



OREGON
WATERSHED
ENHANCEMENT BOARD

Agenda Item K

Spring 2024 Open Solicitation Grant

Offering Board Awards

Board Meeting October 22-23, 2024



Oregon

Tina Kotek, Governor



OREGON
WATERSHED
ENHANCEMENT BOARD

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Agenda Item K supports OWEB's Strategic Plan priority # 4: Watershed organizations have access to a diverse and stable funding portfolio.

MEMORANDUM

TO: Oregon Watershed Enhancement Board
FROM: Eric Williams, *Restoration Grants Manager*
SUBJECT: Agenda Item K. Spring 2024 Open Solicitation Grant Offering
October 22-23, 2024, Board Meeting

I. Introduction

This staff report describes the Spring 2024 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:

- 36 Restoration grants
- 17 Technical Assistance grants
- 5 Engagement grants
- 12 Monitoring grants

II. Spring 2024 Grant Offering Background and Summary

A total of 137 applications were received requesting over \$25 million. **Attachment A** shows applications submitted by region, project type and funding request.

III. Review Process

Staff facilitated a review process where all eligible grant applications were evaluated by Technical Review Teams (TRT), including the agency's six Regional Review Teams (RRTs) and the Oregon Plan Monitoring Team (OPMT). TRTs are made up of technical experts from multiple state and federal agencies and tribes who are local to each region. Staff scheduled site visits for as many proposed projects as possible, with all RRT members invited to attend.

OWEB then facilitated RRT meetings in each region for Restoration, Technical Assistance and Engagement grant types and OPMT for Monitoring grants. 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 "Recommended," "Recommended with Conditions," or "Not Recommended," the TRTs then prioritized the projects recommended for funding by application type.

The project evaluations and recommendations were distributed to all applicants.

Attachment C includes the number of applications recommended for funding in each region by application type, as well as staff-recommended award totals by application type

and region. Before the board meeting, staff will forward to the board any written comments received from applicants regarding the project award 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 to support projects located in Oregon's sagebrush/sage-steppe ecosystem that improve greater sage-grouse habitat. The recommended Spring 2024 Open Solicitation Grant awards include three projects that meet the criteria:

- 224-5043, *Rip Van Winkle Revisited* — requesting \$172,108
- 224-5049, *The Work Never Stops*— requesting \$80,685
- 224-5050, *Eagle Creek Floodplain Restoration Design Project* — requesting \$177,722

If awarded, total funding for sage-grouse projects since 2015 will be \$16,602,326.

V. Invitation for Board Discussion

In addition to normal discussion and deliberation, staff would particularly welcome feedback from the board for the following questions:

- a. What information can staff compile to demonstrate the strategic nature of projects recommended for an Open Solicitation award?
- b. How can staff better present the Open Solicitation award recommendation to effectively demonstrate how evaluation criteria in administrative rules were applied during the application review process?

VI. Funding Recommendation

Staff considered the TRT recommendations, funding availability and evaluation criteria in developing the staff funding recommendations provided in **Attachment D**. The funding recommendations for the Spring 2024 Open Solicitation Grant Offering are summarized in **Table 1**. This will be the third Open Solicitation grant award for the 2023-2025 biennium.

Staff recommend the board adjust the Open Solicitation amounts to move \$8,067 from Restoration to Monitoring in the 2023-2025 Spending Plan included in the Agenda section of the Board book and award funds for the staff-recommended projects listed in **Attachment D**.

Table 1: Spending Plan and Funding Recommendations for Spring 2024 Grant Offering

Grant Type	Current Spending Plan	Awards to Date	Staff Recommendation	Remaining Spending Plan Balance
Restoration	\$37,500,000	\$17,960,532	\$8,910,100	\$10,629,368
Technical Assistance	\$6,800,000	\$2,823,820	\$2,148,542	\$1,827,638
Engagement	\$2,000,000	\$820,928	\$593,895	\$585,177
Monitoring	\$4,500,000	\$2,235,398	\$2,272,669	(\$8,067)
TOTAL	\$50,800,000	\$23,840,678	\$13,925,206	\$13,034,116

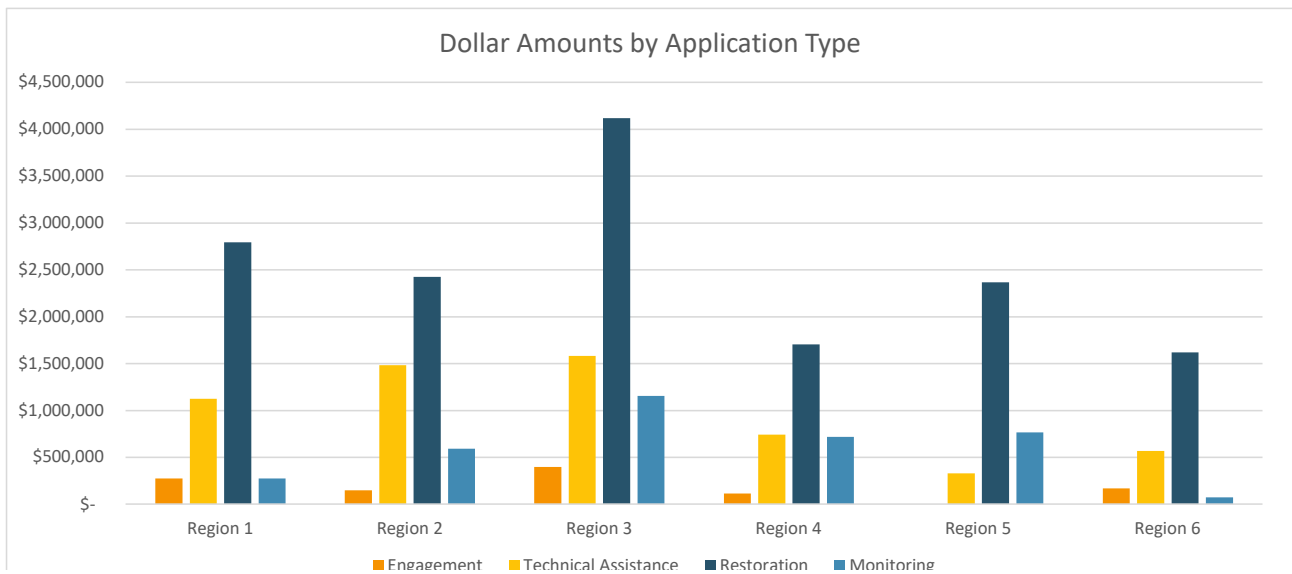
VII. Attachments

- A. Grant Applications Submitted
- B. Evaluation Criteria
- C. Technical Review Team and Staff Funding Recommendations
- D. Regions 1-6 Funding Recommendations

Oregon Watershed Enhancement Board Spring 2024 Open Solicitation Grant Offering

Dollar Amounts Requested by Application Type

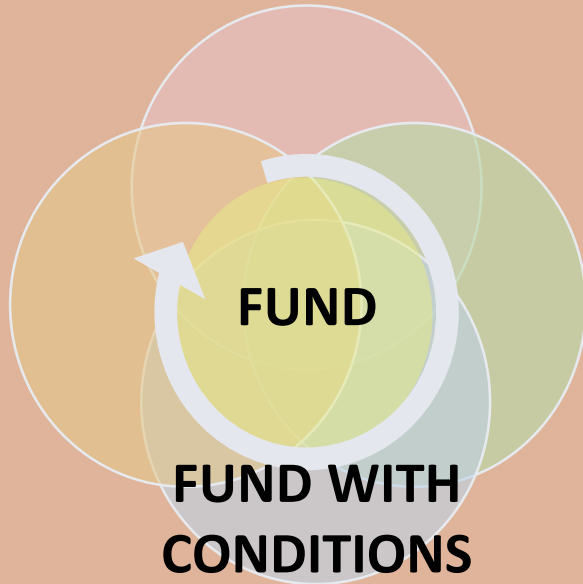
	Engagement	Technical Assistance	Restoration	Monitoring	Totals by Region
Region 1	\$ 275,199	\$ 1,126,174	\$ 2,795,008	\$ 274,992	\$ 4,471,373
Region 2	\$ 149,207	\$ 1,483,000	\$ 2,424,271	\$ 593,118	\$ 4,649,596
Region 3	\$ 397,243	\$ 1,582,274	\$ 4,118,876	\$ 1,157,194	\$ 7,255,587
Region 4	\$ 115,689	\$ 741,781	\$ 1,706,281	\$ 718,847	\$ 3,282,598
Region 5	\$ -	\$ 330,191	\$ 2,367,896	\$ 766,076	\$ 3,464,163
Region 6	\$ 168,971	\$ 568,305	\$ 1,621,576	\$ 72,749	\$ 2,431,601
Total Requested	\$ 1,106,309	\$ 5,831,725	\$ 15,033,908	\$ 3,582,976	\$ 25,554,918



Open Solicitation- OAR Divisions 10, 15, 25, and 30

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

Recommend



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

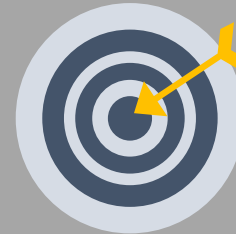
Prioritize



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 technical team & make a statewide funding recommendation to the Board base on available resources for the grant period & type.

RESTORATION

Evaluation Criteria
OAR 695-010-0060

All projects must meet the following:

- Will the project provide public benefit by supporting improved water quality, habitat, &/or ecosystem functions?
- Does the project demonstrate sound watershed management principles?
- Are project methods adapted to the project location?
- Will professionally accepted restoration approaches be followed?

Is the project ready to be implemented?

Does the application provide an overall budget that reflects expected & quantified watershed health benefit?

Does the budget reflect necessary costs & reasonable rates for direct costs?

Does the applicant have capacity for successful long-term stewardship & maintenance of the project?

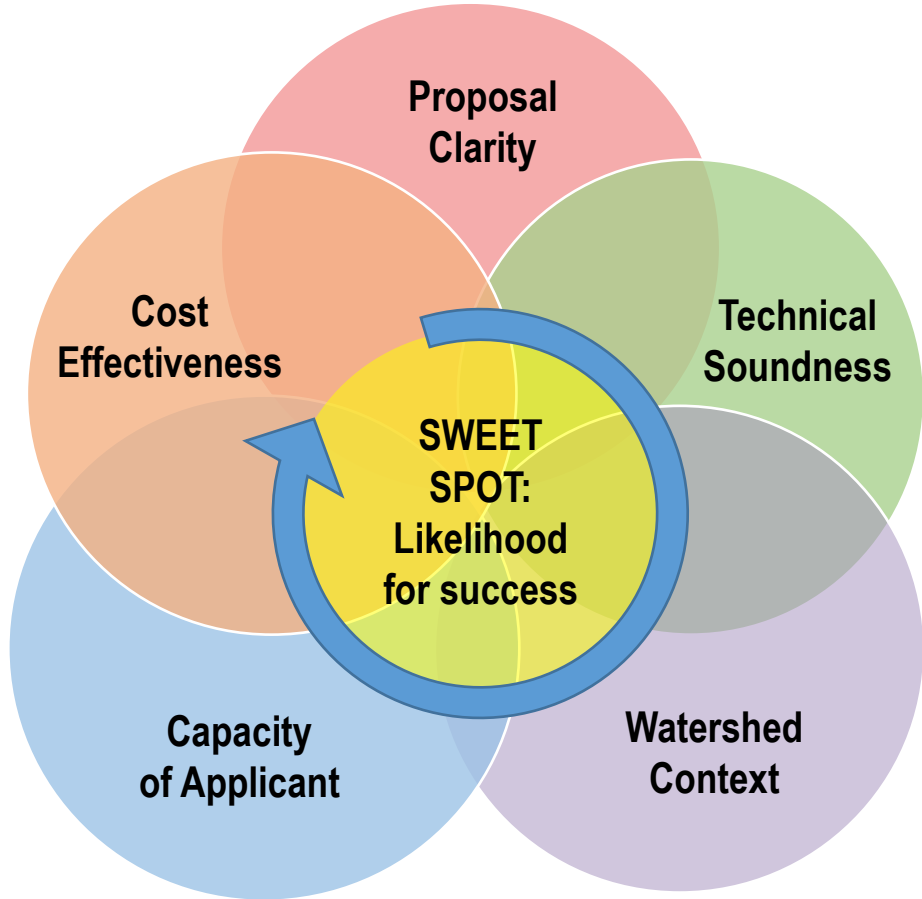
Does the applicant have a proven track record managing projects, completing projects as proposed & reporting?

Will appropriate partners be engaged in the project?

How did/will engagement with local communities disproportionately impacted by climate change inform project?

Does the application clearly state the project objectives & provide information about how those objectives will be met?

Will project be implemented using a clearly defined methods appropriate for addressing the problem?



Does the project address limiting factors or watershed issues by treating the causes rather than the symptoms of disturbance?

Were alternatives to address the identified problem identified & evaluated?

How are watershed benefits adequately quantified in the application?

How are changing climate conditions incorporated & how will project contribute to durable adaptation & resilience for ecosystems?

How has consideration of greenhouse gas emissions or long-term carbon sequestration or storage informed project?

How were likely impacts to the site & adjacent properties during & after project implementation considered?

What specific action(s) will be implemented that are within an explicit geography prioritized in a watershed restoration plan?

How does the project address watershed function & ecosystem processes, including water quality & the life stages of fish & wildlife?

How does the project fit within the context of past & planned future restoration efforts in the watershed?

How will the project promote public awareness that may lead to opportunities for watershed restoration?

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

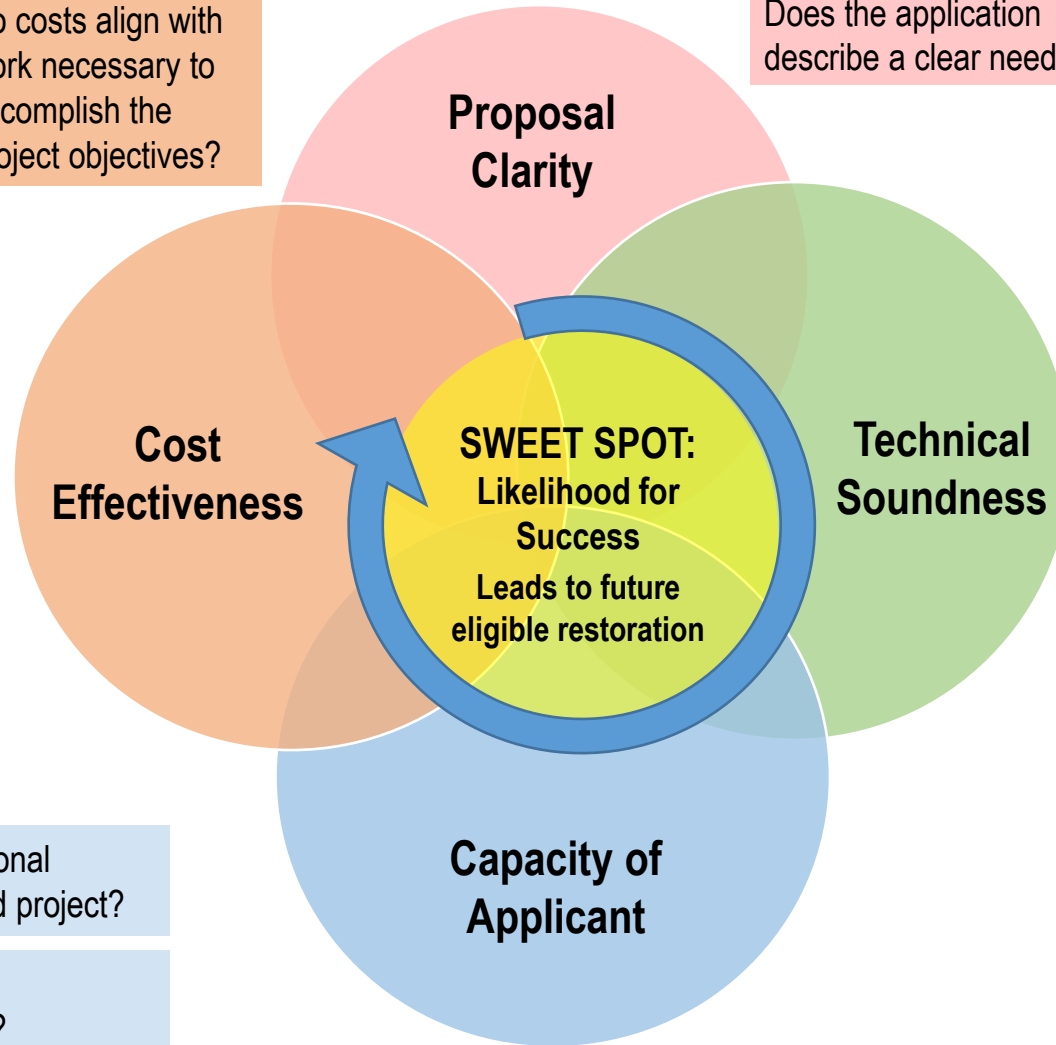
= information about existing water quality or habitat conditions and processes at an identified scale, and relates those conditions and processes to actions that will directly lead to desired future conditions within a specified timeframe.

Does applicant have the organizational capacity to implement the proposed project?

Are staff or consultants qualified to accomplish the proposed activities?

Are appropriate audiences engaged in the project?

Do costs align with work necessary to accomplish the project objectives?



Does the application describe a clear need?

Technical Design & Engineering

- How does the project address limiting factors in existing conservation or recovery plans?
- Was an alternative analysis completed that demonstrates a range of options were considered?
- Will appropriate data be collected to inform designs?
- Will professionally accepted technical or engineering approaches will be used?
- How are changing climate conditions incorporated & how will project contribute to durable adaptation & resilience for ecosystems?
- How has consideration of greenhouse gas emissions or long-term carbon sequestration or storage informed project?

Resource Assessment & Planning

- Is the project scope & scale feasible? Have the partners demonstrated the ability for collaborative work at this scale?
- Is the process by which data will be managed & shared with partners appropriate?
- Will professionally accepted methods & parameters will be used?
- How are changing climate conditions incorporated & how will project contribute to durable adaptation & resilience for ecosystems?
- How has consideration of greenhouse gas emissions or long-term carbon sequestration or storage informed project?

How did/will engagement with local communities disproportionately impacted by climate change inform project?

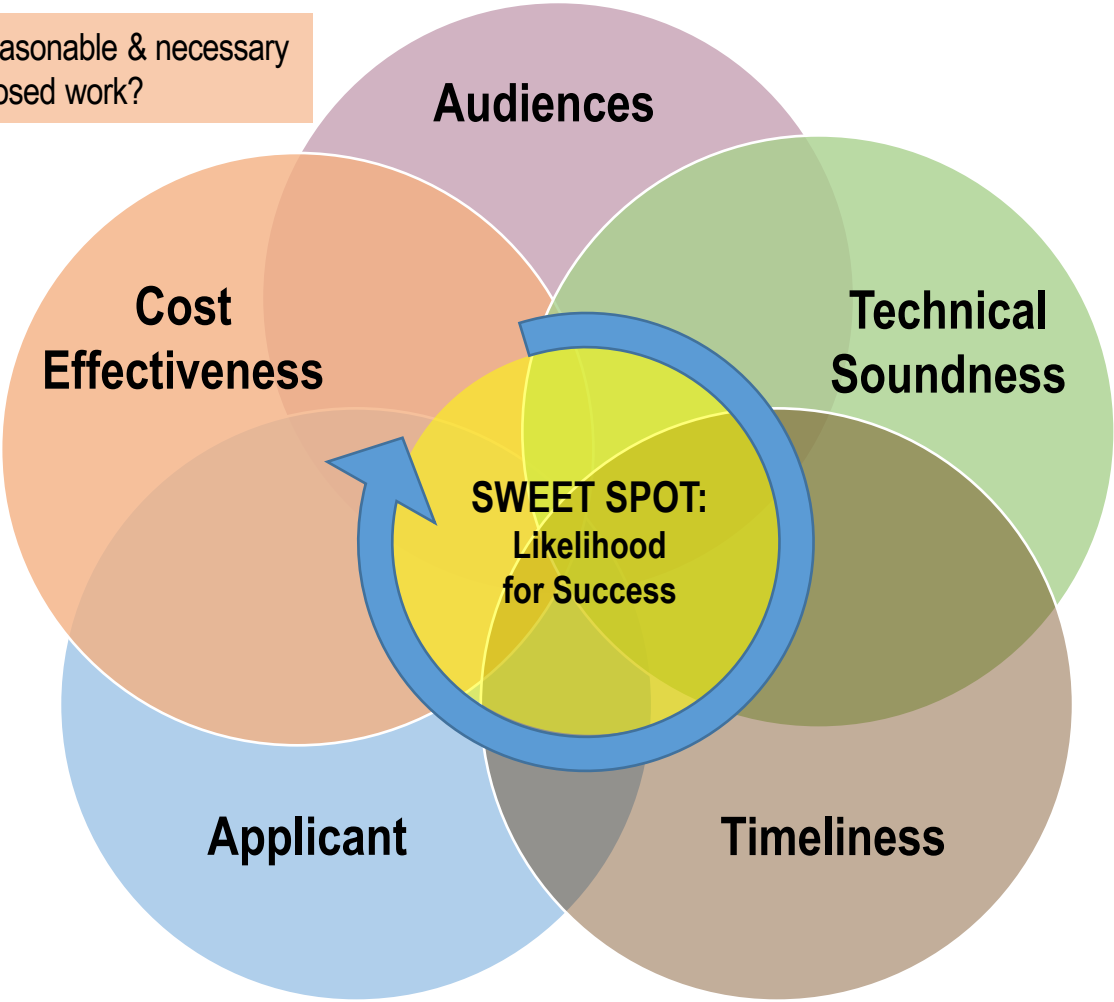
ENGAGEMENT

Evaluation Criteria
OAR 695-015-0070

“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

Are costs reasonable & necessary for the proposed work?



How is the applicant qualified to implement the project? Do they have relevant experience?

Will engagement result in timely development of eligible restoration or acquisition projects or programs?

How will applicant engage with appropriate audiences in the appropriate geography?

How did/will engagement with local communities disproportionately impacted by climate change inform project?

How is the multi-directional communication among the applicant & audiences likely to be effective?

What is the evidence linking engagement to eligible restoration or acquisition projects or programs?

Will the outcomes of the expected restoration or acquisitions protect or restore fish or wildlife habitat, watershed function, &/or water quality or quantity?

How are changing climate conditions incorporated & how will project contribute to durable adaptation & resilience for ecosystems?

How has consideration of greenhouse gas emissions or long-term carbon sequestration or storage informed project?

MONITORING

Evaluation Criteria

OAR 695-025-0140

Purpose

Monitoring activities necessary for carrying out projects that protect or restore native fish or wildlife habitats, or protect or restore natural watershed or ecosystem functions to improve water quality or stream flows.

Eligibility

Projects that gather & analyze data to:

1. Describe current watershed conditions
2. Establish trends about watershed conditions
3. Evaluate the specific effects of a restoration or acquisition project

Monitoring relates to limiting factors, habitat conditions, watershed processes or actions described in local plans

Need, relevance, applicability, & timeliness of proposed monitoring to inform future projects

Complements existing data or current or planned monitoring efforts

Proposed costs are appropriate for the work necessary to accomplish the objectives

How the appropriate technical experts & community members are engaged

Organizational capacity relative to past experience & successful implementation of monitoring projects

Proposal Clarity

Monitoring questions & how proposed monitoring methods will answer these questions

Professionally accepted monitoring & analysis protocols, including quality assurance / quality control procedures to be utilized

Process by which data & results will be stored, reported, & made publicly available

Consideration of greenhouse gas emissions or long-term carbon sequestration or storage

Changing climate conditions incorporated; & contribution to durable adaptation & resilience for ecosystems

Technical Soundness

Cost Effectiveness

SWEET SPOT:
Likelihood for Success
Necessary for future eligible restoration or acquisition

Capacity of Applicant

Qualifications & ability of applicant technical staff, consultants, or project partners to apply appropriate monitoring approaches & data collection & analysis methods to successfully complete monitoring activities

Engages & applies input from local communities disproportionately impacted by climate change

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RRT and Staff Funding Recommendations for the Spring 2024 Open Solicitation Grant Offering

Tables compare the number of projects recommended by each Regional Review Team (RRT) with projects recommended by Staff based on funds available in the 2023-2025 Spending Plan.

Restoration			
Region	RRT	Staff	%
1	10	8	80%
2	7	4	57%
3	4	3	75%
4	3	3	100%
5	15	11	73%
6	8	7	88%
Total	47	36	77%

Technical Assistance			
Region	RRT	Staff	%
1	5	3	60%
2	10	3	30%
3	7	3	43%
4	3	1	33%
5	3	2	67%
6	7	5	71%
Total	35	17	49%

Engagement			
Region	RRT	Staff	%
1	3	2	67%
2	1	1	100%
3	2	2	100%
4	N/A	N/A	0%
5	N/A	N/A	0%
6	1	0	0%
Total	7	5	71%

Monitoring			
Region	RRT	Staff	%
1	2	2	100%
2	2	2	100%
3	5	3	60%
4	2	2	100%
5	4	2	50%
6	1	1	100%
Total	16	12	75%

Funding amounts are the totals for Staff Recommended projects

Region	Restoration	Technical Assistance	Engagement	Monitoring	Total
1	\$ 1,914,610	\$ 315,946	\$ 152,154	\$ 146,754	\$ 2,529,464
2	\$ 1,583,579	\$ 565,589	\$ 149,207	\$ 452,966	\$ 2,751,341
3	\$ 1,030,958	\$ 417,093	\$ 292,534	\$ 581,597	\$ 2,322,182
4	\$ 1,491,638	\$ 136,105	\$ -	\$ 718,847	\$ 2,346,590
5	\$ 1,598,386	\$ 258,407	\$ -	\$ 299,756	\$ 2,156,549
6	\$ 1,290,929	\$ 455,402	\$ -	\$ 72,749	\$ 1,819,080
Total	\$ 8,910,100	\$ 2,148,542	\$ 593,895	\$ 2,272,669	\$ 13,925,206

All Regions Spring 2024 Funding Recommendations

Spring 2024 Funding Recommendations
Status

Staff Recommended Funding

Below Funding Line

OWEB Regions

Region 1

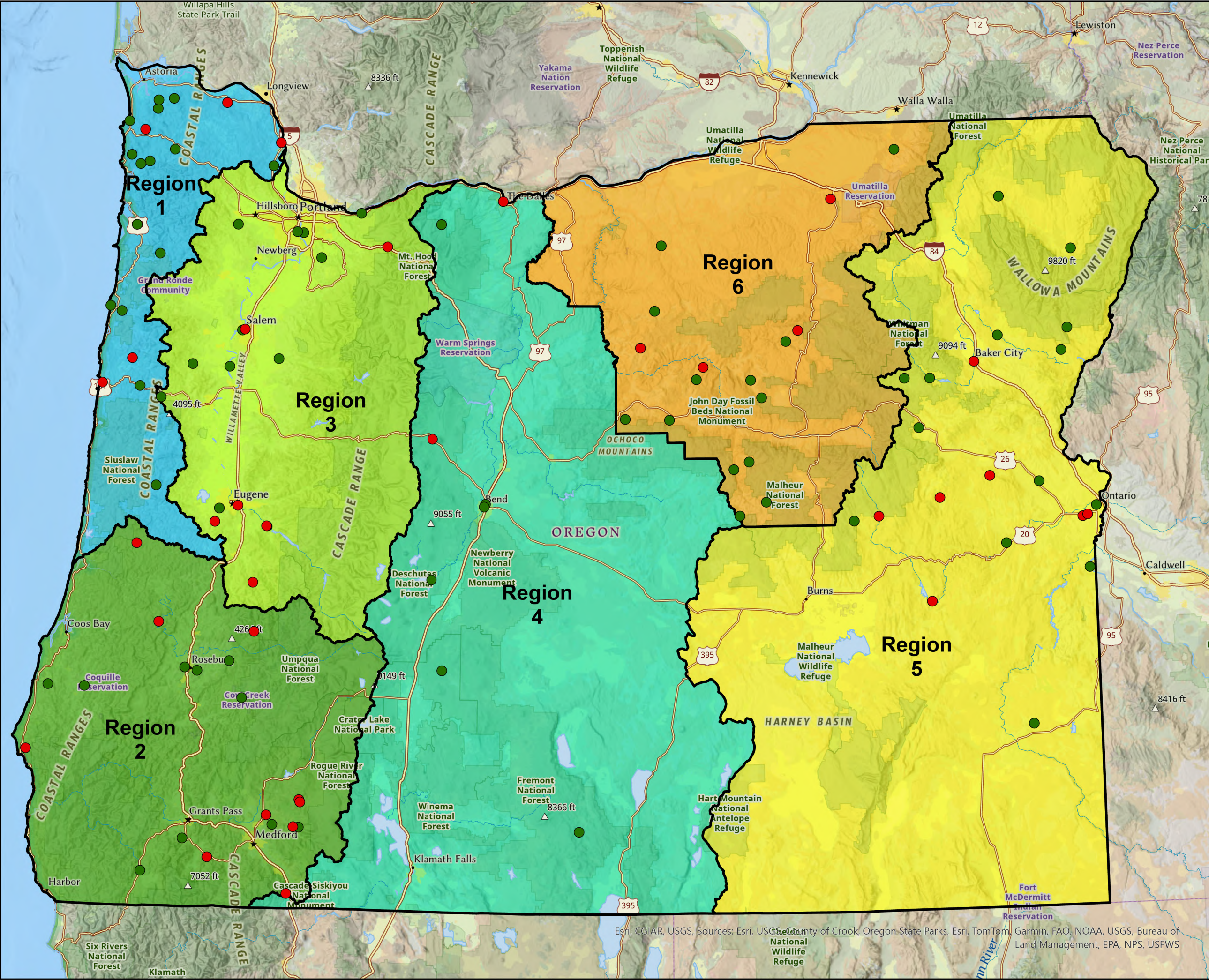
Region 2

Region 3

Region 4

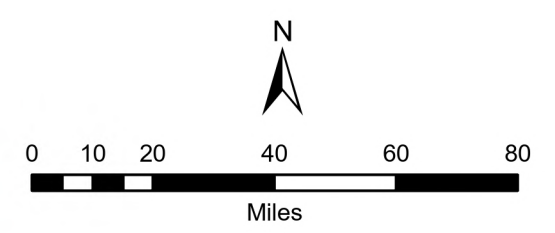
Region 5

Region 6



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HARNEY BASIN
Sources: Esri, USGS, Esri, USGS, County of Crook, Oregon State Parks, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS

Oregon Watershed Enhancement Board: Region 1 Restoration, Technical Assistance, Engagement and Monitoring

Region 1 - North Coast Restoration				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-1032	Lower Nehalem WC	Gods Valley Instream Enhancement Phase 1	The goal of this project is to restore instream habitat complexity by placing large wood in God's Valley Creek and two of its tributaries: Roberson Creek and God's Valley Creek Tributary E. This will restore floodplain and side channel connection, sort sediments, and develop pool/riffle sequences. Project activities will increase coho salmon populations in three anchor habitats.	\$ 145,657
224-1035	CREST	Nicolai-Wickiup Watershed Connectivity and Tidal Restoration Project - update	The project goal is to reconnect over 110 acres of historic off-channel habitat within the tidal reach of the Nicolai-Wickiup watershed, further promoting habitat access and quality for salmonids within the Columbia River Estuary (CRE). This proposal brings forward two of the four projects, Agency Cr. and Warren Slough, which will restore 43.93 acres.	\$ 144,110
224-1036	North Coast WS Assn	North Fork Klaskanine Fish Passage Project	Provide fish passage in the North Fork Klaskanine River while maintaining the hatchery water diversion, continue to meet fish screen regulations, and minimize sediment deposition at the upstream unstable streambank. Increase resilience and restore connectivity to meet the natural life history variations and adaptive strategies inherent in healthy aquatic populations.	\$ 892,655
224-1028	North Coast Land Conservancy	Shangrila Wetlands Restoration	Restore and protect native plant communities to improve ecosystem function within critical estuarine-upland wetland habitat crucial for native fish and wildlife including ESA-listed coho salmon and species of concern, such as willow flycatcher, northern red-legged frog, and Pacific lamprey.	\$ 180,913
224-1029	Columbia SWCD	Scappoose Oak Habitat Restoration & Education	The primary goal for this project is to restore habitat form and function to the two oak woodland sites (~7.4 acres) and the adjacent oak savannah (~18.2 acres). This will provide approximately 25.6 total acres of quality habitat for the many species that rely on oak environments for food, shelter, and the biodiversity that they provide.	\$ 88,715
224-1033	Siuslaw WC	Greenleaf Creek Unnamed Tributary AOP Enhancement	The goal of the Greenleaf Creek Unnamed Tributary AOP Enhancement project is to increase the available spawning and rearing habitat for OC Oregon Coast coho and to benefit the longitudinal migration of stream corridors for a variety of native aquatic organisms by restoring unimpeded passage to approximately 0.50 miles of Essential Salmonid Habitat.	\$ 163,292
224-1034	MidCoast WC	Echo Mountain Fire Recovery	The goal of this project is to continue efforts to restore healthy, native plant communities in riparian and upland areas that were devastated by the 2020 Echo Mountain Fire complex. This includes arresting erosion along the mainstem Salmon River where increased erosion has occurred since the fire and where continued erosion would negatively affect downstream spawning of Chinook salmon and steelhead.	\$ 255,640
224-1026	Lincoln SWCD	Upper Yaquina SIA Restoration	We aim to improve the riparian function and habitat quality of 0.63 river miles and 4.62 acres of private land across three properties on the Upper Yaquina by reducing invasive weed presence, increasing density and diversity of native vegetation, establishing long-lived conifers in areas dominated by deciduous trees or lacking trees entirely, and installation of protective fencing. We also plan to establish a pollinator meadow in former pasture land adjacent to the riparian zone at Site A.	\$ 43,628
Total Restoration Projects Recommended for Funding by RRT and OWEB Staff				\$ 1,914,610

Oregon Watershed Enhancement Board: Region 1 Restoration, Technical Assistance, Engagement and Monitoring

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
224-1031	Columbia SWCD	Conyers Creek Habitat Diversification and Enhancement	The immediate goal of this project is restore planform and in-stream complexity to this reach of Conyers Creek, thereby increasing and enhancing spawning and rearing habitat for native species of salmon and lamprey. We anticipate our actions will catalyze natural processes that will transform this reach of Conyers into a morphologically complex system capable of supporting greater salmon production while providing benefits to a multitude of other wildlife species.	\$ 588,413
224-1030	Lincoln SWCD	Lincoln County Parks Riparian Restoration	Our proposed project would aim to enrich native tree and shrub coverage and increase plant diversity in the riparian buffer zone at each site, ensure the future presence of mature, shade-providing conifers, assist in the natural recruitment of young conifers and the development of mixed-age tree stands, reduce invasive weed presence, and prevent continued vegetation degradation and soil erosion due to off-trail human activity.	\$ 73,341

Projects NOT RECOMMENDED for Funding by RRT				
Project #	Grantee	Project Title	Amount Requested	
224-1027	Institute for Applied Ecology	Phase 2: Coastal Prairie Restoration at Westwind	\$ 218,644	

Region 1 - North Coast Technical Assistance				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-1043	Nestucca-Neskowin Watersheds Council	East Creek Large Wood, Road Decommissioning, and Fish Passage Design Project	The project goal is to complete plans for road decommissioning, removal of 3 culverts that are fish passage barriers and impair stream function, and enhance habitat. When implemented, this project will restore full volitional fish passage for coho and Chinook salmon, steelhead, and Pacific lamprey, and will reduce the potential for catastrophic failure of a high-risk stream crossing. Road decommissioning will reduce the potential for side cast road failure and stream contamination with sediment.	\$ 86,464
224-1038	Institute for Applied Ecology	Coastal dune restoration planning at Camp Westwind	The goal of this project is to facilitate coastal dune habitat restoration at Westwind. This will be achieved by developing a site-specific restoration plan and collecting native seed. Coastal dune restoration is an emerging but rare practice in Oregon; there are no tried-and-true methods for how to best accomplish it. Having a detailed site-specific plan in place will be critical before undertaking restoration activities.	\$ 136,599
224-1037	Lower Nehalem WC	The Little Rackheap Creek Fish Passage Designs	The goal of the Little Rackheap Creek Fish Passage project is to develop designs that will be used to improve fish passage in Little Rackheap Creek. Implementation of the designs produced by this project will enhance Little Rackheap Creek's ability to support multiple life stages and life histories for salmonids and other estuarine species. These designs will also improve sediment transport and wood transport in Little Rackheap Creek.	\$ 92,883
Total Technical Assistance Projects Recommended for Funding by RRT and OWEB Staff				\$ 315,946

Oregon Watershed Enhancement Board: Region 1 Restoration, Technical Assistance, Engagement and Monitoring

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
224-1041	Necanicum WC	North Coast Watersheds Restoration Assistance	To add shared capacity across the ecoregion by co-managing a grant development specialist available in even portions of time and commitment to each participating watershed council. This will allow the development of projects that meet local and regional restoration priorities for improved salmonid habitat and function and address limiting factors affecting native migratory fish populations. In addition, it will provide additional support to secure funding for strategic planning resources.	\$ 87,764
224-1042	Columbia SWCD	McBride Creek Fish Passage and Habitat Restoration	The goal of technical assistance at this site is to facilitate the process of identifying, prioritizing, selecting, and designing the restoration actions that are the most appropriate for the site and for addressing the specific environmental stressors and limiting factors for this particular watershed. In addition, we will collect data necessary to inform replacement of the existing culverts with a structure that meets fish passage requirements and best suits the conditions of the site.	\$ 103,907

Projects NOT RECOMMENDED for Funding by RRT				
Project #	Grantee	Project Title		Amount Requested
224-1039	Upper Nehalem WC	Rock Creek Fish Passage Improvement - City of Vernonia		\$ 145,288
224-1040	Tillamook Estuaries Partnership	Tuffy Creek Fish Passage - Building Resilience in a Changing Climate		\$ 265,019
224-1044	Necanicum WC	Thompson Creek Alternatives Analysis & Design Phase I		\$ 142,954
224-1045	Lincoln SWCD	Siletz Livestock Water Quality Project		\$ 65,296

Region 1 - North Coast Engagement				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-1052	Lower Nehalem WC	Nehalem Landowner Engagement Initiative	To protect the Nehalem watershed from climate impacts and restore critical habitat of threatened OC coho, the Nehalem Landowner Engagement Initiative will foster positive relationships with forest, agricultural and residential landowners in priority areas identified in the Nehalem Strategic Action Plan (NSAP). With landowner engagement and cooperation, key NSAP strategies will be written into MOUs and site plans, ensuring high priority actions are implemented for recovery of Oregon Coast coho.	\$ 116,340
224-1050	North Coast Land Conservancy	Rainforest Reserve Expansion	The expansion of the Rainforest Reserve to protect the remaining portions of this unique landscape will be enabled by building upon relationships with both the landowners and the donors that are needed in order to develop successful acquisition projects. This will be accomplished by showing the landowners that NCLC is a capable and trustworthy partner, and by investing in relationships with major donors who supported the Rainforest Reserve and can contribute towards its expansion.	\$ 35,814
Total Engagement Projects Recommended for Funding by RRT and OWEB Staff				\$ 152,154

Oregon Watershed Enhancement Board: Region 1 Restoration, Technical Assistance, Engagement and Monitoring

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
224-1049	Institute for Applied Ecology	Stakeholder Engagement to Improve Native Plant Materials on the Oregon Coast	Develop and implement an Engagement Plan for the Coastal Native Seed Partnership that will result in native seed mix design and resources for restoration practitioners and growers to synergize current and future restoration efforts and improve efficiency of projects on the Oregon coast.	\$ 58,536

Projects NOT RECOMMENDED for Funding by RRT				
Project #	Grantee	Project Title		Amount Requested
224-1051	Necanicum WC	Neacoxie Fish Passage and Riparian Restoration Community Engagement		\$ 37,736
224-1053	Necanicum WC	Beerman Creek Community Coho Corridor Engagement and Planning		\$ 26,773

Region 1 - North Coast Monitoring				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-1046	Tillamook Estuaries Partnership	TEP Volunteer Bacteria Monitoring Program	The goal of the VWQMP is to assess changes in water quality, specifically bacteria concentrations for E. coli and enterococcus, to evaluate the effectiveness of restoration activities and land management practices on improving overall water quality. The data will also be used to make informed decisions on future restoration activities to address on-going water quality concerns.	\$ 97,751
224-1047	North Coast WS Assn	NCWA Water Monitoring Expansion and Data Analysis	To fill water quality and quantity data gaps that are both immediately pertinent to CAT's septic upgrade program and to local governments' knowledge of water quality/quantity, as well as more broadly useful to inform NCWA's future use of water monitoring and habitat restoration resources. All monitoring data will not only help direct restoration efforts but also serve as baseline effectiveness data in restored areas.	\$ 49,003
Total Monitoring Projects Recommended for Funding by RRT and OWEB Staff				\$ 146,754

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
		N/A		

Projects NOT RECOMMENDED for Funding by RRT				
Project #	Grantee	Project Title		Amount Requested
224-1048	North Coast WS Assn	North Coast Watershed Association and Necanicum Watershed Council RBA and LFA Light 2025		\$ 128,238

Region 1 Total OWEB Staff Recommended Board Award	\$2,529,464

Region 1 - 6 Grand Total OWEB Staff Recommended Board Award	\$13,925,206

Open Solicitation Restoration-Spring 2024

North Coast (Region 1)

Application Name: 224-1026-23598

Project Type: Restoration_v2

Project Name: Upper Yaquina SIA Restoration

Applicant: Lincoln SWCD

Region: North Coast

County: Lincoln

OWEB Request: \$43,628

Total Cost: \$127,118

Application Description This project would involve multiple privately owned properties located within the Bales Creek-Upper Yaquina (6th field HUC 171002040102) watershed in eastern Lincoln County. This watershed has been identified as Oregon DEQ 303(d) listed for impairments concerning dissolved oxygen, high temperatures, and bacteria (fecal coliform and E. coli). Excessive sedimentation and lack of riparian vegetation, or replacement of native vegetation with invasive species such as Himalayan blackberry (*Rubus armeniacus*) and reed canary grass (*Phalaris arundinacea*) is another common concern within the watershed. The area is part of an Oregon Department of Agriculture (ODA) Strategic Implementation Area (SIA). The SIA process include an evaluation of parcels in the selected area for violations of water quality law and prioritization of opportunities. The properties in this restoration proposal include parcels identified as having an opportunity for land use improvement that will improve water quality. The Lincoln Soil & Water Conservation District is currently conducting water quality monitoring as one part of a Strategic Implementation Area program focused on the Upper Yaquina and Little Elk Creek watersheds. Riparian restoration implementation is another component of the SIA program, and will address watershed concerns through measures such as manual and chemical invasive plant control, native shrub and tree planting, and livestock exclusion fence installation. The implementation of each of these activities will be tailored to the needs of each individual property participating in the project; each of them suffer from the watershed-wide impairments listed above to varying degrees. Partners will include the Natural Resources Conservation Service and MidCoast Watershed Council.

