowners, are already actively engaged in this venture.
- The project team has shown extensive experience and technical knowledge on similar projects and success with interacting with the local community.

- Secured funding with the Columbia Basin Water Transaction Program increases the likelihood of success of the proposal.

### Concerns

- The application is unclear whether this effort is duplicative of existing Wallowa Resource programs; however, during the virtual site visit, the applicant explained this project is focused on engagement in water leasing transactions, which many stakeholders in the area are lacking the expertise to negotiate.
- The application does not describe the history of piping and water savings through irrigation efficiencies in the upper Wallowa area, which would have provided meaningful context for the proposed work.
- Letters of support from NRCS, landowners, and the local SWCD would have provided a stronger impression of community and stakeholder acceptance.
- In order to determine cost effectiveness, the application would have benefited from more detail in the budget development section, especially in the project management line item, which includes lump sums.

### Concluding Analysis

The need for landowner engagement is clear along the streams in the watershed, which provide critical habitat to ESA-listed spring and summer Chinook, steelhead, bull trout and recently introduced coho. The application would have been stronger if it had included letters of support from the numerous stakeholders that are working on projects to increase stream flow.

### Review Team Recommendation to Staff

Fund

### Review Team Priority

3 of 3

### Review Team Recommended Amount

\$112,716

### Review Team Conditions

n/a

### Staff Recommendation

#### Staff Follow-Up to Review Team

n/a

### Staff Recommendation

Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**

\$0

**Staff Conditions**

North Coast

Southwest

Willamette Basin

Central Oregon

Eastern Oregon

Mid-Columbia



# Mid-Columbia - Region 6 Spring 2020 Funding Recommendations



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Funding Recommendation

Staff Recommendation For Funding (SRF)

Below Funding Line (BFL)

Previous Grants 1998 - Fall 2019

Land Acquisition

Restoration

Region 6 Cities

Region 6 Streams

OWEB Region 6 Boundary



OREGON

WATERSHED

ENHANCEMENT BOARD

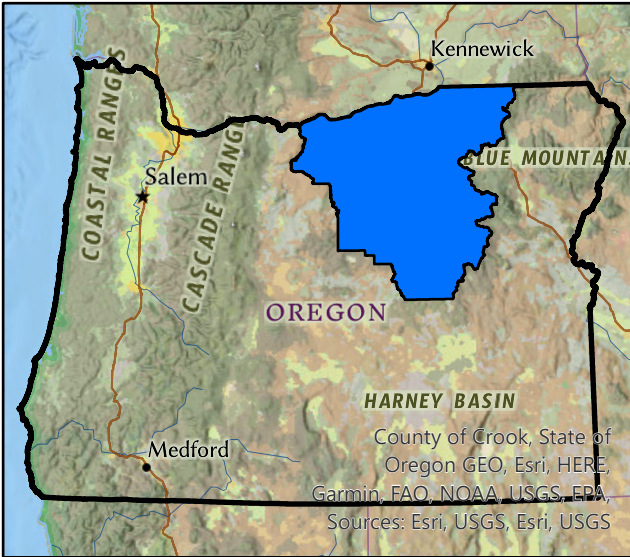
775 Summer St, NE Suite 360

Salem, OR 97301-1290

(503) 986-0178

<https://www.Oregon.gov/OWEB/>

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## Region 6 - Mid-Columbia Basin

### Restoration Projects Recommended for Funding in Priority Order

Project #	Grantee	Project Title	Brief Description	Amount Recommended	County
221-6012	Wheeler SWCD	Rock Creek - Derr Meadow Restoration	Fish habitat will be improved on Rock Creek, an important steelhead tributary to the John Day River, by restoring natural stream function through the placement of instream structures.	56,573	Wheeler
221-6001	Wheeler SWCD	Pine Hollow Upland Restoration	Juniper will be removed on 430 acres to address altered watershed function, off channel livestock watering facilities will be installed to promote sustainable grazing patterns, and CREP enrollment will be used to enhance and protect native grasses and forbs providing essential feed for terrestrial wildlife in Pine Hollow Creek.	135,044	Wheeler
221-6002	Monument SWCD	Cole-Engle Fish Habitat and Passage Improvement	Retrofits will be made to an irrigation diversion impacted by multiple flood events over the last decade to provide steelhead and other aquatic organisms with year-round access to spawning and rearing habitats throughout Cottonwood Creek.	136,865	Grant
221-6013	Wheeler SWCD	Upper Pine Hollow Culverts	Two undersized culverts will be replaced to provide full access for all life stages of steelhead to half a mile of stream habitat on Pine Hollow; riparian areas will also be fenced and planted through CREP enrollment.	40,982	Wheeler
221-6008	Bridge Creek WC	Pine Creek Watershed Improvement Phase 3	Conservation practices on two properties, including juniper removal, development of upland water sources for wildlife and livestock, noxious weed treatment, reseeding treated ground, and installing cross fence to manage grazing pressure through livestock distribution, will reduce fire risk and enhance forage health and wildlife habitat in the Pine Creek Watershed.	117,252	Wheeler
221-6004	South Fork John Day WC	Rosebud Watershed Improvements	Watershed and wildlife habitat conditions will be improved in the Rosebud and Caps Creeks by removing 244 acres of juniper, protecting over two acres of aspen, and re-fencing a riparian pasture along Rosebud Creek to help manage and protect the riparian zone from both livestock and feral horses.	117,160	Grant
221-6005	South Fork John Day WC	Lewis Creek Watershed Health	Water quality and critical winter habitat for mule deer and elk will be improved on Lewis Creek by removing juniper on 180 acres and developing an upland spring source for livestock and wildlife.	44,725	Grant
221-6006	Grant SWCD	Scotty Creek Water Developments	Off-channel water developments and rock hardened stream crossings will be installed to effectively distribute livestock to reduce their impact on streams and reduce sediment in Scotty , Little Scotty and Damon Creeks on the Malheur National Forest.	118,335	Grant

Region 6 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

221-6010	Wheeler SWCD	Henry Creek Forest Restoration	Watershed conditions on Henry Creek will be improved by thinning Ponderosa Pine stands to a healthy, fire resilient density, eradicating Western Juniper to increase desired grass and forb communities, protecting two declining Aspen stands, and addressing impacts to riparian areas through CREP enrollment and development of a spring for wildlife and livestock.	84,577	Wheeler
<b>Total Restoration Projects Recommended for Funding by RRT and OWEB Staff</b>				<b>851,513</b>	
<b>Restoration Projects <i>Recommended but Not Funded</i> in Priority Order</b>					
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County
None					
<b>Total Restoration Projects Recommended for Funding by RRT</b>				<b>851,513</b>	
<b>Restoration Applications <i>Not Recommended</i> for Funding by RRT</b>					
Project #	Grantee	Project Title		Amount Requested	County
221-6000	Walla Walla Basin Watershed Foundation	NF Walla Walla River Salmonid Passage Barrier Rectification Project		163,997	Umatilla
221-6003	Monument SWCD	Top Ranch Integrated Resource Management Phase 2		113,362	Grant
221-6007	South Fork John Day WC	Smoky Creek Restoration		37,780	Grant
221-6009	South Fork John Day WC	Grouse Creek Restoration		18,489	Grant
221-6011	Wheeler SWCD	King Creek Upland Enhancement		28,954	Wheeler



Region 6 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

Technical Assistance (TA) Projects Recommended for Funding in Priority Order					
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County
221-6016	Confederated Tribes Umatilla Indian Reservation	Upper Walla Walla River Watershed Assessment and Strategic Action Plan_Resubmittal	A strategic action plan that follows CTUIR's River Vision principles will be developed to provide a quantitative prioritization of potential restoration actions for the Walla Walla River from stateline to the headwaters of the North and South Forks.	47,488	Umatilla
221-6018	Walla Walla Basin Watershed Foundation	South Fork Walla Walla River Base Flow Assessment	A baseflow assessment will be completed to characterize the springs and tributaries in the Walla Walla River to evaluate their vulnerability to climate changes and begin developing a strategy to protect them.	24,982	Umatilla
221-6014	Umatilla SWCD	McKay Creek Habitat Restoration Phase I	Data will be collected to identify potential project sites along a five-mile reach of McKay Creek and begin designing restoration in areas impacted by severe erosion and flood damage over the last two years.	62,749	Umatilla
Total TA Projects Recommended for Funding by RRT and OWEB Staff				135,219	
Technical Assistance Projects <i>Recommended but Not Funded</i> in Priority Order					
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County
None					
Total TA Projects Recommended for Funding by RRT				135,219	
Technical Assistance Applications <i>Not Recommended</i> for Funding by RRT					
Project #	Grantee	Project Title		Amount Requested	County
221-6015	Sherman SWCD	Lower Grass Valley Canyon Structural Restoration		28,607	Sherman
221-6017	Monument SWCD	Wall Creek Crossing and Habitat Enhancement Design		74,074	Grant
Stakeholder Engagement Projects Recommended for Funding in Priority Order					
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County
221-6020	South Fork John Day WC	South Fork John Day Watershed Stakeholder Engagement	Various outreach methods will be used to engage landowners in completing restoration needs assessments to develop a list of projects that will leverage RCPP funds and multiply the extent of ecological benefit in the South Fork John Day River Watershed.	39,226	Grant
Total Stakeholder Engagement Projects Recommended for funding by OWEB Staff				39,226	

Region 6 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

Stakeholder Engagement Projects <i>Recommended but Not Funded</i> in Priority Order					
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County
221-6019	Umatilla SWCD	Bank Stabilization Engagement Project	Four workshops will be developed for landowners facing impacts from recent flood events in Umatilla County. The workshops will provide information on ecological friendly alternatives to bank stabilization and permitting requirements for working in and along the Umatilla River and significant tributaries.	6,804	Umatilla
Total Stakeholder Engagement Projects Recommended for funding by RRT				46,030	
Stakeholder Engagement Projects <i>Not Recommended</i> for Funding by RRT					
Project #	Grantee	Project Title		Amount Requested	County

Region 6 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, and Stakeholder Engagement Grant Cycle - July 27, 2020

None				

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6000-18962

**Project Type:** Restoration

**Project Name:** NF Walla Walla River Salmonid  
Passage Barrier Rectification Project

**Applicant:** Walla Walla Basin Watershed  
Foundation

**Region:** Mid Columbia

**County:** Umatilla

**OWEB Request:** \$163,997

**Total Cost:** \$534,736

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**Application Description** The North Fork Walla Walla River (NFWWR) is an 18-mile tributary of the Walla Walla River and is located near Milton Freewater, OR.