Review Team Evaluation

Strengths

- The project actions and geography are prioritized in several watershed planning documents for the region. The project is located within an area where a TMDL was recently completed for the Yaquina basin, in a priority area for NRCS, and within an ODA Strategic Implementation Area.
- The planting plan and follow-up treatments for stewardship are appropriate for the site and likely to be successful.

- Existing baseline data for stream shading in the Upper Yaquina can be used to determine how restoring riparian vegetation will affect stream shade over time. Water temperature is also well documented in this part of the basin, which establishes the ability to follow temperature changes that result from the restoration project.
- Creating pollinator habitat in the coast range is valuable and increases the overall ecological benefit of the project.
- Riparian restoration will occur on several different landownerships. The applicant has built support for restoration in the Upper Yaquina to put together a larger project with greater impact. There is a plan to host additional workshops in Eddyville, which could serve to attract more interest in restoration activities.
- The applicant has capacity to accomplish the proposed objectives. Technical expertise will be contributed to the project from a variety of sources and the landowners are engaged and active in stewarding their riparian habitat.
- Costs are reasonable for the proposed actions and the application provides detailed breakdown of the material costs.

Concerns

- It is unclear whether the sequencing of the site preparation and seeding activities is the best approach for the pollinator meadow, it may be ambitious to seed so quickly before non-native vegetation is effectively controlled.
- It is unclear why herbicide is needed for site preparation in addition to the other methods of mechanical removal and weed torches proposed.

Concluding Analysis

Riparian planting on several privately owned parcels along the river in the Upper Yaquina addresses the limiting factor of stream temperature. The landowners and project partners are clearly committed to a successful project as evidenced by the level of stewardship activities already undertaken at the planting sites.

Review Team Recommendation to Staff

Fund

Review Team Priority

8 of 10

Review Team Recommended Amount

\$43,628

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Fund

Staff Recommended Amount

\$43,628

Staff Conditions

n/a

Open Solicitation Restoration-Spring 2024

North Coast (Region 1)

Application Name: 224-1027-23603

Project Type: Restoration_v2

Project Name: Phase 2: Coastal Prairie Restoration at Westwind

Applicant: Institute for Applied Ecology

Region: North Coast

County: Lincoln

OWEB Request: \$218,644

Total Cost: \$277,712

Application Description The goal of this project is to restore 11 acres of coastal prairie to protect existing populations of rare flora and create habitat for the federally threatened Oregon silverspot butterfly (OSB). The coastal prairies are owned by the Westwind Stewardship Group (Westwind) and are located on the Oregon coast approximately five miles north of downtown Lincoln City.

Westwind has two coastal prairies: Iris Meadow and Fraser Farm. Iris Meadow is a pristine, four-acre coastal prairie that has substantial native plant abundance and supports a diverse mix of coastal species not commonly found in other prairies. Iris Meadow is a critical seed source for the Fraser Farm component of this project and other coastal prairie projects. Shrub and fir encroachment along with non-native grasses threaten the native plant community at Iris Meadow and could have devastating impacts if restoration actions do not intervene. Fraser Farm is a seven-acre degraded pasture directly southeast of Cascade Head which hosts OSB. Fraser Farm currently has few native plants and most of the plant community is non-native grasses. Along the northern edge of Fraser Farm is a dense patch of Himalayan blackberry that spans the length of the project area. As coastal prairies decline, Fraser Farm provides a rare opportunity to restore seven acres within close proximity to an extant OSB population (Cascade Head) and a venue to educate future generations of Oregonians (campers at Camp Westwind) about conservation, wildlife, and stewardship.

To restore Iris Meadow and Fraser Farm we propose to use an integrated pest management approach to treat invasive species and problematic weeds. Specific methods include manual (hand pulling), mechanical (mowing, sawing), chemical (herbicide application) and thermal (flame weeding) treatments. Following treatments, native species, particularly OSB host and nectar species will be planted via seeding and planting plugs and bareroot plants.

Review Team Evaluation

Strengths

- Concerns from the previous evaluation are addressed by explaining permitting and including additional information describing the chemical fallow technique proposed for the Fraser Farm site.

- The restoration project occurs on a property that is encumbered by a conservation easement held by OWEB. The restoration also builds off an OWEB-funded Technical Assistance grant that produced a design for the proposed restoration.
- The remnant coastal prairie habitat currently present within the Iris Meadow site is highly rare and imperiled from encroaching woody vegetation.
- The project focuses on limiting factors affecting native vegetation desirable for wildlife.
- Coastal prairie is a declining habitat type on the coast and is a priority for restoration. The proposed actions will restore habitat that could be utilized by the federally listed Oregon silverspot butterfly.
- The timeline for implementation is detailed and appropriate. The method and approach proposed has proven to be successful in other locations on the coast, including the Nestucca Bay Wildlife Refuge.
- Cultural resource considerations are incorporated into the design and the budget includes survey work.
- The applicant has shown ingenuity with their approach to build capacity to increase the availability of native seed necessary for restoring Oregon coastal prairies. Previous project evaluations concerns related to the approach for acquiring native seed are addressed by clarifying that the seed grown and purchased with the project funds will be utilized at the project site.
- The applicant has a track record implementing similar work.

Concerns

- The herbicide-heavy approach to the Fraser Farm site may be incongruous with the goals and management of the property as a youth camp. The site preparation and plant establishment approach proposed for Fraser Farm relies primarily on using herbicide. Maintaining the early successional habitat is likely to require intensive herbicide use into the future, it is unclear whether the approach is compatible with camp operations or whether it is something the landowners can maintain into the foreseeable future. This project approach may be a missed opportunity to experiment on a smaller scale with chemical-free approaches to coastal prairie restoration.
- It is unclear whether there is existing capacity to manage the Fraser Farm site long-term. Restoring coastal prairie requires intensive management and the plan for maintaining the site in an early-successional state over the next several decades is unclear in the application. The soils at the Fraser Farm site have been affected by decades of management for livestock and as a pasture. The presence of organic material and nutrients may create challenges for the establishment of early successional habitat in this type of soil. It is unclear if coastal prairie at this location is feasible to maintain into the future.

- Including information in the application describing the level of commitment the landowner can contribute to ongoing stewardship needed into perpetuity would be helpful to understand capacity to maintain the restoration investment.
- The budget does not contain a breakdown of activities between the Iris Meadow and Fraser Farm site even though different approaches will be utilized at each location. It is challenging to evaluate the cost effectiveness of the actions planned at individual sites.

Concluding Analysis

The Iris Meadow site is of great ecological importance, containing some of the last remaining coastal prairie habitat in the region, and it is imminently threatened by encroaching woody vegetation. Restoration at the Iris Meadow is urgently needed given the threatened nature of the habitat and the rare and sensitive plant populations present. The Fraser Farm site is a former pasture and an intensive prairie restoration utilizing chemical fallow techniques is proposed. The current site conditions and soil profile will require an intensive maintenance plan by the landowners to achieve success on the Fraser Farm site. There may be merit to focusing the project on restoring Iris Meadow to target actions on the highest priority habitat with the greatest potential for ecological uplift for the investment, and breaking the Fraser Farm site into smaller manageable units where different techniques can be tested to reduce intensive herbicide use.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

n/a

Review Team Recommended Amount

\$0

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

n/a

Open Solicitation Restoration-Spring 2024

North Coast (Region 1)

Application Name: 224-1028-23624

Project Type: Restoration_v2

Project Name: Shangrila Wetlands Restoration

Applicant: North Coast Land Conservancy

Region: North Coast

County: Clatsop

OWEB Request: \$180,913

Total Cost: \$245,437

Application Description Shangrila Wetlands is located in Clatsop County within the city limits of Seaside, Oregon. The property was conserved in 2009 using OWEB funding to protect 70 acres of important estuarine and freshwater wetland habitat, including highly productive Coho spawning and rearing habitat. The property's proximity to commercial land use has created human impact challenges since the property was first protected. In recent years these challenges significantly increased, resulting in a substantial amount of trespassing and dumping, causing ongoing ecological harm to the site. These activities have negatively impacted water quality, wildlife habitat, and native plant communities by killing vegetation and creating areas of bare ground, dumping toxic and hazardous material in and near wetlands, and digging and causing ground disturbance that leads to erosion. The unvegetated areas also cause sediment erosion into the wetland during rain events, negatively impacting water quality and salmon habitat and decreasing the site's water-holding capacity. The project area for this proposal includes 11 acres of freshwater forest/shrub wetland including 200 ft of Shangrila creek. We plan to remove all trash and debris from the site, install 2,500 feet of perimeter fencing to restrict human access, and plant native forbs and shrubs into impacted areas. The property is an ecologically and culturally important site and an archeologist will be present during the clean up and fence installation, and will help inform the planting plan. Following the restoration project, NCLC will commit to weekly monitoring to ensure no negative impacts and to steward for plant establishment success. Other project partners include the Confederated Tribes of Siletz Indians, the Confederated Tribes of Grand Ronde, the City of Seaside, the Necanicum Watershed Council, Clatsop Community Action, Seaside High School Key Club, and Harold & Arlene Schnitzer CARE Foundation.

Review Team Evaluation

Strengths

- Shangrila Wetlands is a 70-acre complex of high-quality wetlands, including tidally-influenced Sitka spruce swamp, that were protected through an OWEB acquisition project. A conservation easement protects the property's ecological values into perpetuity.
- The need to restore and protect native plant communities within estuarine habitat is clear. Houseless camping is a long-term issue impacting property stewardship. Recent sanctioned camping on a neighboring City of Seaside property has exacerbated the problem and there is an urgent need to protect watershed health.

- The proposal to restore impacted areas through planting and fencing is a creative and technically sound approach. The plants selected will restore biodiversity to the damaged areas and the fencing plan will allow for passage of small wildlife while protecting sensitive biological and cultural resources.
- The property connects with other investments in conservation as part of a larger network of protected wetlands, including the neighboring Mill Ponds property.
- There are letters of support from both the Confederated Tribes of the Siletz Indians and the Confederated Tribes of Grand Ronde, highlighting the importance of this project to Tribes.
- The City has a community support officer that is dedicated to helping the houseless community relocate outside of Shangrila Wetlands and preventing illegal camping within the project area.
- There is a clear benefit to water quality that will result from the removal of the hazardous material and debris from the site.

Concerns

- It remains unclear whether the fencing design will be effective over time. Fencing established in the past has been cut and removed illegally.

Concluding Analysis

Shangrila Wetlands is a wetland complex with a high ecological value. The property contains priority habitats, such as the globally-imperiled Sitka spruce wetland, and it has been impacted in recent years by repeated trespassing and illegal camping. Fencing and plantings will be established to restore and protect the degraded habitat. Overall, the planting areas are small in total acreage but important considering the high value of the site. Given the applicant's demonstrated commitment to stewardship, the project is likely to succeed in meeting the expected ecological outcomes.

Review Team Recommendation to Staff

Fund

Review Team Priority

4 of 10

Review Team Recommended Amount

\$180,913

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Fund

Staff Recommended Amount

\$180,913

Staff Conditions

n/a

Open Solicitation Restoration-Spring 2024

North Coast (Region 1)

Application Name: 224-1029-23632

Project Type: Restoration_v2

Project Name: Scappoose Oak Habitat Restoration & Education

Applicant: Columbia SWCD

Region: North Coast

County: Columbia

OWEB Request: \$88,715

Total Cost: \$126,577

Application Description 1) This project is located on a property owned by the Port of Columbia County, at the northern tip of

the Willamette Valley ecoregion and is part of the Multnomah Channel Bottomlands. Traveling north on W. Lane Road in Scappoose, the property is directly to the east.

2) Only about 5-6% of legacy oak habitat still exists in the Willamette Valley and Coastal ecoregions. Consequently, any remaining oak habitat is of extreme value to the many wildlife species that utilize these environments. There are very few opportunities in Columbia County to participate in oak restoration projects and for the public to see and learn about healthy, functional oak habitat.

The goal of this project is to work with agency partners and volunteers to restore two oak woodland sites and the adjacent field to an oak savannah. Currently the woodland areas are very overcrowded and infested with non-native English hawthorn. The hawthorn impedes the oak's ability to achieve its full growth potential and shades out the native understory species that would naturally occur. The understory suffers from a severe infestation of Garlic mustard (somewhat reduced by seasonal treatments over the last 5 years) as well as other more common invasive species like Himalayan blackberries, Shiny geranium, and Poison hemlock.

3) Funding from OWEB would allow the Columbia SWCD to pursue the following restoration activities: 1) Removal and treatment of hawthorn; 2) Tree thinning; 3) Weed control; 4) Replanting and seeding; 5) Development and installation of informational signs; 6) Building and installment of bird and bat boxes; 7) Monitoring; and 8) Education in the form of outreach, volunteer involvement, and site tours.

4) Project partners include the Port of Columbia County, Oregon Department of Forestry, US Fish & Wildlife Service, Natural Resource Conservation Service, and volunteers.

Review Team Evaluation

Strengths

- The approach to restoring the oak habitat areas is technically sound; methods are clearly defined in the application. The plan for managing invasive species in concert with reestablishing native vegetation is balanced and appropriate for the site.
- Thinning oaks to promote habitat variability is an appropriate method for oak woodland restoration. The trees that will be removed to enhance forest health will be utilized as firewood for community members in need or will be made into bird or bat boxes.

- There are significant large acorn-producing oaks on site that will provide a seed source for oak habitat restoration.
- Oak woodlands and oak savannah are rare and declining habitat types in the Scappoose watershed and are a priority for restoration. In this part of the state, oak habitat has been significantly fragmented due to urban development.
- There is limited legacy oak habitat remaining in the region. The project site is in the extreme northern range of white oak habitat in an ideal location to allow for expansion with the changing climate.
- The project is located on the edge of the range of Kincaid's lupine, the host plant for Fender's blue butterfly. With the willing public landowner, the project may lead to future project opportunities for the butterfly and other pollinator species.
- There is potential for engaging the public to promote oak in the community and the approach described in the application for outreach is detailed and likely to succeed.
- The partnership with the ODF to provide some of the labor for the project is a cost-effective approach that will provide additional technical expertise and grow a seasonal labor force within the community.

Concerns

- No significant concerns are identified.

Concluding Analysis

Restoring oak woodlands and oak savannah at a publicly owned site in Columbia County represents a unique opportunity to enhance and conserve a priority habitat. There are limited locations in this part of the range of Oregon white oak to engage in restoration and conservation of oaks. The thoughtful community engagement approach is likely to be effective in increasing awareness of the important role oaks serve in our watersheds.

Review Team Recommendation to Staff

Fund

Review Team Priority

5 of 10

Review Team Recommended Amount

\$88,715

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Fund

Staff Recommended Amount

\$88,715

Staff Conditions

n/a

Open Solicitation Restoration-Spring 2024

North Coast (Region 1)

Application Name: 224-1030-23643

Project Type: Restoration_v2

Project Name: Lincoln County Parks Riparian Restoration

Applicant: Lincoln SWCD

Region: North Coast

County: Lincoln

OWEB Request: \$73,341

Total Cost: \$96,810

Application Description This project would concern three county parks along the Siletz River, with most restoration activities occurring at Moonshine Park, and smaller projects at Ojalla Park (44.765061273, -123.914505109) and Jack Morgan Park (44.801479782, -123.899631784).

Moonshine Park, located four miles north of the unincorporated community of Logsden, is a highly popular location for swimmers and campers during the summertime, and while receiving less traffic during other times of year, it is still frequented in the fall and winter by recreational salmon fishermen. While mature conifer coverage is present along the stream banks throughout most of the park, visitor foot traffic has degraded much of the understory vegetation within the riparian buffer and several invasive species are present, particularly Himalayan blackberry (*Rubus armeniacus*)

Ojalla Park, located further downstream at Siletz River mile 31, is a relatively low-traffic location primarily used for its boat launch which was constructed in 2015 and involved the total removal of trees and ground cover vegetation in the vicinity. Some revegetation was conducted, which we intend to supplement.

Jack Morgan Park is an additional 6 miles downstream of Ojalla, experiences moderate recreational usage levels during the summer, and has a lack of conifers and a large amount of Himalayan blackberry along its stream bank.

Our proposed project would aim to enrich native tree and shrub coverage in the riparian buffer zones of each of these parks and increase plant diversity by removing invasive weeds via mechanical and chemical treatment, planting native shrub species in the project areas, propagating willow along the stream edge, and installing protective fencing in high traffic areas to prevent trampling until plants become established.

Partners will include the Lincoln County Parks & Recreation Department, MidCoast Watershed Council, Oregon Department of Fish and Wildlife, and the Wild Salmon Center.

Review Team Evaluation

Strengths

- The project design balances recreational use with promoting riparian vegetation where appropriate in a public park. The approach is technically sound and likely to succeed in converting non-native grass to native plant communities.

- The application clearly describes how the project will mitigate climate change impacts to the Siletz River over time. Restoring riparian areas will contribute to a reduction in stream temperature in the future when an overstory becomes established.
- Revegetating the identified sites within the park system will reduce sediment inputs to the river at those locations.
- The planting plan includes species that will benefit native pollinators. The plantings will also benefit native biodiversity at the parks. Moonshine Park currently hosts several species not appropriate to the ecoregion and adding native vegetation will benefit wildlife.
- Lincoln County Parks has been working across their portfolio of properties to proactively plan habitat improvement projects. The partnership with the Lincoln SWCD increases capacity to accomplish the proposed restoration.

Concerns

- The small collective size of the planting areas is likely to have minimal impact on the overall temperature of the Siletz River.
- The planting areas, particularly at Moonshine Park, are heavily utilized by the public. It may be challenging to prevent anthropogenic damage to the installed plants.
- Climate models have shown that western red cedar may not persist in this area of the coast range into the future. It may be pragmatic to consider other native tree species to utilize in plantings.

Concluding Analysis

The project will have a beneficial impact on riparian conditions in the county parks where planting is proposed. There is a clear need for the project because riparian vegetation in the heavy-use areas is subject to trampling and erosion due to recreational use. This is a relatively small project in acreage, but there are ancillary benefits to the public, including outreach opportunities with these highly visible riparian plantings.

Review Team Recommendation to Staff

Fund

Review Team Priority

10 of 10

Review Team Recommended Amount

\$73,341

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

n/a

Open Solicitation Restoration-Spring 2024

North Coast (Region 1)

Application Name: 224-1031-23657

Project Type: Restoration_v2

Project Name: Conyers Creek Habitat Diversification and Enhancement

Applicant: Columbia SWCD

Region: North Coast

County: Columbia

OWEB Request: \$588,413

Total Cost: \$790,816

Application Description 1) Project Location: Conyers Creek in Clatskanie, OR. (GPS: 46.08805, -123.21805)

2) Conyers Creek is a tributary of the Clatskanie River (a Conservation Opportunity Area). Conyers is habitat to several ESA-listed species including Lower Columbia River Coho, Lower Columbia River DPS Steelhead, and Lower Columbia River Chinook. Other species of concern inhabiting Conyers include Coastal cutthroat trout and Pacific lamprey. ODFW is currently reintroducing Chum to several Clatskanie River tributaries, including Conyers Creek. Recovery plans identify lack of overwintering habitat as the primary tributary limiting factor for the Lower Columbia River watershed. Over time, activities including road building, residential development, farming and logging practices have resulted in the degradation and simplification of Conyers Creek. Surveys and assessments of Conyers note a lack of complex pools and large wood and a need for riparian restoration.

3) This project will create and restore quality spawning and rearing habitat in Conyers Creek by accomplishing the following objectives: 1) Re-engaging a side channel historically occupied by Roaring Creek, 2) Creating off-channel habitat in the form of alcoves and more frequent floodplain engagement, 3) Encouraging pool development and adding complexity to existing pools through large wood installation, 4) Installing beaver dam analogues in Roaring Creek and an off-channel area; 5) Replanting floodplain areas with willows and other desirable forage species to encourage beaver activity, and 6) Improving water quality through drain tile removal, upland wetland enhancement, and installation of large wood structures along sensitive banks.

4) Project partners include: Natural Resource Conservation Service, Oregon Department of Fish and Wildlife, Private landowners.

Review Team Evaluation

Strengths

- Improving stream complexity will address important limiting factors for numerous species of fish, including Columbia River coho salmon. Conyers Creek is a tributary of the Clatskanie River, which is a priority location for restoration to recover salmon populations in the Lower Columbia watershed.
- The technical approach is sound and 60% designs have been completed. The project builds on a previous OWEB-funded Technical Assistance grant.

- The engineering team has experience with similar successful projects.
- The adaptive approach to restoring the plant community and addressing invasives is technically sound and likely to succeed. Monitoring changes to hydrology after implementing stream restoration and before addressing reed canary grass infestation and installing plantings will align revegetation actions with the site conditions.
- Addressing the historic field drainage in the downstream site will limit pollutants to the stream. The project overall is likely to have positive benefits to the water quality in Conyers Creek.
- The landowners are supportive and engaged in the restoration project. There is also potential for outreach to occur that could be a catalyst for similar restoration in the future along Conyers Creek.

Concerns

- Some elements are unclear due to a lack of design information in the application. For example, beaver dam analogue (BDA) structures and alcoves are proposed actions, but site-specific designs are still under review by the design team and are not available yet.
- The size of the trees proposed for the instream large wood structures is unclear. A 4" diameter tree is listed in the application, which may not meet standards suitable for a stream the size of Conyers Creek.
- The planting plan includes some species that may be out of range for the project area, including white alder, ponderosa pine, and redwood. Given the changing climate it may be appropriate to include these species. Providing an explanation in the application on how plant species were selected would be helpful to understand the planting plan.
- The costs of the project may be high for the expected ecological benefit, especially with materials located on site that should provide cost savings.

Concluding Analysis

Conyers Creek provides important habitat for Columbia River salmon and this project will improve habitat for these species by adding pools, slowing water velocities, and increasing spawning gravels in this tributary of the Clatskanie River. The project team is capable and experienced, and the applicant has established positive relationships with willing landowners throughout the project reach. Working on private land in this part of the watershed is essential for the recovery of Columbia River coho salmon. The cost of the project is high due to the site constraints from the rural residential area, but the expected ecological benefits are likely to be realized.

Review Team Recommendation to Staff

Fund

Review Team Priority

9 of 10

Review Team Recommended Amount

\$588,413

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

n/a

Open Solicitation Restoration-Spring 2024

North Coast (Region 1)

Application Name: 224-1032-23686

Project Type: Restoration_v2

Project Name: Gods Valley Instream Enhancement Phase 1

Applicant: Lower Nehalem WC

Region: North Coast

County: Tillamook

OWEB Request: \$145,657

Total Cost: \$249,627

Application Description This project is located in Tillamook County on Gods Valley Creek 4.6 miles from the confluence with the North Fork Nehalem River. The project reach includes the mainstem of Gods Valley Creek from RM 4.6 to RM 5.7 (1.1 miles), Roberson Creek (0.6 miles), and Gods Valley Creek Tributary E (0.5 miles) for a total of 2.3 miles. The entire project area is owned by Giustina Land and Timber Company, a private timber company.

This project proposes to place instream wood structures to increase instream complexity, floodplain interaction, and side channel development. A total of 41 structures will be installed: 19 in Gods Valley Creek, 10 in Roberson Creek, and 12 in Gods Valley Creek Tributary E. Structures size will vary based on the channel characteristics of each structure site ranging from 4 pieces up to 10 pieces with a dbh of 16" to 24". Structures will contain between two and four pieces with rootwads attached, again depending on the channel characteristics of the site.

This is a project of the Nehalem Basin Partnership and is prioritized in the Strategic Action Plan for the Protection and Restoration of Coho Salmon Habitat. Summer and winter rearing habitat are limiting factors for the Nehalem coho population. Reduced instream wood, which reduces instream complexity, in the Nehalem Watershed from stream cleaning and historical timber harvest practices drive these limiting factors in Gods Valley Creek. The lack of instream wood creates higher, flashier flows that make natural regeneration of instream wood less likely to establish, incises channels, and simplifies the system. Placing instream wood is an effective way to reverse this trend.

The project will be implemented by the Nehalem Bay Watershed Council, Oregon Department of Fish and Wildlife, and Giustina Land and Timber Company. Additional support for the project will be provided by Tillamook Estuaries Partnership, the Wild Salmon Center, and the Oregon Department of Forestry.

Review Team Evaluation

Strengths

- The project reach is identified as anchor habitat in the Nehalem Coho Strategic Action Plan. Gods Valley Creek is a highly productive stream for salmonids, including Oregon coast coho, fall Chinook, winter steelhead, and coastal sea-run cutthroat trout.

- Gods Valley Creek contains cooler water that is critical for aquatic life in the Nehalem watershed by providing refuge from elevated summer temperatures in the mainstem river.
- The proposed actions address habitat limiting factors for salmon by increasing stream complexity and developing side channel connection. Juvenile rearing habitat and adult spawning habitat will be improved. Gravel is limited within the project reach and the addition of large wood will capture the bedload and increase available areas for spawning.
- The application has a clearly defined project goal and provides detailed methods for accomplishing the proposed actions.
- The project site and the proposed actions are identified in several local and regional watershed plans.
- The private timber landowner is an engaged partner in the project and will be providing trees for the habitat improvement.
- The project team is experienced and has a track record in implementing similar projects.
- The project is cost-effective given the expected high ecological benefit.
- Funding for Phase 2 implementation is already secured and will build on this phase by addressing the incised channel and reconnecting the floodplain.

Concerns

- No significant concerns are identified.

Concluding Analysis

The Gods Valley watershed is a priority location to improve habitat for salmon, including Oregon coast coho. Key limiting factors will be addressed by improving in-stream conditions on 2.3 miles of anchor habitat.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 10

Review Team Recommended Amount

\$145,657

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Fund

Staff Recommended Amount

\$145,657

Staff Conditions

n/a

Open Solicitation Restoration-Spring 2024

North Coast (Region 1)

Application Name: 224-1033-23691

Project Type: Restoration_v2

Project Name: Greenleaf Creek Unnamed Tributary AOP Enhancement

Applicant: Siuslaw WC

Region: North Coast

County: Lane

OWEB Request: \$163,292

Total Cost: \$240,335

Application Description The Greenleaf Creek Unnamed Tributary AOP Enhancement project is located in the Greenleaf Creek/Lake Creek sixth-field HUC 171002060603, in the Lake Creek basin. The Greenleaf Creek Unnamed Tributary flows from its headwaters through Federal forest and private timberland before entering a mix of rural residential and agricultural properties in its lower reach, near the confluence of Greenleaf Creek and Lake Creek. The Strategic Action Plan for Coho Salmon Recovery for the Siuslaw River lists longitudinal connectivity as a key ecological attribute (KEA) and states that “inadequate culverts in tributaries [...] often restrict access for both adult and juvenile coho to prime spawning and rearing habitat areas” and this project would support the Siuslaw Coho Partnership’s goal of “upgrading working lands and infrastructure to improve water quality and increase habitat availability”. The work proposed in the project would address a high-priority fish passage barrier on public lands on an Unnamed Tributary to Greenleaf Creek at the Unnamed Tributary/Greenleaf Creek Road road-stream crossing. The proposed new AOP structure, which has been designed by a private Consultant and subsequently reviewed and approved by BLM engineers and ODFW fisheries biologists, meets ARBO II standards and is sized at 1.5 ACW. The newly constructed streambed through the culvert was designed using stream simulation techniques detailed in the USFS Guide to Stream Simulation. Project Partners include the Siuslaw Watershed Council, Bureau of Land Management, and the Oregon Department of Fish and Wildlife. The SWC and BLM will cooperatively raise funds and manage the technical details of the project and provide construction oversight. The SWC will be responsible for all project procurement and bid/contract documents. The BLM will permit the project under ARBO II and utilize programmatic pathways for removal/fill reporting.

Review Team Evaluation

Strengths

- The Greenleaf Creek sub-watershed provides important cool water habitat for winter steelhead, fall Chinook, and Oregon coast coho salmon. The project will address a high priority fish passage barrier and provide access to a half mile of quality spawning and rearing habitat.
- The project is ready to implement with 100% designs already developed. The new structure is designed to state and federal guidelines and ODFW has provided fish passage approval.

- The crossing to be replaced is the last barrier in the system, there are no additional barriers downstream. Addressing the crossing will improve watershed function by allowing for the passage of bedload and improving floodplain connectivity.
- The applicant is experienced with implementing similar projects and has a track record of success. The project team includes the appropriate experience and capacity to complete the project.
- The costs are reasonable for the proposed actions and expected ecological benefit.

Concerns

- There is no planting or seeding mentioned in the application as a post-project activity to stabilize the site and prevent erosion post construction.

Concluding Analysis

A priority fish passage barrier will be addressed on a tributary of Greenleaf Creek in the Lake Creek basin, restoring access to cool water refugia for a multitude of fish species, including Oregon coast coho salmon. The project location is identified in the Siuslaw Coho Strategic Action Plan and the project is likely to succeed in opening access to instream habitat for fish of all life stages.

Review Team Recommendation to Staff

Fund

Review Team Priority

6 of 10

Review Team Recommended Amount

\$163,292

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Fund

Staff Recommended Amount

\$163,292

Staff Conditions

n/a

Open Solicitation Restoration-Spring 2024

North Coast (Region 1)

Application Name: 224-1034-23697

Project Type: Restoration_v2

Project Name: Echo Mountain Fire Recovery

Applicant: MidCoast WC

Region: North Coast

County: Lincoln

OWEB Request: \$255,640

Total Cost: \$391,040

Application Description This project occurs in the Salmon River basin that was affected by the Echo Mountain Complex fire in 2020. The fire burned trees, scorched soil, and created erosion prone slopes; immediate response fire- fighting efforts compacted soils and exacerbated erosion in some areas, negatively affecting water quality and salmon habitat in the Salmon River and its tributaries. Following the fire, invasive weeds took over in burned areas, and many native bare-root trees planted after the fire did not thrive. The proposed work builds off two previously funded OWEB agreements in this fire affected area and includes riparian and upland native species planting to control erosion throughout the area, and maintenance of over 80 acres of plantings that have already taken place. Further, proposed work includes bank stabilization and riparian planting along the mainstem Salmon River to reduce sediment impacts to downstream spawning habitat. Project partners are 22 private landowners, Cascade Relief Team/Landscaping with Love, US Forest Service, and the Lincoln Soil and Water Conservation District.

Review Team Evaluation

Strengths

- There is a clear need described in the application for continuing the planting and stewardship actions in the Echo Mountain Fire area. This project will build on previous restoration implemented with two OWEB Post-Fire Recovery grants.
- The plan for the planting is clear and technically sound. Increasing the plantings on the south side of the Salmon River will improve stream shading and address temperature impacts from the fire. Stewardship of plantings is a considerable component of the grant request and is imperative to successfully maintain restored vegetation long-term.
- The proposed bank stabilization treatments to prevent erosion are appropriate for the stream energy and site constraints associated with private lands. There is infrastructure adjacent to the river that is vulnerable to stream erosion.
- The applicant is successfully partnering with local community groups impacted by the fire. Previous projects have proved effective in growing the local capacity to implement restoration in the fire impacted area.
- The costs for the proposed activities are reasonable considering the ecological benefit expected.

- The applicant has an extensive track record of implementing similar projects successfully.

Concerns

- No significant concerns are identified.

Concluding Analysis

The Echo Mountain Fire in September 2020 caused significant degradation in the Salmon River basin, this project will continue to remedy those impacts. Many plantings have already been installed in the fire impacted area, and more funding is needed to plant additional areas and to provide stewardship so that the plants can reach a free-to-grow state. This effort implements a comprehensive stewardship approach with four years of planned work. It will support the landowners recovering from the fire and ensure that native trees and shrubs are able to establish.

Review Team Recommendation to Staff

Fund

Review Team Priority

7 of 10

Review Team Recommended Amount

\$255,640

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Fund

Staff Recommended Amount

\$255,640

Staff Conditions

n/a

Open Solicitation Restoration-Spring 2024

North Coast (Region 1)

Application Name: 224-1035-23722

Project Type: Restoration_v2

Project Name: Nicolai-Wickiup Watershed Connectivity and Tidal Restoration Project - update

Applicant: CREST

Region: North Coast

County: Clatsop

OWEB Request: \$144,110

Total Cost: \$2,996,572

Application Description Located between River Mile (RM) 20 and 30 of the Columbia River in Clatsop County Oregon, four sites comprise the Nicolai-Wickiup Watershed Connectivity and Tidal Restoration Project: Wolf Bay at Columbia RM 20 (46.169558, -123.695282), Agency Creek at RM 26 (46.186919, -123.607724), Warren Slough at RM 27 (46.192721, -123.575337), and E. Aldrich Point at RM 30 (46.232615, -123.496397).

This proposal seeks additional funds to complete Phase II projects: Agency Creek and Warren Slough. CREST applied to the OWEB Restoration Grant round in May 2023 and was awarded funding for Phase II: Agency Creek and Warren Slough. Since then, CREST completed the E. Aldrich Point project during summer-fall 2023 and received bids for the project at Wolf Bay in spring 2024 (both Phase I projects). As a result, CREST better understands working with ODOT/PNWR, which includes additional tasks and associated costs that were not included in our original construction plans for E. Aldrich; and can more accurately estimate construction costs, since the actions at Wolf Bay (bridge installation, channel excavation, etc.), are analogous to those planned for Agency Creek and Warren Slough.

The projects will reestablish juvenile salmonid access to rearing habitats by breaching the railroad prism, which currently bisects habitat adjacent to the CR mainstem. Agency and Warren will provide access to 43.93 acres of rearing habitat, and improve habitat quality through reducing velocities, reduce habitat patch distance, and restore natural hydrologic connectivity.

The project is located adjacent to Lewis & Clark National Wildlife Refuge on the OR shoreline of the CR within the Big Creek- Frontal CR (HUC 10). This project is a partnership between CREST, North Coast Land Conservancy (NCLC), Columbia Land Trust (CLT), Oregon Department of Forestry (ODF), and three private landowners (Connie and Bob Hunt, Hampton Lumber, and ODOT/PNWR Rail). All landowners strongly support project implementation.

Review Team Evaluation

Strengths

- The project will reconnect the lower Columbia River with 44 acres of tidal wetland habitat and provide critical rearing habitat for lower Columbia River fish species.

- The restoration and reconnection of estuary habitat will provide a host of benefits to a wide variety of species, including songbirds, mammals, forage fish, and waterfowl.
- The designs are technically sound and will address known fish passage barriers with a range of approaches, including levee breaching, bridge installation, and creating new openings in the railroad prism.
- The project is ready for implementation with permitting complete.
- Data from temperature loggers installed upstream and downstream of the railroad line was used to inform project development.
- The applicant has been diligent in working with the railroad and putting together a large-scale project that encompasses several different land ownerships and crossing locations.
- CREST has a proven track record in implementing similar types of projects and this will be the second phase of this tidal connectivity effort in the lower Columbia.

Concerns

- No significant concerns are identified.

Concluding Analysis

The application requests additional funding to a previously funded project because bids were higher than originally estimated. The applicant has successfully raised the majority of the funds to cover the remaining outstanding costs, and this request will ensure that this high priority project is fully funded and ready to implement. The project builds on a strategic effort within the Lower Columbia River estuary to reconnect priority areas of tidal wetland with the river. The project will contribute to a larger watershed connectivity effort that will collectively provide over 100 acres of tidal habitat for the myriad of species that depend on estuaries to thrive.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 10

Review Team Recommended Amount

\$144,110

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Fund

Staff Recommended Amount

\$144,110

Staff Conditions

n/a

Open Solicitation Restoration-Spring 2024

North Coast (Region 1)

Application Name: 224-1036-23729

Project Type: Restoration_v2

Project Name: North Fork Klaskanine Fish Passage Project

Applicant: North Coast WS Assn

Region: North Coast

County: Clatsop

OWEB Request: \$892,655

Total Cost: \$4,167,744

Application Description The North Fork Klaskanine River is a major tributary to Young's Bay and the first major watershed that ocean-returning fish encounter in the Lower Columbia River and estuary. Fish passage has historically been blocked by three water diversion dam structures that function to take water from the North Fork and North Fork Klaskanine River to provide a year-round water source for the hatchery, referred to as Intake #1 (Ogee Dam), Intake #2, and Intake #3 (North Fork Dam). Over the past several years project partners engaged in a process to develop fish passage solutions in the watershed. This led to a 2020 removal of one hatchery dam on the North Fork Klaskanine and a natural like fish passage structure built at a second dam in 2022, thus fully opening fish passage upstream of this proposed barrier removal project. Fish passage at the North Fork Klaskanine Diversion #1 dam (Ogee Dam) is the final phase of a watershed scale project to maximize wild fish passage and stream connectivity while maintaining hatchery management. Providing fish passage at the Ogee dam will provide access to 12 miles of spawning and rearing habitat for ESA listed coho salmon, spring Chinook salmon, winter steelhead, coastal cutthroat trout, Pacific lamprey and Western brook lamprey. Project partners include the Oregon Department of Fish and Wildlife, Bureau of Reclamation, Confederated Tribes of Grand Ronde, and USFWS.

Review Team Evaluation

Strengths

- The project addresses a priority fish passage barrier at a water diversion dam associated with the Klaskanine Fish Hatchery. The Ogee Dam is the final barrier on the stream system; its removal will restore access for aquatic organisms to 12 miles of quality spawning and rearing habitat for wild ESA-listed coho salmon, steelhead, Pacific lamprey, coastal cutthroat trout, chum, and spring Chinook.
- The project is ready to implement with final designs and permitting is underway.
- The design approach and proposed actions are technically sound. Utilizing large wood to stabilize an eroding streambank is the best approach for the site constraints to reduce sediment input into the stream.
- A weir will be employed during the 4-5 months a year where the fish need to be sorted at the diversion. The weir design will have less ecological impact than the current dam while still maintaining hatchery operations.

- The design approach will allow for passage of lamprey and juvenile salmon year-round.
- The project has the potential to demonstrate how hatcheries can remain active while still providing passage for wild fish.
- The Ogee Dam is currently failing; wild fish are often trapped at its base and lose opportunity to reach spawning habitat upstream. The new roughened channel and weir system will incorporate water-to-water transfer of wild fish, meaning they will pass through the stream reach with significantly less impact than current conditions.
- The project team is experienced and has a proven track record of implementing similar projects successfully.

Concerns

- The Confederated Tribes of Grand Ronde is listed as a project partner, but their level of involvement is unclear in the application.
- More information on whether hatchery infrastructure improvement projects are eligible for ODFW funding would clarify the need for OWEB investment in the project.

Concluding Analysis

The removal of the Ogee Dam will build on several previous investments in the watershed, including another diversion dam that was recently addressed using OWEB Restoration funding. The project location is a high priority fish passage barrier and addressing it will restore access to a significant amount of habitat to wild fish. This is a rare opportunity in the watershed to provide access to cooler water that is critical for fish recovery in the face of climate change.

Review Team Recommendation to Staff

Fund

Review Team Priority

3 of 10

Review Team Recommended Amount

\$892,655

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Fund

Staff Recommended Amount

\$892,655

Staff Conditions

n/a

Open Solicitation Technical Assistance-Spring 2024

North Coast (Region 1)

Application Name: 224-1037-23605

Project Type: Technical Assistance_v2

Project Name: The Little Rackheap Creek Fish Passage Designs

Applicant: Lower Nehalem WC

Region: North Coast

County: Tillamook

OWEB Request: \$92,883

Total Cost: \$93,383

Application Description The Little Rackheap Creek Fish Passage Designs project will produce construction ready final designs for fish passage at a privately owned residential culvert over Little Rackheap Creek. Little Rackheap Creek is a tributary to the North Fork Nehalem River in Tillamook County east of the City of Nehalem. The mouth of Little Rackheap Creek is at river mile 3.2 on the upstream right bank of the North Fork Nehalem.

This project focuses on a double barrel culvert where Little Rackheap Creek crosses under Storm Drive. There are two round culverts, one 6 ft, the other 4 ft, and both partially rusted through. Little Rackheap Creek has a bankfull width at this crossing of 17.7 ft. There's an additional 1.5 miles of Coho spawning and rearing habitat upstream of the crossing including an Anchor Habitat from river miles 1.10-1.29 of moderate functionality due to low spawning gravel and large wood complexity. The culverts act as a barrier to juvenile salmonids during summer flows and may impede adult salmonids during high flow events.

This project is the first phase in a series of projects that will address fish passage at Storm Drive, treat invasive species (Japanese knotweed and Himalayan blackberry), plant riparian vegetation, and add large wood to anchor habitats in Big and Little Rackheap Creeks.

The Nehalem Bay Watershed Council (NBWC) is managing this project on behalf of the Nehalem Basin Partnership. This project fits the Nehalem Strategic Action Plan for Coho Strategy 6: Replace or remove culverts or other barriers to fish passage. Additionally it will create better passage to the anchor habitat upstream and will facilitate future instream wood enhancements prioritized in Strategy 2: Add large wood to identified anchor habitats.

This project will be led by the NBWC with support from Tillamook Estuary Partnership and the Oregon Department of Fish and Wildlife.

Review Team Evaluation

Strengths

- Designs will be developed to replace a fish passage barrier impeding access to 1.5 miles of Oregon coast coho salmon habitat. The creek also provides habitat for coastal cutthroat trout.
- The crossing has fallen into disrepair and the need to address fish passage at the site is apparent. Material is blocking the crossing much of the time and one of the culverts is perched at a level that impedes fish access.
- The Little Rackheap Creek contains cool water habitat, which is critical to the recovery of coho in the Nehalem watershed given the warm summer temperatures in the mainstem.
- The condition of the riparian area along the project reach is healthy, providing considerable shade and possible long-term large wood recruitment.
- There are opportunities upstream to improve habitat. The feasibility of placing instream large wood structures in the future depends on addressing the fish passage barrier.
- The design process and expected deliverables are clearly outlined in the application.
- The applicant has a history of completing similar projects successfully. The project team has the necessary capacity and experience to guide the design process effectively and implement the project.
- The landowners are engaged in the project and supportive of improving the salmon populations in The Little Rackheap.
- The costs for the design are reasonable and align with the stream size and site constraints.

Concerns

- The resulting restoration project may be costly and the road is utilized by a small number of residents.

Concluding Analysis

The crossing to be addressed is a double barrel culvert system that has deteriorated to a degree that is both unsafe for the community and inhibiting fish from moving upstream to spawning and rearing habitat in The Little Rackheap Creek. In addition to restoring fish access to cool water habitat upstream, the project will also open opportunities to add instream habitat complexity to the creek in future project phases.

Review Team Recommendation to Staff

Fund

Review Team Priority

3 of 5

Review Team Recommended Amount

\$92,883

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Fund

Staff Recommended Amount

\$92,883

Staff Conditions

n/a

Open Solicitation Technical Assistance-Spring 2024

North Coast (Region 1)

Application Name: 224-1038-23613

Project Type: Technical Assistance_v2

Project Name: Coastal dune restoration planning at Camp Westwind

Applicant: Institute for Applied Ecology

Region: North Coast

County: Lincoln

OWEB Request: \$136,599

Total Cost: \$137,099

Application Description The goal of this project is to facilitate the restoration of native dune habitat at Westwind by developing a site-specific restoration plan and collecting plant materials. Westwind is a 529-acre property located at the mouth of the Salmon River in Otis, Oregon, and is owned and managed by the Westwind Stewardship Group (WSG) . OWEB holds a conservation easement over the site due to its extraordinary conservation value, and the property exists within the 102,110-acre UNESCO Cascade Head Biosphere Reserve.

Native sand dune habitat has declined precipitously along the Oregon coast since European beachgrass was introduced in the early 1900's to stabilize the landscape. The loss of dynamic, open-sand areas has resulted in the decline of native species and has degraded inland estuary habitat by altering tidal floodplain dynamics. A prime example of this phenomenon is along the 160-acre sand spit at Westwind. This area is ripe for restoration, but there are currently no documented standards or best practices for how to successfully conduct this work. Furthermore, there are inadequate plant materials available to restore the unique species that historically made up coastal dune plant communities.

To lay the foundation for successfully restoring coastal dune habitat at Westwind, the Institute for Applied Ecology will work collaboratively with the WSG to write a comprehensive restoration plan. This will be achieved by (1) conducting a geomorphological study assessing the sand spit (2) visiting and gathering information from high-quality remnant and restoration sites along the coast, (3) hosting regional dune restoration practitioners and experts on site to provide guidance, (4) synthesizing information and writing a restoration plan, and (5) collecting and storing seeds from native dune species. Ultimately, this project will guide actions leading to the restoration of native dune habitat at Westwind and be a model for future dune restoration in Oregon.

Review Team Evaluation

Strengths

- Concerns from the previous evaluation are addressed by engaging qualified expertise to conduct geomorphic assessments necessary to identify an alternative and build a restoration design.

- Native coastal dunes are imperiled in the state of Oregon due to the predominance of system-changing European beachgrass. The project will lead to restoring a native-dominated dune system on the Salmon River spit. The location of the project site has the potential to succeed.
- The plan for dune restoration fits in well with camp operations that occur at Westwind. The applicant and landowner have thoughtfully considered an approach that will work for both the human use of the site and the ecology of the dunes.
- The property is conserved into perpetuity by an OWEB conservation easement and contains a plethora of priority habitat types that are declining in Oregon. Westwind is also within the Cascade Biosphere Reserve.
- The application proposed actions include a full assessment and data collection by a coastal geomorphologist that will provide critical information necessary for evaluating alternatives.
- The project is part of a larger Oregon coastal dune partnership that is working to determine appropriate restoration and permitting pathways for this type of work. The project will help provide important data needed about sand movement that is necessary for permit applications and help inform other dune project sites.
- The applicant is engaging the appropriate expertise needed to inform restoration planning.
- The project team has the capacity to complete this technical assistance effectively and the resulting project will restore an imperiled habitat type in Oregon.
- The costs are appropriate and align with the actions proposed.

Concerns

- More clarity in the application describing how the collected data will inform the permitting pathway would be helpful in evaluating the likelihood of success.
- River flow data is not referenced in the application, and likely will need to be considered as part of the overall project planning.

Concluding Analysis

Restoring a native, naturally functioning dune system to the Salmon River is a unique opportunity. Many imperiled species in the state, including the federally listed western snowy plover and pink sand verbena, rely on the dynamic conditions prevalent on sand dunes that are not stabilized by the invasive European beach grass. The isolated nature of the sand spit at Westwind in relation to other dune systems means that maintaining a native dune community and controlling European beach grass into the future is a real possibility.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 5

Review Team Recommended Amount

\$136,599

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Fund

Staff Recommended Amount

\$136,599

Staff Conditions

n/a

Open Solicitation Technical Assistance-Spring 2024

North Coast (Region 1)

Application Name: 224-1039-23617

Project Type: Technical Assistance_v2

Project Name: Rock Creek Fish Passage Improvement - City of Vernonia

Applicant: Upper Nehalem WC

Region: North Coast

County: Columbia

OWEB Request: \$145,288

Total Cost: \$175,288

Application Description The City of Vernonia is looking to improve fish passage within Rock Creek. Currently they install a temporary dam during the summer months to allow the community to come together and have a local swimming pool. This pool is important to the community and therefore complete removal of the dam is not feasible. However, this dam is a fish passage barrier from early June through September.

Rock Creek is a major cool-water tributary to the Nehalem River spanning 28.8 miles upstream of Vernonia. The proposed improvements are meant to mitigate for the existing impediment and provide suitable conditions for fish migration while maintaining the necessary system functionality.

Based on ODFW fish surveys, the waterway is critical for migratory and spawning habitat for Fall and Spring Chinook, Coho, Coastal Cutthroat Trout, Winter Steelhead, Lamprey, Largescale Suckers, Sculpins, and Crayfish. With this, it is expected that different life stages of these species are present throughout the year and the variable flow patterns of the creek.

Improvements to fish passage are focused on creating a fish passage friendly side channel that will be opened during the dams operational months.

Review Team Evaluation

Strengths

- A design solution will be developed to address a priority juvenile fish passage barrier on Rock Creek in the Upper Nehalem watershed. Most of Rock Creek is currently inaccessible to juvenile fish migrating upstream to cooler water by the presence of the Nehalem “swimming pool,” which is used for recreation and constructed by a seasonal dam across the creek.
- Rock Creek contains important cold water refugia for juvenile steelhead and Oregon coast coho salmon. Temperatures in the mainstem Nehalem have been increasing; providing access for juveniles to Rock Creek’s cooler waters in the summer is a priority.

- There is a clear need for the technical assistance. The passage solution is likely to be complicated at the project site due to the temporary nature of the dam and the need for meeting juvenile fish standards.
- The approach is technically sound with the proposed hydrologic modeling appropriate for the expected deliverables.
- The site has been a priority for natural resource agencies and the City of Vernonia for a long time; other relevant partners are finally now engaged in finding a solution. The project builds on a recently funded OWEB Restoration grant that addressed another juvenile barrier caused by City infrastructure located just downstream of the project site.
- The applicant is qualified to implement the project and has a track record of successfully implementing similar projects. They bring to the project decades of experience and positive working relationships with the City of Vernonia staff.
- There are significant outreach opportunities possible at this highly visible location.

Concerns

- There is conflicting information in the application about the level of design that will be achieved. The project workplan indicates 60% designs will be completed while the narrative specifies that construction-ready designs will be produced.
- The application does not address how the “swimming pool” might be warming water temperatures downstream in Rock Creek.
- The project will have limited benefit for adult fish and the design solution does not address the root cause of the watershed issue. The potential habitat benefit is limited by the design solution that prioritizes maintaining the recreational pool over fish passage.
- It is unclear what the potential impacts of a permanent structure in the creek will be during high flows. It would be helpful to provide examples of possible alternatives that will be considered as design solutions.
- It is not clear how current conditions at the swimming pool meet federal Endangered Species Act compliance and whether action should have already been taken to address impacts to fish habitat.
- The budget includes lump sums, making it difficult to determine whether costs are reasonable for the proposed actions. The staff and contractor hours seem high without an explanation of how this time relates to proposed actions. It is unclear why the cost of the project has increased substantially since the last submittal for the same deliverables.

Concluding Analysis

There are both community and ecological benefits to addressing juvenile fish passage at the project

location on Rock Creek within the City of Vernonia. The project could have benefit to juvenile fish but the ongoing existence of the “swimming pool” in town means that the root causes of the watershed issue will continue to go unaddressed. The resulting restoration project may have minimal ecological benefit for the cost with juvenile fish passage addressed for only a few months of the year and no benefit provided to adult fish. It is also difficult to envision what type of design solutions are feasible for the site and whether they will be permanent or temporary features. Additional information is needed to understand the basis for the permanent nature of the annual swimming pool, how state and federal fish passage regulations are met, and examples of similar design solutions that might prove effective at this site.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

n/a

Review Team Recommended Amount

\$0

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

n/a

Open Solicitation Technical Assistance-Spring 2024

North Coast (Region 1)

Application Name: 224-1040-23618

Project Type: Technical Assistance_v2

Project Name: Tuffy Creek Fish Passage - Building Resilience in a Changing Climate

Applicant: Tillamook Estuaries Partnership

Region: North Coast

County: Tillamook

OWEB Request: \$265,019

Total Cost: \$274,259

Application Description The proposed project requests funding for technical engineering design assistance that would result in construction to replace an existing fish passage ladder and dam (Tuffy Dam) on the South Fork Wilson River (Tillamook Bay basin on the north Oregon coast, about 30 miles east of Tillamook). The current dam supplies water through an unscreened intake to the Tuffy Creek rearing pond (satellite facility of ODFW's Trask River Hatchery) and to the Oregon Department of Corrections (jointly operated with the Oregon Department of Forestry) South Fork Forest Camp, an Adults in Custody rehabilitation camp. The current diversion dam is a barrier to juvenile salmonid and lamprey migration, partial barrier to adult salmonid migration, and likely at least a partial barrier to adult lamprey migration. In addition, the water intake is unscreened, potentially allowing juvenile fish to be diverted from the river. A new screened intake would be included as part of the project. Multiple fish species would benefit from this project, including Chinook salmon, coho salmon, steelhead, cutthroat trout, and lamprey. The completed project (diversion dam with fish ladder and new screened intake) would enhance the ability of wild fish to use the South Fork Wilson River watershed and should increase downstream survival of juveniles passing the water intake. A fish trapping/sorting facility will allow removal of returning hatchery fish, reducing competition with wild stocks. Less unintended mortality should increase the resiliency of the populations of fish that utilize the South Fork Wilson River and continue to allow operation of the rearing pond (which raises spring Chinook and winter steelhead to provide recreational angling opportunity in the Tillamook Bay basin) while also providing water to the prison camp. Project partners include Tillamook Estuary Partnership, ODFW, Bureau of Reclamation, Oregon Department of Forestry, Department of Corrections.

Review Team Evaluation

Strengths

- The project will address a fish passage barrier to both adults and juveniles and will improve access for Pacific lamprey, Oregon coast coho, Chinook, steelhead, and cutthroat trout to habitat on Wilson River.
- The habitat upstream of the site is high quality and has an intact riparian buffer and cooler water. There are also no additional barriers located downstream.

- The project is a priority on the ODFW barrier list for the region. ODFW and ODF are both partnering on the project.
- The budget contains appropriate detail.

Concerns

- The description of the proposed actions and how they will be implemented do not correspond, making it challenging to understand the expected deliverables. For example, action four in the application references maintaining water needs for hatchery fish rearing and the corresponding direction explains permitting unrelated to the action.
- Some of the actions listed in the application pertain solely to hatchery operations. For example, it is unclear how maintaining hatchery and camp water needs described in action four of the application will contribute to the overall health of the watershed or wild fish populations.
- The application is lacking detail about current conditions in the watershed, how fish passage will be addressed at the site, how wild fish are currently managed at the hatchery, and why OWEB funds are needed to support hatchery operations and infrastructure.
- It is unclear whether the project is eligible for funding from existing ODFW programs that may be a more appropriate source for the proposed design actions associated with hatchery infrastructure.

Concluding Analysis

Restoring fish access to the significant amount of habitat upstream of the fish hatchery will have considerable ecological benefits to native fish populations, but the application contains limited information to assist in evaluating current conditions at the Tuffy Creek site. The possible benefit to wild fish and watershed health is unclear without details needed to understand the nature of the current barrier created by the hatchery.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

n/a

Review Team Recommended Amount

\$0

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

n/a

Open Solicitation Technical Assistance-Spring 2024

North Coast (Region 1)

Application Name: 224-1041-23621

Project Type: Technical Assistance_v2

Project Name: North Coast Watersheds Restoration Assistance

Applicant: Necanicum WC

Region: North Coast

County: Clatsop

OWEB Request: \$87,764

Total Cost: \$107,764

Application Description The four watershed councils along the lower Columbia River and North Coast of Oregon in Clatsop and Tillamook Counties are similar in that they each have relatively small staffs and work in areas with significant aquatic resources and restoration opportunity. The watersheds of the Nehalem, Necanicum, Tillamook and lower Columbia estuary each support evolutionarily significant unit populations of Oregon Coast coho salmon, include the opportunity for reestablishing chum salmon and provide important habitat for Pacific lamprey, Chinook salmon, cutthroat trout, and steelhead along with other aquatic and wetland dependent species.

The workload associated with grant funded restoration taxes even the most efficient watershed council directors even with staff support. This application does two things; first, it helps the participating disparate watershed councils approach common issues together with a cohesive strategy, secondly it provides additional capacity to assist with grant applications, freeing the limited staff capacity to implement projects previously funded.

Each Council's needs are similar in nature so the sharing of services of a highly qualified contractor effectively leverages each organization's ability to secure funding and move high-priority projects and planning forward. This has resulted in a proven model that takes advantage of economies of scale with only one contract. The successful history of the effort (OWEB grants 214-1015, 216-1011, 218-1011, 219-1025, and 221-1036) is supported by both local groups and public agencies. Participating councils include: North Coast Watershed Association (NCWA), Necanicum Watershed Council (NWC), Lower Nehalem Watershed Council (LNWC) and Nestucca, Neskowin & Sand Lake Watersheds Council (NNSL).

Review Team Evaluation

Strengths

- The increased capacity provided to watershed councils from previous iterations of this project has been helpful in developing restoration opportunities that leads to on-the-ground implementation.
- The technical assistance continues efforts that have fostered collaboration among the north coast watershed councils in the past.

- The application includes general descriptions of action plans and assessments that will guide the technical assistance to ensure watershed priorities are met.
- The watershed councils affiliated with this technical assistance effort have increased capacity in recent years, which could also increase their ability to implement the projects developed by the contractor.
- The collaboration has been effective in previous years in helping with staff turnover among the organizations involved.
- The project is cost-effective with the involved organizations sharing the services of one technical provider instead of seeking support on an individual basis.

Concerns

- The application lacks measurable outcomes, and the goals are general in nature. Previous applications contained significantly more detail about the expected deliverables from the contractor. For example, additional measurable objectives in the actions, such as the number of applications that will be developed as described in action one, would be helpful for understand the technical assistance products.
- Detail explaining the types of projects that will be developed in each watershed would be helpful to understand the priority habitats or species that will be targeted.
- There are not a lot of specific details provided to help evaluate project readiness of the ideas under consideration for project development by the contractor. It is unclear if the products will directly lead to site-specific restoration within a specific timeframe.
- The application lacks details on how decisions will be made to ensure that the resources are equitably used between the involved organizations.

Concluding Analysis

The application has limited details explaining the process for implementing the technical assistance and path to specific restoration projects. The proposed technical assistance will continue an effort that serves multiple watershed councils in the north coast by hiring a contractor to work with all the organizations on project development and provide grant writing services. Addressing limited capacity through shared services to develop projects is an effective approach for implementing restoration priorities.

Review Team Recommendation to Staff

Fund

Review Team Priority

4 of 5

Review Team Recommended Amount

\$87,764

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

n/a

Open Solicitation Technical Assistance-Spring 2024

North Coast (Region 1)

Application Name: 224-1042-23628

Project Type: Technical Assistance_v2

Project Name: McBride Creek Fish Passage and Habitat Restoration

Applicant: Columbia SWCD

Region: North Coast

County: Columbia

OWEB Request: \$103,907

Total Cost: \$112,875

Application Description 1) This project is located on McBride Creek, a tributary of the Columbia River in the Lower Columbia River watershed. McBride Creek flows through Columbia City, just north of the city of St. Helens.

2) McBride Creek is habitat for several ESA listed species (Lower Columbia River Coho and Steelhead) as well as numerous species of concern including Coastal Cutthroat Trout and Pacific lamprey. The project addresses both fish passage and habitat quality concerns on a private property owned by the Iversons. The sole access for the Iversons' residence is a private driveway over McBride Creek. The crossing consists of a metal culvert that is significantly undersized for the stream's active channel width. The culvert is perched several feet above water level on the downstream end, resulting in a deep scour pool and a complete fish passage barrier. The driveway also contains several small (<2' span) concrete culverts from the 1960s that convey overflow. All of these culverts get plugged regularly by debris during high flows. Scouring and pooling is visible around the culvert inlet. The Iversons' property contains ~0.25 miles of McBride Creek in an area with relatively wide floodplains and low gradient. Currently this stretch of stream is incised and simplified, but there is great habitat potential if restoration actions can be applied. There is at least one resident beaver on site, but the area lacks quality forage and high flow velocities are not conducive to dam building.

3) The project will fund designs for the replacement of the driveway culverts and in-stream habitat restoration. Survey and analysis will identify opportunities for habitat enhancement through elements like floodplain engagement, increased in-stream complexity and roughness, side channel re-engagement, off-channel habitat formation, and riparian restoration.

4) Project partners include the Oregon Department of Fish and Wildlife, the Oregon Department of Forestry, and private landowners.

Review Team Evaluation

Strengths

- The application clearly describes the need for replacing existing culverts to address fish passage on McBride Creek. Technical assistance is needed to determine the best design alternative for a road crossing with a culvert that has a complex configuration with a private driveway and is adjacent to a county road.

- There is potential for high ecological uplift from the project by increasing ground water storage and floodplain connectivity that will also enhance resilience of McBride Creek to climate change.
- The landowner involved is engaged and supportive of the project and has indicated they may be able to donate some materials to the project. There is potential for further floodplain restoration upstream of the culvert.
- The project addresses limiting factors described in recovery plans for Lower Columbia River salmon populations.
- The applicant has built community relationships along McBride Creek that could lead to future restoration beyond the project reach.
- The applicant has the experience and capacity to implement a successful technical assistance project.
- The applicant is pursuing funding and proactively building partnerships necessary to implement the restoration project.

Concerns

- The condition at the culverts located upstream and downstream of the project site may limit opportunity for large wood installation and the potential ecological benefit of the future restoration. Both the upstream and downstream culverts are not able to pass large wood, although the downstream culvert is fish passable.
- More details about the role of ODFW and ODF in the project would be helpful to evaluate whether appropriate partners needed to implement the project are engaged.

Concluding Analysis

Technical designs will be produced to replace a fish passage barrier at a private driveway on McBride Creek and evaluate other habitat improvements that can be implemented upstream of the crossing. The project site was the subject of an older OWEB Technical Assistance grant from 2014 that examined alternatives for this crossing and the crossing just downstream. At that time, the potential alternatives for repair were not feasible primarily due to the expense of replacing the downstream crossing. Since that time, the crossing downstream was replaced by the landowner, which opened a new opportunity to address the subject crossing. The technical assistance product is likely to succeed in leading to restoration that will restore fish passage, instream habitat, and riparian areas along McBride Creek.

Review Team Recommendation to Staff

Fund

Review Team Priority

5 of 5

Review Team Recommended Amount

\$103,907

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

n/a

Open Solicitation Technical Assistance-Spring 2024

North Coast (Region 1)

Application Name: 224-1043-23658

Project Type: Technical Assistance_v2

Project Name: East Creek Large Wood, Road
Decommissioning, and Fish Passage Design Project

Applicant: Nestucca-Neskowin Watersheds Council

Region: North Coast

County: Tillamook

OWEB Request: \$86,464

Total Cost: \$106,464

Application Description East Creek is a 6.13 sq mile tributary watershed in the Nestucca basin with headwaters in the Coast Range foothills in south Tillamook County. The project goal is to secure engineering designs for three fish passage culvert removals, road decommissioning for more than two miles of road including removal of approximately one dozen road drainage culverts, and placement of multiple large wood structures to improve aquatic habitat in a portion of the affected reach. The three fish passage culverts are partial adult and full juvenile upstream fish passage barriers and impair stream function. This project will improve habitat and restore full volitional fish passage to 10.8 miles of native fish habitat including at least 5.6 miles for ESA listed Oregon Coast coho salmon, and will also benefit winter steelhead, Pacific lamprey, Chinook salmon, and cutthroat trout,

Project partners include Bureau of Land Management (BLM, the landowner), US Fish & Wildlife Service (USFWS), Oregon Department of Fish and Wildlife (ODFW), Trout Unlimited (TU), and Nestucca, Neskowin and Sand Lake Watersheds Council (NNSLWC). NNSLWC will be the contract officer, 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 with design and road/culvert decommissioning projects. BLM, USFWS and ODFW will assist with reviews of the proposed project designs, and BLM will provide design support and later work with NNSLWC to implement the culvert removals and road decommissioning.

Review Team Evaluation

Strengths

- A myriad of project elements are proposed that will address multiple habitat limiting factors for fish in the Nestucca basin. Three fish passage barriers will be addressed, two miles of roads will be decommissioned, and large wood structures will be placed to improve instream complexity.
- One of the barriers proposed for replacement is ranked #3 on the Salmon SuperHwy priority list.
- There is a clear need for the project, the culverts are both partial barriers for adults and full barriers for juveniles.

- There is quality spawning and rearing habitat located above the project reach that is currently not widely accessible due to the fish barriers.
- Decommissioning the road will result in considerable ecological benefit. The road has a history of sloughing off and degrading water quality by contributing sediment to the stream.
- The project will address key TMDL water quality priorities for the basin.
- The application describes climate change impacts and how the resulting restoration project will contribute to ecosystem resilience over time.
- The applicant and project partners have completed similar projects successfully.
- The costs seem appropriate for designing three culverts and the fish habitat benefit is high for the cost.

Concerns

- No significant concerns are identified.

Concluding Analysis

The project takes a holistic approach to planning restoration in East Creek in the Nestucca basin. The technical assistance will not only address three barriers but will also design a plan for road decommissioning and large wood placements. These three actions together target habitat limiting factors for fish in the basin, including Oregon coast coho salmon. The project partnership is comprised of the organizations and agencies needed to ensure this effort is likely to lead to a successful restoration project with high ecological benefit.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 5

Review Team Recommended Amount

\$86,464

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Fund

Staff Recommended Amount

\$86,464

Staff Conditions

n/a

Open Solicitation Technical Assistance-Spring 2024

North Coast (Region 1)

Application Name: 224-1044-23681

Project Type: Technical Assistance_v2

Project Name: Thompson Creek Alternatives Analysis & Design Phase I

Applicant: Necanicum WC

Region: North Coast

County: Clatsop

OWEB Request: \$142,954

Total Cost: \$153,764

Application Description 1) Thompson Creek is a highly productive ESA-listed and Evolutionarily Significant Unit of coho and steelhead stream on the north end of Seaside with direct drainage into the Stanley Lake and the Necanicum Estuary. The stream high has intrinsic potential for coho habitat. It currently has a productive but declining coho run and has stretches of stream that are essentially roadside ditch and reaches with little to sinuosity.

2) Regardless of challenging habitat conditions in the current (non-traditional) location of the stream channel, coho and steelhead utilize the upstream habitat of Thompson Creek annually with high productivity and high quality spawning habitat. However the run is declining and there have been continued discussions between the NWC and partners about a collective effort to review potential large scale restoration efforts to move Thompson Creek closer to its original channel and reconnect with Stanley Marsh (NCLC conserved habitat).

3) Funding from this proposal would focus on two main things:

- a) Provide NWC with staff capacity to conduct in-depth partner collaboration meetings, landowner outreach and contractor oversight during habitat surveying and alternatives analysis and designs and;
- b) Retain a qualified professional stream engineering firm to conduct habitat surveying and produce alternatives analyses and a 60% design of the preferred alternative for Thompson Creek restoration.

4) Necanicum Watershed Council

North Coast Land Conservancy

City of Gearhart (potential need for land access)

Nuveen Natural Capital (potential need for land access)

Private residential landowners (potential need for land access)

Review Team Evaluation

Strengths

- The need for the technical assistance is clear. The project site is complex with numerous constraints associated with the adjacent roads and housing development and there is not a good understanding of its current hydrology.
- The Thompson Creek basin is small, but it supported one of the largest local coho runs when all the culverts were passable. The wetlands contain high quality rearing habitat.
- Some of the surrounding habitat is in conservation ownership by a land trust and has habitat improvement potential.
- There are outreach opportunities for the project given its urban interface and its association with the land trust.
- The watershed council has developed a partnership with the Chinook Nation and the budget includes funding for the Tribe to participate in the design process.

Concerns

- There is conflicting information in the application about whether 60% or 90% level of design will be achieved.
- There is limited information on how decisions will be made for the bid and contracting process.
- Details describing technical team members involved in the project and who will be making decisions about the selected design alternative would be helpful to determine whether qualified expertise are engaged in the project. For example, the budget shows NOAA and USFWS time for review, but the roles of those agencies are not described in the proposed solution.
- There is limited fish habitat upstream due to a natural barrier at some falls.
- There is infrastructure in the wetland associated with the housing development that straddles the stream and road system. Considerations may be required to protect utilities could increase the cost of the project or alter the design approach. The application lacks information describing how the design will address these site constraints.
- A county road runs through the project site but there is no evidence in the application indicating the County is a partner.
- It is unclear if the budget for the project is sufficient given the lack of details on the scope of work for the technical assistance provider.

Concluding Analysis

Thompson Creek, despite its small size, hosts a thriving Oregon coast coho salmon population. Its unique hydrology and fish rearing potential in the wetlands makes it a priority place to implement restoration and conservation. The project area, however, is riddled with complexities given its adjacency

to homes, roads, and different landownerships that comprise the site. The need for technical assistance is clear, but there are limited details in the application to help understand what kind of alternatives will be considered and how decisions about the area might be made given the diversity of interests involved. A broader partnership with additional technical expertise on the team would increase the project likelihood of success.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

n/a

Review Team Recommended Amount

\$0

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

n/a

Open Solicitation Technical Assistance-Spring 2024

North Coast (Region 1)

Application Name: 224-1045-23705

Project Type: Technical Assistance_v2

Project Name: Siletz Livestock Water Quality Project

Applicant: Lincoln SWCD

Region: North Coast

County: Lincoln

OWEB Request: \$65,296

Total Cost: \$70,296

Application Description This project involves four sites within the Siletz-Rock Creek watershed (Sites A, B, C, and D) each of which are used for livestock grazing (mainly cattle, with Site B also being used for sheep and Site C including chickens and horses), and borders the Siletz River or a tributary of it. Site A directly borders the mainstem Siletz River just downstream of the town of Siletz; Site B borders Euchre Creek approximately 0.25 miles from its confluence with the Siletz River; Site C directly borders the Siletz River 1.4 river miles upstream from the town of Siletz; Site D borders Steer Creek, a tributary to Rock Creek which is a major tributary of the Siletz River.

As each site is in immediate proximity to a stream and is subject to livestock operations, proper manure control is necessary in order to maintain water quality in the Siletz River and Rock Creek; the former of which is a major drinking water source for the cities of Newport, Toledo, and Siletz. Additionally, livestock operations at Site D currently allow cattle to enter a small tributary to Steer Creek, resulting in heavy erosion of the stream at the crossing point. Without modification, this crossing point will continue to contribute to increased sedimentation and turbidity in Steer Creek.

We intend to address these issues by constructing manure storage facilities at Sites A, B, and C, and a hardened cattle stream crossing at Site D. Currently, we are seeking funds to create designs for these developments. We will be partnering with the Natural Resources Conservation Service on this project.

Review Team Evaluation

Strengths

- The streams associated with the proposed technical assistance are 303(d) listed for temperature. All streams contain runs of Oregon coast coho salmon that could benefit from improved water quality.
- Eliminating manure inputs to the stream will have water quality benefits to the Siletz River.
- The applicant has the experience and capacity necessary to implement the project and has a track record of success with similar projects.

Concerns

- The application lacks details on current site conditions and existing grazing management that would provide helpful context for understanding the need for the technical assistance.

- The application lacks details that would be helpful for understanding the need for livestock crossing designs. For example, there is no information provided about how livestock are currently accessing the stream or the size and scale of the farm operations involved.
- The proposed solutions is unlikely to address water quality problems because fencing to exclude livestock from the stream is not proposed and livestock management will remain unchanged.
- It is not clear if partners will be engaged in the project that could provide expertise needed to implement the technical assistance. For example, it is unclear how and if NRCS is involved with the designs nor what their role in the project might be.
- It may be possible to utilize a similar design for all three manure structures, it is unclear why three individual designs are needed for the same type of facility.

Concluding Analysis

The project proposes working with three private landowners in the Siletz watershed to design manure storage facilities, which could benefit water quality. Details explaining current site conditions, why design is needed for the restoration actions, and whether livestock management or grazing will change is needed to understand the expected ecological benefit.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

n/a

Review Team Recommended Amount

\$0

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

n/a

Open Solicitation Monitoring-Spring 2024

North Coast (Region 1)

Application Name: 224-1046-23696

Project Type: Monitoring_v2

Project Name: TEP Volunteer Bacteria Monitoring Program

Applicant: Tillamook Estuaries Partnership

Region: North Coast

County: Tillamook

OWEB Request: \$97,751

Total Cost: \$143,192

Application Description The proposed project aims to measure elevated bacteria concentrations in streams, bays, and beaches within Tillamook County, Oregon, surpassing State standards for recreational contact and shellfish harvest. To tackle this issue, the Department of Environmental Quality (DEQ) has developed three Total Maximum Daily Loads (TMDLs) for the North Coast Subbasins, Tillamook Bay Watershed, and Nestucca Bay Watershed. Since 1997, the Tillamook Estuaries Partnership (TEP) has monitored E. coli and enterococcus bacteria levels in Tillamook County through its Volunteer Water Quality Monitoring Program (VWQMP). The VWQMP's ongoing mission is to track the long-term status and trends of bacteria levels in streams, sloughs, and bays across 83 sites throughout Tillamook County. Consistent water quality monitoring serves as a dependable resource for restoration practitioners and helps the public make informed decisions about when and where to recreate. The water quality results are published bi-weekly on an integrative, online map along with data from the NNSLWC, a partner organization in the county also collecting bacteria data. TEP engages citizen scientists to collect water samples at monitoring locations every two weeks year-round. These samples undergo processing and analysis for bacteria counts using IDEXX equipment and methods at the TEP office. Subsequently, the results are recorded and entered into an online database and live map. The three most recent findings are accessible to the public through this interactive map on TEP's website. TEP forwards the bacteria data to DEQ for assessment against State water quality standards to determine the status of the waterbodies. Additionally, DEQ conducts regression analysis for each site to identify statistically significant changes (trends) in bacteria concentrations. To ensure regular analysis and dissemination of information to partners and the public, TEP conducts DEQ status and trend analysis methods annually in-house.

Review Team Evaluation

Strengths

- This project will monitor bacteria at locations that correspond with Oregon Department of Environmental Quality (DEQ's) list of impaired waterbodies, identified in the Total Maximum Daily Load (TMDL) and Water Quality Action Plan developed by the Tillamook Estuaries Partnership (TEP).
- This project will complement a robust historic data set that will continue to consistently collect bacteria data in the same manner for the next two years.

- This project will complement bacteria monitoring efforts occurring in the North Coast with the Nestucca, Neskowin, and Sand Lake Watershed Council and the North Coast Watershed Association.
- The applicant follows professionally accepted monitoring methods and sample analysis standards that are described in a DEQ approved Sampling and Analysis Plan (SAP).
- The letters of support demonstrate that the applicant has a history of actively working with the community and local partners to provide them with information to guide future restoration actions.
- The applicant has the relevant experience and qualifications to implement this project as proposed.
- This project will continue to make the bacteria data available to the public by utilizing a near real time internet-based tool.
- This project will submit all data to DEQ which allows them to use this data as part of their integrated water quality report that assesses the surface water quality conditions in Oregon.
- This project is extremely cost-effective by utilizing an established local volunteer network.