A passage barrier located near mile 1 is impeding progress to 17 miles of suitable salmonid habitat. The NFWWR is an important waterway used primarily by ESA listed Mid-Columbia summer steelhead & bull trout, and by spring Chinook salmon and red band/rainbow trout. Multiple salmonid life stages are directly affected by the barriers, most prominently fish seeking to move upstream to rear/spawn in more suitable cold water environments. Irrigation rights are fulfilled by withdrawing flows directly from the NFWWR, resulting in depleted (7 CFS) river flow. Compounding challenges for migrating salmonids are push up berms built across the channel to divert flows into ditches to serve multiple users.

To reduce the negative effects on the river resulting from the irrigation infrastructure, the WWBWC is proposing to modify the intake by constructing a roughened riffle with engineered logjam structures to improve habitat complexity, restore channel processes, and discourage the annual construction of a channel spanning push up berm. Alternative concepts were explored and determined that converting to a well was not a viable option due to not being able to satisfy the irrigation right.

We have a cooperative relationship with irrigation users due to conducting several successful & mutually beneficial projects. ODFW endorses the project and have participated in the barrier identification and planning processes. US Forest Service owns property upstream and is contributing native grass seed & tree saplings or cuttings to reinvigorate stream banks and improve overall project function. CTUIR has approved the project proposal through their WWBWC Board representative upon their annual evaluation and ranking of proposed WWBWC projects.

### Review Team Evaluation

#### Strengths

- The conceptual design is appropriate for this type of project, which utilizes a roughened riffle for stability and large wood for habitat complexity.
- The North Fork Walla Walla River is home to ESA-listed steelhead, bull trout and reintroduced spring Chinook. This project will provide access to 17 miles of critical cold water habitat.

- The applicant has working relationships with landowners along the North Fork, and is working to address fish passage and habitat issues along the entire reach.
- Collaboration with ODFW and the Umatilla Tribe indicates this is an important project to key stakeholders.
- The applicant has experience implementing projects with a similar scale and scope.

### **Concerns**

- The application lacks clarity on which of the two diversions discussed in the application would be addressed by the project.
- The application may be premature; with only 15% designs submitted, there are concerns about the accuracy of the budget.
- The lack of design information limits the understanding of the proposed structures, costs, and eventual ecological outcomes.
- The timeline indicated the project was scheduled for implementation in 2022; so a resubmittal with more cohesive and advanced designs is a viable option.
- A significant portion of the match is pending with no discussion of timing of those contributions and what affects it could have on implementation.
- Including the entire BPA contract as an upload contributes to the lack of application clarity by providing an excessive volume of tangential information.
- The application would have been stronger with letters of support from partners indicating their roles.
- The lack of clarity in the budget made it difficult to review for cost effectiveness.
- Boulder and stream simulation material could significantly influence the cost, depending on where the products are sourced from.

### **Concluding Analysis**

The issues this project seeks to address are significant and could result in strong ecological benefits; however, the application appears to be premature with insufficient level of design available to assure both technical soundness and the likelihood of success. The applicant is encouraged to resubmit the application with more advanced designs, and addressing the concerns noted above.

### **Review Team Recommendation to Staff**

Do Not Fund

### **Review Team Priority**

### **Review Team Recommended Amount**

\$0

### **Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Do Not Fund

**Staff Recommended Amount**  
\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6001-19059

**Project Type:** Restoration

**Project Name:** Pine Hollow Upland Restoration

**Applicant:** Wheeler SWCD

**Region:** Mid Columbia

**County:** Wheeler

**OWEB Request:** \$135,044

**Total Cost:** \$224,749

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**Application Description** 1) The project is located in the uplands of Pine Hollow Creek, a steelhead bearing tributary of Rock Creek. Pine Hollow Creek flows into the John Day River in Wheeler County, Oregon near the town of Mitchell. 2) The area has been heavily encroached by Western Juniper, which has a negative effect on water quality, quantity, and both upland and riparian habitat. Past grazing management practices have been limited by stockwater needs and previous management. This has had a negative impact on the riparian corridors, as well as the upland health and vigor. 3) This project seeks to address the negative impacts Western Juniper imposes on the watershed functions, and promote the distribution of livestock grazing patterns. There will be 430 acres of Western Juniper cut and piled to be jackpot burned at a later date. A livestock watering system will be installed with two 1,800 gallon cistern tanks, which will supply 7 livestock watering troughs. East Cocklebur Creek, adjacent to the proposed upland work, will also be enrolled into CREP to ensure that watershed benefits are protected. Project partners include USDA/FSA, the landowner, Wheeler SWCD, and OWEB.

### Review Team Evaluation

#### Strengths

- The application is clearly written with appropriate actions to achieve the stated objectives.
- The project components include cutting, piling and jackpot burning 400 acres of prioritized juniper on North and East facing slopes, where the highest ecological benefits will be realized.
- Reseeding the area where the ground is disturbed will help keep invasive weeds from establishing.
- Installing seven troughs as upland water sources via a collection cistern is an innovative method to extend minimal spring output to multiple pastures.
- The spring source will be fenced to protect sensitive wet areas, which can be habitat to a host of amphibians, small animals, and insects.
- Utilizing Conservation Reserve Enhancement Program fencing expands the ecological benefits of the project by providing long-term protection for the riparian corridor and at the same time aiding in livestock management.
- Removing juniper from deep soil slopes should benefit the groundwater infiltration rate and potentially add to summer flows on downslope streams.
- The proposed work fits within the context of past and future restoration in this watershed, providing a holistic approach to the ecological uplift.

- The new landowner has participated in past conservation projects and is focused on improving habitat across the ranch for both aquatic and terrestrial wildlife. This partner commitment demonstrates capacity for long-term stewardship and maintenance.

### **Concerns**

- The narrative does not describe how the landowner plans to keep juniper from re-establishing in treated areas.
- Treating annual invasive grasses was missing from the application and would have added another layer of benefit to the project.

### **Concluding Analysis**

The Antone Ranch in Wheeler County has a history of ranching, logging and mining that has impacted the process and function of both upland and riparian zones. In recent years, management has shifted more to a ranching/recreational focus with the latest landowner showing enthusiasm to restore the ranch, ridgetop to ridgetop. This project footprint is in a headwater area of several drainages to Pine Hollow Creek, a steelhead stream that drains into Rock Creek in the middle John Day Basin. This project has the potential to increase infiltration rates, and creating upland water sources for both livestock and wildlife so adjacent live streams can be exclusion fenced.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

2 of 9

### **Review Team Recommended Amount**

\$135,044

### **Review Team Conditions**

### **Staff Recommendation**

**Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$135,044



## **Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6002-18956

**Project Type:** Restoration

**Project Name:** Cole-Engle Fish Habitat and Passage Improvement

**Applicant:** Monument SWCD

**Region:** Mid Columbia

**County:** Grant

**OWEB Request:** \$136,865

**Total Cost:** \$177,941

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**Application Description** 1) This project is located at stream mile 12.75 on Cottonwood Creek, approx. 15 miles south of Monument in Grant County, OR. Cottonwood Creek is a tributary to the North Fork John Day River that provides vital spawning and rearing habitat to ESA listed Mid-Columbia River Steelhead and other aquatic species.

2) In 2010 a diversion structure consisting of sheet pilings, a fish passage box, ODFW drum style fish screen and a headgate for irrigation was installed at this location to service the water rights of two adjacent landowners. However, this structure has not held up well to high flow events which have exposed over three feet of the sheet pilings and caused moderate streambed erosion both above and below the structure. The placement of the fish passage box next to the headgate also creates a danger for juvenile fish which can be pulled into the headgate and through the fish screen causing them to swim in a "circle of death" as they try to navigate past the structure.

If measures are not taken to address the aforementioned problems, site conditions will continue to degrade and impede fish access to over 25 miles of crucial upstream habitat as well as compromise the landowners ability to maintain irrigation water rights.

3) This project will implement design plans recently completed from OWEB Technical Assistance Grant 218-6037. These plans will involve removing the fish ladder and reconstructing the creek channel so that the diversion can withstand a 100-year flood event and meet with ODFW fish passage requirements while still maintaining a surface water elevation sufficient to service the existing water rights.

4) Confederated Tribes of the Warm Springs, USFWS Partners Program, Monument SWCD, Anderson Perry & Associates, OWEB

### Review Team Evaluation

#### Strengths

- The project is a result of an OWEB-funded technical assistance grant for design and offers a clear approach to remedy a fish passage issue on a ten-year-old channel-spanning steel diversion.

- Cottonwood Creek provides habitat to ESA-listed steelhead and this project will open access to over 25 miles of habitat for both juveniles and adults accessing cooler flows upstream.
- The design is technically sound, and will retrofit the existing diversion by installing a roughened riffle to backwater the structure.
- By incorporating a low-flow thalweg, fish passage is assured for all life stages at all levels of stream flow.
- The design ensures stability and access to legal water rights, and has been reviewed and approved by agency engineers.
- Similar structures in the basin and on this stream have proven to be effective.
- The floodplain terrace across from the head gate will provide some relief from high flows and help mitigate erosional forces.
- The design eliminates the fishway “circle of death” issue when fish, using the old fish ladder, were sucked back into the adjacent head gate, only to then again go through the fish screen, and get kicked back into the stream below the diversion.
- The project builds on extensive restoration on Cottonwood Creek and upstream Fox Creek.
- The project partners have both technical expertise and organizational capacity indicating a high likelihood of success in obtaining the project goals and objectives.
- The application includes effectiveness monitoring that will focus on plant survival and fish passage once the project is complete.

## **Concerns**

- The design includes extending the fish bypass pipe and building a pool to receive fish. It is unclear whether the ODFW Screen Shop was consulted on elevations, alternatives, and future maintenance to ensure success and avoid harm to fish. To assure design will address any concerns, the applicant needs to consult with the ODFW fish biologist throughout the design process.
- The budget lacks sufficient detail on some items to determine cost effectiveness, such as rock, for which costs appeared high.