Concerns

- It is not clear how this data set, which has been collected for over 10 years, has been used to inform restoration efforts. The application would have benefited by providing examples of completed best management practices (BMPs) or completed riparian restoration projects.
- The application would be strengthened by providing the link to the integrative, online mapping tool that is used to publish and share the most recent data.
- It is not clear how the applicant incorporates quality assurance and quality control (QA/QC) measures into their volunteer training, including QA/QC processes in the field and the lab which are included in their DEQ approved SAP.
- The budget does not include travel expenses and it is unclear if these are covered by in-kind matching funds.
- The application did not describe why funding is requested for the Nestucca, Neskowin and Sand Lake Watershed Council's bacteria sample analysis.

Concluding Analysis

This long-term monitoring project in the North Coast watersheds has consistently produced high quality data that is valuable to the applicant, local partners and state agencies. The applicant's track record and qualified monitoring staff will contribute to a high likelihood of success to complete the project as proposed and to support other local watershed councils who are collecting the same type of data.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 2

Review Team Recommended Amount

\$97,751

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$97,751

Staff Conditions

N/A

Open Solicitation Monitoring-Spring 2024

North Coast (Region 1)

Application Name: 224-1047-23727

Project Type: Monitoring_v2

Project Name: NCWA Water Monitoring Expansion and Data Analysis

Applicant: North Coast WS Assn

Region: North Coast

County: Clatsop

OWEB Request: \$49,003

Total Cost: \$71,329

Application Description The North Coast Watershed Association (NCWA) seeks to enhance our water quality monitoring program by including flow and fecal bacteria monitoring and to interpret our existing long-term temperature data. Sites are located within the Skipanon, Nicolai-Wikiup, Youngs Bay, and Ecola Creek watersheds.

In 2021 Clatsop County partnered with the Association of Oregon Counties and SeaGrant to assess local water information needs. They identified a lack of water quality and quantity data and systems where existing data is difficult to find. State, Local, and Federal agencies do not have the capacity to conduct comprehensive testing throughout all watersheds or to conduct detailed interpretation of results. In addition Community Action Team Inc. (CAT) now has funding to help Clatsop and Tillamook County residents upgrade failing septic systems. NCWA's fecal bacteria testing can help hone their outreach efforts.

From May-October 2025-26 the NCWA will take continuous stream height measurements and monthly velocity readings at 3 sites to determine flows and conduct bi-monthly E. coli/total coliform testing at 13 sites. Salinity will be measured at all site visits. This will serve as a pilot program with the intent of building monitoring capacity within the NCWA through staff experience and training, volunteer recruitment, and engagement of project partners. Temperature data trend analysis will be conducted by the long time Project Manager who will receive additional training in data analysis and the Executive Director; this will inform how to move forward with both monitoring and restoration efforts. Our partners include Clatsop County, CAT, Tillamook Estuary Partnership (TEP), Oregon Department of Environmental Quality (DEQ), Oregon Water Resources Department (OWRD), ODFW and Clatsop Community College (CCC).

Data from this project will be shared with project partners to fill persistent data gaps, the public, and used to inform restoration and management decisions.

Review Team Evaluation

Strengths

- This locally lead monitoring project will fill a critical data gap for water quality and quantity in the North Coast.
- This project will provide bacteria data to inform a Community Action Team (CAT) to assist Clatsop and Tillamook County residents to update failed and failing septic systems.
- This monitoring project will analyze water temperature data in streams that host critical fish species including coho, steelhead and Chinook.
- The applicant will develop a DEQ approved SAP to include bacteria sampling.
- The letters of support demonstrate that the applicant is reaching out to the appropriate technical experts at ODFW, OWRD and DEQ for both bacteria and streamflow monitoring and will have hands on support during the field season to ensure data collection and bacteria lab analysis is properly performed.
- The letters of support demonstrate that the applicant is engaging with Clatsop County officials and will help share data with the City of Warrenton and City of Astoria.
- The applicant has a great track record in collecting continuous water temperature data and their capacity has been steadily growing that will likely assist them to successfully expand their water quality monitoring and analysis efforts.
- The application has a thorough explanation of how expenses were estimated and are appropriate for the work necessary to accomplish the actions proposed.

Concerns

- The water quantity monitoring question is overly broad and will be challenging to answer for the streamflow monitoring study design proposed. Narrowing the scope of the question they're asking would have helped make a clearer application.
- The application was not clear how many water temperature monitoring sites there are and how many years of data exists to understand the scope of the water temperature analysis that is proposed.
- It is not clear if the proposed water level monitoring methods is adequate to collect consistent, high quality water level data from May to October over two years. The proposed monitoring approach will require the applicant to develop separate rating curves at each site from year to year.
- The application lacked a description of the factors to be considered for proper site selection for the streamflow monitoring portion of the project.
- It is not clear how all three components of the project will be reported to summarize results in a comprehensive manner beyond sharing results with partners and posting results on the website.

- The application lacks details on the role of volunteers that are providing in-kind services and how the applicant will incorporate QA/QC measures to ensure high quality data is collected.

Concluding Analysis

The expansion of the applicant's water quality and quantity monitoring efforts will enhance their ability to better understand watershed conditions and inform local decision-making efforts. While the application lacked some detail on the collection of streamflow data, the coordination with ODFW and OWRD will provide support and the opportunity for the applicant to learn and increase the project's likelihood of success. This project will enhance the applicant's capacity to analyze their existing water temperature data to identify spatial and temporal trends.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 2

Review Team Recommended Amount

\$49,003

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$49,003

Staff Conditions

N/A

Open Solicitation Monitoring-Spring 2024

North Coast (Region 1)

Application Name: 224-1048-23739

Project Type: Monitoring_v2

Project Name: North Coast Watershed Association and Necanicum Watershed Council RBA and LFA Light 2025

Applicant: North Coast WS Assn

Region: North Coast

County: Clatsop

OWEB Request: \$128,238

Total Cost: \$176,576

Application Description 1)The North Coast Watershed Association (NCWA) incorporates two watershed councils in Clatsop County: the Coastal Council serving Ecola, Arch Cape, Short Sands, and other coastal drainages; and the River Council serving Skipanon, Youngs Bay, Nicolai-Wikiup, and other Lower Columbia River drainages. The Necanicum Watershed Council (NWC) serves the Necanicum River drainage. The Necanicum drainage sits between the NCWA River Council watersheds to the North and the NCWA Coastal Council watershed to the South. Together the NCWA and NWC Watersheds encompass a contiguous drainage area of approximately 297,244 acres of Oregon's North Coast. This expansive territory provides habitat for ESA listed coho, chinook, and chum salmon; non-listed steelhead and coastal cutthroat trout; and Pacific and brook lamprey.

2) Watershed assessments and plans drafted by local, state, tribal and federal entities have identified the lack of basin-scale inventories of salmonid distribution, abundance, and habitat distribution in the North Coast watersheds as significant data gaps in efforts to prioritize areas for restoration and conservation. Previous assessments within the NCWA and NWC watersheds are outdated and/or do not provide the detail needed to establish restoration goals for specific sub-watersheds or reaches within those streams.

3) This project proposes to conduct the third year of a Rapid Bioassessment of 198 stream miles throughout the combined watersheds of the NCWA and NWC. The goal is to establish baseline abundance and distribution profiles, and determine seasonal habitat limitations for salmonids and develop a systematic approach to identify and implement restoration actions that address those limiting factors. Funding for a third year of RBA data will provide a complete assay of the three distinct coho salmon cohorts for ESA listed populations.

4)

1. NCWA and NWC
2. Bio-Surveys, LLC
3. ODFW
4. ODF
5. GreenWood Resources
6. Technical Advisory Committee

Review Team Evaluation

Strengths

- This project will collect data that was informed by several state and federal salmon recovery and conservation plans.
- This resulting data will be used to develop and prioritize restoration actions.
- The applicant will be working with local and internet-based software programs to manage and store the data to make it publicly accessible.
- The applicant has been working with a qualified contractor with a proven track record to collect and report the results in a successful manner.
- The applicant's contractor that started to collect this data in 2023 will use the same monitoring protocol and QA/QC procedures in the field to ensure the data is properly handled and transferred to be managed in the office.
- The applicant will convene a Technical Advisory Committee (TAC) to engage technical experts and community members to share relevant data and for them to review the data and resulting analyses to develop and implement recommendations.
- The budget is detailed and describes important elements to estimate expenses to accomplish the actions proposed in the application.

Concerns

- The application didn't properly describe the planned/current fish monitoring efforts and existing fish data in the region, suggesting that the applicant may not be adequately engaging with ODFW and ODF.
- The monitoring methods were not described for monitoring water temperature, fish abundance and distribution or the gravel surveys.
- The application is unclear on whether the contractor will perform another limiting factors analysis (LFA) with the data they propose to collect in 2025.
- The application does not describe how the data will be analyzed to answer the multitude of monitoring questions posed in the application.
- The application does not describe how the data will be stored and reported to ODFW and their involvement with the project besides their small unsecured match contribution in the budget.

Concluding Analysis

The proposed collection of RBA data is informed by state and federal salmon recovery and

conservation plans and would be used to identify and prioritize restoration actions to improve habitat conditions. It is not clear this effort will be able to collect and adequately analyze the data to answer the monitoring questions to know if restoration projects are functioning as intended and what level of maturation restoration projects have gained. Additional information was needed on how water temperature, fish distribution and abundance data would be analyzed to describe its variation over three years. Increased engagement with ODFW and ODF would strengthen the proposal.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Engagement-Spring 2024

North Coast (Region 1)

Application Name: 224-1049-23616

Project Type: Engagement_v2

Project Name: Stakeholder Engagement to Improve Native Plant Materials on the Oregon Coast

Applicant: Institute for Applied Ecology

Region: North Coast

County: Lincoln

OWEB Request: \$58,536

Total Cost: \$60,297

Application Description Coastal ecosystems are among the most rare and impacted ecosystems in the Pacific NW and as a result, threatened and endangered species, and the habitats where they make their home, are greatly imperiled. One barrier to successful restoration is a lack of diverse, locally adapted native seed available for large-scale restoration projects. The Coastal Native Seed Partnership (CNSP) was formed in 2020 to increase the availability and affordability of native seed to restore Pacific NW coastal habitats including coastal grasslands, dunes, and estuaries. CNSP partners are located along the Oregon coast from Gold Beach to Astoria and the partnership extends to Willapa Bay, WA. With four years of partner meetings under its belt, the CNSP has identified a need for additional work to engage partners and develop or compile native seed mix design resources as well as develop or compile resources for restoration practitioners and native seed growers. This will help coastal partners develop and implement more efficient and resilient restoration projects. Key partners include U.S. Fish and Wildlife Service, U.S. Forest Service, National Park Service, Natural Resource Conservation Service, The Nature Conservancy, Midcoast Watershed Council, Bureau of Land Management, Curry Watersheds Partnership, Coos Watershed Association, Tillamook Estuaries Partnership, The Understory Initiative, McKenzie River Trust, and Oregon Parks and Recreation Department.

Review Team Evaluation

Strengths

- The project builds on previous OWEB investments in the Coastal Native Seed Partnership (CNSP). Outreach will be conducted to build a new network of potential growers and current and new partners will be engaged.
- The actions described in the application are clear and the appropriate audiences will be engaged.
- Measurable objectives and expected outcomes are clearly defined in the application, including the development of a seed guide for different habitat types and restoration planning resources.
- The application includes a climate resilience statement that explains how planting native plants in the region will improve resilience over time.

- The cost of producing native seed is high and the Partnership is raising funds to make the program more sustainable. This engagement project could help achieve that goal.
- The project will increase the availability of native seed in the coastal market, which will help with meeting restoration goals for coastal prairie and other habitat types that suffer from lack of seed sources.
- There is a huge need in the coastal region for local seed genetics and this project could be an important step toward meeting that need.
- The applicant has experience coordinating the CNSP for over five years.
- The estimated cost is low for the actions proposed and the expected benefit of new seed production on the coast.

Concerns

- It is unclear who will be the coordinator for the project and how the staff roles will interface with the proposed action items.
- Information describing how decisions will be made about seed production would be helpful to understand whether multi-directional communications with participants will be effective.
- Momentum for the CNSP appears to have stalled in recent years, it may require more structured facilitation and leadership to achieve on-the-ground success. Including plans for utilizing a facilitator and clarifying who will be leading conversations to establish new relationships with growers would be helpful for understanding the Partnership's strategy.

Concluding Analysis

The Coastal Native Seed Partnership addresses the lack of genetically appropriate seed material on the coast. It has made strides in identifying needs, building relationships with growers, and establishing seed fields. This engagement effort could be a logical next step to build support for the effort and expand the relationships with lower coastal growers.

Review Team Recommendation to Staff

Fund

Review Team Priority

3 of 3

Review Team Recommended Amount

\$58,536

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

n/a

Open Solicitation Engagement-Spring 2024

North Coast (Region 1)

Application Name: 224-1050-23629

Project Type: Engagement_v2

Project Name: Rainforest Reserve Expansion

Applicant: North Coast Land Conservancy

Region: North Coast

County: Clatsop

OWEB Request: \$35,814

Total Cost: \$40,688

Application Description The project area is in the peaks of the Coast Range, situated between the communities of Arch Cape and Nehalem, in Clatsop and Tillamook counties. This project focuses on the lands adjacent to NCLC's 3,500-acre Rainforest Reserve that include temperate rainforest and rare rocky bald habitat that are currently owned by timber companies.

Protection of these lands from further timber harvest is important for several reasons. Their steep, forested slopes provide the source water for salmon-bearing streams stretching in all directions, and the quality, quantity and temperature of the water in these streams depends on having healthy, intact forest ecosystems to capture and supply it. This mosaic of rocky balds and forest is home to globally rare endemic plant assemblages, threatened species, and iconic species, such as Roosevelt elk, black bear, and eagles. Lastly, protection of these lands would prevent the harvest of certain forest stands, which would require re-opening and improving roads on access easements that the landowners hold through the Rainforest Reserve, destroying habitat for certain threatened species and negatively impacting water quality in salmon-bearing streams.

Protection of the coastal rainforest and rocky bald habitat surrounding the Rainforest Reserve requires taking the time to build relationships with the timberland owners in order to find common ground and work towards further buffering the Rainforest Reserve from future timber activities. NCLC is uniquely suited to work with these landowners, having demonstrated the ability to complete complex forest acquisition projects. In preparation for future acquisitions, NCLC will also engage with certain major donors who helped to purchase the Rainforest Reserve, with the goal of securing their support for expansion of the Rainforest Reserve by providing funding towards acquisition of these properties.

Review Team Evaluation

Strengths

- The Rainforest Reserve Expansion project will build on a successful acquisition project that was partially funded by OWEB. The project area contains locally rare plant communities and there is a clear need to protect additional areas surrounding the Rainforest Reserve. Rocky bald habitats and coastal rainforest in and around the Angora and Onion Peak complexes are important and unique areas that are a priority for conservation.

- The applicant will engage with two landowners with ownership adjacent to the Rainforest Reserve and develop relationships with funders to recruit support for expanding the Reserve.
- The approach of holding meetings with community leaders and building relationships with the Siletz Tribe could lead to new partnerships.
- The applicant has the experience and capacity to implement the outreach effort and has achieved success in the past with similar projects. They are trusted in the community, have continued to grow as an organization, and are well-positioned to take on this expansion.
- The project is cost-effective for the actions proposed, and efficiencies will be achieved by utilizing the applicant's existing contacts and outreach strategies.

Concerns

- Only one tribe is identified as an audience for outreach; however, there are several tribal entities in the area that should also be considered.

Concluding Analysis

The Rainforest Reserve is a flagship conservation project in Oregon that contains many sensitive plant communities, including those found on rocky bald habitats that are uncommon in the coast range. Protecting these habitats from further timber harvest and impacts is a priority in the region as they host a variety of rare plant species. Additionally, conservation lands are limited in Clatsop County due to the overall lack of public landownership when compared to other counties. This project will build support for expanding the Rainforest Reserve by targeting outreach to neighboring landowners and community members. The applicant has clearly identified the strategy and audiences, indicating the project is likely to succeed in leading to a future acquisition project.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 3

Review Team Recommended Amount

\$35,814

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Fund

Staff Recommended Amount

\$35,814

Staff Conditions

n/a

Open Solicitation Engagement-Spring 2024

North Coast (Region 1)

Application Name: 224-1051-23698

Project Type: Engagement_v2

Project Name: Neacoxie Fish Passage and Riparian
Restoration Community Engagement

Applicant: Necanicum WC

Region: North Coast

County: Clatsop

OWEB Request: \$37,736

Total Cost: \$46,860

Application Description 1) The Neacoxie Creek is located in Gearhart, Oregon and is a direct tributary of the Neawanna Estuary and greater Necanicum Estuary. The stream is approximately 3.75 miles in length and is largely urbanized with majority of the stream having residential property on both sides.

2) There are multiple fish passage barriers to the Neacoxie system which are leading to declining conditions for both native migratory fish and other organisms that rely on functional aquatic habitat in the system. These include undersized and insufficient concrete culverts less than half of the active channel width of the stream. In addition there are numerous reaches of the stream where the collection of sediment have caused passage issues.

3) Restoration of the Neacoxie system would provide critical coho rearing habitat as well as lamprey and coastal cutthroat habitat. In order to propose successful and community supported restoration work on this highly urbanized stream, effective engagement and connection with landowners along the stream is vital. This project proposes a targeted engagement strategy to connect landowners with the watershed council and City of Gearhart during restoration planning. Landowners and concerned community members will be given opportunities to contribute to the planning process.

4) NWC

City of Gearhart

Chinook Indian Nation

ODFW

USFWS (pending)

Portland State University (pending)

Review Team Evaluation

Strengths

- The Neacoxie watershed has high intrinsic potential for Oregon coast coho salmon and this project could lead to improved habitat conditions for the species.
- The deliverables in the application are well-described, including the surveys and restoration plan.

- The plan to develop a Memorandum of Agreement with the City of Gearhart is an appropriate starting point for pursuing restoration in the Neacoxie watershed. The City has limited resources and the partnership with the watershed council will be beneficial to the City and watershed health.

Concerns

- The list of partners is limited and there are missing entities who likely should be considered for engagement. Only one tribe is listed as a partner, but there are two federally recognized tribes in the area and one other tribal entity. It is unclear why they are not an audience identified for outreach. There are other partners listed in the application for which there are no details provided about their role or contributions to the project. For example, it is unclear what role Portland State University might play in implementing the project, which is only referenced in the abstract but not in the actions or workplan.
- The watershed council has a currently funded Engagement grant and the last progress report for that project indicated no progress has been made. It is unclear how the previous grant will interface with this project and the other Engagement application received from the applicant this cycle.
- Part of this project is to develop an outreach plan. Including examples of actions and success indicators that will be considered in developing the plan would provide helpful context in the absence of a current plan.
- It is unclear how the outreach activities interface with the other Engagement application received from the applicant this cycle.

Concluding Analysis

The Neacoxie watershed within the City of Gearhart contains fish populations that will benefit from increased attention and focus on addressing the watershed problems that accompany a stream with an urban interface. The applicant has made strides in connecting with the City and other partners to develop momentum for addressing watershed health limiting factors. More details on what the outreach strategy will look like, the progress on the applicant's existing Engagement grant, and how the partners will work together is needed to understand how the project is likely to lead to fish passage and habitat restoration in the Neacoxie Creek system.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

n/a

Review Team Recommended Amount

\$0

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

n/a

Open Solicitation Engagement-Spring 2024

North Coast (Region 1)

Application Name: 224-1052-23714

Project Type: Engagement_v2

Project Name: Nehalem Landowner Engagement Initiative

Applicant: Lower Nehalem WC

Region: North Coast

County: Clatsop

OWEB Request: \$116,340

Total Cost: \$170,290

Application Description The Nehalem Bay Watershed Council is submitting this grant on behalf of the Nehalem Basin Partnership.

The Nehalem Landowner Engagement Initiative (NLEI) is located in the Nehalem watershed, home to an independent population of ESA-listed Oregon coast coho salmon (OC coho).

The NLEI will engage landowners to restore habitat on their property, as called for in the Strategic Action Plan for the Protection and Restoration of Coho Salmon Habitat (NSAP) which implements the ODFW and NOAA Fisheries' plans for OC coho. Landowner participation is critical to implementation of the NSAP.

The Nehalem Basin Partnership will contact landowners to enlist their cooperation in implementing key strategies from the plans, including adding large wood to priority reaches to increase stream complexity, enhancing riparian habitats with native plantings, managing invasive species, promoting beaver colonization, reconnecting and restoring tidal wetlands and sloughs and associated freshwater habitats, and replacing or removing culverts and other barriers to fish passage. NBP will contact timber, agriculture, residential and public landowners whose properties are in priority locations to invite participation in implementing restoration projects on their properties. A contractor will develop and use mailings, meetings, website posts, phone calls and in-person meetings to contact prioritized landowners. These will explain the priorities of the NSAP and develop a schedule for planning, design, and implementation. Landowners will be scheduled into a 10 year work plan.

This is a project of the Nehalem Basin Partnership which includes the Upper Nehalem Watershed Council, Nehalem Bay Watershed Council, Tillamook Estuaries Partnership, Oregon Department of Fish and Wildlife, Oregon Department of Forestry, Weyerhaeuser Company, Columbia Soil and Water Conservation District Tillamook County Creamery Association, Lower Nehalem Community Trust, North Coast Land Conservancy, and Giustina Timber Co.

Review Team Evaluation

Strengths

- The outreach effort builds on the recent completion of the Nehalem River Strategic Action Plan for Coho Salmon Recovery, which provides a framework to guide community engagement efforts and sub-watersheds to target.

- The application clearly identifies the audience and specific actions that will be taken to accomplish the outcomes. The project goals are ambitious, but the deliverables can reasonably be achieved.
- The approach to engaging with tribes is thoughtful and likely to succeed.
- The application describes a clear need for targeted engagement to develop relationships and build support for an existing list of stream habitat projects.
- A consultant who specializes in community outreach will be hired, which will build the capacity of the existing Nehalem Basin Partnership.
- The costs detailed in the budget are reasonable for the actions proposed and expected deliverables.

Concerns

- No significant concerns are identified.

Concluding Analysis

Engagement to build support and relationships necessary to accomplish the projects detailed in the Nehalem SAP is a critical next step for the Nehalem Basin Partnership. The main partners involved have limited capacity to conduct extensive outreach and this effort will allow them to expand their reach and build a set of projects that are ready to implement. Primary habitat limiting factors for Oregon coast coho salmon will be addressed by building the connections with landowners necessary to implement identified projects in the SAP.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 3

Review Team Recommended Amount

\$116,340

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Fund

Staff Recommended Amount

\$116,340

Staff Conditions

n/a

Open Solicitation Engagement-Spring 2024

North Coast (Region 1)

Application Name: 224-1053-23735

Project Type: Engagement_v2

Project Name: Beerman Creek Community Coho Corridor
Engagement and Planning

Applicant: Necanicum WC

Region: North Coast

County: Clatsop

OWEB Request: \$26,773

Total Cost: \$29,413

Application Description 1) Beerman Creek is a tributary of the Necanicum River located just south of the urban boundary of the City of Seaside. It is mostly residential property ownership with some small/private agricultural use. The upper half of the stream is mostly private timberlands owned and managed by Nuveen Natural Capital.

2) Beerman Creek is a coho sanctuary stream. Despite declining conditions due to areas of extreme erosion, invasive vegetation and lack of instream complexity, coho continue to utilize Beerman Creek as a spawning ground for the Necanicum system. There remain long reaches of the stream with quality canopy cover and water temperatures. However a growing Japanese Knotweed infestation has accelerated bank erosion and outcompeted important native streamside vegetation. Areas of the stream lack instream complexity and could use additional canopy to protect against rising summer temperatures and drought. There may also be opportunities to create high functioning side-channel or cold water refugia as well.

3) This engagement proposal is meant to provide the NWC with an opportunity to foster participation from more landowners along Beerman Creek in an already developed but not yet funded invasive species management, riparian revegetation and instream habitat improvement project. We have secured landowner agreements from three adjacent landowners whom all have knotweed infestations and bank erosion. In addition, preliminary results from our RBA surveys in 2023 show that coho are utilizing this stream consistently and there remains suitable spawning gravels.

4) Nuveen Natural Capital (upper watershed owners)

Private landowners (Andy Still & Miranda Olson)

Additional landowners (pending)

NCLC (invasive species management protocol uniformity)

Review Team Evaluation

Strengths

- Beerman Creek is a productive coho and steelhead stream that contains quality spawning and rearing habitat. It is also one of the most productive tributaries of the Necanicum for Chinook.

- The creek has been impacted by erosion and the riparian habitat could be improved. There is a clear need for restoration projects.
- The application outlines a reasonable plan for outreach along Beerman Creek to continue engaging landowners that have been contacted and additional landowners where expanded outreach is needed.

Concerns

- The application lacks detail on the number of landowners to be engaged.
- There may be missing community members who are not identified for outreach or partnership. Only one tribe is listed as a partner, but there are two federally recognized tribes in the area and one other tribal entity. It is unclear why they are not an audience identified for outreach.
- The success indicators are unclear in the application. Details describing what types of projects will be implemented in the geography would be helpful for evaluating the likelihood for the project to succeed in restoring stream habitat or improve water quality.
- The one-year timeline may not be sufficient to accomplish the proposed actions.
- The watershed council has a currently funded Engagement grant and the last progress report indicated no progress has been made. It is unclear how the previous grant will interface with this project and the other Engagement application received from the applicant this cycle.

Concluding Analysis

Beerman Creek is a high priority location in the Necanicum watershed to improve habitat for fish populations. The application, however, lacks details necessary to understand the approach to engage landowners. The applicant currently has an existing funded OWEB Engagement grant that includes the project area, and no information is included in this application to understand how the efforts would interface. More details on partner roles, audiences, and expected outcomes would be helpful in evaluating the likelihood for the proposed engagement to lead to riparian restoration on Beerman Creek.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

n/a

Review Team Recommended Amount

\$0

Review Team Conditions

n/a

Staff Recommendation

Staff Follow-Up to Review Team

n/a

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

n/a

South Coast - Region 2 Spring 2024 Funding Recommendations



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Funding Recommendation

Staff Recommendation For Funding (SRF)

Below Funding Line (BFL)

Previous Grants 1998 - Spring 2023

Land Acquisition

Restoration

Region 2 Cities

Region 2 Streams

OWEB Region 2 Boundary



OREGON

WATERSHED

ENHANCEMENT BOARD

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Oregon Watershed Enhancement Board: Region 2 Restoration, Technical Assistance, Engagement and Monitoring

Region 2 - Southwest Oregon Restoration				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-2025	Rogue River WC	North Fork Little Butte Creek River Mile (RM) 2.9 Ecological Restoration	This project will provide the necessary ecological components to improve water quality, stream processes, and aquatic and terrestrial habitats that build a resilient ecosystem and robust native fish and wildlife populations as part of a comprehensive restoration strategy in North Fork Little Butte Creek and the greater Upper Rogue Basin. Placing large wood at 34 locations, rehabilitating 53.5 acres of riparian forest, and constructing 5 miles of riparian fence will achieve the goal.	\$ 648,205
224-2028	Douglas SWCD	Fall Creek Ag water quality and restoration project.	The overall goal of the Fall Creek Ag water Quality and Restoration project is to reduce Ag bacteria load, reduce erosion, increase water availability, improve riparian conditions to a better filter system and increase stream shade. It is also hoped that this will be an anchor project to gain the attention of surrounding Ag landowners to be able to expand further onto neighboring ranches and to the confluence of Fall creek and Little River.	\$ 61,287
224-2031	South Umpqua Rural Community Partnership	Days Creek Phase II	Adding large wood and boulder structures to 31 stream reaches over 3 miles in the upper Days Creek watershed will increase spawning and rearing habitat for ESA-listed Coho salmon and other native aquatic species, increase summertime flows, decrease water temperatures during late summer months, and provide off-channel and side-channel rearing habitats during high flashy flows. Preserving cold, clean water will benefit lower Days Creek and the mainstem South Umpqua.	\$ 136,282
224-2029	Jackson SWCD	Antelope Creek RM 4.3 Riparian Restoration and Water Quality Improvement Project	We will restore 41 acres of riparian forest along Antelope, Spring , and Yankee Creeks by removing invasive plants and restoring native trees, shrubs, and herbaceous cover, installing 20,500' of livestock exclusion fencing and 1 spring fed off-channel livestock watering facility. We will eliminate polluted surface irrigation return flows from 51-acres of flood irrigated pasture, which drains into Yankee Creek, and increase irrigation water management on 161 acres of pasture.	\$ 737,805
Total Restoration Projects Recommended for Funding by RRT and OWEB Staff				\$ 1,583,579

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
224-2026	Smith River WC	Crane Creek Passage Improvement	The goal of this restoration project is to restore natural a flow regime and improve fish passage at the West Fork Smith River and Crane Creek confluence, meeting or exceeding state and federal passage criteria. This project has been designed specifically to provide passage under all flow conditions and life stages.	\$ 357,000
224-2030	Partnership for the Umpqua Rivers	Archie Creek Post-Fire Riparian Restoration - Rock Creek	The Post-Archie Creek Fire Riparian Restoration - Rock Creek project seeks to reestablish a healthy, resilient native riparian plant community on 50 acres of riparian and floodplain habitat along 2.73 miles of Rock Creek to improve watershed health and fish habitat condition. This includes 1.5 years of site prep, applying 187.5 lbs. of native grass seed after site prep, planting 75,000 native trees and shrubs (or 1500 stems/acre) over 2 years, and 3-4 years of plant maintenance.	\$ 242,106
224-2027	Pacific Forest Trust	Mount Ashland Forest Climate Resilience Restoration Project	The goal of the restoration at our project site(s) is to increase long-term ecological resilience, increase watershed function, restore the critical ecological process of low-intensity fire, and enhance wildlife habitat quality across the Project Area.	\$ 241,586

Oregon Watershed Enhancement Board: Region 2 Restoration, Technical Assistance, Engagement and Monitoring

Projects <i>NOT RECOMMENDED</i> for Funding by RRT			
Project #	Grantee	Project Title	Amount Requested
N/A			

Region 2 - Southwest Oregon Technical Assistance				
Projects <i>RECOMMENDED</i> for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-2040	WaterWatch of Oregon	Murphy Dam Removal Phase 1	The project's Technical Assistance goal is develop a project design that will be approved by the relevant agencies and eliminate adverse impacts to salmon, steelhead, and other native fish caused by Murphy Dam and its associated water diversion system, all while maintaining existing water use and increasing irrigation system resiliency within the Murphy Ditch Association.	\$ 220,000
224-2038	Coos SWCD	Lower Coquille Strategic Implementation Area: Bear Creek Riparian Restoration	To complete the designs and permits required to produce a shovel-ready plan for restoration. The resulting restoration project will restore 15.67 acres of degraded riparian habitat along 2.45 miles of Bear Creek, through construction of 5 mi of exclusion fencing, 2 off-channel watering facilities/hardened crossings, and plant 15,700 trees. The project will implement wetland enhancement to increase quality and connectivity of 2.0acres of winter rearing habitat for juvenile coho salmon.	\$ 158,239
224-2039	Coquille Watershed Association	2024 North Fork Coquille River Subbasin Archeology for Riparian Restoration	The goal of this technical assistance is to conducting archeological surveys that are needed to protect cultural resources and restore riparian ecosystems that build upon previous riparian restoration activities implemented along the NF/EFCR as part of a collaborative whole watershed restoration initiative to further improve habitat and water quality for fish and wildlife, as well as improve water quality for community residents and recreational visitors.	\$ 187,350
Total Technical Assistance Projects Recommended for Funding by RRT and OWEB Staff				\$ 565,589

Projects Recommended but <i>NOT FUNDED</i> in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
224-2037	Applegate Partnership, Inc.	Applegate River Mile 25 Side Channel Design	The primary goal is to develop preliminary engineered designs for the restoration of a 0.65 mile remnant side channel along the Applegate River. The secondary goal is to complete a complementary riparian restoration planting plan along the side channel and the river. By restoring these areas, we aim to improve overall stream condition and function and create a more resilient ecosystem that benefits native fish and wildlife species.	\$ 142,243
224-2033	Trout Unlimited Inc	MID NF and SF Little Butte Cr Fish Passage Project	The Project's goal is to increase recruitment into populations of ESA-listed SONCC Coho Salmon, fall Chinook Salmon, summer and winter steelhead trout, and Pacific Lamprey in Little Butte Creek watershed by developing designs for fish passage at two diversions, MID North Fork and MID South Fork Little Butte Dams. This will improve access to over 30 miles of high quality for adult and juvenile fish and contribute to long term native species population viability.	\$ 160,458
224-2035	Trout Unlimited Inc	Butte Creek Mill Fish Passage and Flow Restoration Project	The goal is to increase recruitment into populations of ESA-listed SONCC coho salmon, fall chinook salmon, summer and winter steelhead trout, and Pacific lamprey in Little Butte Creek watershed by developing designs for fish passage and screening at Butte Creek Mill Dam and identifying opportunities to conserve water and dedicate it instream. This will improve access to over 40 miles of high quality for adult and juvenile fish and contribute to long term native species population viability.	\$ 87,054

Oregon Watershed Enhancement Board: Region 2 Restoration, Technical Assistance, Engagement and Monitoring

224-2034	Trout Unlimited Inc	Brophy Ditch Big Butte Creek Flow Restoration Project	The Project's goal is to increase recruitment into populations of federally listed as threatened SONCC Coho Salmon, state-listed Spring Chinook Salmon, summer and winter Steelhead Trout, and Pacific Lamprey in Nork Fork Big Butte and Big Butte Creeks. We seek to improve instream flow and improve water quantity and quality in Nork Fork Big Butte and Big Butte Creeks and contribute to long term native species population viability.	\$ 86,714
224-2042	Curry SWCD	Bagley Creek Stream Channel Design	WRLT's acquisition or lease of the six parcels that constitute lower Bagley Creek created a unique opportunity to comprehensively restore 2,100 feet of stream corridor for fish passage, rearing habitat, and water quality. The goal of this TA grant is to advance the CWP's conceptual project design to a 'construction-ready' design, to conduct a cultural resources assessment, secure project permits, and complete other tasks, so the project can be implemented in 2026.	\$ 129,802
224-2041	Rogue River WC	South Fork Big Butte Creek RM 1.5 Fish Passage Design	This technical assistance project aims to develop the information necessary to select, design, and apply for the permits necessary to improve fish passage conditions for all affected native fish populations at EPID's diversion dam on South Fork Big Butte Creek. This project will result in an acceptable technical approach to improving passage (and potentially enhancing downstream flows through improved and remotely operated controls), and produce designs sufficient to secure all required permits.	\$ 69,075
224-2036	Partnership for the Umpqua Rivers	Wolf Creek Fish Passage and Off-Channel Design	Obtain engineering designs, restoration alternatives, section 106 compliance, and local/state/federal permitting for the removal/modification of the Wolf Creek Splash Dam and adjacent Oxbow Lake to restore fish passage and enhance off-channel rearing habitat for priority migratory fish populations. The deliverables produced through this OWEB Technical Assistance project will be used to create a shovel-ready project in a high-priority subbasin of the Umpqua River.	\$ 174,030

Projects NOT RECOMMENDED for Funding by RRT				
Project #	Grantee	Project Title	Amount Requested	
224-2032	Umpqua SWCD	Umpqua Estuary Fish Passage & Water Quality Improvement	\$ 68,035	

Region 2 - Southwest Oregon Engagement				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-2046	Partnership for the Umpqua Rivers	Engaging Stakeholders in Umpqua Basin Flow Restoration	The goal is to 1) Increase the technical capacity in the Umpqua Basin to engage the water user community and restoration practitioners to increase the pace and scale of flow restoration in the Umpqua Basin in order to better balance in-stream and out-of-stream water use in the face of a changing climate and increased drought frequency; and 2) To increase the participation of priority stakeholders in voluntary, incentivized flow restoration projects.	\$ 149,207
Total Engagement Projects Recommended for Funding by RRT and OWEB Staff				\$ 149,207

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
N/A				

Oregon Watershed Enhancement Board: Region 2 Restoration, Technical Assistance, Engagement and Monitoring

Projects <i>NOT RECOMMENDED</i> for Funding by RRT			
Project #	Grantee	Project Title	Amount Requested
N/A			

Region 2 - Southwest Oregon Monitoring				
Projects <i>RECOMMENDED</i> for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-2044	Partnership for the Umpqua Rivers	Umpqua Basin Collaboartive Monitoring 2025-2026	This project's goal is to gather high-quality water quality data across the Umpqua Basin, enabling ongoing status and trend monitoring and collaborating with PUR restoration staff and partners. The project will enhance water quality and salmon survival through informed resource management and project planning.	\$ 304,537
224-2043	Illinois Valley SWCD	IV WQM 2024-6	The project's goal is to extend and expand the Illinois Valley Water Quality Monitoring project portfolio to develop a robust baseline of water quality data in the watershed that is quantifiable, beneficial, and actionable. The data will inform watershed condition and restoration initiatives, make crucial data publicly accessible, and support improving source water quality for the community and habitat conditions for TESA-listed SONCC coho salmon and other conservation plan-identified species.	\$ 148,429
Total Monitoring Projects Recommended for Funding by RRT and OWEB Staff				\$ 452,966

Projects Recommended but <i>NOT FUNDED</i> in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
N/A				

Projects <i>NOT RECOMMENDED</i> for Funding by RRT			
Project #	Grantee	Project Title	Amount Requested
224-2045	The Understory Initiative	Rogue Basin Riparian Vegetation and Soil Carbon Monitoring	\$ 140,152

Region 2 Total OWEB Staff Recommended Board Award	\$2,751,341

Region 1 - 6 Grand Total OWEB Staff Recommended Board Award	\$13,925,206

Open Solicitation Restoration-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2025-23612

Project Type: Restoration_v2

Project Name: North Fork Little Butte Creek River Mile (RM)
2.9 Ecological Restoration

Applicant: Rogue River WC

Region: Southwest Oregon

OWEB Request: \$648,205

County: Jackson

Total Cost: \$1,614,735

Application Description The proposed project at North Fork Little Butte Creek River Mile 2.9 is part of multi-year ecological restoration actions throughout the Little Butte Creek sub-basin. The project area is identified in the Upper Rogue Coho Salmon Strategic Action Plan, developed with partners to address limiting factors and stressors. With a drainage area of 55 square miles, North Fork joins South Fork near the town of Lake Creek to form Little Butte Creek, which flows into the Rogue River at Eagle Point. North Fork has impaired water quality, degraded stream processes, and diminished aquatic and terrestrial habitats, negatively affecting ecosystems. Riparian forests are reduced, grazed, and infiltrated with noxious weeds. Unimpeded livestock access to the creek increases sedimentation and nutrient loading. Simplified stream channels and a lack of large wood eliminate channel complexity, aquatic habitat, and floodplain interactions. These cumulative impacts contribute to elevating summer water temperatures, threatening cold water fish populations. We propose a combination of significant ecological restoration actions covering 3.5 miles of creek. Placing large wood at 34 strategic locations will restore stream processes and aquatic habitat. Rehabilitating 53.5 acres of riparian forest buffer will recover the native plant community. This will be accomplished with noxious weed control, natural recruitment of native species, and installation of 5 miles of wildlife-friendly riparian fence on both sides of the creek. These actions will improve water quality and terrestrial habitat conditions. Public awareness is also an essential component to promote restoration efforts and generate an increased interest through media outlets and project tours. This project is in partnership with a private landowner, Wild Salmon Center/ NOAA Restoration Center, and Rogue River/ Siskiyou National Forest.

Review Team Evaluation

Strengths

- The restoration actions, including riparian enhancement and large wood placement, are priorities specifically identified in the draft Upper Rogue Coho Strategic Action Plan.
- The scope of work has clear objectives and activities for placing large wood at 34 strategic locations to restore stream processes and aquatic habitat along with rehabilitating 53.5 acres of riparian forest buffer to recover the native plant community. Riparian restoration will include noxious weed control, natural recruitment of native species, and installation of 5 miles of wildlife-friendly riparian fence on both sides of the creek. The project reach is substantial, covering 3.5 miles of stream.

- The applicant is successfully employing a “release and natural recruit” technique to restoring riparian areas. Invasive plant species are removed to expose native seed banks and allow natural regrowth of native species while treating noxious vegetation that regenerates.
- The design approach is technically sound by including consideration of stream size and velocity as well as design alternatives.
- The project team has experience with restoring streams in the Little Butte River system. Their design approach has a high likelihood of restoring stream and floodplain function along with improving instream habitat in the project reach.
- The project timing coincides with multiple efforts occurring downstream in the South Fork and mainstem Little Butte Creek to improve fish passage to upstream habitats along with instream and riparian restoration.
- The wildlife friendly approach to fencing with setbacks ranging from 30 feet to over 100 feet will allow for natural stream and floodplain function as well as support a functioning riparian area. Livestock will be excluded from the stream and riparian area to reduce water quality impacts caused by bacterial inputs.
- The applicant is engaging landowners in the Little Butte Creek watershed and the project site serves as a demonstration site to recruit future restoration projects.
- While the overall project cost is high, the project is cost-effective because it covers a large area.

Concerns

- Consideration of opportunities for future side-channel reconnection would expand habitat benefits by increasing floodplain function and creating off-channel habitat.
- The project schedule may be optimistic because final designs are not yet completed.

Concluding Analysis

Proposed restoration actions will address multiple limiting factors impacting salmonids identified for the Little Butte Creek sub-basin. The project area is in the upper North Fork Little Butte Creek where public lands give way to private agricultural operations and the cumulative land use impacts are in a more reversible state. The project is part of a comprehensive restoration strategy in North Fork Little Butte Creek and the greater Upper Rogue Basin and will provide the necessary ecological components to improve water quality, stream processes, and aquatic and terrestrial habitats. This will build a resilient ecosystem needed to support native fish and wildlife populations.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 7

Review Team Recommended Amount

\$648,205

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$648,205

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2026-23615

Project Type: Restoration_v2

Project Name: Crane Creek Passage Improvement

Applicant: Smith River WC

Region: Southwest Oregon

County: Douglas

OWEB Request: \$357,000

Total Cost: \$525,000

Application Description This project seeks to improve adult and juvenile salmonid passage by accomplishing an instream structure removal/modification project at the mouth of Crane Creek, a tributary of the West Fork Smith River. Crane Creek is located 36 miles east of the city of Reedsport, in the central Smith River Basin. At the confluence of Crane Creek and the West Fork Smith River, two concrete weirs were installed to backwater the Crane Creek culvert in the early 1970's. These concrete weirs were essentially designed to function as a fish ladder, a function that is no longer needed. The Crane Creek culvert was subsequently replaced in 1979 and again in 2003 to a bottomless arch with concrete footings. The concrete weirs function as barriers to both adult and juvenile salmonid passage during a variety of flow conditions. Removing the concrete weirs and installing instream grade control structures will improve fish passage at the culvert and on the main stem of the West Fork Smith, while retaining substrate present within the culvert. Additionally, the constructed fishway will reduce downstream impacts from resulting substrate movement towards the ODFW Lifecycle Monitoring Project Trap sites 2.5 mile downstream. SRWC has received completed designs from River Design Group for the implementation of this project; SRWC and project partners have approved final designs received by River Design Group. Project partners include: The Smith River Watershed Council, Coos Bay District Bureau of Land Management, Oregon Department of Fish and Wildlife, Roseburg Resource Co., and River Design Group.

Review Team Evaluation

Strengths

- The project is ready for implementation with designs at 100% completeness. The construction approach and plans for a low impact staging area includes considerations for maintaining the stream pool area at the top of the site and potential impacts to adjacent riparian areas.
- The restoration will target critical habitat for ESA-listed coho, Chinook, and steelhead by improving access to important spawning and rearing habitats above the project reach.
- The design approach is technically sound by including consideration of stream size and velocity as well as design alternatives.

- The applicant has experience working in the Crane Creek system. Their design approach is technically sound and has a high likelihood of restoring stream and floodplain function along with improving instream habitat.
- The design contractor has experience solving fish passage issues in the Smith River watershed.
- The West Fork Smith River has an established Oregon Department of Fish and Wildlife Life Cycle Monitoring site that provides a long-term data set documenting fish usage. This information will be used to illustrate the impacts from improving fish passage on salmonid populations.
- Improving fish passage will leverage significant investments in instream improvements implemented throughout the watershed by providing unimpeded access to this restored stream habitat.

Concerns

- Additional information describing the amount of habitat located above the project site would be helpful for understanding the quantified watershed benefit expected from the proposed restoration.
- Including maps depicting the project location and its relation to other restoration sites would be helpful for understanding watershed context and potential for expanding habitat connectivity.
- Additional detail explaining how the proposed actions will be implemented would be helpful for understanding the restoration methods.
- Information describing how the proposed restoration and location was prioritized for implementation would be helpful for understanding the importance of the project.

Concluding Analysis

A natural flow regime and fish passage under all flow conditions and life stages will be restored at the West Fork Smith River and Crane Creek confluence. Addressing man-made fish passage impediments restores natural ecosystems processes beneficial to aquatic life, including improved sediment transfer, access to spawning habitat, expanded forage opportunities, and access to thermal refugia during summer months. Improving fish access to upstream reaches with quality habitat and cool water refugia is also critical to protecting and restoring salmonid populations.

Review Team Recommendation to Staff

Fund

Review Team Priority

5 of 7

Review Team Recommended Amount

\$0

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

N/A

Open Solicitation Restoration-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2027-23623

Project Type: Restoration_v2

Project Name: Mount Ashland Forest Climate Resilience Restoration Project

Applicant: Pacific Forest Trust

Region: Southwest Oregon

County: Jackson

OWEB Request: \$241,586

Total Cost: \$313,801

Application Description The Project builds upon the successful 2022 completion of Pacific Forest Trust's (PFT's) Mount Ashland Climate Resilience Project land acquisition, made with generous support from OWEB. We now seek restoration funding to begin implementing our comprehensive Management Plan, which is pending OWEB's review and approval. The Management Plan relies on OWEB's Dry Forest Restoration Model and the Rogue Basin Cohesive Forest Restoration Strategy, as well as other relevant scientific sources, to inform habitat restoration and enhancement of ecological resilience to climate change stressors on the Project Area. The Project Area is in the Siskiyou Crest Conservation Opportunity Area, within the Klamath Mountain Region of southwest Oregon. Altered disturbance regimes – namely, intensive logging and the suppression of frequent, low-intensity fire – compounded with hotter, drier climate conditions have caused widespread ecological degradation across Oregon Conservation Strategy Habitats (Late Successional Mixed Conifer Forests, Ponderosa Pine Woodlands, and Wetlands) and OWEB Ecological Priorities for the Rogue Basin (Deciduous Swamp, Montane Riparian Woodland and Shrubland, and Subalpine or Montane Wet Meadow). These habitats are negatively impacted by the unnatural dominance of young white fir trees and unhealthy stand densities. The Project will use silvicultural treatments (felling and piling with hand crews) and the reintroduction of prescribed burning (pile and broadcast burning) to reduce the white fir understory, restore fire-adapted stand spacing, improve drought resilience, and generally enhance ecological function in the Project Area. This will also result in an increased extent of hardwood-dominated, open-forests, and wetland habitats in the Project Area. In addition to our ongoing partnership with OWEB, we will work with Lomakatsi Restoration Project to complete this Project and leverage their Youth Workforce Development Program to benefit the tribal community.

Review Team Evaluation

Strengths

- The application describes impacts from climate change and how the project design and approach address these impacts. The applicant plans to use the project area for outreach to demonstrate how management can support plant communities more adapted to survive climate change in forested landscape. Currently the area has dense stands of conifers filled with species like yellow fir that are not well suited to changing climate conditions.

- Site specific treatments and citations for the methodologies that will be used are provided in the application. The actions proposed are techniques being applied by the nearby Ashland Forest Resiliency effort.
- The proposed actions will be implemented by a contractor with experience in addressing forest health issues across different plant species and habitat types.
- The riparian and wet meadow complexes on the property are diverse and support clean, cool water inputs to Neil Creek. Protecting this head water area is important to supporting cooler water temperatures downstream.
- Project support is demonstrated through letters from project partners.

Concerns

- Project costs for treating each acre are the same regardless of existing habitat conditions and treatment approach. It is unclear if this rate per acre is reasonable and sufficient for the proposed actions without additional information describing how costs were estimated.
- Including an explanation describing similar forest restoration efforts occurring in the area and coordination with those efforts would provide context to better understand the importance of the project site in contributing to the cumulative benefits of landscape scale forest health restoration.
- Additional information describing how the proposed actions at the project site will expand habitat connectivity would be helpful for understanding the watershed benefit as a whole for the cost.
- The potential measurable water quality benefits to salmon provided in the application may be optimistic for the size of the project footprint.
- The project is located on a property acquired through an OWEB acquisition project and is protected by a conservation easement. Including links to the draft land management plan required by the easement would have provided clarifying information about existing and future desired plant communities. This information may have provided context for understanding plant species selection and how these species will improve ecosystem adaptation to climate change.
- The project is located at an elevation with snow accumulation that makes prescribed burning difficult. The feasibility for prescribed burning will be dependent on securing a waiver to extend the burn period if conditions are not right.

Concluding Analysis

The project will move the property towards a more climate adapted landscape using silvicultural treatments and reintroduction of prescribed burning to reduce the white fir understory, restore fire-adapted stand spacing, improve drought resilience, and generally enhance ecological function.

Review Team Recommendation to Staff

Fund

Review Team Priority

7 of 7

Review Team Recommended Amount

\$241,586

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

N/A

Open Solicitation Restoration-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2028-23637

Project Type: Restoration_v2

Project Name: Fall Creek Ag water quality and restoration project.

Applicant: Douglas SWCD

Region: Southwest Oregon

OWEB Request: \$61,287

County: Douglas

Total Cost: \$108,255

Application Description The project is located along Fall creek in the Little River watershed which is a tributary to the North Umpqua in the Glide area. UTM 10T: T27S-R03W-S-05.

The project area is located on an historic cattle ranch and lacks available upland livestock water away from Fall creek. The livestock, mainly cattle, have full access to the stream and use it for the main water source and cross in two main locations to get to pastures on the opposite side. The banks at the crossing areas are eroding and increased sediment enters the stream as cattle move through. Blackberries have heavily invaded the riparian under-story and out competed the native vegetation. Adjacent to Fall creek is an unnamed tributary with feeding stations on bare ground in close proximity, that become mud pits in winter.

The proposed project seeks to improve Ag water quality and habitat conditions by livestock exclusion, providing an alternate water sources, improving feeding stations, improving riparian/stream conditions and reducing Ag runoff and erosion.

Practices are to continue livestock exclusion fencing along Fall creek, continue blackberry removal, install two hard use ramp crossings, install two livestock watering facilities and two hard use feeding pads in two pastures farther away from Fall creek and its tributary, and plant more appropriate native vegetation in the riparian to better filter Ag runoff, stabilize banks and shade stream.

At this time the SWCD is in collaboration with ODFW and Partners of the Umpqua Rivers (PUR) for a possible fish passage improvement project at the confluence of Fall creek and Little River to allow better access for salmon species to miles of extrinsic habitat up Fall creek. PUR is currently monitoring the adjacent watershed and the SWCD will assist them in gaining access to Fall creek to increase their monitoring efforts. The Mornarich's are also assisting in contacting neighbors in hopes that we can further expand restoration efforts.

Review Team Evaluation

Strengths

- The scope of work in the proposed solution section of the application has clear objectives and activities for restoration actions that will benefit water quality in Fall Creek. Proposed actions include excluding livestock from Fall Creek, providing an alternative livestock water source away from the creek, and establishing native plants in the riparian area, which will reduce sediment and bacteria loading and increase stream cover that can contribute to lowering water temperatures.
- The restoration actions implement measures identified in the Umpqua Basin Agricultural Water Quality Management Area Plan and the Total Maximum Daily Load Water Quality Management Plan.
- The proposed restoration approach is technically sound by adhering to Natural Resource Conservation Service Field Office Technical Guides.
- Alternative design options were evaluated before selecting the proposed strategy.
- Landowner project support is demonstrated by their active involvement in the design and match contribution to implement, and stewardship commitment to maintain the long-term ecological outcomes of the restoration. The project approach fits into the landowner's management objectives for the property.
- The project provides an outreach opportunity to raise awareness among neighboring agricultural landowners that could lead to future restoration.

Concerns

- A natural barrier located downstream of the project near the confluence of New River blocks most fish passage upstream, which will limit habitat benefits to fish.
- Detail describing plans for fencing setbacks from the creek is needed to determine whether there will be sufficient area protected to allow natural stream and riparian function.

Concluding Analysis

Improving riparian conditions and excluding livestock from Fall Creek to reduce runoff into the stream will decrease sediment inputs and increase stream shading, which will help to reduce water temperatures and bacteria levels.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 7

Review Team Recommended Amount

\$61,287

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$61,287

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2029-23717

Project Type: Restoration_v2

Project Name: Antelope Creek RM 4.3 Riparian Restoration and Water Quality Improvement Project

Applicant: Jackson SWCD

Region: Southwest Oregon

OWEB Request: \$737,805

County: Jackson

Total Cost: \$1,733,600

Application Description A tributary to Little Butte Creek, Antelope Creek provides 5 miles of Coho salmon spawning habitat within the Little Butte Creek Watershed in Jackson County. Agricultural and residential land management practices influence water quality in Antelope Creek. Impacts include tailwater return flows from surface irrigated fields, livestock access to streams, and loss of forest canopy and herbaceous cover by grazing livestock and cropping into riparian buffers. Water quality limitations, TMDLs, and 303(d) impairments in Antelope Creek include reduced dissolved oxygen, increased bacteria, elevated stream temperatures, high pH, excess nutrients, terrestrial and aquatic weed infestations, increased chlorophyll-a, and a modified hydrograph.

With our NRCS partners, we will restore 41 acres of riparian forest along Antelope Creek and two tributaries- Spring Creek and Yankee Creek by removing blackberry and other invasive species and restoring native trees, shrubs, and herbaceous vegetation through active replanting, reseeding, and passive recruitment of volunteer native species. We will build 20,500' of livestock exclusion fencing to protect recovering native vegetation and prevent livestock access to Antelope Creek and tributaries. We will convert 51 acres of surface irrigated pasture to a gravity-fed pressurized wheel line system, improve another 15 acres of surface irrigation infrastructure, improve the efficiency and/or eliminate pumping costs for another 161 acres, and develop 1 spring-fed off-channel stockwater facility. This will restore near-stream habitat for terrestrial and aquatic species for approx. 2 miles of stream used by Coho salmon. Riparian forest restoration will moderate stream temperatures and reduce the risk of catastrophic wildfire. Livestock exclusion fencing and the stockwater facility will prevent livestock-related impairments of water quality. Irrigation conversion will eliminate tailwater return flows.

Review Team Evaluation

Strengths

- The applicant is engaging landowners within Antelope Creek Drainage to restore 41 acres of riparian forest. Five contiguous landowners are engaged in the project. The proposed restoration provides an opportunity to raise awareness that could lead to future projects in the area within the agricultural community.

- The project builds on momentum from previous piping and pressurizing of main ditches feeding the project properties that made conversion to more efficient irrigation systems feasible. An irrigation water management plan will be provided by Jackson Soil and Water Conservation District staff to ensure proper use of the new sprinkler systems.
- The proposed actions are consistent with water quality improvement measures identified in the Rogue River Watershed Council's Little Butte Creek Water Quality Improvement Plan, Rogue Basin Partnership's Rogue Restoration Action Plan, the ODEQ Total Maximum Daily Load Water Quality Management Plan, and Oregon Department of Agriculture Inland Rogue Agricultural Water Quality Management Area Plan.
- The application has a clear description of the environmental stressors impacting the stream and data used to determine the restoration approach.
- Alternative designs were evaluated before selecting the proposed strategy that is most likely to improve water quality.
- The applicant has collected water quality data in the project stream that will provide a baseline to measure project effectiveness.
- A "release and recruit" approach will be utilized in riparian areas currently dominated by invasive blackberries. This approach emphasizes invasive species removal and suppression to allow for the natural recruitment of native vegetation and has proven to be effective at similar sites.
- The applicant has successfully implemented irrigation improvement projects in the Little Butte Creek watershed. Monitoring data from these projects show decreased runoff in response to restoration actions that resulted in a decrease in warm water and sediment inputs.

Concerns

- The stream's water quality is affected by irrigation withdrawal at a Bureau of Reclamation diversion upstream, which takes a large portion of the flow out of Antelope Creek. Water used for irrigation by the landowners also comes from water diverted higher in the watershed from the North and South Forks of Little Butte Creek. It is conveyed via open ditch and a piped section that provides gravity pressurized water to be distributed in portions of the project footprint. There is also additional water withdrawn from Yankee Creek. During irrigation season, current flows in the project reach are either nonexistent or low. Currently, these existing flows are augmented by irrigation tailwater returns that will be eliminated, which will create a stream that will likely become dry. It is not clear if the overall project cost of the irrigation conversions is reasonable for the expected watershed health benefits.

Concluding Analysis

Antelope Creek is a tributary to Little Butte Creek that provides 5 miles of Coho salmon spawning habitat. Agricultural and residential land management practices influence water quality in Antelope Creek due to impacts from tailwater return flows from surface irrigated fields, livestock access to streams,

and loss of forest canopy. The proposed restoration actions will improve water quality and restore habitat by rehabilitating a 41-acre riparian area, constructing livestock exclusion fencing to restrict livestock access, converting 51 acres of surface irrigated pasture to a gravity-fed pressurized wheel line system, and developing 1 spring-fed off-channel stock water facility. Together, these actions will restore near-stream habitat for terrestrial and aquatic species for approximately 2 miles of stream used by ESA-listed coho.

Review Team Recommendation to Staff

Fund

Review Team Priority

4 of 7

Review Team Recommended Amount

\$737,805

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$737,805

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2030-23721

Project Type: Restoration_v2

Project Name: Archie Creek Post-Fire Riparian Restoration - Rock Creek

Applicant: Partnership for the Umpqua Rivers

Region: Southwest Oregon

County: Douglas

OWEB Request: \$242,106

Total Cost: \$337,226

Application Description The 2020 Archie Creek Fire devastated the Rock Creek watershed resulting in an over 70% loss of riparian trees and shrubs crucial for protecting stream health and salmonid habitat. Since then, noxious weeds like Himalayan blackberry, scotch broom, and thistles have established in the riparian zone, limiting the natural regeneration of native riparian plants. To address this, the proposed Archie Creek Post-Fire Riparian Restoration - Rock Creek aims to rebuild a resilient, native riparian plant community within the Rock Creek watershed, an important salmon-producing tributary of the North Umpqua River. The project will restore a total of 50 acres of riparian habitat bordering 2.73 miles of stream with a focus on controlling noxious weeds and establishing a variety of native trees, shrubs, and grasses.

The proposed five-year restoration project will improve the health of the Rock Creek watershed and benefit multiple Strategy Species covered in the Oregon Conservation Strategy (OCS), including Fall Chinook, coastal cutthroat trout, Pacific lamprey, and the Oregon Coast coho salmon ESU (threatened). The restored riparian zone will provide shade to regulate stream temperatures, add woody debris to enhance habitat complexity and food webs, stabilize fire-damaged stream banks to reduce sediment input, and filter runoff to protect water quality.

OWEB funds will be used to hire experienced contractors to conduct noxious weed control, native plantings, and riparian assessments, to purchase native trees and shrubs, and for PUR staff to coordinate, monitor, and complete the project. The project is a collaboration between the Bureau of Land Management (BLM), Ash Creek Forest Management (ACFM), and the Partnership for the Umpqua Rivers (PUR).

Review Team Evaluation

Strengths

- Rock Creek is an important salmon-producing tributary of the North Umpqua River. The proposed actions will benefit multiple strategy species described in the Oregon Conservation Strategy, including Fall Chinook, coastal cutthroat trout, Pacific lamprey, and ESA-listed coho salmon.

- Restoring the riparian zone with native species will provide shade to regulate stream temperatures, stabilize streambanks, and increase large wood recruitment that will lead to future instream woody structure that enhances habitat complexity.
- The applicant's restoration riparian specialist will identify sites that are most suitable for ensuring planting survival, employing a more strategic approach rather than a mass planting. A total of 50 riparian acres will be restored that borders 2.73 stream miles by controlling noxious weeds and establishing a variety of native trees, shrubs, and grasses.
- The project builds on previous restoration that installed instream large wood structure to trap sediment and create more complex habitat opportunities post-fire. The proposed riparian restoration is the next step in the post-fire recovery at Rock Creek.
- Pre and post fire fish and stream temperature monitoring data has been collected that will provide a baseline for tracking the success of the restoration efforts in the watershed.
- The project is near a popular recreational area, making it highly visible and providing an outreach opportunity to raise awareness about watershed restoration.
- A cultural resource investigation is included in the project design approach.

Concerns

- Including information in the application describing the status of natural regeneration, such as the maple tree sprouting that is occurring, would be helpful to understand the potential for successfully establishing vegetation. It will be important to source plant material that is appropriate for the conditions and location of the project site to improve the chances for long-term survival and restoration of a diverse riparian community. The project site is hot and dry in the summer, the target plant survival rate will be challenging to achieve without watering replanted areas.
- Including detail describing restoration that is occurring in the watershed would provide helpful context to understand how the project will leverage other investments in the Rock Creek watershed.

Concluding Analysis

The 2020 Archie Creek Fire severely burned the Rock Creek watershed, resulting in over 70% loss of riparian trees and shrubs crucial for protecting stream health and salmonid habitat. Invasive plant species quickly took over the area, diminishing the ability for natural regeneration. Actively replanting to restore riparian areas within the watershed will create future large wood sources for the stream and is critical to reducing water temperatures on a stream that currently has no protection from solar radiation following the fire.

Review Team Recommendation to Staff

Fund

Review Team Priority

6 of 7

Review Team Recommended Amount

\$242,106

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

N/A

Open Solicitation Restoration-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2031-23734

Project Type: Restoration_v2

Project Name: Days Creek Phase II

Applicant: South Umpqua Rural Community Partnership

Region: Southwest Oregon

County: Douglas

OWEB Request: \$136,282

Total Cost: \$381,792

Application Description The South Umpqua Rural Community Partnership (SURCP) is applying for restoration grant funding to place instream wood and boulders on Days Creek, a tributary to the South Umpqua River in south Douglas County. The project is 7 miles upstream from the town of Days Creek on checkerboard land of BLM and a section of private inholdings. The private landowners are fully engaged and supportive of the project (see attached letter of support).

In 1999, Oregon Coast Coho salmon were listed as threatened under the Endangered Species Act. In 2022 National Marine Fisheries Service(NMFS) did a status review on Oregon Coast Coho Salmon. The only populations that did not improve in viability was the Umpqua stratum specifically the South Umpqua Basin(includes Days Creek). ODFW completed Spawning Ground surveys in the late fall 2022 and early 2023. Zero Coho salmon were observed and/or counted during the South Umpqua Basin surveys.

Days Creek Phase II project will increase spawning and rearing capacity for ESA-listed Coho salmon, Chinook salmon, winter steelhead, and Pacific Lamprey. The proposed project will place large wood and boulders over three miles of Upper Days Creek. Close to 100 structures over 31 stream reaches will be constructed with logs and boulders. Logs and boulders will be placed using excavators in the historical streambed. Excavators will enter through ideal entry/access points in the watershed. Placing large wood and boulders will help collect spawning gravel and increase rearing pools throughout the three-mile section of the stream. This project will help address known limiting factors for these species in the watershed.

Partners in this project include the Roseburg office BLM, the Allen Family (private landowners who supported this conservation work and the SURCP Days Creek Phase I project), and Native Fish Society. Others supporting our work include ODFW, Wild Salmon Center, and many other groups in the South Umpqua River Action Team.

Review Team Evaluation

Strengths

- Previous application evaluation concerns are addressed by including site design information.

- The project builds on an earlier restoration phase located below the proposed reach that resulted in log structures placed instream to accumulate substrate to improve habitat and summer water flows.
- Landowner support is demonstrated by their active involvement in project development.
- Days Creek supports Endangered Species Act-listed coho and Pacific lamprey. Improving stream function and instream habitat conditions will benefit these species' ability to spawn and rear successfully and is consistent with recommendations from the Recovery Plan for Oregon Coast Coho Salmon.
- The project team has capacity and relevant experience placing structures in the Umpqua watershed. The project design was developed by an experienced Bureau of Land Management (BLM) hydrologist and a BLM fish biologist.
- The project costs are reasonable for the activities proposed.

Concerns

- Providing more detailed information on fish distribution and habitat conditions above the project reach would help with understanding watershed context and expected benefits from the project. Including captions on the individual photographs that describes the photo content and the time of year it was taken would provide helpful context.
- There may be a missed opportunity to coordinate with the Strategic Implementation Area located lower in the sub-basin to utilize the project to raise public awareness about watershed restoration.
- Confirmation of landowner support is unclear because the letter of support included in the application lacks a signature and date.

Concluding Analysis

Installing boulder and log structures to over 3 miles in the upper Days Creek watershed will increase spawning and rearing habitat for ESA-listed Coho salmon and other native aquatic species, increase summertime flows, decrease water temperatures during late summer months, and provide off-channel and side-channel rearing habitats during high flashy flows. Preserving cold, clean water will benefit lower Days Creek and the mainstem South Umpqua.

Review Team Recommendation to Staff

Fund

Review Team Priority

3 of 7

Review Team Recommended Amount

\$136,282

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$136,282

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2032-23622

Project Type: Technical Assistance_v2

Project Name: Umpqua Estuary Fish Passage & Water Quality Improvement

Applicant: Umpqua SWCD

Region: Southwest Oregon

OWEB Request: \$68,035

County: Douglas

Total Cost: \$82,535

Application Description Umpqua SWCD has nurtured relationships with four landowners in the Umpqua River Estuary that will allow us to bring forward three projects that will greatly increase fish and wildlife values of this extremely important area. In addition, social issues will be attended to including livestock crossings, vehicle access, and flood control. By addressing these issues we will continue to build goodwill within this historically challenging demographic which will likely lead to additional projects. The three project sites are all located within a 2 mile radius of Reedsport on Scholfield Creek and Providence Creek. All three sites are highly tidally influenced. Throughout the Umpqua Estuary fish passage barriers abound, and this project seeks to remove three of these barriers. Project funds are requested to survey the sites, design bridges and/or fish-friendly tidegates, delineate livestock exclusion fencing, and conduct landowner outreach (including adjacent landowners). This project shares many of the same partners as the Providence Creek tidegate replacement project (scheduled for 2026). Relationships fostered with partners will also help facilitate that high-priority project. Project partners include: The City of Reedsport, Scholfield Development LLC, ODFW, and two private landowners.

Review Team Evaluation

Strengths

- The resulting restoration actions will target habitat limiting factors identified in a number of watershed plans by addressing access to tidal habitats that provide critical over wintering habitat for juvenile ESA-listed coho and improving hydraulic function.
- Returning brackish water to the project site will help eradicate invasive canary reed grass due to its intolerance to salt water.
- Restricting livestock will protect sensitive wetland areas and water quality by decreasing the introduction of fecal materials into Scholfield Creek.
- A letter of support provided by one of the landowners illustrates their commitment to the project and provides an explanation of the management benefits that could be realized from project implementation.

Concerns

- Additional detail in the “Project Solution” application section describing actions and how they will be implemented would provide a better understanding of the planning approach and resulting products.
- Including more discussion on the specific ecological benefits and watershed function uplift expected from the resulting restoration actions would be helpful to understand the potential outcomes of a future project.
- Additional information regarding restoration alternatives that will be considered and the processes for selecting the best alternative would be helpful for better understanding the planning approach.
- The development of a water management plan to support tide gate management is not identified in the application. Adding a water management plan for tide gate operation to the project deliverables that includes target water levels during the winter months would increase the likelihood of success for the technical assistance to inform the future restoration project.
- It is unclear if additional restoration, such as riparian or wetland restoration actions, will be included in the future project to maximize the benefit from improving juvenile salmonid access to habitat in tidal wetlands and hydrologic function.
- Additional information in the budget narrative explaining how project expenses were estimated for the proposed tasks is needed to evaluate whether costs are reasonable, necessary, and adequate for achieving the proposed technical assistance. For example, it is unclear how the hours associated with salaries and landowner outreach correspond with the actions and workplan, or how the hours for permitting are needed without a list of required permits.
- Including photographs of the project sites would help illustrate current conditions of the structures and project area to better understand the project need.

Concluding Analysis

Only 19% of tidal wetlands within the Umpqua remain relatively undisturbed. The high percentage of altered wetlands in the basin makes restoration of disturbed sites important to a wide variety of fish and wildlife species. The three project sites are tidally influenced and improving tidal exchange and hydrologic functions increases access to tidal wetland areas that is important to multiple fish species. Including more information in the application on budget development, expected ecological uplift from restoration actions, project alternatives, and water management plan information would be helpful to evaluate the likelihood for the project to succeed.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2033-23636

Project Type: Technical Assistance_v2

Project Name: MID NF and SF Little Butte Cr Fish Passage Project

Applicant: Trout Unlimited Inc

Region: Southwest Oregon

County: Jackson

OWEB Request: \$160,458

Total Cost: \$179,004

Application Description This Project addresses the need for fish passage improvement at two high priority dams listed on the ODFW Statewide Fish Passage Priority List: MID North Fork Little Butte Dam (RM 0.9) on N Fork Little Butte Creek and MID South Fork Little Butte Creek Dam (RM 1.1) on S Fork Little Butte Creek in Jackson County near Lake Creek, Oregon. These two dams divert water to the Joint System Canal that supplies water to Medford Irrigation District (MID) and Rogue River Valley Irrigation District (RRVID) that serve 2,220 patrons. The proposed project will develop fish passage alternatives and designs for these two diversions that will provide fish passage to over 30 miles of habitat, benefiting ESA-listed Coho Salmon, Fall Chinook Salmon, summer and winter Steelhead Trout, Pacific Lamprey, Cutthroat Trout, and smallscale suckers.

Little Butte Creek watershed has been identified as a high priority by many local, state, and federal strategic restoration, water quality improvement, and fish species recovery/management plans. Significant ecological restoration, fish passage barrier removal, irrigation improvement, and flow restoration projects have and are occurring throughout Little Butte Creek. NOAA's Coho Recovery Plan identifies fish passage barriers and water withdrawals as key limiting factors to all life stages of Coho. Twenty miles of habitat above the dams has been identified as high intrinsic potential and the watershed is a known stronghold for Coho salmon in the Rogue. Upstream passage and low flows are primary limiting factors for summer and winter steelhead and coho in the Upper Rogue Basin according to ODFW's 2021 Rogue-South Coast Multi-Species Conservation and Management Plan. The proposed project will complement MID and RRVID's current efforts to conserve water and modernize their irrigation system. Partners include MID and RRVID, RRWC, FCA, Rogue Basin Partnership, JSWCD, BLM, Medford Water Commission, Wild Salmon Center, and Middle Rogue Steelheaders.

Review Team Evaluation

Strengths

- The resulting restoration actions will address habitat limiting factors in Little Butte Creek identified in a number of watershed plans by improving fish access to quality cool water refugia and instream habitat that will benefit ESA-listed coho, winter steelhead, and Pacific lamprey.
- There is a clear need to develop designs for fish passage at the two diversions.
- Alternative approaches will be identified and analyzed as part of the technical assistance project.

- Appropriate data and analysis will be used to inform the design and professionally accepted engineering approaches will be used to develop designs for fish passage at two diversions.
- The project partners, including Rogue River Watershed Council, Rogue Basin Partnership, Wild Salmon Center, and Jackson Soil and Water Conservation District, have capacity to implement the project and a consistent track record for successfully developing and implementing solutions to fish passage issues.
- The engineering firm is experienced with designing and implementing similar projects in the Little Butte Creek watershed.

Concerns

- Including information about opportunities for water conservation or increasing instream flows would be helpful for understanding the likelihood that stream flows could be increased as a result of the project. Streamflow is a key limiting factor for ESA-listed coho in Little Butte Creek.

Concluding Analysis

The North Fork Little Butte Creek dam is listed as the number 12 priority barrier and the South Fork Little Butte Creek dam as the number 47 priority barrier in the Rogue on the ODFW's Statewide Fish Passage Priority List. Combined, addressing the two impediments will improve access to over 28 miles of high quality coho habitat. This project complements the significant investment in habitat restoration and fish passage in the Little Butte Creek watershed over the last 20 years.

Review Team Recommendation to Staff

Fund

Review Team Priority

5 of 10

Review Team Recommended Amount

\$160,458

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

N/A

Open Solicitation Technical Assistance-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2034-23638

Project Type: Technical Assistance_v2

Project Name: Brophy Ditch Big Butte Creek Flow Restoration Project

Applicant: Trout Unlimited Inc

Region: Southwest Oregon

County: Jackson

OWEB Request: \$86,714

Total Cost: \$164,813

Application Description This proposed flow restoration project will evaluate current conditions and water use of Brophy Ditch on the North Fork Big Butte Creek in Jackson County for opportunities to conserve water instream and provide efficient water delivery through conveyance efficiencies to benefit the irrigators as well as ESA-listed threatened Coho salmon, state-listed Spring Chinook, summer and winter steelhead, Pacific Lamprey, and cutthroat trout. Big Butte Creek is the only tributary of the Rogue River that Spring Chinook use to spawn which makes preserving flows, especially during migration essential. This project will occur in one of the highest-priority watersheds in the Rogue River Basin for flow restoration and address limiting factors specifically identified by multiple plans for recovery of federal and state-listed fish species. This proposal would provide the required match for our secured OWRD Feasibility Study Grant.

Brophy Ditch has high transmission losses and even though the irrigators divert their full water right and are on a rotation, they do not receive their full allotment. The ditch will be surveyed, and the amount of conserved water will be evaluated through a seepage study, water rights assessment, and crop water requirement evaluation. Opportunities to permanently dedicate conserved water from this senior water right instream for the benefit of fish, wildlife, and the public will be identified and quantified. The final report will include summary of opportunities for conserved water, preliminary designs for conveyance efficiency alternatives, and cost estimates. Project partners include the Big Butte District Improvement Company (irrigators), OWRD, Jackson SWCD, BLM, Rogue River WC, Medford Water Commission, Rogue Basin Partnership, Wild Salmon Center, and Middle Rogue Steelheaders.

Review Team Evaluation

Strengths

- There is potential for the technical assistance project to lead to protecting a 1920 water right on Big Butte Creek, the most senior water right in the stream reach, through an instream water right.
- The proposal clearly describes the project phases from outreach to technical assistance and describes a clear pathway to restoration actions that will benefit Endangered Species Act-listed coho, Chinook, steelhead, Pacific lamprey, and cutthroat.

- Alternatives will be identified and analyzed as part of the technical assistance project. The applicant is evaluating appropriate options in piping and pump systems that create efficiencies in water use and the potential for conserved water.
- The project manager and applicant have capacity to implement the project and a consistent track record with similar projects.
- Appropriate partners are engaged in the proposed project, including the Bureau of Land Management, Jackson Soil and Water Conservation District, the Jackson County Watermaster, Rogue River Watershed Council, Rogue Basin Partnership, and Wild Salmon Center, increasing the likelihood of success for the technical assistance to lead to restoration projects.

Concerns

- More information describing how the seepage study will be applied to determine water savings is needed to understand the potential scale of conserved water.

Concluding Analysis

The Big Butte Creek watershed is important to Rogue fisheries and is the primary source for the Rogue Valley's drinking water. The system has been over allocated and climate change is negatively impacting summer stream flows, making fish passage more difficult in summer months through the higher gradient stream reaches. Current conditions and water use will be evaluated for Brophy Ditch on North Fork Big Butte Creek to identify opportunities to conserve water instream and provide efficient water delivery through conveyance efficiencies. Future irrigation efficiencies projects will benefit irrigators as well as improve instream flow for ESA-listed coho salmon and other aquatic organisms.

Review Team Recommendation to Staff

Fund

Review Team Priority

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Review Team Recommended Amount

\$86,714

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

N/A

Open Solicitation Technical Assistance-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2035-23653

Project Type: Technical Assistance_v2

Project Name: Butte Creek Mill Fish Passage and Flow Restoration Project

Applicant: Trout Unlimited Inc

Region: Southwest Oregon

County: Jackson

OWEB Request: \$87,054

Total Cost: \$90,079

Application Description This project seeks to improve fish passage and restore instream flow at a high priority dam that will be listed on the 2024 ODFW Statewide Fish Passage Priority List: Butte Creek Mill Dam (RM 6) on Little Butte Creek in Jackson County near Eagle Point. The dam diverts water to the historic 1872 Butte Creek Mill for milling operations. The proposed project will develop fish passage and piping alternatives and designs for this diversion that will provide fish passage to over 40 miles of habitat, benefiting ESA-listed coho salmon, fall chinook salmon, summer and winter steelhead trout, Pacific lamprey, cutthroat trout, and Klamath smallscale suckers. In addition, opportunities to conserve water and dedicate a portion of these senior rights instream will be assessed through ditch efficiency designs (piping) that would add to the instream water right created by TU's 2022 instream transfer.

Little Butte Creek has been identified as a focal area by the Upper Rogue River Strategic Action Plan for SONCC Coho and this project has been identified as a high priority for implementation on the short-term project list. Significant ecological restoration, fish passage barrier removal, irrigation improvement, and flow restoration projects have and are occurring throughout Little Butte Cr. NOAA's Coho Recovery Plan identifies fish passage barriers and water withdrawals as key limiting factors to all life stages of Coho. Over 40 miles of habitat above the dam has been identified as high intrinsic potential and the watershed is a known stronghold for coho salmon in the Rogue. Passage and low flows are primary limiting factors for summer and winter steelhead and coho according to ODFW's 2021 Rogue-S Coast Management Plan. Partners include Butte Creek Mill Foundation, Wild Salmon Center, Rogue Basin Partnership, ODFW Passage and Screen Program, Jackson SWCD, OWRD, BLM, Medford Water Commission, RRWC, and Middle Rogue Steelheaders.