## **Concluding Analysis**

Erosion from extreme high water events degraded the existing diversion structure, such that water was seeping below and creating a fish passage barrier at low flows. With all fish passage barriers downstream corrected, this work will open access to over 25 miles of fish habitat. The technical assistance project that preceded this project included an alternatives analysis, and preferred a retrofit over a complete removal and rebuild. Also, the landowner has dealt with historic erosive high flows and did not want to remove the entire structure because of stability issues related to the diversion.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

3 of 9

**Review Team Recommended Amount**

\$136,865

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$136,865

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6003-18916

**Project Type:** Restoration

**Project Name:** Top Ranch Integrated Resource Management Phase 2

**Applicant:** Monument SWCD

**Region:** Mid Columbia

**County:** Grant

**OWEB Request:** \$113,362

**Total Cost:** \$202,242

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**Application Description** 1) Top Ranch is located in northwest Grant County, Oregon approximately 7 miles north of the town of Monument. The proposed project area is located just south of upper Fern Creek, a tributary of Big Wall Creek.

2) Big Wall Creek is a major tributary of the North Fork John Day River that provides critical spawning and rearing habitat for ESA listed Middle-Columbia River steelhead and is a 303(d) listed stream system for temperature. Altered hydrologic processes and degraded water quality are a major limiting factors in Big Wall Creek Basin with Juniper encroachment and historic land use practices being significant contributors. The current manager of Top Ranch has implemented multiple resource improvements over the last 5 years. However, the south central portion of the property still has a large amount of juniper encroachment intermixed with overstocked Ponderosa Pine stands. Additionally, there is a 2,320 ft. section of gnarled and loose barbwire fence in this portion of the ranch that presents an entanglement risk to mule deer. If action is not taken to alleviate these problems, current site conditions could degrade upland hydrologic function as well as increase the risk of catastrophic wildfire and ungulate mortality.

3) This project will address the need for further restoration work in the south central portion of the ranch and involve an integrated restoration approach that combines the following activities:

- Forest stand assessment and thinning recommendation
- 62 acres of juniper removal
- 92 acres of Ponderosa Pine forest stand improvements
- 2,320 feet of wildlife friendly fencing improvements
- Re-seed the 196-acre project area with a conservation cover mix post juniper and pine treatments.
- Livestock exclusion from project for one full grazing season to provide wildlife cover seed mix time to grow and establish.

4) Monument SWCD, Top Ranch Properties LLC, ODF, OWEB

### Review Team Evaluation

## **Strengths**

- This ranch has demonstrated restoration capacity by implementing prior OWEB grants, as well as projects with their own investment.
- The focus of property management is more toward wildlife habitat, utilizing livestock grazing as a tool to reduce fire danger.
- Improving forest health and removing juniper will result in improved grass and shrub vegetative components.
- Replacing a degraded barbed and hogwire fence will reduce wildlife injuries.
- Reseeding disturbed areas is a proven practice to eliminate encroaching weeds from becoming established and is appropriate in those areas being treated for juniper removal and forest thinning.

## **Concerns**

- The application lacks clarity when describing the components around fence removal, and exactly where the acres of forest thinning and juniper removal would occur.
- The match sources and activities are unclear, and appear to include landowner contributions from a previous OWEB grant.
- The narrative lacks discussion of proposed methods to prevent juniper from re-establishing, making it difficult to determine whether capacity for long-term stewardship and maintenance exists. Further, reliance on seeding grass to inhibit juniper re-establishment, as described by the applicant during the virtual site visit, is not a technically sound approach.
- The proposed seed mix includes one variety – smooth brome – that is known to be problematic as it can form a dense monoculture due to its rhizomatous growth. While it may be good forage for livestock, it is not ideal for wildlife.
- Sainfoin legume has had limited success in this geography. Also, the application proposes broadcast seeding where drilling may be more successful in getting soil contact, resulting in higher germination rates.
- The total cost to do the work appears high for the potential ecological uplift.

## **Concluding Analysis**

The project has potential to add to the landscape scale restoration this landowner has achieved over the last seven years; however, lack of clarity around technical soundness and long-term sustainability of results prevented the application from being recommended for funding. If the applicant resubmits the application, it is advised to address the concerns noted above and clearly delineate the ecological benefit realized by the proposed investment.

## **Review Team Recommendation to Staff**

Do Not Fund

## **Review Team Priority**

**Review Team Recommended Amount**

\$0

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6004-18950

**Project Type:** Restoration

**Project Name:** Rosebud Watershed Improvements

**Applicant:** South Fork John Day WC

**Region:** Mid Columbia

**County:** Grant

**OWEB Request:** \$117,160

**Total Cost:** \$160,060

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**Application Description** The Double R Ranch owns approximately 12,000 acres of land near the town of Izee. The project area lies in two sections within the Rosebud Creek Watershed; on Caps Creek about 1.4 miles upstream from the confluence with Rosebud Creek until the Forest Service boundary and along Rosebud Creek approximately 2.7 miles upstream from the confluence with the South Fork John Day River until the Double R Ranch boundary.

This portion of the Double R Ranch is heavily used by big game species and feral horses. The project area falls within the critical winter range for elk and mule deer, the Murderers Creek Wild Herd Management Unit and the South Fork John Day River Conservation Opportunity Area.

The South Fork John Day Watershed Council is proposing to cut and pile 181 acres of juniper along the west side of Caps Creek up to the Forest Service boundary. We are also proposing to protect approximately 2.2 acres of aspen using a buck and pole fence and utilizing some of the cut juniper to make brush deterrents around smaller aspen stands in the area. Another part of the project will be to re-fence a dilapidated fence around 225 acres of pastures on the ranch encompassing approximately 2.5 miles of Rosebud Creek, a total of 6 miles of fencing for both sides of the creek. The landowner match for this project includes 2.5 miles of fencing from the 6 mile total as well as approximately 63 acres of juniper cutting within the pasture that they fence. Project partners include the South Fork John Watershed Council and the Double R Ranch.

### Review Team Evaluation

#### Strengths

- The application is well-written with clear objectives and technically sound approaches to improve upland habitat.
- Buck and pole fencing and juniper brush fence have shown to be highly successful in protecting aspen saplings from livestock, feral horses, and elk on previous aspen restoration projects on this ranch.
- Juniper encroachment into aspen stands are a threat to future aspen regeneration. Juniper prioritization modeling was used to help select the best sites to remove juniper.
- The proposed cross fencing will aid in managing impacts to riparian areas from livestock and feral horses.
- The project builds on and leverages restoration funded by a recently awarded NRCS Regional Conservation Partnership Program (RCPP) grant.
- The meadow habitat is in good condition, indicating the commitment from management to maintain and improve the ecological values these systems provide.



- The landowner is actively working with the USFS to trap feral horses in the area, and help reduce the population closer to what is identified as manageable in the BLM Murderers Creek Wild Horse Management Plan.
- Felling adjacent junipers into gullies is a proven method to slow erosion and catch sediment in areas with frequent flashy storm events.

### **Concerns**

- The application lacked clarity on the effectiveness of the proposed fencing as a deterrent to feral horse encroachment into the meadows and aspen, especially in the winter.
- The applicant and landowner should consult with ODF on juniper piles and juniper carcasses to avoid potential fuel load issues that would increase wildfire intensity.

### **Concluding Analysis**

There has been successful restoration done on this ranch in past years, and their commitment to improving habitat is evident. The project intertwines goals of resolving the degradation from abundant feral horse herds, improving infrastructure to better control livestock use, and restoring aspen and riparian habitat resulting in clear ecological benefits.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

6 of 9

### **Review Team Recommended Amount**

\$117,160

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$117,160

## **Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6005-18904

**Project Type:** Restoration

**Project Name:** Lewis Creek Watershed Health

**Applicant:** South Fork John Day WC

**Region:** Mid Columbia

**County:** Grant

**OWEB Request:** \$44,725

**Total Cost:** \$55,965

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**Application Description** Lewis Creek is located on the Double R Ranch, in the Upper South Fork of the John Day River, near Izee, Oregon. Lewis Creek is listed as a redband bearing stream, and within the Murderers Creek Mule Deer Initiative Area, as well as the South Fork John Day River Conservation Opportunity Area. Lewis Creek is on the DEQ's 303d list for temperature and sedimentation. We are proposing to increase water availability and water quality through cutting and piling 180 acres of Western Juniper and developing 1 spring source. Project partners include the South Fork John Day Watershed Council, the Oregon Wildlife Heritage Foundation, and the private landowners and ranch manager of the Inshallah Ranch.

### Review Team Evaluation

#### Strengths

- The application describes proven methodology for removing juniper, with clear objectives and outcomes.
- Better distribution of livestock by developing upland water sources can improve forage health and upland habitat conditions for wildlife.
- Removing juniper from deeper soils on North facing slopes can result in better infiltration to increase groundwater reserves that could impact stream flows downslope.
- The application includes a long-term juniper management plan which includes utilizing loppers eight years after removal to keep junipers from re-establishing.
- This project complements and leverages a recently awarded NRCS Regional Conservation Partnership Program (RCPP) grant.
- The sites to be treated were identified by a juniper prioritization model, funded by a previous OWEB technical assistance grant.
- The project outcomes will improve critical mule deer and elk winter habitat, as well as potentially improving water quality and quantity in Lewis Creek, addressing concerns identified in DEQ's 303(d) list of high temperature and sediment.
- The applicant has proven successful in completing projects similar in scope and size.

#### Concerns

- More detail on how this project fits into restoration priorities in the basin would have provided important information to understand the watershed context for the project.
- The ecological benefits expected are limited for the investment.

## **Concluding Analysis**

Guided by the South Fork John Day Watershed Assessment, the ODFW Murderers Creek Mule Deer Initiative, the SFJDR Conservation Opportunity Area document, and Council's recently completed juniper prioritization model, this project was straightforward with clear objectives and expected outcomes.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

7 of 9

### **Review Team Recommended Amount**

\$44,725

### **Review Team Conditions**

### **Staff Recommendation**

Staff Follow-Up to Review Team

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$44,725

### **Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6006-19006

**Project Type:** Restoration

**Project Name:** Scotty Creek Water Developments

**Applicant:** Grant SWCD

**Region:** Mid Columbia

**County:** Grant

**OWEB Request:** \$118,335

**Total Cost:** \$177,285

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**Application Description** Scotty Creek Water Developments includes the three northeastern pastures of Scotty Creek Allotment. The subject allotment is located in Bear Valley, which is North of Seneca Oregon, and West of Highway 395. The spring locations are between 10 and 25 miles from Seneca. This project will include 11 off-channel water developments and 2 stream crossings. This project will be broken up over two years parts due to the total number of developments. Our first year will consist of five spring developments and two stream crossings. The second-year will be six spring developments and no stream crossings. The first developments will include development numbers 10,13,14,33,38 and 39. The second year's developments will include development numbers 4,6,7,8,9 and 11 (all development numbers represented in Figure 2.)

The project addresses a need to decrease livestock pressure and use along Scotty Creek, Little Scotty Creek, and Damon Creek of which are habitat for Interior redband and trout, a sensitive species on the Malheur National Forest, within the Scotty Creek Allotment. These three creeks sit approximately 5300 feet in elevation. The three creeks have riparian areas consisting of predominately Alder with a small mixture of Willow and other riparian grasses. Little Scotty Creek and Damon Creek are both tributaries to Scotty Creek. Scotty Creek runs all ye.

The installation of the spring developments and stream crossings are designed to better distribute cattle within the Little Scotty Creek, Little Damon Riparian, and Damon Creek pastures.

The project partners would include Grant Soil and Water Conservation District, USFS Malheur National Forest Blue Mountain Ranger District, and Permittee Matt Carter.

### Review Team Evaluation

#### Strengths

- The project is permitted and ready to implement.
- Eleven off-channel spring developments and two hardened stream crossings will improve water quality by reducing grazing pressure on riparian areas.
- The streams within the project scope offer habitat for redband trout.

- The permittee has a long history of proactive management on this allotment with the support of the USFS, indicating ample capacity for long-term stewardship and maintenance.
- The budget includes reasonable costs for the infrastructure, estimates for which were generated from previous bids on similar spring developments.
- Using aluminum troughs will extend the life of the investment up to twenty years or more.
- The allotment is large (35,000 acres) and the permittee, with USFS support, has divided it into eight smaller and more manageable pastures resulting in better livestock distribution and reduced watershed impacts.
- The permittee's grazing strategy includes high intensity/low duration rotation, which has proven beneficial to forage health over the past twenty years using these pastures.

### **Concerns**

- Photos included in the application indicate the likely presence of wetlands; the application is unclear regarding whether rock placement would trigger a DSL removal/fill permit.
- The costs per spring development appeared to be higher than NRCS cost rates. While the sites are in a remote area, providing a justification in the budget narrative section of the application would help reviewers to determine cost effectiveness.

### **Concluding Analysis**

Partnering with the Malheur National Forest staff on this multiple use forest allotment indicates strong collaboration and desire to improve conditions on these high elevation pastures. This permittee has a proven record of good stewardship and management on public lands they graze. Their contribution to share in the investment also indicates there is a high likelihood of success for project completion and long-term maintenance.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

8 of 9

### **Review Team Recommended Amount**

\$118,335

### **Review Team Conditions**

### **Staff Recommendation**

### **Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$118,335

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6007-18891

**Project Type:** Restoration

**Project Name:** Smoky Creek Restoration

**Applicant:** South Fork John Day WC

**Region:** Mid Columbia

**County:** Grant

**OWEB Request:** \$37,780

**Total Cost:** \$47,360

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**Application Description** Smoky Creek is a tributary of the South Fork John Day River, near the town of Dayville. It is designated Mid-Columbia Steelhead habitat, and also within the Murderers Creek Wildlife Management Unit of the ODFW Mule Deer Initiative. Smokey Creek is a high priority area for habitat improvements for both fish and wildlife species. The Hand family has recently purchased the property that is bordered on the West (downstream) end by the Phillip W. Schneider Wildlife Area, and on the East and South by the BLM's Aldrich Wilderness Study Area. Smoky Creek was one of the only Eastern South Fork tributaries that did not burn in the 2014 South Fork Fire.

The Hand family purchased the property for it's wildlife value as well as the value that they saw in the Juniper. The Hands own and operate the South Fork Gardens, and specialize in juniper products, lumber, post and polls, firewood, and animal bedding. They have been working to pre-commercially thin the Juniper, and harvest valuable Juniper within the Smoky Creek watershed. This work has also helped to improve the riparian area, and uplands. They are working with ODFW to re-seed disturbed ground, and would like to work with the South Fork John Day Watershed Council, and OWEB in order to further protect their stream by creating a riparian pasture, and developing 2 upland watering sources. The proposed riparian pasture fencing would be phase 1 of protecting their riparian area, and as they work up the stream removing Juniper they would like to continue to fence the stream. Members of the Hand family also operate a contracting company, John Day Basin Contractors, and are very experienced in fence building, juniper removal, and spring developments, and will perform the work themselves.

### Review Team Evaluation

#### Strengths

- Smoky Creek has value as a perennial stream offering habitat to steelhead and redband trout.
- The landowner has the capacity to implement the project, and has experience installing both spring developments and fencing.
- The property is surrounded by both public and private lands with difficult terrain, making cattle trespass an issue. Phasing in riparian fencing will help protect watershed resources, and aid in livestock management.
- Juniper has been extensively managed on the property, with harvested juniper going into products for sale.



## Concerns

- It is unclear from the riparian pasture management plan whether cattle would be fenced in or out of the riparian area.
- It is also unclear whether cattle would access upland sources for water or have to use Smoky Creek. Accessing Smoky Creek could increase degradation of the stream corridor vegetation.
- Although the application includes a grazing management plan, more description in the narrative would have improved proposal clarity to help reviewers evaluate the ecological benefits of the proposal.
- The juniper management strategy appears to include harvest of only commercially viable juniper instead of focusing on eradication, reducing the ecological benefits of the project.

## Concluding Analysis

The application lacks clarity on the ecological benefits of the proposed riparian pasture management, spring developments, and juniper removal to warrant a funding recommendation. If the applicant decides to resubmit the application, they are advised to provide more detail on the overall goals for ecological improvements and address the various concerns noted above.

## Review Team Recommendation to Staff

Do Not Fund

## Review Team Priority

## Review Team Recommended Amount

\$0

## Review Team Conditions

## Staff Recommendation

## Staff Follow-Up to Review Team

## Staff Recommendation

Do Not Fund

## Staff Recommended Amount

\$0

## **Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6008-18985

**Project Type:** Restoration

**Project Name:** Pine Creek Watershed Improvement Phase 3

**Applicant:** Bridge Creek WC

**Region:** Mid Columbia

**County:** Wheeler

**OWEB Request:** \$117,252

**Total Cost:** \$151,857

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**Application Description** 1. The Pine Creek Watershed Improvement Phase 3 project is located in the Pine Creek watershed in northwestern Wheeler County. The watershed drains to the John Day River near Clarno.

2. Like much of Central and Eastern Oregon, this area has been inundated with western juniper and faces threats from annual grass invasions as well. Western juniper encroachment disrupts the plant and animal communities as well as the hydrologic cycle. Limiting factors in this watershed include water quantity and quality. Conservation work has been completed on Pine Creek Properties over the last five years through two previous OWEB restoration grants. Additional work on neighboring properties including the Confederated Tribes of Warm Springs Reservation's Pine Creek Conservation Area.

3. This project includes conservation practices on two properties in the Pine Creek Watershed. 235 acres of western juniper on north facing slopes will be removed, 8 springs will be developed with 9 troughs for off channel watering sites, 800 feet of fence will be constructed to protect the spring sources, 25 acres of disturbed ground will be treated for noxious weeds and reseeded, and 14,800 feet of cross fencing will be constructed for better upland management options.

4. Project partners include Pine Creek Properties, LLC, Bar U Ranch, LLC, NRCS, Mid John Day-Bridge Creek Watershed Council, and OWEB.

### Review Team Evaluation

#### Strengths

- The application narrative provides a clear pathway to achieve the stated objectives.
- The focus areas for restoration are on North facing slopes where the deepest soils reside. The project components of juniper removal, spring developments, cross fencing, and weed treatments will likely result in a faster return to a functioning landscape with healthy vegetation and increased infiltration.
- Pine Creek watershed is one of the watershed council's highest priority areas identified for restoration.
- This project builds on previous work done on Pine Creek Properties LLC; as well as other restoration completed on adjoining properties lower in the watershed.
- Future restoration opportunities on Pine Creek are likely to occur, due in part to the successful work done by this landowner (the "over the fence" affect).
- When this property changed ownership seven years ago, the current landowner stopped grazing livestock for five years to allow the grasslands to heal, indicating a long-term commitment to restoration.

- The ranch manager also has demonstrated long-term commitment to restoration through projects on this ranch and through previously serving as a Soil and Water Conservation District board member in another part of the state.

### **Concerns**

- The weed treatment approach using glyphosate on medusahead has had low to moderate success; lessons learned from prior applications should be incorporated in future treatments.

### **Concluding Analysis**

The project site upslope of Pine Creek in Wheeler County continues to expand the ecological benefits realized in the first two phases. The ranch manager of Pine Creek Properties LLC has successfully implemented numerous restoration projects, and the successes on this ranch inspired a neighbor to collaborate and become involved in restoration. This area has a history of lightning strikes resulting in multiple large wildfires. By continuing to reduce the fuel load, and establishing strong stands of perennial grasses, future fires could become more of a tool rather than a catastrophic event.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

5 of 9

### **Review Team Recommended Amount**

\$117,252

### **Review Team Conditions**

### **Staff Recommendation**

#### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$117,252

### **Staff Conditions**



## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6009-18945

**Project Type:** Restoration

**Project Name:** Grouse Creek Restoration

**Applicant:** South Fork John Day WC

**Region:** Mid Columbia

**County:** Grant

**OWEB Request:** \$18,489

**Total Cost:** \$24,889

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**Application Description** Grouse Creek is located near the town of Dayville, on the Widows Creek Ranch, and is a tributary of Widows Creek, a tributary to the Upper Mainstem John Day River. Widows Creek is classified as bearing Mid-Columbia Steelhead and Spring Chinook Salmon. Grouse Creek is designated as a redband bearing stream, and also located in the Murderers Creek Mule Deer Initiative area. The landowner has been clearing Juniper and performing forest health treatments in the Grouse Creek watershed, but has yet to remove the Juniper from near the stream. The stream has also been fenced on the Western side, but is still accessible for livestock on the Eastern side. In order to enhance the health of Grouse Creek we are requesting OWEB support to remove the remaining Juniper in the watershed, and fence the Eastern side of the creek. The Widow's Creek Ranch will pay for the Juniper to be piled and burned.