Review Team Evaluation

Strengths

- The resulting restoration actions will address habitat limiting factors identified for the Little Butte Creek in a number of watershed plans by improving fish access to quality cool water refugia and quality instream habitat that will benefit ESA-listed coho, winter steelhead and Pacific lamprey.
- Appropriate data and analysis will be used to inform the design and professionally accepted engineering approaches will be used to develop designs for fish passage and screening at Butte Creek Mill Dam and identify opportunities to conserve water.

- The Butte Creek Mill possesses the most senior water right on this stream system. The project provides an opportunity to conserve water and dedicate a portion of these senior rights instream that will add to the instream water right created by Trout Unlimited's 2022 instream transfer.
- A mix of project partners are engaged in the project, including Butte Creek Mill Foundation, Wild Salmon Center, Rogue Basin Partnership, Oregon Department of Fish and Wildlife Passage and Screen Program, Jackson Soil and Water Conservation District, Oregon Water Resources Department, Bureau of Land Management, Medford Water Commission, Rogue River Watershed Council, and Middle Rogue Steelheaders.
- The applicant has capacity to complete the technical assistance and a consistent track record for successfully developing and implementing solutions to fish passage issues.

Concerns

- Only two design alternatives will be considered. Examining a broader range of restoration alternatives would provide more options to consider for the site conditions and determine a solution that provides the greatest watershed benefit while maintaining the ability for the water user to access their water right effectively.
- The application lacks information describing how the current project builds on or utilizes lessons from previous attempts to improve fish passage on the dam by improving the ladder and adding boulders to create jump pools below.

Concluding Analysis

The proposed technical assistance will improve fish passage and restore instream flow at a high priority dam located at river mile 6 on Little Butte Creek. Butte Creek Mill Dam is expected to be listed on the 2024 ODFW Statewide Fish Passage Priority List. The dam supports milling operations for a historic 1872 water powered grist mill. Improving passage at the site will improve access to over 40 miles of habitat, benefiting ESA-listed coho salmon, fall chinook salmon, summer and winter steelhead trout, and Pacific lamprey.

Review Team Recommendation to Staff

Fund

Review Team Priority

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Review Team Recommended Amount

\$87,054

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

N/A

Open Solicitation Technical Assistance-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2036-23673

Project Type: Technical Assistance_v2

Project Name: Wolf Creek Fish Passage and Off-Channel Design

Applicant: Partnership for the Umpqua Rivers

Region: Southwest Oregon

County: Douglas

OWEB Request: \$174,030

Total Cost: \$177,930

Application Description The remnants of a historic splash dam remains on Roseburg Resources property near the confluence of Wolf Creek and the Umpqua River in the community of Tyee, OR. The dam currently poses an unnatural restrictive barrier to upstream fish migration for Oregon Coast coho, Fall Chinook, Coastal cutthroat trout, and winter steelhead in all flow conditions. The dam causes coho to succumb due to undue predation, energy loss, and direct injury by jumping on the concrete. The Partnership for the Umpqua Rivers (PUR) will utilize OWEB Technical Assistance funds to hire a reputable engineering firm, River Design Group, to develop shovel-ready designs for the removal or modification of the Wolf Creek splash dam barrier and restoration of off-channel habitats in an adjacent oxbow lake. Once the design phase is complete and permits are in place, funding will be sought for the implementation of shovel-ready design. The final project will provide native fish species, including threatened Oregon Coast coho, unimpeded access to 20 miles of high-quality fish habitat in the Wolf Creek watershed, including 14 miles of previously restored instream habitat (please refer to attached Wolf Creek Basin Restoration map).

Project partners include the Oregon Department of Fish and Wildlife (ODFW), Bureau of Land Management (BLM), Roseburg Resource Company (RR), River Design Group (RDG), and the Partnership for the Umpqua Rivers (PUR). OWEB funding for the project will be used to obtain engineering design to improve fish passage, cultural resource surveys for compliance with Section 106, eDNA sampling to better characterize the fish use and presence, and personnel time and travel for PUR to manage contractors and outreach.

Review Team Evaluation

Strengths

- The application provides a clear explanation describing the need to develop designs to address the fish passage issue. Restoring hydrology and stream function on Wolf Creek by improving off-channel and floodplain connectivity, as well as removing a major barrier impeding fish migrations, is consistent with actions identified in several watershed plans.
- The project builds on previously implemented restoration completed by Bureau of Land Management and the applicant.

- Environmental DNA (deoxyribonucleic acid) data will be collected to inform design approaches by providing information about the presence or absence of small mouth bass in the project area.
- Project partners, including the Oregon Department of Fish and Wildlife, Bureau of Land Management, and Roseburg Resource Company, have the capacity and a consistent track record for successfully developing and implementing solutions to fish passage issues.
- The engineering firm is experienced with designing and implementing similar projects in this watershed.
- Cultural resource surveys are included in the project budget.

Concerns

- There is a possibility that passage improvement could increase the potential for small mouth bass to access the upstream habitat. It is unclear what alternatives will be considered to address potential impacts of small mouth bass to native aquatic species.
- It is unclear if the natural barrier will be modified or just the concrete footings of the historic splash dam. Modification of the natural barrier may not comply with fish passage guidelines.
- Additional detail describing the complexity of the site, data to be collected, and design considerations is needed to better understand the proposed approach and expected outcomes.

Concluding Analysis

The remnants of a historic splash dam remain near the confluence of Wolf Creek and the Umpqua River that restricts upstream fish migration for multiple salmonid species, including ESA-listed coho. The proposal presents an opportunity to improve fish passage to 14 miles of restored habitats upstream located upstream of the project site.

Review Team Recommendation to Staff

Fund

Review Team Priority

10 of 10

Review Team Recommended Amount

\$174,030

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

N/A

Open Solicitation Technical Assistance-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2037-23689

Project Type: Technical Assistance_v2

Project Name: Applegate River Mile 25 Side Channel Design

Applicant: Applegate Partnership, Inc.

Region: Southwest Oregon

County: Jackson

OWEB Request: \$142,243

Total Cost: \$154,583

Application Description This project will result in engineered designs for the restoration of instream and off-channel refugia habitat and a riparian restoration plan along the Applegate River. The site is located in Jackson County, near the unincorporated town of Applegate, Oregon. Like many other rivers in Oregon, the Applegate River has been disconnected from its historic floodplain due to extensive levees and dikes built by farmers in the 1900s, flow regulation by the Applegate Dam, and reduced snow pack/winter high water events. This project will restore and enhance 0.65 miles of off-channel and side-channel habitat through placement of instream large woody debris and enhancement of side-channel and alcove habitat which are two of the Highest Priority Recovery Actions for SONCC Coho salmon. This project will directly improve off-channel habitat availability, floodplain connectivity, and improve streamside vegetation composition by improving native species recruitment through riparian restoration. Enhanced rearing habitat will support populations of spring and fall Chinook salmon, ESA-listed threatened SONCC Coho salmon, summer and winter steelhead, Pacific lamprey, cutthroat (migratory) trout, and Western Pond Turtle, as well as other species in the Applegate River Watershed. Project Partners include the landowners, Bureau of Land Management, the Southern Oregon Native Fish Society, Trout Unlimited and Oregon Department of Transportation.

Review Team Evaluation

Strengths

- The technical assistance will lead to actions identified in several watershed plans, including the Final Recovery Plan for the Southern Oregon/Northern California Coast Evolutionarily Significant Unit of Coho Salmon. The resulting restoration will address two of the highest priority actions identified, including increasing instream structure and re-connecting off-channel habitats. The Applegate Dam has altered the normal hydrology of the river; placing instream large wood structures and reconnecting remnant side channel will restore some of that lost function in the project reach.
- Appropriate data and analysis will be used to inform the design, including site surveys, a geomorphic assessment, hydraulic modeling, drawings for dam removal, and fish passage analysis and design.
- The United States Army Corps of Engineers and the local community will be engaged early in the process on project design and permitting.
- The application clearly articulates the process steps and resulting products.

- The project partners have the capacity and experience to deliver the project components and include the landowners, Bureau of Land Management, the Southern Oregon Native Fish Society, Trout Unlimited, and Oregon Department of Transportation.
- Landowner project support is demonstrated by them approaching the applicant to pursue the project.

Concerns

- The side-channel and alcove reconnection may require ongoing action in future years to maintain their connection with the Applegate River. High flow events could move substrate into the channel opening and disconnect newly restored off-channel habitat. It is unclear from the application what alternatives will be considered to increase the likelihood of the off-channel connection to sustain long term.
- It is unclear if required cultural resource investigation will be completed because there are no related actions or costs included in the application workplan or budget.

Concluding Analysis

Restoring and enhancing 0.65 miles of off-channel and side-channel habitat along the Applegate River will improve the overall stream condition and function, creating a more resilient ecosystem that benefits native fish and wildlife species. Placing large wood structures instream, enhancing a side-channel and alcove, and planting riparian areas will improve conditions for ESA-listed coho and directly improve availability of off-channel habitat, floodplain connectivity, and riparian vegetation composition.

Review Team Recommendation to Staff

Fund

Review Team Priority

4 of 10

Review Team Recommended Amount

\$142,243

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

N/A

Open Solicitation Technical Assistance-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2038-23692

Project Type: Technical Assistance_v2

Project Name: Lower Coquille Strategic Implementation
Area: Bear Creek Riparian Restoration

Applicant: Coos SWCD

Region: Southwest Oregon

County: Coos

OWEB Request: \$158,239

Total Cost: \$166,585

Application Description

Bear Creek is a tributary of the Coquille Basin that enters the Coquille Estuary at River Mile (RM) 8.4 near Bandon, OR. The Bear Creek Watershed provides habitat for ESA-listed coho salmon (Oregon Coast ESU), fall Chinook salmon, winter steelhead, Pacific lamprey, and coastal cutthroat trout. Historic log drives, riparian clearing, stream ditching, and unrestricted livestock grazing have resulted in a present-day degraded riparian ecosystem, a simplified stream channel, and poor water quality in the lower reaches of the subbasin. The goal of the project is to improve aquatic habitat and water quality for rearing coho salmon, along with benefits to other species including amphibian and waterfowl. This Grant will provide funding for Coos SWCD capacity to complete the following:

- contract a qualified engineer to design a wetland enhancement project that will increase the quality and connectivity of winter rearing habitat for juvenile coho salmon in a 2-acre seasonal pond that currently poses a stranding risk to juvenile salmonids.
- produce permit-level project designs to restore ecological function to 15.67 acres of currently degraded riparian and floodplain habitat along 2.45 miles of Bear Creek, a tributary to the Coquille River
- perform initial Tribal and regulatory consultations,
- complete cultural resource surveys, reporting, and produce an inadvertent discovery plan
- obtain all required permits

This is the highest priority restoration project for the Lower Coquille River Strategic Implementation Area (SIA), which is a partnership between the Coos Soil and Water Conservation District, the Oregon Department of Agriculture, the Oregon Department of Environmental Quality, and the Oregon Department of Fish and Wildlife. Additionally, the Bear Creek Watershed has been identified as a high priority for restoration in the Coho Strategic Action Plan that is currently being developed by the Wild Salmon Center and conservation partners in the Coquille Basin.

Review Team Evaluation

Strengths

- The application has a clear goal and actions describing the proposed technical assistance and includes detailed maps and data demonstrating the importance of the project.
- The future project will address the highest priority restoration for the Lower Coquille River Strategic Implementation Area.

- The Bear Creek Watershed is identified as a high priority for restoration in the draft Coho Strategic Action Plan for the Coquille Basin. Future expected restoration actions will benefit water quality and habitats important to ESA-listed coho.
- Restoration plans and technical designs will be completed to restore 15.67 acres of degraded riparian habitat on Bear Creek. Restoration will include protecting riparian areas from livestock through 5 miles of fencing and tree enclosures, installing 2 off-channel watering systems for livestock, establishing native plants along 2.45 stream miles, and enhancing a 2-acre wetland. These actions will contribute to lowering summer water temperatures in Bear Creek over time.
- Technical assistance products will include 60%-90% designs and completion of cultural resource surveys, and development of an inadvertent discovery plan.
- The project partners, including the Coos Soil and Water Conservation District, the Oregon Department of Agriculture, the Oregon Department of Environmental Quality, and the Oregon Department of Fish and Wildlife, have the technical expertise and capacity to implement the project scope of work.
- The project will provide opportunity to raise public awareness about the importance of improving water quality that could lead to future restoration opportunities. The project area is highly visible and presents a valuable outreach opportunity to the local agricultural community.

Concerns

- It will be important to manage expectations with landowners on riparian setbacks needed to ensure there is adequate room for riparian areas to function as filter strips and provide enough shade to support water quality and natural stream function.

Concluding Analysis

The Bear Creek Watershed is the core of the Lower Coquille Strategic Implementation Area, which focuses technical and financial resources to improve agricultural water quality. The project represents an opportunity to take meaningful actions to support water quality improvement on the stream and to provide outreach to the local agricultural community.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 10

Review Team Recommended Amount

\$158,239

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$158,239

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2039-23693

Project Type: Technical Assistance_v2

Project Name: 2024 North Fork Coquille River Subbasin
Archeology for Riparian Restoration

Applicant: Coquille Watershed Association

Region: Southwest Oregon

County: Coos

OWEB Request: \$187,350

Total Cost: \$188,046

Application Description The North Fork Coquille River (NFCR) is a main tributary of the Coquille River in Coos County, Oregon that provides habitat for fish and wildlife and serves as the drinking water source for the 2,715 residents of the city of Myrtle Point. The NFCR basin has experienced unintended damage resulting from historic land use practices (e.g., deforesting riparian vegetation, removing instream large wood, and log drives) that have exacerbated bank erosion and sediment inputs, increased solar loading on the stream, and reduced filtration of surface runoff from roads and agriculture. This application seeks funding that will be used to conduct a bidding and contracting process to hire an experienced, licensed archaeology firm to implement archeological surveys at two project sites to protect historical and cultural resources where project implementation will result in ground disturbing activities and create reports to file with the Oregon State Historic Preservation Office (SHPO). These projects are located within 7.5 river miles, or less, of the City of Myrtle Point drinking water intake plant and continue the systematic restoration approach in the NFCR to address habitat limiting factors within the basin for ESA listed Coho. Water quality limiting factors include low dissolved oxygen (DO), high fecal coliform count, sedimentation, and high summer temperatures that are a result of degraded riparian ecosystems and extensive livestock presence. The projects will enhance approximately 31.8 riparian acres along 2.4 river miles by treating noxious weeds, planting 22.5 acres with native trees and shrubs, removing installing 11,700 feet of wildlife-friendly livestock-exclusion fencing along 2 river miles. Project partners include landowners, City of Myrtle Point, Coquille Indian Tribe, Coos Soil and Water Conservation District, Oregon Department of Fish and Wildlife, US Bureau of Land Management. TA funding will result in SHPO concurrence and Inadvertent Discovery Plan creation.

Review Team Evaluation

Strengths

- The North Fork Coquille River provides habitat for fish and wildlife and serves as the drinking water source for the City of Myrtle Point.

- Archeological surveys will be conducted necessary to implement two projects that will address limiting factors for ESA-listed Coho habitat and water quality, including low dissolved oxygen, high fecal coliform count, sedimentation, and high summer temperatures. Approximately 31.8 riparian acres along 2.4 river miles will be enhanced by treating noxious weeds, planting 22.5 acres with native trees and shrubs, removing installing 11,700 feet of wildlife-friendly livestock-exclusion fencing along 2 river miles.
- Professionally accepted methods will be use that will likely result in State Office of Historic Preservation concurrence and an Inadvertent Discovery Plan creation.
- Landowner support is demonstrated by signed agreements.
- The project partners, including landowners, the Coquille Watershed Association, the City of Myrtle Point, the Coquille Indian Tribe, Coos Soil and Water Conservation District, Oregon Department of Fish and Wildlife, United States Bureau of Land Management, have the expertise and capacity to successfully deliver the project objectives.
- The application budget is detailed, and costs are reasonable for the technical assistance products.

Concerns

- It is unclear from the application narrative whether surveys will occur on two or four project sites.

Concluding Analysis

Funding is requested to conduct a bidding and contracting process to hire an experienced, licensed archaeology firm. The contractor will implement archeological surveys at project sites to protect historical and cultural resources where restoration implementation will result in ground disturbing activities. The future project is part of a collaborative whole watershed restoration initiative that is implementing projects to improve habitat and water quality for fish in wildlife in the Coquille River.

Review Team Recommendation to Staff

Fund

Review Team Priority

3 of 10

Review Team Recommended Amount

\$187,350

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$187,350

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2040-23703

Project Type: Technical Assistance_v2

Project Name: Murphy Dam Removal Phase 1

Applicant: WaterWatch of Oregon

Region: Southwest Oregon

County: Josephine

OWEB Request: \$220,000

Total Cost: \$521,800

Application Description

1) This project is located on private and county property near Murphy, in Josephine County, on the Applegate River, tributary of the Rogue River, and on Onion and Stringer creeks, tributaries to the Applegate River flowing through lands served by the Murphy Ditch Association.

2) A stream-spanning concrete, wood, and rock dam blocks or impede adult and juvenile fish passage to 100 miles of spawning and rearing habitat. Impacted species include Fall Chinook Salmon, Coho Salmon, summer and winter Steelhead, Pacific Lamprey, Cutthroat Trout, and Suckers. Murphy Dam is ranked in Group 2 of ODFW's 2019 Statewide Fish Passage Priority List. Murphy Dam fish ladder does not comply with NOAA and ODFW fish passage criteria. Barriers at road- and canal-crossings in the Onion and Stringer creek tributaries of the Applegate River, which flow through lands served by Murphy Dam, impede and harm native migratory fish. This project complements salmon restoration efforts ongoing throughout the Rogue Basin.

3) This project will remove Murphy Dam and significantly improve access to 100 miles of spawning and rearing habitat. A new, properly screened pump with pump house will be installed to maintain existing water use, with pumping costs partially offset by installation of a solar array. This project will also remove and replace fish barriers in the Onion and Stringer creek tributaries identified by ODFW and/or NOAA.

4) WaterWatch's project partners include the dam owner, ODFW, USFWS, NOAA, USFS, BLM, OWRD, River Design Group, and Rogue Basin Partnership.

Review Team Evaluation

Strengths

- Murphy Dam is ranked in Group 2 of ODFW's 2019 Statewide Fish Passage Priority List. The stream-spanning concrete, wood, and rock dam blocks impedes adult and juvenile fish passage to 100 miles of spawning and rearing habitat. Murphy Dam fish ladder does not comply with NOAA and ODFW fish passage criteria.

- The resulting restoration actions will address habitat limiting factors identified in a number of watershed plans by improving fish access to cool water refugia and instream habitat that will benefit ESA-listed coho, fall Chinook, summer and winter steelhead, Pacific lamprey, and cutthroat trout.
- The project partners, including the dam owner, Oregon Department of Fish and Wildlife, United States Bureau of Land Management, Oregon Water Resources Department, United States Forest Service, United States Fish and Wildlife Service, National Oceanic and Atmospheric Administration, River Design Group, and Rogue Basin Partnership, have the capacity and expertise to successfully implement this project.
- Appropriate data and analysis will be used to inform the design, including topographic and geotechnical.
- The overall project cost is reasonable for the expected watershed health benefits from the future dam removal.

Concerns

- It is unclear whether a range of alternatives was or will be considered because only one alternative is described in the application. Including detail describing restoration alternatives that could be considered and the processes for selecting the best alternative would be helpful for better understanding the planning approach.
- The timeline for the project may be optimistic for the tasks that will need to be completed to develop a design to remove Murphy Dam.
- It is unclear from the application if there is potential for the project to lead to instream flow benefits from the future irrigation efficiency improvements expected to result from this technical assistance.
- The level of project support from water users is unclear without letters of support from the Murphy Ditch Association or any of the water users.
- Project costs are provided as lumped sums; it is difficult to evaluate whether costs are reasonable and necessary for achieving the proposed technical assistance.

Concluding Analysis

Developing a project design to eliminate adverse impacts to salmon, steelhead, and other native fish caused by Murphy Dam and its associated water diversion system while maintaining existing water use and increasing irrigation system resiliency within the Murphy Ditch Association, is important to improving anadromous fish populations in the Applegate River watershed. The project will improve passage for salmonids, trout, and Pacific lamprey to approximately 100 miles of upstream habitat.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 10

Review Team Recommended Amount

\$220,000

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$220,000

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2041-23716

Project Type: Technical Assistance_v2

Project Name: South Fork Big Butte Creek RM 1.5 Fish Passage Design

Applicant: Rogue River WC

Region: Southwest Oregon

OWEB Request: \$69,075

County: Jackson

Total Cost: \$109,546

Application Description This project will lay the groundwork to improve fish passage on South Fork Big Butte Creek at a passage barrier: Eagle Point Irrigation District (EPID) Diversion Dam (ODFW # 22851). This facility, diverting water for irrigation and hydroelectric power generation, is recognized as a priority (one of 90 from among 3,500 passage impediments in the Rogue) on ODFW's 2019 Statewide Priority Barriers List. It impedes the movement of spring Chinook Salmon (to 0.8 miles of habitat), Coho Salmon (federally listed as threatened, 1.4 miles), summer and winter steelhead (15 miles) migration. Resident Rainbow and Cutthroat Trout and migratory Klamath Smallscale Suckers are also impacted. The dam is located adjacent to the rural community of Butte Falls in the Upper Rogue sub-basin.

The proposed technical assistance project will develop the necessary information to guide and inform diversion facility design, engineering, and construction to improve fish passage for all life stages of native fish species inhabiting the South Fork of Big Butte Creek. Activities include summarizing hydrologic information, collecting topographical survey data, assessing hydraulic and geomorphic conditions, developing fish passage concepts, selecting a preferred concept, and engineering designs sufficient to develop permit applications/ initiate proposal development for construction. We will complete the design phase, develop construction specifications, and create a request for proposal packet in a following phase of this technical assistance effort.

Big Butte Creek is prioritized in many local, state, and federal plans, including NOAA's SONCC Coho Salmon Recovery Plan, ODFW conservation and management plans (for several species), and the Upper Rogue Coho Strategic Action Plan. These plans identify fish passage barriers as a threat (or passage difficulties as a stressor).

Project partners are the EPID and ODFW. Supporters include Rogue Basin Partnership (funding) and Wild Salmon Center.

Review Team Evaluation

Strengths

- Designs for a new diversion facility will improve passage for all types and life stages of native migratory and resident fish in the South Fork Big Butte Creek. The project supports climate resiliency by facilitating upstream fish migration to cool, clean water sources. The watershed above the project area is also a drinking water source for the Rogue Valley.
- Three alternatives will be identified and analyzed as part of the technical assistance project.
- The project partners, including the Rogue River Watershed Council, Eagle Point irrigation District, Oregon Department of Fish and Wildlife, the Wild Salmon Center, and Rogue Basin partnership, have a track record in successfully addressing fish passage issues.
- Appropriate data and analysis will be used to inform the design.

Concerns

- Including detail describing restoration alternatives that could be considered and the processes for selecting the best alternative would be helpful for better understanding the planning approach.
- It is unclear if required cultural resource investigation will be completed; there are no related actions or costs included in the application workplan or budget.
- The natural falls located less than a mile upstream of the project site will impede fish passage except during the right flow conditions, which will limit the benefits of the future restoration project.

Concluding Analysis

The project will lay the groundwork to improve fish passage on South Fork Big Butte Creek at the Eagle Point Irrigation District diversion dam. The dam impedes the movement of spring Chinook Salmon to 0.8 miles of habitat, ESA-listed coho Salmon to 1.4 miles, and summer and winter steelhead to 15 miles of cool water habitat. The project will develop information necessary to guide diversion facility design, engineering, and construction to improve fish passage for all life stages of native fish species inhabiting the South Fork of Big Butte Creek.

Review Team Recommendation to Staff

Fund

Review Team Priority

9 of 10

Review Team Recommended Amount

\$69,075

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

N/A

Open Solicitation Technical Assistance-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2042-23718

Project Type: Technical Assistance_v2

Project Name: Bagley Creek Stream Channel Design

Applicant: Curry SWCD

Region: Southwest Oregon

County: Curry

OWEB Request: \$129,802

Total Cost: \$218,755

Application Description The Bagley Creek project site is located in the Elk River watershed on the southern Oregon coast, approximately 5 miles north of the town of Port Orford. From the mid-19th to the late-20th century, logging, road construction, stream cleaning, channel straightening, etc. dramatically changed fluvial processes and degraded instream habitat in Bagley Creek, and circa 1951, two dams were constructed near the mouth of the stream at the former Western States Plywood Mill, which led to the extirpation of anadromous salmonids and lamprey from the watershed.

When the Elk River Strategic Action Plan for Coho Salmon Recovery was completed in 2017, the Wild Rivers Land Trust (WRLT) began acquiring parcels and long-term leases on lower Bagley Creek; creating a unique opportunity to comprehensively restore the stream corridor from the Elk River confluence upstream to the wall of the river valley. While WRLT was acquiring land, the Curry Watersheds Partnership (CWP) developed a conceptual project design to restore 2,100 feet of stream channel, 8 acres of floodplain wetland, and 11.4 acres of native riparian forest.

With this TA proposal, the Curry Soil and Water Conservation District (a member of the CWP) will hire an archaeologist and an engineering firm, and utilize in-house staff/contractors, to: assess cultural and historic resources at the project site; finalize the project design; develop a revegetation plan; design an off-stream livestock water system; prepare project permits; and develop contracting documents for project construction in 2026. The CWP will coordinate this work with WRLT, who is implementing an EPA Brownfield Cleanup project at the former mill site, to remediate contaminated soils and sediment from the operation of the mill. Project partners include WRLT, ODFW, the Wild Salmon Center, NOAA Restoration Center, the EPA, ODA, private conservation investors, and adjacent landowners.

Review Team Evaluation

Strengths

- The project components are identified in the Elk River Strategic Action Plan for Coho Salmon Recovery (2017). Factors limiting ESA-listed coho recovery will be addressed by improving access to habitats and restoring instream and riparian habitat and floodplain connectivity.
- The application has a clear goal and actions describing a design plan for restoring 2,100 feet of stream corridor for fish passage, rearing habitat, and water quality.

- Cultural resource surveys and compliance actions are included in the project deliverables.
- Project partners, including the Curry Soil and Water Conservation District, Wild Rivers Land Trust, the Oregon Department of Fish and Wildlife, the Wild Salmon Center, National Oceanic and Atmospheric Administration Restoration Center, the Environmental Protection Agency, the Oregon Department of Agriculture, and adjacent landowners, have the experience and capacity to successfully deliver the project.
- The project builds on previous riparian and instream habitat restoration accomplished in the Elk Creek watershed.

Concerns

- The former plywood mill property site is an Environmental Protection Agency Brownfield Site where high concentrations of dioxin, furan, and other contaminants have been found in sediment and soils. The consultant will integrate the spatial footprint and design components of the stream project into the contamination cleanup plan to ensure the cleanup and restoration are implemented efficiently and effectively. There is, however, potential for contaminant migration into the Elk River and the design alternatives will need to factor this in carefully.
- Additional detail describing restoration alternatives that could be considered and the process for selecting the best alternative would be helpful for better understanding the planning approach.
- Project costs are provided as lumped sums, it is difficult to evaluate whether costs are reasonable and necessary for achieving the proposed technical assistance.

Concluding Analysis

Restoring lower Bagley Creek will eliminate all 6 fish passage barriers downstream of the Elk River County Road, which will restore access to 2.07 miles of spawning and rearing habitat for salmonids, Pacific lamprey, and other native fish. The future project will restore 2,100 feet of stream channel and 8 acres of inset floodplain and restore 19.4 acres of native riparian vegetation.

Review Team Recommendation to Staff

Fund

Review Team Priority

8 of 10

Review Team Recommended Amount

\$129,802

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

N/A

Open Solicitation Monitoring-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2043-23667

Project Type: Monitoring_v2

Project Name: IV WQM 2024-6

Applicant: Illinois Valley SWCD

Region: Southwest Oregon

County: Josephine

OWEB Request: \$148,429

Total Cost: \$194,045

Application Description The applicant proposes to perform surface water quality monitoring (grab, continuous, and passive sampling), data analyses, public reporting, and community engagement in the Illinois River subbasin in SW Josephine County.

The Illinois River subbasin lacks forward-looking broad spectrum baseline water quality monitoring data, presenting an incomplete picture of water quality in the Illinois River Basin. This lack of data adversely impacts the ability of the applicant and partners develop effective management strategies. Without clear water quality condition benchmarks across the watershed, restoration and conservation opportunities cannot be responsibly developed and adaptively managed.

Project work furthers the grab sampling surface water quality monitoring regime that was developed and established in 2022 in collaboration with ODA, IVWC, and DEQ, and launches a pilot continuous water quality monitoring project with the US Geological Survey (USGS). It provides a vitally important comprehensive water quality dataset that will be useful to other community partners and neighbors in considering and deciding how to best care for their watershed.

Passive water quality monitoring utilizes samplers (POCIS and SPMD units) that continuously accumulate chemicals from the water during their deployment period, enabling measurements at lower but still biologically relevant concentrations and capturing episodic events such as storms, surface runoff, and spills. They provide information on the time-weighted average concentration of chemicals, vital to assessing the potential risk of exposure for aquatic species.

Partners include USGS, Illinois Valley Watershed Council, Oregon Department of Agriculture, Oregon Department of Environmental Quality, Oregon State University, Rogue Riverkeeper, Grants Pass Water Lab, IEH Analytical Laboratories, Siskiyou Field Institute, partnering landowners, and community members.

Review Team Evaluation

Strengths

- The resulting data will inform an upcoming Oregon Department of Agriculture (ODA) Strategic Implementation Area (SIA) effort as well as community concerns around illegal dumping and illegal agricultural activity.
- The application provided a link to a video that included a description of both the science behind the proposed monitoring approach as well as monitoring methodology and sample analysis procedures.
- The streams targeted for sampling are important for Endangered Species Act (ESA) listed coho, lamprey, and other sensitive aquatic species.
- The applicant is working with a US Geological Survey expert to receive training and assistance to deploy and analyze the passive samplers.
- The letters of support demonstrate that the applicant is engaging community members and technical experts to address the concerns that the local community has raised.
- The data will be made available for download on the applicant's website and a technical report will be prepared and shared with OWEB and project partners using an annual newsletter.
- The applicant has recently started a water quality monitoring project in 2022 in coordination with ODA and DEQ and are building their capacity and experience to successfully implement the proposed project.
- The budget details expenses that are necessary to collect, analyze and disseminate the information described in the application.

Concerns

- The application is not clear how this project will complement the existing water quality data in the watershed.
- The application was unclear how previously collected data is contributing to this project.
- The monitoring question is overly broad and is not clear why there are not more specific monitoring questions being sought based on the grab sampling and passive sampling efforts.
- This project aims to incorporate traditional ecological knowledge, but the application was not clear who and how they will specifically engage with indigenous communities to understand if this will result in a valuable component of the project.
- Additional details on how some of the data will be analyzed and integrated together would have provided the reviewers more confidence that the monitoring questions could be answered.
- The application lacked information to understand how sites were selected for water temperature sites.

- It is unclear why there are costs associated with hiring technicians to collect water quality samples when the application states that their local Stream Team conducts water sampling.

Concluding Analysis

A clear understanding of water quality conditions in the Illinois River and its tributaries will help the applicant address local community concerns of impacts from an increase in illegal dumping and illegal agriculture. The applicant is partnering with the appropriate experts and have the capacity to collect and analyze the proposed monitoring data.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 2

Review Team Recommended Amount

\$148,429

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$148,429

Staff Conditions

N/A

Open Solicitation Monitoring-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2044-23720

Project Type: Monitoring_v2

Project Name: Umpqua Basin Collaborative Monitoring
2025-2026

Applicant: Partnership for the Umpqua Rivers

Region: Southwest Oregon

County: Douglas

OWEB Request: \$304,537

Total Cost: \$627,663

Application Description Our project is located throughout the Umpqua Basin, encompassing 2,569,527 acres of land and 1,740 stream miles of anadromous fish habitat, the largest watershed draining into the Pacific Ocean south of the Columbia River. There is a lack of data on water quality for many streams. This information is essential for human, fish, and wildlife survival. Identifying stream-specific limiting factors informs planning decisions to address issues in areas most in need of restoration and identify areas most in need of preservation.

This grant consists of PUR staff and well-trained volunteers performing monthly water quality monitoring runs in 5th field watersheds for three years, then monitoring select sites combined into 4th field reference runs. Sampling sites are selected in coordination with partners and located on public and private lands with permission. This partnership allows a greater range of sites to be monitored in the Umpqua Basin. All runs are monitored once per month, collecting water quality data on temperature, turbidity, conductivity, dissolved oxygen, pH, nitrate, blue-green algae (presence/absence), total coliform, E. coli, and photo points at 12-20 sites per 5th field watershed. Also, summer instream continuous temperature loggers, 25-40 units (funding dependent) recording every 30 minutes, are located throughout the watersheds. This allows a significant amount of important and actionable knowledge to be collected about our watersheds.

We collaborate with partners, including the Bureau of Land Management(BLM), Department of Environmental Quality(DEQ), US Forest Service(USFS), Natural Resources Conservation Service (NRCS), Oregon Department of Agriculture(ODA), Oregon Department of Fish and Wildlife(ODFW), Tribes, Soil and Water Conservation Districts(SWCD), Oregon Water Resources Department (OWRD), US Geological Survey (USGS), municipalities, counties, water treatment plants, private landowners, area residents, and other community stakeholders.

Review Team Evaluation

Strengths

- This project directly addresses the need to collect water quality data that is recommended in state and federal salmon recovery and TMDL plans.

- The applicant has created a process to summarize and share the results to inform future restoration actions to improve salmon habitat and enhance water quality.
- This project complements existing water quality data that has been collected since 2007.
- The letters of support from local, state, tribal and federal agencies demonstrate support for the project and that the data is used to identify and prioritize restoration actions.
- The applicant has a DEQ approved SAP and follows established professionally accepted protocols and incorporates QA/QC measures to train and oversee volunteers who assist in collecting the data in the field.
- The applicant will continue to coordinate with DEQ to participate in bi-monthly split sampling to ensure data quality is maintained over the life of the project.
- The applicant will share data with DEQ annually and generate a comprehensive report summarizing results at the end of the project.
- The staff and project partners have the necessary qualifications and proven performance history to collect similar data over several years.
- The budget and uploaded attachment provides adequate detail that describes how the expenses were estimated and are adequate to accomplish the actions proposed in the application.

Concerns

- The study design's sampling frequency is not adequate to use the continuous dissolved oxygen (DO) data for DEQ's water quality assessment purposes.

Concluding Analysis

The Partnership for Umpqua Rivers fills a vital role in the Umpqua Basin to collect and share high quality data to describe watershed conditions. Several local, state and federal agencies contribute to this ongoing monitoring project and will continue to benefit from the data that is produced to inform future restoration actions.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 2

Review Team Recommended Amount

\$304,537

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$304,537

Staff Conditions

N/A

Open Solicitation Monitoring-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2045-23723

Project Type: Monitoring_v2

Project Name: Rogue Basin Riparian Vegetation and Soil Carbon Monitoring

Applicant: The Understory Initiative

Region: Southwest Oregon

County: Jackson

OWEB Request: \$140,152

Total Cost: \$175,252

Application Description The project aims to restore riparian habitats in the Upper Rogue River watershed, addressing the degradation caused by flow regime changes, invasive species, and historical land management practices. Riparian restoration is crucial for maintaining cool water temperatures vital for native salmonids and enhancing ecosystem functionality. Traditional container stock plantings, while somewhat successful, are costly and logistically challenging. An alternative "release and recruit" strategy may offer a cost-effective solution, but its effectiveness needs evaluation. Additionally, soil carbon dynamics, altered by climate change and invasive species, require understanding for effective restoration. Urgency stems from climate change impacts, threatening native plant communities and salmon populations. The project will collect data on vegetation and soil responses to restoration treatments, comparing the "release and recruit" approach with traditional planting. Data analysis and reporting will inform future restoration strategies, aiding in ecosystem resilience against climate change impacts.

Review Team Evaluation

Strengths

- This project will collect soil carbon data that complements an existing riparian planting carbon monitoring effort led by The Nature Conservancy (TNC) to provide an understanding of variability in soil carbon across a given site.
- This project will follow professionally established methods and utilize an established lab to analyze soil samples for carbon.
- The applicant has the organizational capacity and the qualifications to collect and manage the vegetation and soil data as proposed in this application.
- The applicant is engaging with the appropriate technical experts, from TNC and the University of Oregon to assist with the soil carbon monitoring, analyses and data interpretation.

Concerns

- The application lacked information to explain the different restoration treatment types that will be evaluated.

- It is not clear if the study design, including the number of sites and years monitored, is adequately accounting for all the factors that could influence the success of the different riparian revegetation treatment types.
- The application proposed two years of monitoring, which is not enough time to answer the questions posed in the application.
- The application did not clearly describe if future monitoring will occur, which is needed to answer the monitoring questions proposed in the application.
- The soil carbon portion of the project seemed disconnected from the purpose to understand the effectiveness of the two riparian revegetation treatment types.

Concluding Analysis

The applicant is working with local partners to evaluate two different approaches to restore riparian vegetation in Southwest Oregon. Providing quantitative data to understand if an alternative approach is more successful than traditional treatments could be valuable to develop efficient riparian revegetation restoration techniques. There is merit to the intent of this monitoring application, however there were many concerns raised on the study design, including if there are an adequate number of sites and time to answer the monitoring questions. The application did not account for environmental factors that would influence the success of the restoration treatment types.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Engagement-Spring 2024

Southwest Oregon (Region 2)

Application Name: 224-2046-23655

Project Type: Engagement_v2

Project Name: Engaging Stakeholders in Umpqua Basin
Flow Restoration

Applicant: Partnership for the Umpqua Rivers

Region: Southwest Oregon

County: Douglas

OWEB Request: \$149,207

Total Cost: \$150,439

Application Description This project increases the pace and scale of instream flow restoration in the Umpqua Basin by engaging stakeholders to increase their knowledge of flow restoration and the opportunities, tools, and incentives available to voluntarily reduce or conserve out-of-stream water use in prioritized reaches of the watershed. Flow restoration tools include leasing and transfer of water, irrigation efficiency upgrades, and minimum flow agreements, which help ensure fish passage and water quality needs for the life stages of native fish and aquatic-dependent organisms. Insufficient instream flow is listed as a key limiting factor in the NOAA Fisheries Oregon Coast Coho Salmon Recovery Plan (Recovery Plan) (2016), which identifies the withdrawal of water as a factor leading to the ESA listing of these fish. In fact, water quantity is listed as the primary limiting factor in the Umpqua (Table 3-2, p 3-7), and agricultural activities that reduce instream flows, are cited as degrading water quality, which is a secondary limiting factor leading to declines in coho population abundance.