### Review Team Evaluation

#### Strengths

- The application is well-written with clear and achievable objectives.
- Juniper removal in the headwater area could have positive impacts on downslope watershed hydrology.
- Exclusion fencing on the east side of Grouse Creek will complete the goal of protecting the riparian area along this reach.
- On previous juniper removal sites, the landowner has successfully used loppers to remove all juniper saplings that emerge after the cut, indicating capacity for long-term stewardship and maintenance. Additionally, the landowner will consider following up with prescribed burns to keep juniper within its natural habitat.
- Grouse Creek is a tributary of Widows Creek, a steelhead stream.

#### Concerns

- Participation in the Conservation Reserve Enhancement Program (CREP) would provide long-term sustainability of restoration. The application does not include CREP as a component; however, during the virtual site visit the landowner said he is currently enrolling two other streams on his property and is willing to consider CREP on this reach as an alternative.
- More detail on the habitat value of Grouse Creek is required to fully assess ecological benefits. While redband are present in Grouse Creek, the ecological benefit is unclear due to fragmentation of habitat on the creek.

- The watershed context for this project is unclear; while the goals for the ranch are described, the application does not address how the project fits into broader landscape priorities.
- The project could result in increased cattle access to the riparian area downstream of the project site, transferring potential negative water quality impacts to another location.

### **Concluding Analysis**

The project was well presented and would provide protection to a section of Grouse Creek; however, better ecological outcomes could result from an expansion of the scope of the project to include CREP and address downstream water quality impacts. A clearer understanding of watershed context for this project would also improve the application.

### **Review Team Recommendation to Staff**

Do Not Fund

### **Review Team Priority**

### **Review Team Recommended Amount**

\$0

### **Review Team Conditions**

### **Staff Recommendation**

#### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Do Not Fund

### **Staff Recommended Amount**

\$0

### **Staff Conditions**

## Open Solicitation-2020 Spring Offering Mid Columbia (Region 6)

**Application Number:** 221-6010-19038

**Project Type:** Restoration

**Project Name:** Henry Creek Forest Restoration

**Applicant:** Wheeler SWCD

**Region:** Mid Columbia

**County:** Wheeler

**OWEB Request:** \$84,577

**Total Cost:** \$119,183

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**Application Description** 1) The project is located in Kahler Basin, near where Henry Creek leaves the Umatilla National Forest and enters privately owned property. This is approximately 8.5 miles north of the town of Spray, Oregon in Wheeler County. 2) Historic logging practices and increased fire suppression has led to the over-stocking of timber stands and allowed for the expansion of invasive Western Juniper. This has resulted in a forest setting that is highly vulnerable to disease and insect infestations, as well as large fuel loads that increase the risk of catastrophic wildfire. The property also hosts two declining Aspen stands that are in need of protection and enhancement. Additionally, historic grazing practices have resulted in a nearby riparian area being nearly void of any woody species. 3) This project seeks to thin stands of Ponderosa Pines back to healthy density, eradicate the presence of Western Juniper, restore the riparian area through the USDA/FSA's CREP program, develop one spring for stockwater use, and protect two declining Aspen stands. 4) Project partners include the USDA Farm Service Agency, NRCS, ODF, OWEB, and the landowner.

### Review Team Evaluation

#### Strengths

- The application is well-written and provides clear actions to achieve restoration. The project components of forest thinning, aspen protection, and spring development are well thought out and will provide ecological uplift to the landscape.
- Henry Creek is important spawning habitat for steelhead, and is listed in the Mid-Columbia Recovery Plan as Essential Salmonid Habitat.
- This project builds on other restoration efforts completed on private and public lands in the basin.
- The landowners have developed and implemented conservation strategies, including incorporating prescribed fire as a management tool, indicating capacity for long-term stewardship and maintenance.
- Appropriate agency partners are engaged and support the project.

#### Concerns

- While CREP is not an actual component of this project, it is not clear in the application how the proposed CREP relates to the project. A comprehensive description of CREP across the landscape would have been useful in the review and increased the understanding of the overall ecological benefit.



## **Concluding Analysis**

Kahler Basin has been the focus for restoration within the past several years by both private and public land managers. Yet much more work is required to achieve overall ecological uplift in the watershed. This landowner has successfully completed several restoration projects, either through OWEB or NRCS programs.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

9 of 9

### **Review Team Recommended Amount**

\$84,577

### **Review Team Conditions**

### **Staff Recommendation**

#### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$84,577

### **Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6011-19067

**Project Type:** Restoration

**Project Name:** King Creek Upland Enhancement

**Applicant:** Wheeler SWCD

**Region:** Mid Columbia

**County:** Wheeler

**OWEB Request:** \$28,954

**Total Cost:** \$69,317

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**Application Description** 1.) This project is located on the properties of two different landowners in the Butte Creek Watershed. The nearest town to both properties is Fossil, Oregon in Wheeler County. The Humphrey Ranch is west of Fossil and King Creek runs through the property, which is a direct tributary Butte Creek. The Wright Ranch is located east of Fossil.

2.) This area is becoming heavily encroached with Western Juniper, which has negative impacts on water quality and quantity. This results in loss of vegetation, sediment erosion, as well as degraded upland and riparian wildlife habitat. Current stockwater sources are deteriorating with rusty bottoms, creating leaks and impacting livestock grazing patterns.

3.) This project seeks to reduce the amount of negative impacts Western Juniper imposes by removing 67 acres of juniper mechanically, enrolling 13 acres of King Creek into USDA/FSA's CREP program, treating 24 acres for herbaceous weeds, installing an additional 2,400 ft. of fencing to manage grazing patterns, and replace 4 water facilities to provide an adequate water source for livestock.

4.) Project partners will include USDA, Farm Service Agency, NRCS, Wheeler SWCD, and OWEB.

### Review Team Evaluation

#### Strengths

- The proposal addresses known watershed issues and limiting factors of the infestation of juniper and invasive annual grass species in the area.
- The application includes Conservation Reserve Enhancement Program (CREP) as a project component, although enrollment status is unclear.

#### Concerns

- The application is confusing with the spring developments missing from both the maps and site photos.
- It was not clear why Wright Ranch was included in the proposal; however, it was clarified on the virtual site tour that this ranch is where the spring developments would be located.
- It is unclear how the project fits into the broader context of the ranch's conservation plan.

- The application narrative lacks critical details, such as the seed mix specifications and water gap and spring development designs.
- It is unclear how the landowner plans to keep juniper from re-establishing or if management practices would be altered to sustain the investment on these restoration actions.
- Characterization of resources, such as stream flow or fish use, is lacking in the application, making the potential ecological benefits difficult to assess.

### **Concluding Analysis**

The application appears to be premature. During the virtual site tour, the applicant explained that the landowner of Wright Ranch was unavailable when the application was submitted and so without permission to enter the property, project component visuals for that ranch were not included in the application. If the applicant decides to resubmit the application, it is advised to better characterize the natural resources of King Creek, specifically identifying how project work would enhance fish and wildlife habitat; including information on stream flow and whether fish passage barriers exist at the confluence with Butte Creek; details on the proposed seed mix and seeding methodology; and what herbicide will be used on the invasive annual grass areas. Providing a comprehensive grazing strategy, especially how it relates to the annual grass/weed treatment area, will be helpful in evaluating the application.

### **Review Team Recommendation to Staff**

Do Not Fund

### **Review Team Priority**

### **Review Team Recommended Amount**

\$0

### **Review Team Conditions**

### **Staff Recommendation**

#### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Do Not Fund

### **Staff Recommended Amount**

\$0

## **Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6012-19036

**Project Type:** Restoration

**Project Name:** Rock Creek - Derr Meadow  
Restoration

**Applicant:** Wheeler SWCD

**Region:** Mid Columbia

**County:** Wheeler

**OWEB Request:** \$56,573

**Total Cost:** \$98,092

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**Application Description** 1) The project is located along Rock Creek, a steelhead bearing tributary of the John Day River. The site is located on Antone Ranch in Wheeler County, 20 miles east of Mitchell and 10 miles west of Dayville.

2) This section of Rock Creek is nearly devoid of large wood and has highly simplified channel form. It is also the only irrigated field in this section of the ranch with Rock Creek splitting the middle of this small field. Due to this, the project site sees very heavy cattle concentration on the stream as it is the main draw for feed and water.

3) The project seeks to take a minimalist approach to restoring the natural function of this section of Rock Creek by installing 14 large wood structures, 12 full vertical post structures, and 7 partial vertical post structures. The project will also fence the field and Rock Creek off and enroll it into the CREP program for planting and protection.

4) The partners on this project are the Wheeler SWCD, the landowner (Alscott Antone Ranch LLC), and the USDA/FSA (CREP).

### Review Team Evaluation

#### Strengths

- The application is well-written and includes ground-based and drone photography that add to the proposal clarity.
- The project addresses limiting factors for fish, such as the lack of large wood, disconnected floodplain meadow, and a simplified stream complex. Rock Creek is a critical steelhead stream providing habitat for both spawning and rearing fish.
- The design uses a low-impact approach to reduce velocity, access the floodplain and historic side channels, and promote channel migration.
- Wood structures will be sized according to the stream reach.
- Incorporating the Conservation Reserve Enhancement Program (CREP) to fence, plant, and protect the riparian and meadow areas is an economical way to expand the ecological benefits.
- A stream inventory assessment, funded by a prior OWEB technical assistance grant, identified this reach as a priority location for restoration that will achieve significant ecological benefit.
- Beaver are present both up and downstream of this site, and once there are adequate anchor points and pools, it is likely that beaver will sustain the effectiveness of the project elements.
- The landowner, relatively new to the property, is focused on ecological restoration on a landscape scale.

- The landowner is also working with Freshwater Trust on instream leases with a future goal of protecting an additional 6-8 cfs flow in Rock Creek.
- Wheeler SWCD has successfully implemented numerous projects similar to this one in complexity and scope, so the likelihood of success is high.

### **Concerns**

- It is unclear whether adaptive management of vertical post structures would be an approved action once the stream is enrolled in CREP.
- 30% designs provided with the application left some of the details unclear about proposed structure components.

### **Concluding Analysis**

This location provides opportunities not always available to restoration practitioners. The landowner is excited about improving habitat, seeing steelhead thrive, and is willing to protect floodplains to achieve some of those objectives. Derr Meadows hasn't degraded to the point of requiring a heavy-handed restoration approach. Using low-tech vertical post structures and some large wood will give this stream a chance to achieve a more balanced, functioning, and natural process as it makes its way downstream to the John Day River.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

1 of 9

### **Review Team Recommended Amount**

\$56,573

### **Review Team Conditions**

### **Staff Recommendation**

**Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$56,573

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6013-19035

**Project Type:** Restoration

**Project Name:** Upper Pine Hollow Culverts

**Applicant:** Wheeler SWCD

**Region:** Mid Columbia

**County:** Wheeler

**OWEB Request:** \$40,982

**Total Cost:** \$96,114

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**Application Description** 1) The project is located along Pine Hollow Creek, a steelhead bearing tributary of Rock Creek, which flows to the John Day River. Located within Wheeler County, 17 miles east of Mitchell and 15 miles west of Dayville.

2) There are two small culverts on the upper reaches of Pine Hollow that are undersized and do not meet fish passage criteria. Pine Hollow supports listed steelhead and it is imperative to provide full access to the available upstream habitat for spawning and rearing.

3) The project will replace two undersized culverts on the upper portion of Pine Hollow with appropriately sized plate arch culverts. The new culverts will be large enough to provide fish passage during low and high flows.

4) Project partners include USFW Partners Program, the Antone Ranch(Alscott Antone Ranch LLC), the ODFW John Day, and the Wheeler County SWCD.

### Review Team Evaluation

#### Strengths

- Comprehensive maps are included in the application, which helps to better understand the landscape context of restoration.
- Two undersized and failing culverts will be addressed, removing passage issues, such as velocity, for juvenile steelhead and redband trout.
- The limiting factors were identified in the Rock Creek Stream Inventory Assessment, a prior OWEB-funded technical assistance grant.
- This project complements ecological benefits realized by other restoration actions in the watershed.
- The landowner is excited and motivated to improve the watershed function on his property, including working with Freshwater Trust to lease irrigation rights instream.
- ODFW is providing one of the culverts, which helps reduce the overall cost.
- The application is clearly written, including overall ecological goals for the ranch and clear descriptions of management strategies.
- The comprehensive grazing management strategy, included in the application, indicates capacity for long-term stewardship and maintenance of the restoration investment.

#### Concerns

- The condition of potential fish habitat upstream is unclear, particularly regarding the presence of spawning habitat.



- The ecological benefits would have increased with the inclusion of correcting a diversion, an additional undersized culvert, and a headcut on Shingle Creek, as identified in the assessment.
- Conservation Reserve Enhancement Program (CREP) enrollment is being held up by required cultural surveys, which could impact the timing of restoration actions.

## **Concluding Analysis**

This project is one of several being completed on Pine Hollow Creek. Initially, fish passage was completely blocked by two perched culverts downstream. The applicant, using the Rock Creek Assessment, corrected that issue (with OWEB funding) and has now moved upstream in phases with the goal of addressing the entire watershed. Because of the past blockage, fish use is mostly unknown, but the overall flow and habitat improvements will provide opportunities for steelhead that previously were blocked.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

4 of 9

### **Review Team Recommended Amount**

\$40,892

### **Review Team Conditions**

### **Staff Recommendation**

#### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$40,892

### **Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6014-18920

**Project Type:** Technical Assistance

**Project Name:** McKay Creek Habitat Restoration  
Phase I

**Applicant:** Umatilla SWCD

**Region:** Mid Columbia

**County:** Umatilla

**OWEB Request:** \$62,749

**Total Cost:** \$79,566

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**Application Description** The McKay Creek Habitat Restoration Phase I project seeks to begin the process of restoring habitat that was severely damaged by the major flooding events that occurred in spring of 2019 on lower McKay Creek.

The project is located directly south and southwest of the city of Pendleton, and encompasses the reach from the base of the McKay Creek Reservoir to the mouth where McKay Creek connects into the Umatilla River. This reach of McKay Creek flows through a rapidly developing small farm community, and eventually passes into the City of Pendleton's Urban Growth Boundary before flowing back into more agricultural ground. The highly-developed nature of the riparian area creates a challenge for floodplain re-connectivity, as the stream is constrained to protect the infrastructure that lines its banks.

The unexpected rains in 2019 caused an unprecedented flow of water into McKay reservoir. To prevent compromising the structural integrity of the dam, Bureau of Reclamation was forced to release high flows for over two weeks. The amount of sedimentation and erosion that occurred was significant, evidenced through the pictures and visible turbidity. Existing riparian vegetation was ripped away, leaving bare and cut banks that promised additional erosion. A systematic approach to the entire five mile reach needs to be developed to begin restoration.

This project proposes to identify and begin gathering design data on project sites along the 5-mile reach. The majority of funds used in this grant will go towards contracting an engineer to begin the process of site selection, working with individual landowners on their property to begin designing restoration efforts.

Partners include City of Pendleton, Umatilla County, Bureau of Reclamation, and Lower McKay Creek Water Control District.

### Review Team Evaluation

#### Strengths

- The project is the first of three phases. During phase one, data will be gathered to characterize the watershed and identify locations to design restoration efforts with landowners.

- The project footprint covers from the base of McKay dam to the confluence with the Umatilla River.
- Releases from the McKay dam provide cool stream flow, benefiting juvenile fisheries in the lower reach.
- The proposal is timely due to the recent severe flooding in Umatilla County.
- The technical assistance approach described in the application is appropriate by using imagery tools to compare stream conditions before and after recent significant flood events. For example, aerial topographic data will be analyzed to better understand the scour and deposition resulting from the flooding.
- Using drones to replicate existing LiDAR flights is an efficient use of funds.
- There is an interest in streamside habitat restoration, including riparian tree and shrub planting.
- Appropriate local, state, and federal agency partners are engaged in this endeavor.
- The SWCD is well positioned to be the lead contact for the community.

### **Concerns**

- It is uncertain whether the resulting restoration work could be blown out by future dam releases.
- Including input in the application from the Bureau of Reclamation on dam management and releases would provide useful context for evaluating the project.
- Additional detail describing the goals for future restoration concepts, including information related to potential restoration alternatives that will be considered, would be beneficial for understanding whether the technical assistance is likely to lead to eligible restoration projects.
- A map identifying high priority stream reaches would provide context to the review. It is unclear from the application whether the reaches in developed urban areas are included in this proposal or if the project focus is solely on the agricultural areas in between the built-out areas.
- The budget lacks detail needed to evaluate whether costs align with work necessary to accomplish project objectives. For example, the engineering costs is provided as a lump sum in the application budget.

### **Concluding Analysis**

The Umatilla SWCD has been contacted by landowners to assist with resource concerns related to recent flooding in Umatilla County. As a first step, this project will compare new drone flight footage with previous LiDAR and aerial imagery to identify locations where erosion and scour has impacted bank stability, which can lead to the loss of riparian trees and shrubs. The data will then be used to communicate and work with landowners to pursue restoration options. Phase two will use the survey data from this phase one project to develop designs; and phase three will take the next step of pursuing restoration funds.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

3 of 3

**Review Team Recommended Amount**

\$62,749

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$62,749

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6015-18960

**Project Type:** Technical Assistance

**Project Name:** Lower Grass Valley Canyon  
Structural Restoration

**Applicant:** Sherman SWCD

**Region:** Mid Columbia

**County:** Sherman

**OWEB Request:** \$28,607

**Total Cost:** \$40,594

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**Application Description** Lower Grass Valley Canyon (LGVC), the lower 16 miles of Grass Valley Canyon, is a tributary to the Lower John Day River in Sherman County. The stream is historic summer steelhead spawning and rearing habitat and beaver habitat as well as current habitat for redband trout, redband shiner, dace, sculpin, suckers, and possibly Pacific lamprey. Due to land use changes, overgrazing, and catastrophic floods, LGVC has eroded, incised, and straightened, leaving the lower 7 miles ephemeral for much of the year. In part due to the loss of riparian vegetation, Grass Valley Canyon has been on the 303(d) list for temperature since 1998. Compounding these problems, a past landowner realigned the mouth decades ago, and the mouth now impounds with sediment and becomes a fish passage barrier for most of the year. Though most of the stream and adjoining draws are enrolled in CREP and landowners improved upland conservation practices, the riparian and in-stream conditions have not improved. This project builds off a 2006 watershed assessment and a 2012 restoration action plan to design in-stream restoration. We will design riparian and in-stream restoration projects on 4.99 stream miles. We will develop measurable restoration objectives; craft a multi-phase restoration design and implementation plan; and submit permit applications for restoration implementation. This project will have a large-scale benefit for Mid-Columbia steelhead habitat. Partners in this project are private landowners, Western Rivers Conservancy, Sherman County Area Watershed Council, Sherman County SWCD, Anabran Solutions, ODFW, and OWEB.

### Review Team Evaluation

#### Strengths

- The project is located on two properties extending up to five stream miles from the confluence of Lower Grass Valley Canyon Creek. The creek is one of the lower basin tributaries to the John Day River that historically provided spawning and rearing habitat to steelhead. These lower tributaries have shown a potential for increased abundance of steelhead when habitat is available.
- The project site is located within an ODA Focus Area prioritized for water quality improvements, and Grass Valley Canyon Creek is on the 303(d) list of water quality impaired waterbodies for temperature.
- Western Rivers recently purchased the property located at the confluence of the Grass Valley Canyon Creek and the John Day River, and there are plans to convey this property to the BLM. This opens a new opportunity for restoration that will be protected long term.
- The proposed project was identified in a watershed action plan that was developed from a 2006 assessment completed by Sherman SWCD.