In the Recovery Plan for the Umpqua Stratum, NMFS identifies the first action is to “assess the potential success of a pilot program and implement the water conservation and instream flow program in the South or Middle Umpqua populations. Develop a pilot flow restoration effort to implement the protection and restoration strategy and test the program feasibility in the South or Middle Umpqua populations” (p 6-50) which is the exact objective of this proposal. The Partnership for Umpqua Rivers proposes to increase staff capacity to provide technical expertise in water transactions, and to engage key water right holders. There is not currently any dedicated capacity in the Umpqua Basin to develop or support flow restoration projects. PUR will collaborate with partners and receive technical support from Trout Unlimited and Wild Salmon Center to develop transactions and to help engage stakeholders.

Review Team Evaluation

Strengths

- There is less water available in the project focus area due to drought, climate change, increasing demand for water for legal agricultural use, and increases in illegal water use. The project fills the gap in water transaction expertise needed for successful flow restoration in the Middle and South Umpqua River watersheds. The lack of adequate instream flow is a critical limiting factor impacting the recovery of ESA-listed coho and water quality in these watersheds.

- Project partners have developed connections within the local community, creating a foundation for launching the engagement project that builds off momentum in the region to restore fish passage and improve irrigation efficiency.
- Trout Unlimited has the experience and qualifications to provide the training and technical support to the Partnership for the Umpqua Rivers (PUR) in the intricacies of water transaction projects.
- The budget request is reasonable and aligns with actions consistent with the expected project deliverables.

Concerns

- Detailed information on the specific aspects of training PUR staff will receive from Trout Unlimited would be helpful for understanding how the project will increase capacity for engaging the water user community.
- The application does not describe coordination with the Oregon Water Resources Department. Engaging with this agency early in this effort will be important to establishing effective messaging and assist in managing the expectations of water users.

Concluding Analysis

Streamflow is a key limiting factor for salmonids, lamprey, and other native fish in the Umpqua River watershed. Currently, there is no local capacity to engage interested water users in developing water leases or instream transfers. Increasing capacity and technical support to identify conservation opportunities and support water conservation efforts would fill this gap. PUR is positioned to be effective in delivering this project by developing their capacity and level of engagement in the Umpqua Basin. This capacity will lead to the development of voluntary water acquisition and instream flow restoration projects, making the pathway from engagement to implementation of streamflow restoration clear.

Review Team Recommendation to Staff

Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$149,207

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

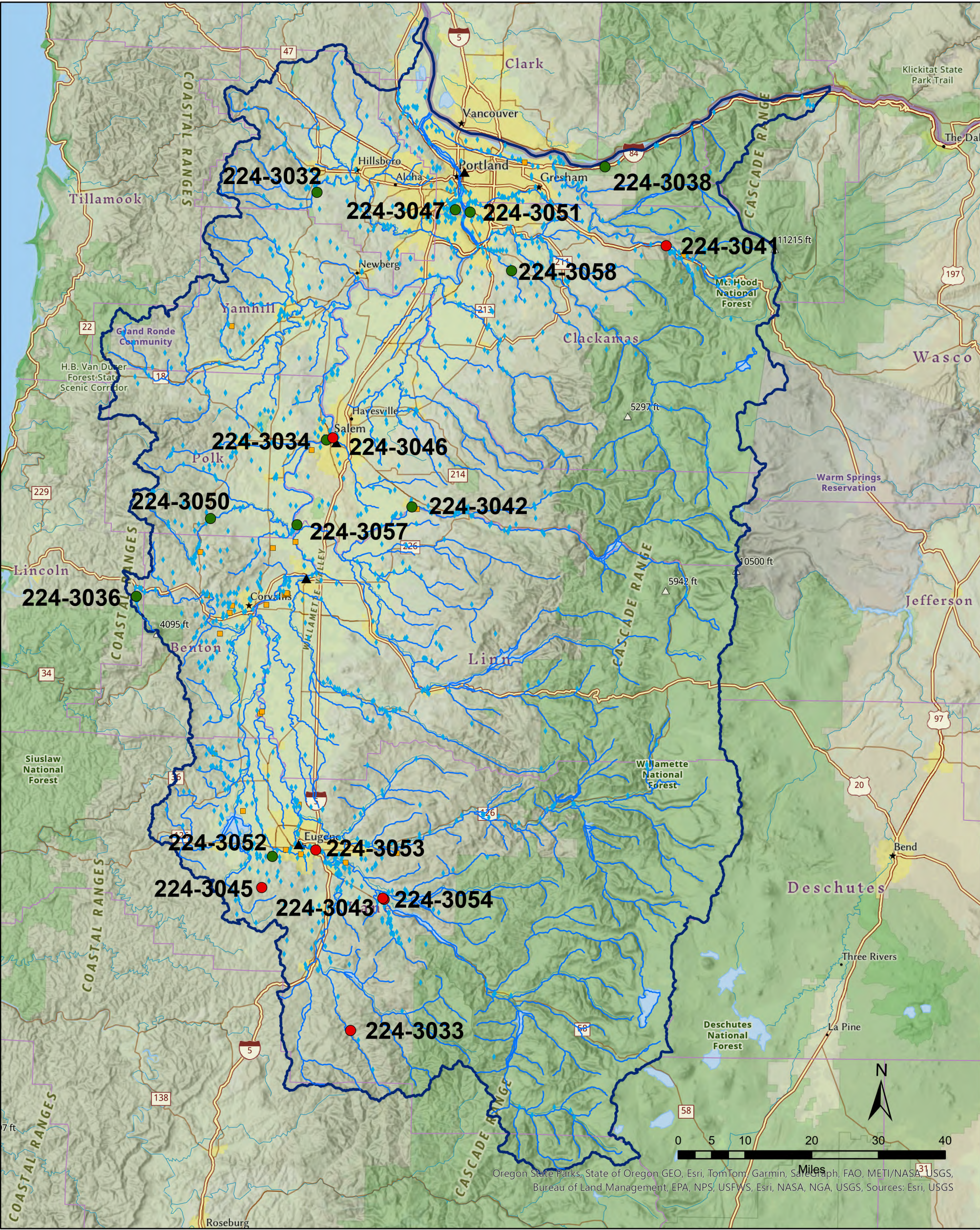
Staff Recommended Amount

\$149,207

Staff Conditions

N/A

Willamette Basin - Region 3 Spring 2024 Funding Recommendations



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Funding Recommendation

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Staff Recommendation
For Funding (SRF)

●

Below Funding Line (BFL)

Previous Grants 1998 - Spring 2023

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Land Acquisition

◆

Restoration

▲

Region 3 Cities

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Region 3 Streams

▭

OWEB Region 3 Boundary



OREGON
WATERSHED
ENHANCEMENT BOARD

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Region 3 - Willamette Basin Restoration				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-3032	Metro	Fern Hill Forest Oak Woodland Restoration	Restore oak woodland habitat structure, function, native species diversity, and increase regional habitat connectivity at a priority site in the Tualatin Basin.	\$ 225,000
224-3036	Marys River WC	Recovering System Process in Shotpouch Creek, Phase III	Restoring system processes by providing a new infusion of large wood to further channel complexity, floodplain connection and water flow sequestration; developing floodplain engagement by removing an artificial fill site and supporting a floodplain enhancement site to engage a multi-braid floodplain; increasing off-channel winter salmonid rearing habitat and floodplain impoundment to provide cold water refugia and improving ground water storage and resultant slow cold water release to the creek.	\$ 259,428
224-3034	City of Salem Public Works	Minto Island Conservation Area Phase 3: West Forest Restoration	Our goal is to build upon previous work at the site to improve the health of the Minto Island Conservation Area, a Willamette River Anchor Habitat, to create a functioning native riparian forest that is a dependable source of large woody debris to the river, provides high flow refugia for native fish, sequesters carbon, and serves as habitat for native flora and fauna. We want to increase public awareness of the project and the need for riparian and watershed restoration actions.	\$ 546,530
Total Restoration Projects Recommended for Funding by RRT and OWEB Staff				\$ 1,030,958

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
224-3033	Coast Fork Willamette WC	Increasing Complexity in Mosby Creek's Floodplain Habitat for NW Pond Turtles	The goals of this project are to create off channel habitat for Northwestern pond turtles (NWPT), a BLM Priority Bureau Sensitive Species, and spring Chinook (Upper Willamette ESU) by reactivating the lateral floodplain connection to Mosby Creek.	\$ 294,000

Projects NOT RECOMMENDED for Funding by RRT			
Project #	Grantee	Project Title	Amount Requested
224-3029	Climate Change Truth Research	Salmon Protection Device	\$ 1,922,691
224-3030	Institute for Applied Ecology	Restoring upland prairies and oak habitat in the West Eugene Wetlands	\$ 300,558
224-3031	South Santiam WC	River Creek Rewilding	\$ 101,830
224-3035	Long Tom WC	Coyote Spencer Wetlands Oak and Prairie Habitat Restoration Phase II	\$ 288,752
224-3037	Polk SWCD	Cornerstone Conservation Holistic Habitat Regeneration and Community Investment	\$ 180,087

Region 3 - Willamette Basin Technical Assistance				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-3038	Lower Columbia Estuary Partnership	Mirror Lake Comprehensive Floodplain Reconnection	The goal is to deliver a preliminary plan set (60% plans, basis of design report (BDR), and cost estimate) and updated wetland delineation in spring 2026. The plan set will address site and LCR limiting factors by detailing the reconnection of this 440-acre site to the Columbia River, restoring the boat basin to an 8-acre wetland/riparian complex, reconnecting Latourell Creek to 18 acres of its floodplain, and removing an abandoned culvert to reconnect a 12-acre wetland.	\$ 204,058

Oregon Watershed Enhancement Board: Region 3 Restoration, Technical Assistance, Engagement and Monitoring

224-3042	North Santiam WC	North Santiam Post-Fire Watershed Resource Assessment & Prioritization Guide	The NSWC and its local and regional partners need to better understand the “state of the watershed,” specifically in the fire impacted areas which highly impacted the Little North Fork and Breitenbush subbasins. Both of these two basins were considered high quality ESH habitat, pre-fire. To be effective at restoration implementation the NSWC needs to re-evaluate the new suite of limiting factors and prioritize actions to protect, restore and mitigate future threats.	\$ 110,286
224-3047	Tryon Creek Watershed Council	Rapid Bioassessment of Tryon Creek watershed	To develop a Rapid Bioassessment for the Tryon Creek watershed. This will assess existing data, close gaps by ground truthing, and develop prioritized specific restoration actions for Tryon Creek Watershed Council to protect long-term fish habitat quality in the Tryon Creek watershed. TCWC’s Coordinator will work directly with the consultant and facilitate the Watershed Action Committee, who will refine documents such as the RFP, select a consultant, and provide intermittent oversight.	\$ 102,749
Total Technical Assistance Projects Recommended for Funding by RRT and OWEB Staff				\$ 417,093

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
224-3041	The Freshwater Trust	Sandy Basin Climate Change Analysis	The goal of the project is to develop a list of specific restoration actions and locations that are feasible and most likely to be effective at offsetting the anticipated impacts of climate change on the abundance, productivity, capacity, and life history diversity of ESA-listed salmon and steelhead populations in the Sandy River basin.	\$ 159,208
224-3043	Middle Fork Willamette WC	Finalizing Floodplain Restoration Designs & Permitting for Elijah Bristow State Park - Phase 3	The goal of this third phase of Technical Assistance for floodplain restoration at EBSP is to perform cultural resource surveys in the areas proposed for fill removal in the Lower Zone project area, and to continue coordination on the submission of a Section 408 Alteration Determination Application.	\$ 94,382
224-3045	Long Tom WC	Chalamali Ecocultural Management Plan	Co-create a management plan with TEIP, LTWC, WVFC, MRT, that weaves together Indigenous and Western approaches to land stewardship, uplifting Indigenous-led stewardship and cultural fire at Chalamali and providing actionable steps forward to guide restoration funding proposals and actions for the next 10 years. This plan will lay a foundation for intergenerational stewardship and ecocultural restoration at Chalamali, ultimately contributing to intertwined social and ecological well-being.	\$ 80,024
224-3046	City of Salem Public Works	Salem Fish Passage Prioritization Study: Collaborate-Assess-Prioritize-Implement	This project will assess migratory fish habitat conditions and barriers and develop a plan to prioritize barrier removal that focuses on the greatest net benefit to migratory fish. This will focus on barriers that prohibit migratory fish from accessing the most stream miles and best upstream habitat conditions. The results will result in future capital improvements with a focus on aquatic habitat connectivity and fluvial conditions within these areas.	\$ 127,338

Projects NOT RECOMMENDED for Funding by RRT			
Project #	Grantee	Project Title	Amount Requested
224-3039	Greater Yamhill Watershed Council	Baker Creek Fish Passage Project	\$ 243,248
224-3040	South Santiam WC	Bilyeu Creek Beginnings	\$ 211,286
224-3044	Human Access Project	Treating the Harmful Cyanobacterial Bloom at Ross Island Lagoon	\$ 133,445
224-3048	Banks School District #13	Banks Creek Culvert Replacement	\$ 116,250

Region 3 - Willamette Basin Engagement				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-3057	North Santiam WC	Rallying the Fellowship: Plan for Your Land in the Middle Willamette	Mid-Valley River Connections will focus on landowner recruitment within the Calapooia, Marys, North Santiam and South Santiam River basins. Our vision is to create more continuous, functioning aquatic and terrestrial habitat by connecting existing riparian projects with neighboring upstream and downstream properties. In support of this vision, we seek to offer resources that empower land managers to develop their own conservation ethos, leading to regional collaborative restoration work.	\$ 246,416
224-3058	Greater Oregon City WC	Beaver Lake Restoration Approaches - Phase 2	The goal of the Beaver Lake Restoration Approaches to Abernethy Creek - Phase 2 remains to develop and refine multiple concepts to improve fish passage, water quality, and riparian and instream habitat within, above, and below the Beaver Lake/Mompano dam focal area. Concepts will be shared with stakeholders and technical experts for refinement and to develop consensus. Selected concepts will be proposed for design and implementation to improve habitat for native fish in Abernethy Creek.	\$ 46,118
Total Engagement Projects Recommended for Funding by RRT and OWEB Staff				\$ 292,534

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
N/A				

Projects <i>NOT RECOMMENDED</i> for Funding by RRT			
Project #	Grantee	Project Title	Amount Requested
224-3055	Corbett Water District	Engaging Gordon Creek Landowners and the Community	\$ 56,782
224-3056	Coast Fork Willamette WC	Landowner Engagement for Monroe Source Water Protection	\$ 47,927

Region 3 - Willamette Basin Monitoring				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-3050	Luckiamute WC	To a Decade and Beyond - Expanding Stream and Species Monitoring to Guide Luckiamute Restoration	This project intends to collect stream temperature data in both existing and new monitoring stations, and eDNA data in streams around the Luckiamute River watershed to inform local restoration project prioritization, design, and implementation in line with local planning efforts. We aim to gather information about stream water quality (temperature) and aquatic species presence (eDNA) to prioritize future restoration projects by potential impact.	\$ 125,737
224-3052	Ecostudies Institute	Fire Effects Monitoring: Developing a Framework for Evaluating Cultural and Ecological Health	The goal of this project is to design, implement, and assess a monitoring framework to share with partners across the region that blends western scientific and cultural values. This monitoring framework will assess how varying severity fire affects ecological and cultural parameters in Willamette Valley oak and prairie habitats. This monitoring will ultimately inform regional prescribed and cultural burning strategies that enhance ecological diversity and support Tribal cultural uses.	\$ 225,001

Oregon Watershed Enhancement Board: Region 3 Restoration, Technical Assistance, Engagement and Monitoring

224-3051	North Clackamas Watershed Council	Kellogg - Mt. Scott Creek Freshwater Mussel Monitoring to Support Salmonid Restoration	The goal is to understand the distribution & population characteristics of freshwater mussels in the KMS watershed,. This will directly inform restoration design & construction planning for the removal of Kellogg Dam and the restoration of the impoundment, and enable NCWC to protect existing mussel beds and monitor population recovery associated with restoration efforts. We also desire to create opportunities for public science and engagement, particularly with communities of color.	\$ 230,859
Total Monitoring Projects Recommended for Funding by RRT and OWEB Staff				\$ 581,597

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
224-3053	Long Tom WC	Monitoring Green Stormwater Infrastructure to Enhance Water Quality	This pilot project aims to measure the overall effectiveness of diverse types of installed green stormwater facilities of varying ages in removing pollutants and, to the extent possible, assess the relative effectiveness of specific features of those stormwater facilities. The results will inform priority investments in GSI and a long-term monitoring strategy to understand the efficacy of GSI facilities, including design elements and maintenance regimes, over a facility's lifespan.	\$ 141,709
224-3054	Middle Fork Willamette WC	Pre-Implementation Monitoring for Floodplain Restoration at Elijah Bristow State Park	The goal of pre-implementation monitoring is to gather baseline conditions data to evaluate the effectiveness of process-based restoration in restoring floodplain function and improving habitat conditions for key species of concern identified in the Oregon Conservation Strategy and by Technical Team advisors, including spring Chinook, steelhead, Pacific lamprey, northwestern western pond turtle, and western pearlshell mussels at Elijah Bristow State Park.	\$ 349,405

Projects NOT RECOMMENDED for Funding by RRT			
Project #	Grantee	Project Title	Amount Requested
224-3049	Institute for Applied Ecology	Effectiveness Monitoring of Prairie and Oak Woodland Restoration in the West Eugene Wetlands	\$ 84,483

Region 3 Total OWEB Staff Recommended Board Award	\$2,322,182
Region 1 - 6 Grand Total OWEB Staff Recommended Board Award	\$13,925,206

Open Solicitation Restoration-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3029-23584

Project Type: Restoration_v2

Project Name: Salmon Protection Device

Applicant: Climate Change Truth Research

Region: Willamette Basin

County: Hood River

OWEB Request: \$1,922,691

Total Cost: \$2,522,691

Application Description Research with Climate Change Truth dba salmonprotectiondevice.com

Synopsis We are very concerned about Climate Change affecting the Salmon runs.

Applicant: Salmon Protection Device

Project type:

1. This project is Designed, Permitted and Scheduled for November to January, including stakeholder engagement. Its shovel ready.

Cost: \$2,904,000

HCP Species: All salmon, Native salmon and trout (Oncorhynchus.) in the Columbia River.

Project:

1. Build and install five salmon protection devices on the downstream side of the fish ladders at Bonneville dam.

2. In conjunction with proposed legislation for a three-year moratorium on salmon fishing west of the Bonneville Dam on the Columbia River to allow the salmon run to recover.

3. Use Chinook Type 1 Helicopters to carry the 15-to-20-ton stainless steel devices to the fish ladders and lower them to divers waiting to position and hook them up.

Benefits: Restore Columbia River salmon runs to 1990 levels within five to eight years.

1. The river, and its well-engineered system of dams and reservoirs is, of course, the natural resource that sustains the quality of human, plant, and animal life on both sides of the Gorge.

2. This includes the multitude of farms and ranches that line the river shores and the thriving towns and cities that nestle in her coves.

Concerns:

1. This is the first time a project of this nature has been attempted.

2. Close attention to detail is needed to make this project the best it can be.

Well-meaning environmental organizations have proposed the extreme measure of removing the entire dam system in a futile effort to protect a single endangered species. This is incredibly short-sighted in its disproportionate response to a simple problem. It is like cutting off your nose to spite your face. We

propose that a more creative and less draconian solution be considered before irreversible damage be inflicted on a well-managed eco-system.

Review Team Evaluation

Strengths

- The watershed problem identified is in the recovery plan for Lower Columbia River Endangered Species Act-listed fish. Pinniped predation on salmon and steelhead at the Bonneville Dam is a limiting factor and threat in the recovery plan.

Concerns

- The application lacks indicators demonstrating the project is ready to implement. For example, there is no evidence in the application, such as a letter of support, that indicates the Army Corps of Engineers will provide permission to implement the project on the Bonneville Dam fish ladders.
- It is unclear how installing the proposed salmon device structures is a technically sound method. The application lacks details describing how the salmon protection devices will be installed on the fish ladders at Bonneville Dam or how the devices are designed to ensure fish passage will not be affected. The design approach appears to be untested; no evidence is provided in the application to demonstrate the design is feasible or supported by science.
- There are currently existing structures on the fish ladders at Bonneville Dam to control pinniped predation. It is unclear how additional structures are needed and will be more effective than the existing structures in preventing pinniped predation on fish.
- The proposed project will require significant partner discussion and coordination to be successful and the scope of work in the application does not include actions related to working with appropriate partners.
- The application lacks information describing alternatives that were considered and evaluated.
- The application lists secured match from the US Army Corps of Engineers; however, there is no documentation from the Army Corps of Engineers provided in the application demonstrating a commitment to that match.
- The application lacks information describing potential quantified watershed benefits expected from the project.
- It is unclear if the applicant has relevant experience and qualifications to engage partners and implement the proposed scope of work.

- It is unclear how the line items in the budget are reasonable and necessary costs for accomplishing the proposed actions in the application scope of work. For example, some line items lack descriptions and cannot be evaluated. There are also line items listed as direct costs that are not directly related to implementing the restoration actions and may be indirect administration costs instead, such as office supplies and equipment, internet, and furniture.

Concluding Analysis

The application lacks details needed to review the project with the evaluation criteria and determine if the project is likely to succeed with a clear scope of work demonstrating the proposed restoration is technically sound, cost effective, and that the applicant has capacity to implement the project.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3030-23620

Project Type: Restoration_v2

Project Name: Restoring upland prairies and oak habitat in the West Eugene Wetlands

Applicant: Institute for Applied Ecology

Region: Willamette Basin

County: Lane

OWEB Request: \$300,558

Total Cost: \$403,940

Application Description In 2023, the Oregon Department of Agriculture added 13 species to the state's list of threatened and endangered plants. Among these species, three are present on Bureau of Land Management (BLM)-administered lands in the West Eugene Wetlands (WEW), located in Lane County, Oregon. Additionally, two species that are candidates for future listing are also present, as are four other species listed prior to 2023. Unfortunately, most of the newly state-listed and candidate species occur on BLM lands designated as Natural Maintenance Areas (NMA), which receive less attention and funding compared to lands designated as Prairie Restoration Areas, which tend to host more federally listed species. As a result, NMAs face significantly higher invasive species pressure, and rare plants are at risk of local extirpation.

For this project, we propose to work at five NMA sites in the WEW across 124 acres to restore habitat and augment or introduce state-listed and candidate species, including Willamette Valley larkspur (*Delphinium oreganum*), shaggy horkelia (*Horkelia congesta* ssp. *congesta*), thin-leaved peavine (*Lathyrus holochlorus*), Willamette navarretia (*Navarretia willamettensis*), white-topped aster (*Sericocarpus rigidus*), and Hitchcock's blue-eyed grass (*Sisyrinchium hitchcockii*). Target species occupy a diverse set of habitats such as upland and wet prairies, vernal pools, ash swales, and oak woodlands. Restoration of these habitats will increase biodiversity and benefit wildlife, improve connectivity between habitat patches, complement adjacent ongoing restoration efforts, and promote climate resiliency. Project success will be achieved through integrated pest management techniques and strategic native revegetation. A network of partners will contribute to and benefit from this project including the BLM, Army Corps of Engineers, U.S. Fish and Wildlife Service, City of Eugene, Long Tom Watershed Council, NRCS Plant Materials Center, and the Institute for Applied Ecology.

Review Team Evaluation

Strengths

- The application has a clearly defined project goal to restore prairie-oak habitat in the West Eugene Wetlands.

- Adding threatened and endangered plant species to the selected site locations will support implementation of goals and tasks in the Prairie Species of Western Oregon and Southwestern Washington Recovery Plan by restoring matrix prairie species and increasing their abundance through population augmentation.
- The applicant is engaging appropriate partners to implement the project, including Bureau of Land Management (BLM), US Army Corps of Engineers, U.S. Fish and Wildlife Service, City of Eugene, Long Tom Watershed Council, and Natural Resource Conservation Services Plant Materials Center.
- Volunteer planting events will promote public awareness about restoring prairie habitat while also extending applicant capacity to implement the restoration.
- The applicant has experience developing prairie species plant materials and implementing prairie restoration in the Willamette Valley.

Concerns

- Additional information explaining the determining factors used to select project sites and identify site-specific treatments is needed to evaluate how the methods are site appropriate and technically sound. For example, breaking the scope of work in the proposed solution into the five sites with information describing the acres of each target vegetation community to be treated at each site, treatment steps, and estimated seeding rates would be helpful to understand restoration planned at each site.
- There may be missed opportunities for restoration treatments on other priority plant communities, such as thinning oak stands at the project site visited for the application review.
- The capacity of BLM to steward and maintain restored sites long-term is unclear from the application. The application indicates BLM lands are designated as Natural Maintenance Areas (NMA) or Prairie Restoration Areas (PRA). Much of the proposed restoration area lies within NMAs. NMAs receive less attention and funding compared to lands designated as PRA. As a result, NMAs face significantly higher invasive species pressure, and rare plants are at risk of local extirpation. In project areas designated NMA, it is unclear whether long-term stewardship to ensure planted areas reach a free-to-grow state is feasible unless OWEB investment could lead towards BLM converting the NMAs to a PRA designation.
- Project costs are provided as lumped sums, and some items are listed in incorrect budget categories; it is difficult to evaluate whether costs are reasonable and necessary for achieving the proposed restoration actions.

- The budget appears to include staff costs to develop native plant materials and lump sum costs to purchase plant materials. It is unclear what plant species will be grown or purchased, or if some of the costs associated with plant materials are duplicative. Without details identifying specific acres to be treated at each project site and seeding rates at those locations, it is unclear if the plant development costs align with the plant materials needed to achieve the restoration goals at the project sites. It is also unclear how excess plant material will be handled if extra material is developed. If excess material is planted on other restoration sites or sold at a discounted or full market rate, it will no longer be supporting the restoration goals at the project sites. It is challenging to evaluate whether plant costs are reasonable and necessary for the proposed scope of work when expenses are for developing plant material instead of providing the cost as a purchase based on planned seeding rates on specific acres.

Concluding Analysis

Augmenting native plant populations of species listed as threatened or endangered can be effective in achieving recovery goals. There is potential the proposed restoration will complement other nearby restoration projects and expand connectivity of prairie and oak habitats; however, the application lacks information to understand this watershed context. Additional information is needed to understand how the project sites and treatments were strategically selected based on their potential of success in establishing selected plant species populations and the long-term sustainability of restored areas.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3031-23642

Project Type: Restoration_v2

Project Name: River Creek Rewilding

Applicant: South Santiam WC

Region: Willamette Basin

County: Linn

OWEB Request: \$101,830

Total Cost: \$128,629

Application Description Historic land use practices in the Willamette Valley have contributed to compromised ecological function that impacts aquatic and terrestrial species alike. Recovery plans for the mid-Willamette basin indicate that reduced access to habitat, and impaired habitat quality are two primary limiting factors for federally listed and managed fish species in the basin. The actions proposed by the South Santiam Watershed Council in partnership with two private landowners are intended to improve water quality, water quantity, riparian and upland habitats for the benefit of Habitat Conservation Plan and federally listed species that include spring Chinook, winter steelhead, rainbow trout, and cutthroat trout. This project seeks to restore approximately 14 acres of wooded upland; meadow and wet prairie; and riparian and floodplain forest along 600 feet of Noble Creek and 600 feet of the South Santiam River by removing invasive plants; building livestock exclusion fencing; thinning existing conifer stands; planting native trees and shrubs; and providing plant establishment activities until the native plantings are free to grow. The proposed work will result in a resilient riparian forest and improved upland habitat bordering the South Santiam River and Noble Creek, enhancing habitat for Upper Willamette River Spring Chinook, Upper Willamette River Steelhead, coastal cutthroat, and resident rainbow trout.

Review Team Evaluation

Strengths

- The application has a clear description of the watershed concerns that will be addressed by restoring upland forest, wet prairie, and riparian forest on Noble Creek and the South Santiam River.
- Landowner support is demonstrated by letters of support included in the application, active participation in the project planning process, and flexibility in integrating habitat restoration into land management.
- The project incorporates treatments that can improve habitat conditions, including creating contiguous habitat in riparian areas to improve water quality, removing invasive plants to allow native species to establish, thinning upland areas to improve forest health, and restoring wet meadow.
- The project has potential for serving as a demonstration site to promote awareness about watershed restoration that could lead to future restoration opportunities. Recruiting neighboring landowners to continue restoration strategies could significantly increase the ecological benefit gained from the proposed investment.

- The applicant has capacity to implement the project.
- Project costs are reasonable for the proposed restoration actions.

Concerns

- Components of the project are not yet fully planned, which could affect project design or costs. For example, fencing will be installed to exclude livestock from the riparian areas; however, currently there is no livestock on site and there is no plan for the type of animal that will be grazing. The type of animal will inform the fencing design needed, which could impact costs. Also, plans for restoring the prairie plant community may still be conceptual.
- The scale of the project and actions may have limited ecological uplift within the context of the system wide disturbances causing water quality concerns and habitat limitations for fish on the South Santiam River. For example, currently the riparian area has plant species composition that provides shade and desirable aquatic habitat. While weed control and additional plantings will generally improve conditions, it will not likely contribute to improving water quality any more than the existing conditions.
- Details describing why the site is important for restoration and how the project implements specific actions identified within an explicit geography prioritized in a plan would be helpful to understand watershed context and potential quantified watershed benefits from the investment.

Concluding Analysis

The proposed project has potential for leading to future habitat restoration in the South Santiam Watershed that could collectively provide water quality and habitat benefits. Project plans appear to be in progress and decisions on final plans could impact project costs. Additional information describing how the proposed restoration is strategic and creates opportunity for significant ecological uplift would be helpful to understand watershed benefits for the investment.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3032-23674

Project Type: Restoration_v2

Project Name: Fern Hill Forest Oak Woodland Restoration

Applicant: Metro

Region: Willamette Basin

County: Washington

OWEB Request: \$225,000

Total Cost: \$1,086,836

Application Description Fern Hill Forest Natural Area is a 262-acre property in Washington County located near Gaston, Oregon within the Tualatin River ODFW Conservation Opportunity Area. FHFNA is located near the center of a regionally significant complex of natural areas owned by Metro, Clean Water Services, USFWS, Joint Water Commission and the Columbia Land Trust. This complex includes several natural areas within 5 miles of Fern Hill Forest including Chehalem Ridge, Penstemon Prairie, Spring Hill, Wapato View, Maroon Ponds, Kings Bend, Atfalati Prairie South and Atfalati Floodplain. FHFNA provides a critical connection between the 1200+ acres Chehalem Ridge Nature Park to the south and the conserved lands supporting prairie, oak and floodplain forest within or adjacent to the Tualatin River Floodplain to the north and west.

The 93-acre project will restore oak and prairie habitat to replace an existing hazelnut orchard afflicted with eastern filbert blight based on a restoration plan developed by Mosaic Ecology in collaboration with Metro. Actions will address fundamental limiting factors identified in the state conservation strategy, especially land use conversion, loss of habitat structure, invasive weeds and climate change.

Restoration actions include:

- 1) Removal of blighted hazelnut orchard and treatment of invasive species;
- 2) Establishing 84 acres of mixed density oak woodland habitat with scattered open prairie pockets and seeding of native prairie/oak species;
- 3) Integrating the oak woodland with adjacent 154 acres of mixed oak-conifer forest by treating blackberry on 9 acres.

As part of a separate but complementary project Metro will be restoring a small seasonal stream channel within the project areas by removing piping and disrupting agricultural drain tiles. The resulting daylighted wet areas will be restored to riparian forest interspersed with the oak woodland.

The cost per acre for the oak woodland restoration over six years is ~\$2000.

Review Team Evaluation

Strengths

- The application has a clearly defined project goal to restore oak and prairie habitat in the Tualatin watershed.
- The restoration methods are clearly defined in the application and technically sound. Plans include invasive plant species removal and native plant reseeding timed to prevent erosion, breaking up drain tiles and restoring natural channel features to mitigate potential impacts from altering the hydrology on the site, and returning prescribed fire to steward the habitat into the future.
- Restoring habitat on the 262-acre Fern Hill Forest Natural Area expands regional habitat connectivity with the 1,267-acre Chehalem Ridge Nature Park to the South, the 500-acre Spring Hill Natural Area to the West, and the 284-acre Penstemon Prairie Natural Area to the North. Increasing habitat connectivity addresses habitat fragmentation and builds landscape resilience to changing climate conditions.
- The project site is protected for conservation, which will ensure long-term protection and maintenance of investments in habitat restoration.
- A cultural resources assessment was completed for the project site and design considerations will be made to allow the project site to be considered as a location for Tribal and Indigenous community cultural practices.
- The applicant has capacity and relevant experience to implement the project and has successfully implemented restoration at the project site. Restored plant communities within the project area are moving towards a free to grow state.
- Costs are reasonable for the proposed restoration.

Concerns

- There is limited partner engagement in the project, this may be due to the nature of the project and site.

Concluding Analysis

Restoring Fern Hill Forest Natural Area oak woodland will create a significant habitat anchor and stepping-stone connection for protected and restored oak and prairie habitats located in every direction from the project site. The project also builds on a unique opportunity to create a network of habitat connectivity of oak habitat in the Portland Metro area.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 4

Review Team Recommended Amount

\$225,000

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$225,000

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3033-23694

Project Type: Restoration_v2

Project Name: Increasing Complexity in Mosby Creek's Floodplain Habitat for NW Pond Turtles

Applicant: Coast Fork Willamette WC

Region: Willamette Basin

County: Lane

OWEB Request: \$294,000

Total Cost: \$569,663

Application Description This project is in the Mosby Creek subbasin, on the mainstem of Mosby Creek. The project aims to support wildlife, hydrology, and fisheries resources within Mosby Creek. Mosby Creek is the only undammed subbasin in the Coast Fork, making it ideal for instream restoration.

The primary project objective for this proposal is to enhance the habitat for Northwestern pond turtles (NWPT). NWPT's are a BLM Priority Bureau Sensitive Species and are currently being petitioned for listing as "Threatened" under the Endangered Species Act. This project is designed to encourage NWPT recruitment within the watershed by reconnecting lateral flow from Mosby Creek back onto the floodplain. The enhancement of the floodplain habitat will focus on creating ponded areas designed for NWPT's at all life stages and restore the plant community from nonnative dominant plant species to native emergent and riparian plant species.

Building off previous efforts in the basin, this project is timely and will benefit the watershed by increasing the amount of active floodplain available in a very constrained system. These actions will have many positive impacts on the Mosby Creek subbasin, increasing the water quality and quantity in a drinking water source area, providing rearing habitat for salmonids, and creating winter storms and summer thermal refugia for other aquatic organisms. The project would benefit fish and wildlife species, primarily Northwestern pond turtle, native fish, and amphibians. This project will be completed by Coast Fork Willamette Watershed Council staff and managed through a cooperative partnership between the Bureau of Land Management - Upper Willamette Field Office, Oregon Department of Fish Wildlife - Springfield Office, and Weyerhaeuser Company – South Valley (Weyco).

Review Team Evaluation

Strengths

- The application has a clearly defined goal and site-specific actions for enhancing Northwestern pond turtle habitat on Mosby Creek.

- Previous application evaluation concerns are mostly addressed by describing how the constructed islands will be designed for turtle basking instead of nesting and how water flow through the constructed off-channel habitat could be maintained despite site constraints. Data from test wells used to monitor water height demonstrated there will likely be water in the project area through interaction of the constructed off-channel habitat with hyporheic flow.
- The project builds on previous OWEB technical assistance, restoration, and monitoring investments in Mosby Creek.
- The project has potential for adding turtle habitat in an area that lacks this type of habitat. The applicant is collaborating with Oregon Department of Fish and Wildlife (ODFW) staff who specialize in turtle habitat. ODFW staff indicated at the application review site visit that the proposed habitat features could be important to Northwestern pond turtles by preemptively creating habitat before further expected habitat loss occurs in the local area. Northwestern pond turtle is likely to be listed as threatened under the Endangered Species Act and the project provides a timely opportunity to restore habitat near an existing source turtle population, which will support population recovery.
- Alternatives for building the off-channel habitat at the project site were considered.
- The project will provide an opportunity for promoting public awareness about watershed restoration that could lead to future project opportunities. In particular, the project is designed to build trust with adjacent landowners and interest in restoring watershed conditions.
- The applicant has capacity to implement the project.
- The application budget includes a detailed explanation that describes context for project costs.
- The design approach will limit the amount of fill material removal and transport, which will limit climate impacts from emissions and reduce costs.

Concerns

- Sustaining long term connectivity of the off-channel habitat with Mosby Creek remains uncertain because of the potential for sediment loads moving downstream in Mosby Creek to disconnect the constructed alcove due to siltation. The site will need to be monitored and structures used to activate flow into the off-channel habitat may require addition of large wood to maintain the alcove connection. There is potential, however, for high flow events in Mosby Creek to create flow through the off-channel habitat that will maintain floodplain connectivity in the constructed project. The test wells providing evidence that water flow is possible through hyporheic connection also indicates that maintaining flow to the alcove is possible.
- The project design is somewhat limited to address concerns about potential risks. For example, wood will be buried rather than allowing it to naturally move in the watershed.

- The project cost is high for the expected ecological benefit due to the small scale of the project footprint, highly engineered approach, and uncertainty for the off-channel habitat connection with Mosby Creek to sustain long term.

Concluding Analysis

Mosby Creek is the only undammed subbasin in the Coast Fork and is an important watershed for Northwestern pond turtles. While the proposed constructed habitat features would not likely occur naturally at the project site, turtle habitat would have been located throughout the watershed and is now limited due to human impacts. Decades of channel simplification and hardening streambanks has disconnected the floodplain from Mosby Creek and eliminated turtle habitat at a watershed scale. The proposed project is an opportunity to create habitat that is likely to be used with the nearby source population, restoring this habitat is a priority with the likely listing of Northwestern pond turtle.

Review Team Recommendation to Staff

Fund

Review Team Priority

4 of 4

Review Team Recommended Amount

\$294,000

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

An administrative error was found in the application budget resulting in the budget lacking indirect costs needed to administer the grant. If funded, a 10% administration cost should be added to address budget error in application.

Staff Recommendation

Do Not Fund; falls below staff-recommended funding line

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3034-23707

Project Type: Restoration_v2

Project Name: Minto Island Conservation Area Phase 3:
West Forest Restoration

Applicant: City of Salem Public Works

Region: Willamette Basin

County: Marion

OWEB Request: \$546,530

Total Cost: \$684,068

Application Description This project is in the Minto Island Anchor Habitat located in, and owned by, the City of Salem (Township 7S, Range 3W, Section 27). Restoration will occur on 48 acres of floodplain adjacent to the Willamette River. The site is part of the 307-acre Minto Island Conservation Area. In 2019 a FIP Grant from MMT and BPA for \$322,722 was awarded to treat invasive species and increase floodplain forest in the Phase 3 – West Forest Restoration Area. This included in kind funding from the City of \$73,978 (Total \$396,700). About 75,000 plants were planted and weeds treated and removed across the site during this grant. Challenges limited the site from reaching a desired state during the grant period. This is discussed in the application Planting section.