- The applicant is expanding from current work focused on upland conservation tillage into new watershed restoration priorities, including instream and riparian project types.
- The consultant selected by the applicant is qualified and has experience designing instream projects based on data and the landscape to effectively meet watershed restoration goals.

## **Concerns**

- More information describing steelhead use in Grass Valley Canyon Creek and the quality of suitable stream habitat would be useful to assess the project cost benefit. For instance, a map showing locations for where fish surveys were completed and results from those surveys would be useful for understanding potential project benefits to native fish.
- Limited fish passage at the Grass Valley Canyon Creek confluence and connectivity of fish habitat are identified in the application as priority concerns, however, the application lacks potential concepts or solutions for addressing these fish habitat issues.
- It is unclear from the application whether a range of restoration design alternatives will be considered.
- A map that includes current property boundaries, locations of BLM properties in the area, fence lines, and any riparian areas protected by fences would be useful for understanding the project area.
- Detail describing land uses on the two project properties, such as grazing or crop production, along with any current conservation efforts, including CREP enrollment or fencing to protect riparian areas, would be helpful context for evaluating the project.
- Grass Valley Canyon Creek fish habitat is limited by intermittent and low flows. The application lacks flow data and a description of where the gauge measuring water flow is located. This information would have provided context for the review.
- It is unclear whether ODFW will be involved in the proposed technical assistance to ensure future restoration actions will result in aquatic ecological benefits.

## **Concluding Analysis**

The application describes a new type of restoration project for the Sherman County partners to address fish passage and improve stream habitat on Grass Valley Canyon Creek. However, the application lacks details to evaluate the project technical soundness and likelihood of success. If the application is resubmitted, the applicant is encouraged to address the above concerns.

## **Review Team Recommendation to Staff**

Do Not Fund

## **Review Team Priority**

## **Review Team Recommended Amount**

\$0

## **Review Team Conditions**

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Do Not Fund

**Staff Recommended Amount**  
\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering Mid Columbia (Region 6)

**Application Number:** 221-6016-18943

**Project Type:** Technical Assistance

**Project Name:** Upper Walla Walla River Watershed  
Assessment and Strategic Action Plan\_Resubmittal

**Applicant:** Confederated Tribes Umatilla Indian  
Reservation

**Region:** Mid Columbia

**County:** Umatilla

**OWEB Request:** \$47,488

**Total Cost:** \$369,040

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**Application Description** The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Fisheries Program, in collaboration with co-managers, has contracted a qualified environmental firm to develop an Upper Walla Walla River watershed assessment and strategic action plan.

The project will be focused on the Walla Walla River from the confluence with Dry Creek near Lowden, Washington, to the headwaters of the North and South Forks of the Walla Walla River in northeast Oregon. The geographic extent of this assessment will build on previously completed studies to provide continuity from the mouth to the headwaters of the Walla Walla River. The project study area is primarily located in Walla Walla County, Washington and Umatilla County, Oregon, with a small portion in Wallowa County, Oregon. Funding from this grant will support work within the Oregon portion of the watershed only.

During the watershed assessment, we will identify the current and historical functioning of natural geomorphic and hydrologic processes, specifically those that are linked to focal species habitat, as organized by the CTUIR River Vision (Jones et al. 2008) and Upland Vision Touchstones (Endress et al. 2019). We will assess the effect of land use on the function of these processes and will identify limiting factors and watershed issues, focusing on those that affect salmonid species.

The strategic action plan will provide a quantitative prioritization of potential restoration actions. We will create an itemized list of restorative actions that may be applied to each geographic area to restore watershed processes. The results will be presented in an atlas-style guide for implementers.

CTUIR, Oregon Dept. of Fish and Wildlife and the Washington Dept. of Fish and Wildlife will act as co-managers on this project. The US Forest Service, Bureau of Land Management, Walla Walla Basin Watershed Council, as well as several other stakeholders will collaborate during the process.

### Review Team Evaluation



## Strengths

- The project builds from the Tribe's River Vision philosophy that guides their restoration actions.
- Previous project evaluation concerns are addressed by providing project details necessary for a comprehensive review of the project.
- The project approach is technically sound because a quantitative assessment will be completed to develop an action plan that identifies locations for priority restoration.
- The project has a significant scope and scale, covering 70 stream miles and approximately 500,000 acres.
- The project area is known habitat for ESA listed salmonids and lamprey.
- Restoration priorities and actions will be based on modeling that includes datasets derived from analyzing 2019 LiDAR and 2020 bathymetric LiDAR.
- Data will be managed and shared to ensure that it will be available to all partners in the basin.
- Previous assessments completed for the lower Walla Walla basin, and some of its significant tributaries, will be incorporated into the proposed work to provide a broad, watershed scale understanding for prioritizing restoration actions.
- The tribes have the qualifications to implement the project and relevant experience from similar projects in other watersheds.
- Stakeholders and partner support is demonstrated by match contributions.

## Concerns

- It is unclear from the application whether the Department of Fish and Wildlife from either Oregon or Washington are involved in the project.
- The application lacks letters of support from local stakeholders and partners.

## Concluding Analysis

The proposed technical assistance will build on initial work already underway to complete a 20-year action plan for stakeholders in the Upper Walla Walla River. Partners from both Oregon and Washington are contributing to the work and each state's watershed restoration efforts will benefit from the resulting document.

## Review Team Recommendation to Staff

Fund

## Review Team Priority

1 of 3

## Review Team Recommended Amount

\$47,488

## Review Team Conditions

**Staff Recommendation**  
**Staff Follow-Up to Review Team**

**Staff Recommendation**  
Fund

**Staff Recommended Amount**  
\$47,488

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6017-18917

**Project Type:** Technical Assistance

**Project Name:** Wall Creek Crossing and Habitat Enhancement Design

**Applicant:** Monument SWCD

**Region:** Mid Columbia

**County:** Grant

**OWEB Request:** \$74,074

**Total Cost:** \$102,298

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**Application Description** 1) This project is located on Robbin's Ranch where little Wall Creek joins Big Wall Creek approx. 8 miles north of the town of Monument in Grant County, Oregon.

2) Stream bank erosion is occurring at a ranch crossing on Little Wall Creek approx. 200 meters upstream from its confluence with Big Wall Creek. A small bridge at this site currently allows foot travel across the creek but is not adequate for larger vehicles. Without a bridge suitable for vehicles the landowners must drive through the creek in order to access the other side of the ranch with any heavy equipment/machinery. Repeated use of this crossing has resulted in streambed degradation and a hindrance to fish passage during low flow periods. There is also a lack of floodplain connectivity approx. 250 meters upstream of the crossing on the opposite side of Little Wall Creek from the landowners home (see attached map). This area contains good willow growth and other riparian vegetation for fish habitat but the current channel structure does not allow for regular inundation of the floodplain. Furthermore, the lack of seasonal floodplain inundation has contributed to altered flow patterns that have washed out an eroded channel and deposited debris near where the landowners built their home.

If no action is taken to remedy these problems, site conditions will continue to degrade and high flow events will further exacerbate food damage problems for the landowners.

3) This project will fund a thorough site evaluation, alternatives analysis and design plans for improving floodplain connectivity and in-stream habitat at a stream crossing near the confluence of Big and Little Wall Creek.

4) Monument SWCD, Anderson Perry & Associates, Robbins Ranch, Confederated Tribes of Warm Springs, USFWS Partners Program and OWEB

### Review Team Evaluation

#### Strengths

- The proposed technical assistance project includes evaluating site conditions, analyzing restoration alternatives, and consulting stakeholders to select a restoration approach for final designs.

## Concerns

- The need for replacing the Wall Creek crossing is unclear because the application lacks detail describing how fish passage is impacted by the existing ford. The project site is also not identified by ODFW as a complete fish passage barrier. It is likely the crossing is a barrier to only juvenile fish at low stream flows.
- The application lacks information describing habitat needs or watershed limiting factors identified for Wall Creek that are needed to understand why the project is prioritized for technical assistance.
- More detail and photos illustrating the potential for connecting the floodplain and historic side-channel to Wall Creek would provide useful context for understanding potential project outcomes. For example, adding instream structures or removing the berm to achieve this connection.
- It appears the bridge site is located within the floodplain and will continue to be potentially inundated during high flows. It is unclear from the application whether alternative locations for the bridge that could be more sustainable were considered.
- The six month timeline may be overly ambitious for completing an alternative analysis along with design and permitting processes.
- The application lacks detail describing instream habitat features that will be restored to benefit aquatic species.
- The project will likely result in minimal ecological benefit for the investment.

## Concluding Analysis

The application lacks enough detail to understand how the proposed project is a priority for addressing watershed limiting factors and enhancing stream habitat. More information needs to be provided that describes actual fish use in Wall Creek, the extent to which the current barrier limits fish passage, the quality of available upstream habitat, and why a ford is not a viable option.

## Review Team Recommendation to Staff

Do Not Fund

## Review Team Priority

## Review Team Recommended Amount

\$0

## Review Team Conditions

## Staff Recommendation

## Staff Follow-Up to Review Team

**Staff Recommendation**

Do Not Fund

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6018-18957

**Project Type:** Technical Assistance

**Project Name:** South Fork Walla Walla River Base Flow Assessment

**Applicant:** Walla Walla Basin Watershed Foundation

**Region:** Mid Columbia

**County:** Umatilla

**OWEB Request:** \$24,982

**Total Cost:** \$115,880

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**Application Description** The South Fork Walla Walla River Baseflow Assessment will occur in the Middle and Upper HUC-6 subwatersheds in the Umatilla National Forest in the Blue Mountains.

The Walla Walla River is a groundwater-dependent system with summer base flows supplied, in large part, by springs emerging from basalt aquifers in the South Fork drainage. Climate science predicts changing precipitation and infiltration patterns in the Blue Mountains will reduce spring performance. Reduced summertime base flows will accentuate downstream low flow and high water temperature conditions documented as primary limiting factors for native fish species.

In order to protect and enhance upper watershed groundwater discharges to the Walla Walla River, we must first understand the status of the resource and the processes that govern spring production. Our goal is to sustain this ecosystem function throughout the predicted shifts in precipitation patterns rather than face the challenge of restoring it in 50 years when spring production has declined and the downstream conditions have been further degraded.

The proposed base flow assessment will include 1) LiDAR acquisition, 2) a field inventory to locate and characterize the springs in order to document baseline conditions, 3) creation of a hydrologic map of the project area. and 4) public outreach to promote water conservation efforts that support sustainable municipal supplies. Isotope results from a concurrent USGS study will furnish information about the timing of groundwater infiltration and relative time to discharge. Results from this assessment will guide strategies for enhancing infiltration, protecting recharge zones, and other efforts to mitigate the anticipated reductions in spring performance due to climate change.

Project partners include the City of Milton-Freewater, USFS, OWRD, USGS, ODEQ, and BLM.

### Review Team Evaluation

#### Strengths

- Previous project evaluation concerns are addressed.

- There is a clear need to better understand baseline flow conditions on over 55 square miles of high quality habitat in the South Fork Walla Walla River supported by groundwater and spring inputs. Baseflow trends will be established by utilizing historical reports on spring conditions dating back to the 1970's, and supplementing this information with data collection to better understand current conditions.
- The technical assistance approach is appropriate given the landscape, scope and scale of the project. The resulting data will contribute to other assessments under development in the Walla Walla Basin, such as the CTUIR watershed assessment and action plan, the Bi-state 2050 plan, and the collaborative groundwater study by OWRD and USGS.
- Water quality data will help to better understand the value of water inputs from these headwater springs.
- Climate change is a driving force behind gathering flow assessment information. With the potential for springs to experience reduced flow or even going dry, having baseline data generated from this project is timely for monitoring potential impacts of climate change on important downstream habitats and fisheries. Increased or sustained cool water in the upper reaches of the Walla Walla River is critical to ESA-listed aquatic species; as well as contributing to flow lower in the watershed where elevated stream temperature is a limiting factor.
- Data will be made available to other stakeholders in the basin to inform restoration priorities and actions.
- Appropriate partners with relevant technical expertise are engaged to participate in the project, including representation from cities, counties, tribes, and state and federal agencies. For example, utilizing USGS for the isotope analysis ensures that professionally accepted methods will be used.
- The applicant has a proven track record for completing monitoring, assessments, community engagement, and restoration projects.

## **Concerns**

- Next steps for the project leading to restoration actions in the upper basin are not clearly articulated in the application, and it is unclear if the continuous flow monitoring will be pursued in the future.
- The methodology for interpreting the LiDAR data is unclear from the application.
- It is unclear from the application whether the proposed technical assistance will also provide comprehensive information on tributary stream flow and the impact of springs on those tributaries. Also, collecting information to characterize existing or future aquifers could help to better understand water resources for the whole Walla Walla basin.

## **Concluding Analysis**

The Walla Walla River has both water quality and quantity limiting factors impacting stream health. Data resulting from the proposed technical assistance project will provide important baseline information for critical headwater inputs that will be useful to stakeholders in the basin working on restoration or water conservation measures.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

2 of 3

**Review Team Recommended Amount**

\$24,982

**Review Team Conditions**

**Staff Recommendation**

**Staff Follow-Up to Review Team**

**Staff Recommendation**

Fund

**Staff Recommended Amount**

\$24,982

**Staff Conditions**



## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6019-18836

**Project Type:** Stakeholder Engagement

**Project Name:** Bank Stabilization Engagement Project

**Applicant:** Umatilla SWCD

**Region:** Mid Columbia

**County:** Umatilla

**OWEB Request:** \$6,804

**Total Cost:** \$23,296

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**Application Description** The Streambank Stabilization Workshops will take place in Umatilla County. Unstable streambanks pose a problem for landowners in the county due to loss of property, while factors such as excess sediment and lack of riparian vegetation overstory are a threat to salmonid habitat. Salmonids require low turbidity and shaded, cool water for spawning. Restoring stream morphology is complex, and regulations and priorities regarding bank stabilization involve environmental, ecological, and hydrologic factors, including floodplain reconnection and disbursement of high flow energy. Currently, information regarding bank stabilization is available but many landowners are unsure of the methods to properly stabilize banks. Landowners therefore commonly stabilize banks improperly and then face fines and must still find a way to stabilize banks to meet regulations. The Umatilla County Soil and Water Conservation District proposes holding four workshops in the city of Pendleton, Oregon. All workshops will be similar in content, but will be held twice per year over two years, and will take place during flood seasons (spring and fall). Representatives from the Army Corps of Engineers, the Department of State Lands, the Confederated Tribes of the Umatilla Indian Reservation, and the Oregon Department of Agriculture have been asked to speak at the workshops. Participating speakers will present on the topic of streambank stabilization during the same session in order to provide consistency in information and opportunity will be given to landowners to ask questions. Following the presentations, groups will visit field sites that demonstrate bank stabilization methods, displaying projects that were successful. Engineers will be available to discuss potential projects with participating landowners.

### Review Team Evaluation

#### Strengths

- Utilizing natural resource agency and tribal experts to engage landowners in learning about alternatives to bank armoring offers opportunity to introduce options that will result in an ecological benefit.
- Including site tours of both successful and unsuccessful bank stabilization methods provides an effective visual to help shift public perception of alternatives to bank armoring.
- Informing landowners about the Conservation Reserve Enhancement Program (CREP) as an option is an important component of this project that could lead to efforts that enhance and protect riparian areas.

- The proposed stakeholder engagement is timely because recent floods in Umatilla County offer an opportunity to work with landowners to address shared watershed concerns.
- The workshops will focus on bioengineering and riparian planting options for stabilizing stream banks, along with permit requirements for bank stabilization projects.
- In addition to broadly advertising the workshops and making them open to the public, the SWCD already has an existing list of interested landowners.
- Qualified staff from permitting agencies and the tribes have committed to present at the workshops.

## **Concerns**

- Additional information describing the rationale for hosting two workshops a year would be useful for evaluating whether the number of workshops is reasonable, necessary, and sufficient for achieving stakeholder engagement objectives.
- More detail is needed in the application explaining how alternative bank stabilization methods presented to landowners will also improve habitat for native fish and wildlife species.
- It is unclear from the application whether the SWCD will take on the role of helping landowners through permitting processes related to future bank stabilization projects.
- It is difficult to understand how the pathway from the workshops leads to on-the-ground, ecologically based restoration without more information describing “next steps” for working with landowners.
- It is unclear whether project costs are reasonable and necessary for the proposed work because a significant portion of the OWEB application budget is for workshop refreshments instead of time spent working with landowners.

## **Concluding Analysis**

The two recent major flood events in Umatilla County offers opportunities to integrate riparian and instream restoration into recovery efforts with landowners that will provide ecological benefits.

## **Review Team Recommendation to Staff**

Fund

## **Review Team Priority**

2 of 2

## **Review Team Recommended Amount**

\$6,804

## **Review Team Conditions**

## **Staff Recommendation**

## **Staff Follow-Up to Review Team**

**Staff Recommendation**

Do Not Fund; falls below staff-recommended funding line

**Staff Recommended Amount**

\$0

**Staff Conditions**

## Open Solicitation-2020 Spring Offering

### Mid Columbia (Region 6)

**Application Number:** 221-6020-18905

**Project Type:** Stakeholder Engagement

**Project Name:** South Fork John Day Watershed  
Stakeholder Engagement

**Applicant:** South Fork John Day WC

**Region:** Mid Columbia

**County:** Grant

**OWEB Request:** \$39,226

**Total Cost:** \$89,226

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**Application Description** The South Fork of the John Day River (SFJDR) flows northward from its headwaters in the Ochoco and Aldrich Mountains and enters the mainstem of the John Day River at Dayville, OR. The SFJDWC territory is located almost entirely within Grant County, Oregon. In its entirety, the South Fork subbasin drains approximately 607 square miles. The length of the mainstem of the South Fork, from its headwaters to mouth is approximately 55 miles.

The South Fork John Day Watershed Council will work with private landowners to advance restoration efforts within the basin in conjunction with the recently awarded Regional Conservation Partnership Program (RCPP) through NRCS. We are proposing to send outreach materials to all landowners, hold landowner sign up meetings, build a landowner needs assessment for the lower South Fork, go on site tours with interested landowners, and advertise informational material for upcoming landowner events. This stakeholder engagement will help provide landowners with valuable information and encourage them to become active in possible restoration opportunities available with RCPP funds. This stakeholder engagement will also build upon the SFJDWC's existing Private Landowner Needs Assessment.

Project partners that have help provided match with the RCPP funding include; Oregon Department of Fish and Wildlife, Grant County Weed Control, and Oregon Watershed Enhancement Board.

### Review Team Evaluation

#### Strengths

- The proposed stakeholder engagement work focuses on upland restoration goals within the newly awarded NRCS Regional Conservation Partnership Program (RCPP) grant focus area, along with a suite of resource concerns related to fish, wildlife, and water quality.
- The proposed project is modeled after a similar approach used in Gilliam County by NRCS and the SWCD to engage landowners in restoration and leverage funding.
- The applicant effectively used the described landowner needs assessment tool in the upper South Fork John Day Basin to identify and implement multiple restoration projects.

- The timeline and actions for stakeholder engagement efforts are likely to result in future restoration projects.
- The applicant has a proven track record in both landowner engagement and restoration projects.

### **Concerns**

- Additional information describing the specific actions included in the RCPP practices would be useful for understanding the overall watershed objectives for the project.

### **Concluding Analysis**

The applicant has a history of implementing restoration on private lands and public lands in the South Fork John Day River Basin. The proposed stakeholder engagement work complements the newly awarded 1.74 million dollar NRCS RCPP for private land upland restoration. This venture covering private lands will multiply the ecological uplift from restoration work also completed on public lands by both the applicant and other stakeholders in the region.

### **Review Team Recommendation to Staff**

Fund

### **Review Team Priority**

1 of 2

### **Review Team Recommended Amount**

\$39,226

### **Review Team Conditions**

### **Staff Recommendation**

#### **Staff Follow-Up to Review Team**

### **Staff Recommendation**

Fund

### **Staff Recommended Amount**

\$39,226

### **Staff Conditions**