The Willamette River is in need of high quality floodplain forest; the reduction in floodplain forests is a limiting factor and threat to Chinook Salmon and Steelhead. Floodplain forest provide large woody debris, which is essential for the aquatic food web and for in water habitat structure. The site is threatened by past land use impacts that removed native floodplain vegetation, altered hydrology and soil chemistry, and contributed to invasive plant issues.

The 48- acre project area (see attached Phase 3 Restoration map) has a 20.5-acre area with a healthy and intact forest interspersed with invasive plants, especially at the edges. The remaining 27.5 acres requires a larger effort. In this area the forest has been replaced by weedy species including reed canarygrass and blackberry. The project will expand the floodplain forest by 27.5 acres through planting of native trees, shrubs, forbs, and grasses. The project will also provide access to future restoration in the Conservation Area.

City partners are Ash Creek Forest Management, Confederated Tribes of Grand Ronde, Salem Audubon, and Willamette Riverkeeper.

Review Team Evaluation

Strengths

- The application has a clearly defined goal and achievable actions for creating a functioning native riparian forest in the Minto Island Conservation Area.

- The proposed restoration builds on previous OWEB Focused Investment Partnership investments at the project site.
- The project is ready for implementation with a contractor selected.
- The scale of the project is large and will likely result in significant ecological uplift.
- The methodology for restoring riparian forest is proving to be effective in areas adjacent to the project site. Removing invasive plant species, preventing further invasive species encroachment, improving plant diversity, and planting for future large wood recruitment are technically sound approaches for restoring floodplain habitat. The restored areas will improve watershed function by creating backwater habitat during high flow events from the Willamette River.
- The project is a priority for the City of Salem's Natural Resource Department and the site is an anchor habitat located in the Willamette River Floodplain Conservation Opportunity Area.
- Mechanical and chemical alternatives to treating weeds were considered.
- The project provides opportunity for promoting public awareness about watershed restoration because Minto Brown Park is the largest and a highly valued greenspace within the City of Salem that is heavily visited by the public.
- The Confederated Tribes of Grand Ronde provided technical assistance to inform adaptive management and incorporate tribal perspective into the restoration strategies. A cultural resource survey has also been completed to identify areas that are safe to auger in some of the plantings.
- The applicant is working with Salem Audubon to identify and protect areas used by nesting birds.
- Costs are appropriate for the restoration actions proposed, attribute for higher costs related to unique site conditions, and are based on estimates provided by a contractor that has implemented restoration in the project area.
- The applicant has capacity to implement the project and the contractor has extensive experience restoring floodplain vegetative communities at the project site.

Concerns

- There is a landfill cap on part of the property and some water pump infrastructure that limits opportunities to restore floodplain features due to limitations on using heavy equipment.
- The project area was acquired through the Oregon Department of Fish and Wildlife (ODFW) Willamette Wildlife Mitigation Program; including a letter of support from ODFW would strengthen the application.

Concluding Analysis

The proposed phase three restoration in the Minto Island Conservation Area will improve and expand existing riparian forested habitat across 48 acres on the mainstem Willamette River in an urban area. The project is likely to succeed in leveraging previous restoration investments and restoring a functioning native riparian forest that supplies large woody debris to the river, provides high flow refugia for native fish, sequesters carbon, and serves as habitat for native fish and wildlife.

Review Team Recommendation to Staff

Fund

Review Team Priority

3 of 4

Review Team Recommended Amount

\$546,530

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$546,530

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3035-23708

Project Type: Restoration_v2

Project Name: Coyote Spencer Wetlands Oak and Prairie
Habitat Restoration Phase II

Applicant: Long Tom WC

Region: Willamette Basin

OWEB Request: \$288,752

County: Lane

Total Cost: \$387,215

Application Description McKenzie River Trust's 230-acre Coyote-Spencer Wetlands property sits at the confluence of Coyote and Spencer creeks in the Long Tom Watershed, providing refugia for numerous native wet and upland prairie- and bottomland oak habitat-dependent species. The property is within an Oregon Conservation Strategy Conservation Opportunity Area, Willamette Valley Synthesis Area, and US Fish and Wildlife Service Priority Conservation Area. Prairie and Oak habitats are among the most fragmented and endangered in Oregon. In 1853, surveyors walking the section lines that cross the property described open prairie on the valley bottom intersected by fringes of riparian woodland bordering Coyote and Spencer Creeks. Since then, the lack of frequent fire and human tending has allowed woody plants to encroach, and agricultural activities on site and nearby have displaced prairie plant species with weedy pasture grasses. Still, the site supports 145 native, herbaceous plant species, including Bradshaw's lomatium, Oregon larkspur, thin-leaved peavine, suncups, and Hitchcock's blue-eyed grass. Phase II of this project proposes to remove encroaching woody species from 55 acres of prairie and oak habitat and reintroduce prescribed fire to the site. LTWC will partner with McKenzie River Trust, U.S. Fish and Wildlife Service, Institute for Applied Ecology, and Department of State Lands to carry out the proposed project.

As a result of the scale of habitat loss and function, the Willamette Valley ecoregion is recognized as globally imperiled. Despite threats posed by high-intensity wildfires, the suppression of prairie plant communities by woody plants and introduced grasses and forbs, and depleted soil conditions, interventions such as those provided by this project will support the gradual adaptation of species and habitats to changing conditions in the Valley. This project promises to maximize resilience of rare and vital ecosystems in the face of climate change.

Review Team Evaluation

Strengths

- The proposed actions for restoring oak and prairie habitats are technically sound and achievable.
- The project site will be utilized for cultural practices, including plant harvest and cultural burning.

- Employing goats to control invasive species could provide an effective demonstration of an alternative technique to using herbicides. It will, however, need continued follow up treatments. Target plant species are likely to rapidly resprout if goats are not brought to the site on a regularly basis.
- The proposed restoration is part of a phased project and builds on a previous OWEB investment that is demonstrating success in achieving desired restored oak and prairie habitat conditions.
- The project site is in the West Eugene Conservation Opportunity Area and includes the confluence of Coyote and Spencer Creeks where restoring oak and prairie habitat is a prioritized action in several watershed plans. The proposed actions will also expand connectivity of these habitats with other restoration projects in the area.
- The project site is protected by a conservation easement that will ensure long-term protection and maintenance of investments in habitat restoration.
- The project provides opportunity for promoting awareness about watershed restoration that could lead to future project opportunities with neighbors.
- The applicant has capacity to implement the proposed restoration actions.
- The budget includes personal protective equipment needed to implement prescribed fire, which addresses a capacity limitation for using fire in habitat restoration.

Concerns

- While the problem statement provides helpful context, it broadly defines historical impacts to the project site. Describing impacts from environmental stressors more specifically at the acres to be treated would be helpful for connecting the habitat limiting factors to be addressed with the site-specific restoration methods.
- It is difficult to understand the expected quantified habitat benefits because the acres to be treated are not consistent through the goal, actions, and habitat map in the application.

- The strategy for the Griffith parcel is less clearly defined in the application compared to the oak and prairie restoration components; the likelihood of success in achieving the expected restored conditions for this parcel is uncertain. Opening the area through the proposed fir tree thinning could create significant challenges from invasive plant species because the soils will be exposed to sunlight for the first time in 30 years. The proposed use of brush piles for habitat structure could be problematic by turning into piles of invasive blackberry that are difficult to control. It is unclear how thinning the fir stand is feasible because equipment access will be limited by the bridge onto the site. Finally, restoration strategies are constrained by restrictions from a legacy Oregon Department of Forestry (ODF) Program with a Forest Resource Trust agreement on the site. There may be merit to first continuing conversations with ODF to consider other programs, such as Firewise, or other solutions to address constraints from the Forest Resource Trust agreement to achieve the greatest ecological habitat benefit for the restoration investment.
- While creating biochar is a novel alternative to pile burning, there are few examples of using this technique on a large scale because most available kilns are too small. Exploring alternatives to burning piles is, however, a preferred technically sound approach. Using a lop and scatter approach may be more effective and economical.
- Costs for project management are unclear without an explanation of how roles and tasks are different for each position. For example, there are two positions with significant overlap in the position descriptions and it is unclear if staff cost may be duplicative for the same tasks.

Concluding Analysis

The proposed oak and prairie habitat restoration actions are a priority for expanding connectivity of these highly imperiled habitats. Focusing an investment on only the oak and prairie acres is likely to result in significant ecological uplift. The likelihood of success for the proposed treatments on the Griffith parcel is uncertain. There may be merit to focusing phase two restoration on the oak and prairie acres and continuing to work with ODF to determine alternatives that can achieve the greatest ecological habitat benefit on the Griffith Parcel in a future project phase.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3036-23710

Project Type: Restoration_v2

Project Name: Recovering System Process in Shotpouch Creek, Phase III

Applicant: Marys River WC

Region: Willamette Basin

OWEB Request: \$259,428

County: Lincoln

Total Cost: \$634,275

Application Description Shotpouch Creek, located in Lincoln County and draining from the west slope of Marys Peak, provides some of the highest quality cutthroat trout habitat in the Marys River basin; steelhead were also observed in Shotpouch Cr in both the 2009 and 2011 Rapid Bio-Assessment surveys. Because of the potential for Marys Peak snowpack to contribute cold water to the system, Shotpouch Cr is one of the key tributaries for addressing the limiting factor of elevated summer stream temperatures.

Extensive restoration actions supporting cutthroat trout, steelhead and Pacific lamprey populations have already been undertaken in Shotpouch Cr to address the limiting factors of channel simplification, floodplain disconnection and elevated stream temperatures. In the previous two phases to restore system processes in Shotpouch Cr, MRWC has built a strong partnership working with numerous agency and funding partners including MMT, OWEB, USFWS, NFWF, NRCS, Lincoln SWCD, ODF, and 15 voluntarily participating private landowners. This strong collaboration will further engage sub-basin landowners as we conduct augmented and new restoration actions on their land in this proposed third phase of restoration.

This third phase of restoration spans multiple properties owned by private landowners, including a Van Eck Forest Foundation site and two newly acquired Shotpouch Foundation parcels. Work includes instream structure placement, re-infusing new wood into existing structures, bank stabilization, floodplain engagement, invasive species removal and riparian planting. This project will also support the active beaver population with large woody debris and low-tech process-based restoration in a perennial tributary to Shotpouch Cr to provide beneficial hydrological conditions, and planted forage and dam construction vegetation.

Project partners include BLM, USFS, Shotpouch Foundation, Van Eck Forest Fnd, & NOAA scientist Chris Jordan who will be assisting with the BDA/PALS install.

Review Team Evaluation

Strengths

- The application has a clearly defined goal and quantifiable actions for restoring stream process in Shotpouch Creek, a tributary in the Marys River Watershed.

- The project is ready for implementation with permits that are either completed or in process.
- The project is prioritized based on a strategic plan. The partners have considered the best areas to restore stream conditions in the Marys River watershed based on rapid bio-assessment data and then determined the sites and approaches to effectively create ecological uplift.
- The proposed actions will address the primary limiting factors for Shotpouch Creek, which are warm water temperature and a lack of floodplain connectivity. The expected restoration outcomes will build resilience to climate change by increasing cold water refugia for fish in a part of the watershed with some of the best cutthroat and steelhead habitat. The project will also improve long term wood recruitment in areas where the riparian zone is currently limited in large wood.
- The project could lead to continued restoration opportunities and leverages previous projects funded by OWEB grants for the Willamette Model Watershed through the Strategic Investment Program. Previous restoration is effectively improving stream function and habitat.
- Alternative restoration approaches were considered for each proposed action and treatments were selected based on consideration of potential impacts to adjacent landowners.
- The applicant has capacity to implement the proposed restoration actions, completed similar projects, and a long history working with landowners and partners in Shotpouch Creek.
- Partner commitment is demonstrated by letters of support and assistance with permit process.
- Landowner support is demonstrated by letters included in the application.

Concerns

- Wood structures will not be buried into the streambanks, instead structures will be anchored and then brush and slash will be used to seal the structures. There is uncertainty for how the design approach will perform long term; however, it appears to be effective in the stream system based on the performance of previously placed structures.
- The application focuses on fish benefits from the proposed restoration, missing opportunity to link the expected habitat benefits for other taxa as a project outcome.
- The GIS mapping costs are unclear in the budget. There are GIS mapping hours under both Salaries and Contracted Services. It is unclear what tasks will be completed and parsed out across these positions because there is no explanation for these costs in the proposed actions or budget narrative. It is also unclear why six GIS licenses are necessary for the two positions assigned GIS tasks and how the licenses are a direct cost necessary for achieving the proposed restoration instead of an indirect cost.

Concluding Analysis

The application clearly describes the need and urgency for the proposed restoration to build and

expand on previous investments in restoring stream process in Shotpouch Creek. Previous project phases have demonstrated momentum in restoring stream habitat. Instream wood structures are now reaching the end of their lifespan. Infusing additional wood to these structures and adding new structures while continuing to restore riparian areas to provide future large wood recruitment will continue progress toward restoring Shotpouch Creek.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 4

Review Team Recommended Amount

\$259,428

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$259,428

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3037-23730

Project Type: Restoration_v2

Project Name: Cornerstone Conservation Holistic Habitat
Regeneration and Community Investment

Applicant: Polk SWCD

Region: Willamette Basin

County: Polk

OWEB Request: \$180,087

Total Cost: \$228,358

Application Description This project furthers the Cornerstone LMP, by implementing major restoration including the enhancement and stabilization of 7ac of riparian area habitat around a 0.55 stream mile tributary of Salt Creek in the Yamhill Watershed. This riparian area is habitat for steelhead & SOC species of amphibian and reptile, areas which need plant diversity increased, especially with Emerald Ash Borer beetle coming to western Oregon. This proposal goes well beyond riparian areas to holistically approach all habitat restoration on this site. Funding will be used to remove an abandoned 7ac fir woodlot. The woodlot removal is the first step in preparing it & the surrounding 26ac for native upland prairie restoration, mirroring the 10ac of successful prairie restoration currently ongoing onsite just south in a partnership with IAE. The combined 30ac will be restored using a similar combination of mechanical and chemical invasive weed control before re-establishing a significant native prairie from grasses & forbs installed by a no-till seed drill. This project will springboard the SWCD's capacity to be a leader in reducing agriculture's impacts to wildlife habitat and invasive species removal within the regional community.

The surrounding north 23ac degraded prairie will be restored as invasive species have begun to compete with the oaks for resources and have become an invasive seed source for the surrounding sensitive prairie acres, especially while establishing new native grass cover. In 2023 IAE and the Polk SWCD installed significant numbers of Willamette Daisy at Cornerstone, with plans for more yet to be installed, this major investment in establishing new populations of listed species needs to be protected in these critical establishment years.

Both standard vegetative & bird surveys will be contracted to monitor effectiveness in addition to requirements for the BPA/ODFW WWMP agreement.

Review Team Evaluation

Strengths

- The proposed habitat goals for the Cornerstone conservation property conceptually target priority ecosystems. Restoring prairie habitat at the project location will build connectivity with nearby locations, such as Baskett Slough National Wildlife Refuge.

- The proposed habitat restoration builds on ten acres of prairie habitat that was previously restored in the project area in partnership with the Institute for Applied Ecology. This area is meeting the targeted ecological outcomes and provides evidence the restoration proposed can also be effective in converting the site to prairie habitat.
- The property was acquired through the Oregon Department of Fish and Wildlife (ODFW) Willamette Wildlife Mitigation Program. As a result, the project site is protected by a conservation easement that will ensure long-term protection and maintenance of investments in habitat restoration.

Concerns

- The application problem statement provides a general description of environmental stressors impacting the project area. Describing impacts from environmental stressors more specifically at the acres to be treated would be helpful for connecting the habitat limiting factors to be addressed with the site-specific restoration methods.
- Restoration goals and actions are conceptual and more generally described; additional detail describing how actions will be implemented is needed to determine whether methods are site appropriate and likely to succeed in achieving the targeted habitat outcomes. For example, the strategy for removing the seven-acre fir lot is unclear. The stand is dense and not marketable, and there are limited options for removing the firs from the site and disposing the material. It is also unclear how thinning is feasible because equipment access will be limited by the bridge onto the site.
- It is unclear whether the applicant has capacity to complete the project or whether partners or contractors with relevant expertise will be engaged in project implementation to fill potential gaps in capacity. Engaging partners to design the project and develop site-specific treatment methodologies could provide technical expertise needed to implement the project.
- Letters of support are confusing because while they are addressed to the OWEB Restoration Grant Program, the content references support for a Private Forest Accord Grant Program application.
- Budget estimates were generated using Natural Resources Conservation general guidance on practices that may not account for additional costs associated with site constraints. The budget may not be sufficient to accomplish the proposed actions and targeted habitat outcomes. Consulting with contractors or other partners with experience implementing similar restoration may be helpful in estimating restoration costs specific to the site.

Concluding Analysis

Native prairie habitat is frequently converted for different land uses in the region and the proposed project provides opportunity to restore this upland habitat type in a priority location. The application lacks details needed to review the project with the evaluation criteria and determine if the project is likely to succeed with a clear scope of work demonstrating the proposed restoration is technically sound and cost effective and the applicant has capacity needed to implement the project.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3038-23627

Project Type: Technical Assistance_v2

Project Name: Mirror Lake Comprehensive Floodplain Reconnection

Applicant: Lower Columbia Estuary Partnership

Region: Willamette Basin

County: Multnomah

OWEB Request: \$204,058

Total Cost: \$511,154

Application Description The Mirror Lake site is a 440-acre tract of Columbia River floodplain located within Rooster Rock State Park in Multnomah County. It provides nearly 20% of accessible floodplain habitat in the lower Columbia River Gorge and supports spawning populations of coho salmon and lamprey. Additionally, salmonids from every major interior portion of the Columbia River basin utilize lower Gorge floodplains (including Mirror Lake) for off-channel rearing during outmigration to the ocean, and Chinook, coho, and chum salmon, as well as steelhead, all utilize the Mirror Lake floodplain. The site is of elevated importance to outmigrating salmonids because it is located immediately downstream of the Columbia River reservoir system, which has limited rearing habitat. Within the project site, habitat conditions are degraded by historic land uses and the construction of Interstate-84, which severed the site's upstream connection to the Columbia River and eliminated flow-through hydrology. Currently, connectivity to the Columbia River is limited to one culvert located at the downstream end of the site that allows for backwater hydrology only. The net effect is muted hydrologic processes, and limited distribution of upriver salmonids rearing at the site (fish sampling indicates they do not utilize the upstream half of the site).

The project team is conducting a formal alternatives analysis. When complete, the team will use this funding request to develop a 60% design plan set (plans, basis of design report, and cost estimate) to (1) reconnect the upstream end of the site to the Columbia River to re-establish flow-through hydrology and improve fish access, (2) reconnect one salmonid-bearing tributary to its floodplain, (3) reclaim the boat basin to provide off-channel wetland/riparian habitat, and (4) remove an abandoned culvert.

Project partners include OR Parks and Recreation Dept., OR Dept. of Transportation, Bonneville Power Administration, and Federal Highways Administration.

Review Team Evaluation

Strengths

- The application describes a clear need for developing a 60% design plan set that will lead to reconnecting a 440-acre floodplain to the Columbia River, restoring an 8-acre wetland-riparian complex, reconnecting Latourell Creek to 18 acres of its floodplain, and removing an abandoned culvert to reconnect a 12-acre wetland within Rooster Rock State Park along the Columbia River.

- The application has a clear goal and quantifiable actions for developing restoration designs.
- The design approach is technically sound and appropriate data will be used to inform the design. The hydrology and fisheries memo included in the application provided helpful context for understanding the selected restoration strategy for the site.
- Design alternatives will be considered as part of the technical assistance project and there are clear feedback loops built into the project for partner input to be solicited and incorporated into final design decisions.
- The project timeline is realistic and appropriate.
- The expertise needed to implement the proposed technical assistance is provided through a diverse set of partners, including Oregon Parks and Recreation Department, Bonneville Power Administration, Oregon Department of Transportation, and Federal Highways Administration. Partner support is demonstrated by letters included in the application.
- The applicant has capacity and relevant experience to implement the project. The project team understands the site and has implemented similar restoration in nearby locations.
- The project will be cost effective for the ecological benefit expected to result from the future restoration project.

Concerns

- Engineering costs are provided as a lump sum in the budget, which lacks details needed to evaluate this cost. The budget narrative, however, provides context describing how costs were determined that indicate the estimate is reasonable based on similar recent engineering projects.

Concluding Analysis

The proposed technical assistance is likely to succeed in leading to restoration that will build on previously implemented watershed projects on and around the Mirror Lake project site. The project is a unique opportunity for the partners to leverage infrastructure funding that has limited availability to restore a large-scale floodplain as close as practical to its historic condition. The resulting project will restore habitat for lower Columbia River Endangered Species Act-listed fish in a priority location.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 7

Review Team Recommended Amount

\$204,058

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$204,058

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3039-23649

Project Type: Technical Assistance_v2

Project Name: Baker Creek Fish Passage Project

Applicant: Greater Yamhill Watershed Council

Region: Willamette Basin

County: Yamhill

OWEB Request: \$243,248

Total Cost: \$243,728

Application Description The purpose of this project is to restore passage to the riparian habitat associated with Baker Creek for anadromous and local fish populations, and other aquatic life. Baker Creek is located northwest of McMinnville, Yamhill County, Oregon.

Fish passage improvements are anticipated to include modifying / removing two existing in-stream structures. This includes an abandoned hydroelectric dam that is a complete barrier to fish passage upstream. This barrier removal has been identified by the Greater Yamhill Watershed Council and ODFW as the top priority for fish passage in the basin.

The project was started with preliminary design work occurring in 2003-2005, but stalled due to lack of funding at the time. This proposal seeks to validate and prepare 30% design level plans needed to move towards the next steps necessary for implementation.

Partners include: Yamhill County, Yamhill County Parks Board, Oregon State University, Oregon State University Extension, Linfield University, Bureau of Land Management, Oregon Department of Fish and Wildlife, Confederated Tribes of the Grand Ronde, Trout Unlimited, Outdoor Education Adventures, Yamhill Soil and Water Conservation District

Review Team Evaluation

Strengths

- The last two fish passage barriers will be addressed on Baker Creek, a sub-basin of the Yamhill River. Removing Juliet Dam has been a long-term goal for the applicant and will open eight miles of habitat that includes 1.5 miles of steelhead spawning habitat.

Concerns

- The application lacks detailed actions and description of how they will be implemented to achieve the project goal, which may indicate the project is not ready to implement without a clear scope of work.
- It is unclear what current information was used to prioritize the proposed project. Project selection is based on a 20-year-old strategic action plan and the proposed project may not address the highest priority limiting factors existing today for the watershed.

- The application indicates the barriers are on the Oregon Department of Fish and Wildlife (ODFW) fish passage priority list. While the barriers may be listed on an ODFW inventory, they are not included in the ODFW fish passage barrier priority list for removal.
- The application indicates permitting requirements have changed over the 20 years since this project was initiated. Including information in the application describing the expected permitting path for the future restoration and how the proposed technical assistance will be used to secure permits would be helpful for understanding how the project will address these changing requirements.
- The pathway for arriving at a design product is unclear because the application lacks information describing the design approach, how partners will be engaged to provide feedback, and how alternatives will be considered.
- The application lacks information describing the roles of the eleven partners listed in the abstract in implementing the project or evidence, such as letters, indicating partner support.
- The Confederated Tribes of Grand Ronde is referenced as a partner; however, it is unclear how the Tribes will be involved and whether there is a commitment to the project from the Tribes without a support letter.
- It is unclear from the application if the county as the landowner supports the project without a letter or some other evidence indicating project approval.
- It is unclear if qualified consultants will be engaged to accomplish the proposed technical assistance actions. An engineering consultant has not been identified for completing 30% designs and the application does not describe the expertise that will be sought to complete the designs.
- Project costs are provided as lumped sums; it is difficult to evaluate whether costs are reasonable and necessary for achieving the 30% design product.
- The application references previous design information that was completed; including previous design products would provide helpful context for understanding the project.

Concluding Analysis

The application lacks details needed to review the project with the evaluation criteria and determine if the project is likely to succeed. The application lacks a clear scope of work demonstrating the proposed technical assistance is technically sound and cost effective and that the applicant has capacity needed to implement the project.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3040-23659

Project Type: Technical Assistance_v2

Project Name: Bilyeu Creek Beginnings

Applicant: South Santiam WC

Region: Willamette Basin

County: Linn

OWEB Request: \$211,286

Total Cost: \$220,719

Application Description This proposal presents Phase 1 of a three-stage restoration strategy for Bilyeu Creek: developing an alternatives analysis. This initial phase is pivotal to set the stage for comprehensive restoration implementation. The council will seek separate funding for Phases 2 and 3, Permitting and Design and Implementation, respectively. The project is located in the Thomas Creek basin in Linn County on privately owned land and involves close collaboration between the South Santiam Watershed Council, a highly regarded environmental engineering firm, and engaged private landowners.

Phase 1 activities are designed to assess and prepare the site for restoration through the development and selection of a preferred alternative. Key tasks include a baseline desktop review to develop a detailed base map including data elements such as site topography, calibrated aerial imagery, and mapped natural resources. This phase also involves evaluating LiDAR data to ensure it meets the project's needs for designing alternatives. Comprehensive field surveys will be conducted to collect data on geomorphic conditions, biological diversity, and cultural resources, crucial for understanding the current state of the creek and surrounding areas. Stream, soil, and bedrock assessments will be completed to evaluate the reach for potential large wood placements. Anticipated habitat improvements would benefit many important fish and wildlife species, including increased spawning and rearing habitat for federally listed Chinook salmon and steelhead.

The successful execution of this phase will provide a robust foundation for restoration action on Bilyeu Creek, ensuring that subsequent phases of the project are based on sound science and detailed, site-specific data. This groundwork will produce a selected preferred alternative that, when implemented, will enhance habitat quality and resilience on Bilyeu Creek, significantly benefiting the Thomas Creek basin, its biodiversity, and the community.

Review Team Evaluation

Strengths

- Bilyeu Creek is a tributary of Thomas Creek in the South Santiam Watershed. Thomas Creek is on the 303(d) list of water quality impaired waterbodies for exceeding water temperature standards and provides critical habitat for Upper Willamette Chinook and steelhead. The expected future restoration project is likely to improve water quality that will benefit Bilyeu and Thomas Creeks.

- Significant landowner support for the project is demonstrated by numerous letters provided with the application.
- There is potential to utilize the project as an example to promote future restoration with other large-scale agricultural landowners in the Thomas Creek watershed.
- The selected engineering firm is qualified to accomplish the proposed technical assistance; however, the project site is considerably smaller compared to the larger scale projects the firm typically completes.

Concerns

- It is unclear from the application why restoring Bilyeu Creek is a priority. Additional information is needed to understand the watershed context, including: (1) how the project area relates to the rest of the watershed by providing details about the habitat quality located up and downstream of the project site; (2) how the project relates to the applicant's restoration strategy by describing how the project was prioritized; and (3) how the applicant plans to build interest in restoration in the project area and continue that momentum to create future project opportunities. Including a map with information describing the broader watershed context and photos of the project site would be helpful to better understand the project need and importance.
- The cultural resources actions described in the application are limited in scope; a desktop survey will provide limited information without also completing a field survey.
- It is unclear if the resulting design will prioritize addressing root causes of watershed disturbance instead of symptoms, and habitat limiting factors over streambank stabilization.
- Costs for the selected engineering consultant are high because the contractor is highly specialized. Details describing why a highly specialized engineering firm is needed to design the project would be helpful to understand how the higher costs are reasonable and necessary for the proposed technical assistance. For example, there does not appear to be any infrastructure or some other site constraint that could be at risk and would need a highly engineered design approach.
- Details describing the expected design product and possible design alternatives would be helpful for better understanding the project cost and potential for it to address priority watershed limiting factors.
- Additional information describing the applicant staff roles and tasks in the work plan and actions would be helpful for understanding staff costs related to implementing the technical assistance project.
- It is unclear how the match identified in the application is related to the project because it appears to be related to restoration implementation instead of accomplishing the goals and objectives of the proposed technical assistance.

Concluding Analysis

The proposed technical assistance has potential to lead to restoration that can be a demonstration site and build trust for collaborative, voluntary watershed restoration in the Thomas Creek community. Additional information is needed to understand how the proposed technical assistance is cost effective and is likely to lead to future restoration that is strategic and addresses priority watershed limiting factors.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3041-23671

Project Type: Technical Assistance_v2

Project Name: Sandy Basin Climate Change Analysis

Applicant: The Freshwater Trust

Region: Willamette Basin

County: Clackamas

OWEB Request: \$159,208

Total Cost: \$176,423

Application Description The Sandy River originates on Mt. Hood and flows 56 miles northwest before entering the Columbia River near Portland, Oregon. Sandy River salmon and steelhead are listed as threatened under the federal Endangered Species Act (ESA). The Sandy River Basin Partners (Partners) are engaged in basin-scale planning and implementation efforts to restore these fish. After 16 years of implementing successful restoration work and collecting habitat and fish response data in the upper Sandy, the Partners are updating their restoration strategy to ensure efforts remain on the right trajectory.

On behalf of the Partners, The Freshwater Trust (TFT) is seeking funding from OWEB to complete a climate change impacts analysis for Sandy salmon and steelhead. With this funding, the Partners will contract with ICF to use climate change temperature and precipitation run-off models to inform changes to attributes that will be input into a Sandy Ecosystem Diagnosis & Treatment (EDT) fish habitat relationship model. The Partners' original restoration strategy was underpinned by the same EDT model but utilized 1990s climate data. The proposed project will model future climate change scenarios (years 2040 and 2080) to identify changes to limiting factors. Project work products will allow the Partners to update their guiding restoration strategy to ensure future work provides suitable habitat for salmon and steelhead under a changing climate.

Primary members of the Sandy River Basin Partners engaged in the proposed project include TFT, US Forest Service (USFS), Bureau of Land Management (BLM), Oregon Department of Fish and Wildlife (ODFW) and City of Portland.

Review Team Evaluation

Strengths

- Previous application evaluation concerns are addressed by describing how information will be shared and citing past work completed by the contractor in nearby watersheds that demonstrates the potential usefulness of using the Ecosystem Diagnosis and Treatment (EDT) model as proposed.

- Conducting an analysis of climate change to understand its impact on fish populations and their habitats to plan restoration addresses limiting factors described in the Endangered Species Act (ESA) Recovery Plan for Lower Columbia River Coho Salmon, Lower Columbia River Chinook Salmon, Columbia River Chum Salmon, and Lower Columbia River Steelhead.
- The application describes a need for assessing restoration strategies to determine if adjustments should be made for climate to protect past habitat project investments, which includes over ten years of grants from OWEB.
- The selected EDT model has been utilized for over 25 years to provide watershed restoration prioritization and planning information and will be used to complete a limiting factors analysis at both stream reach and Sandy River Basin scales.
- The EDT model will use habitat information along with predicted future stream flow and temperature. The product could facilitate building new strategic restoration plans for early action that mitigate for expected climate change impacts to stream conditions.
- The applicant and partners have capacity and experience in effectively collaborating at the proposed scope and scale of the project. The applicant has used the proposed EDT model for the Sandy River watershed in the past.
- A contractor with relevant qualifications in climate change analysis is selected to implement the EDT model.
- Project costs align with the proposed technical assistance actions and specialized expertise needed to complete the EDT model.

Concerns

- The proposed EDT product is single-species focused, targeting only ESA-listed salmon and steelhead, which could miss opportunities for planning habitat restoration for the next ten or more years that also benefits other aquatic species.
- The application summarizes examples of data that will be used and generally describes how the EDT database of reach-level habitat attributes was created using baseline and post-restoration treatment stream survey monitoring data collected by the project partners. Including a more complete list of metrics and data that will be used would be helpful to better understand the EDT model.

- While the EDT approach is likely to provide useful information, it is unclear whether incorporating the climate change scenarios will have different results compared to past EDT modeling that was used to inform restoration in the Sandy Basin. It may not provide information that clearly indicates the current on-the-ground restoration techniques and strategies need to change. It is also difficult to envision how the model results will be translated to types of restoration actions and how projects will be prioritized that is different from what is already occurring in the Sandy Basin. An example of how using the EDT model under different climate change scenarios may lead to different restoration approaches would provide helpful context for understanding the proposed technical assistance.

Concluding Analysis

Significant investment has been made to implement the Sandy River Basin Aquatic Habitat Restoration Strategy. Monitoring has shown statistically significant increases in the production of coho and steelhead smolts and spawning spring and fall Chinook adults since implementation of that strategy. Assessing possible impacts of climate change on the abundance, productivity, capacity, and life history diversity of ESA-listed salmon and steelhead populations in the Sandy to update restoration strategies may be needed to maintain these previous gains.

Review Team Recommendation to Staff

Fund

Review Team Priority

4 of 7

Review Team Recommended Amount

\$159,208

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

N/A

Open Solicitation Technical Assistance-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3042-23675

Project Type: Technical Assistance_v2

Project Name: North Santiam Post-Fire Watershed
Resource Assessment & Prioritization Guide

Applicant: North Santiam WC

Region: Willamette Basin

County: Marion

OWEB Request: \$110,286

Total Cost: \$115,286

Application Description With almost 50% of the North Santiam Watershed (NSW) impacted by the 2020 Labor Day fires, significant post fire salvage logging impacts, increased frequency of droughts and heat dome events and now with the imminent impact of invasives such as the Emerald Ash Borer, the North Santiam Watershed Council (NSWC) recognizes the watersheds ecosystems have changed dramatically in areas of the NSW with recent events, and will continue to be altered in others as the unknown impacts of climate change emerge.

The NSWC and its local and regional partners need to better understand the “state of the watershed,” specifically in the fire impacted areas. To be effective at restoration implementation the NSWC needs to re-evaluate the new suite of limiting factors and prioritize actions to protect, restore and mitigate future threats.

With assistance from River Design Group (RDG) the NSWC, will work with the U.S. Geological Survey Integrated Water Science (USGS-IWS) Program, U.S Army Corps of Engineers (USACE) and the U.S. Forest Service PNW Research to synthesis post fire data and conduct field surveys and modeling to help identify the watersheds new limiting factors identified in the Recovery Plan and state plans, and prioritized areas to focus restoration efforts and outreach. This project focus area will be the Little North Santiam and the Breitenbush River subbasins, both containing Upper Willamette ESA listed Winter Steelhead and Spring Chinook.

Using the information from the U.S Forest Service (USFS) BAER reports and the Beachie Creek Fire – Erosion Threat Assessment/Reduction Team (ETART) Summary Report (FEMA 2020), the NSWC wants to understand what the new baseline conditions are in the fire impacted subbasins. This will allow strategic planning of actionable, long-term restoration guidance in the Breitenbush and Little North Santiam subbasins. The NSWC will work closely with the Partners of the North Santiam, USFS, BLM and local partners throughout the project.

Review Team Evaluation

Strengths

- Previous application evaluation concerns are addressed by clarifying the project goal, describing how existing data will be used, identifying new data that will be collected, explaining plans for site visits, describing how data will be assembled, and outlining a path forward to identifying restoration projects.

- There is a clear need to better understand the new “state of the watershed” in fire impacted areas of the North Santiam Watershed. Investing time in collecting and synthesizing data is a necessary first step before engaging landowners and partners in planning restoration that effectively targets priority limiting factors that may be different compared to before the catastrophic fires.
- The project scale is feasible, and the resource assessment and planning methods are appropriate.
- The proposed technical assistance is timely given the focus of natural resource agencies on addressing the impacts from recent fires. The project provides an opportunity to use momentum from fire response efforts to address watershed impacts, such as erosion and reduced shade.
- The applicant has the capacity to implement the project, and the selected contractor has relevant expertise that will expand this capacity.
- The project builds on complementary work in the watersheds, including: USFS Breitenbush River Stage 0 Floodplain Restoration, Marion County Parks implementing restoration in parks impacted by the 2020 wildfires, and Confederated Tribes of the Warm Springs (CTWS) work in areas impacted by the Lionshead Fire.
- Partner support is demonstrated by letters from US Forest Service, Oregon Department of Fish and Wildlife, Confederated Tribes of Grand Ronde, CTWS, City of Salem, Marion County, South Santiam Watershed Council, and Marion Soil and Water Conservation District.

Concerns

- There is a large amount of data collected for the watershed by a diversity of entities; compiling and synthesizing it could be challenging.
- Additional information describing the products expected from the technical assistance would be helpful for better understanding the types of restoration that could result and how it will be prioritized. Since restoration planning to address catastrophic fire impacts to watershed health is a new role for watershed councils, there is not an existing planning template to work from. It may be the proposed technical assistance will, through collaboration, define the products needed by partners to pursue recovery actions.
- More detail describing how landowners and partners will be engaged and how their participation will inform technical assistance actions would be helpful to better understand their involvement and the path to future restoration.

Concluding Analysis

The Breitenbush and Little North Santiam subwatersheds were severely impacted by the 2020 wildfires that damaged soils, vegetation, and ecosystem processes, which degraded fish and wildlife habitat and water quality. Strategic planning to understand the new baseline conditions and prioritize efforts is needed to collaboratively initiate projects that restore watershed conditions that will benefit Endangered

Species Act-listed fish and improve water quality. The proposed technical assistance could serve as a demonstration for how a watershed council can learn how to shift its role in a community in response to an emergency, such as fire, and use its strengths in watershed planning and project implementation to support recovery while rebuilding watershed health.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 7

Review Team Recommended Amount

\$110,286

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$110,286

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3043-23684

Project Type: Technical Assistance_v2

Project Name: Finalizing Floodplain Restoration Designs & Permitting for Elijah Bristow State Park - Phase 3

Applicant: Middle Fork Willamette WC

Region: Willamette Basin

County: Lane

OWEB Request: \$94,382

Total Cost: \$163,914

Application Description The Middle Fork Willamette Watershed Council (MFWWC) seeks Technical Assistance to plan for process-based floodplain restoration on the Middle Fork Willamette River and Lost Creek within Elijah Bristow State Park (Project). Located below Dexter Dam between the Lane County towns of Jasper and Lowell, the historically dynamic floodplain is in a stagnant and degraded condition due to anthropogenic impacts and lack of natural disturbance. Through a feasibility analysis advised by a Technical Team of collaborating agencies (Oregon Parks and Recreation Department (OPRD), Oregon Department of Fish and Wildlife (ODFW), US Army corps of Engineers (USACE), Confederated Tribes of Grand Ronde (CTGR), and US Forest Service (USFS)), Stage-0 informed floodplain restoration was the selected approach. Previous archaeological surveys performed in for the Project identified cultural resources, and both OPRD Archaeologist, Nancy Nelson and the contracted Chronicle Heritage team recommended further survey. Additionally, there is a Section 408 nexus associated with this project that is currently being pursued by the MFWWC with expertise support from Wolf Water Resources (W2r).

This Technical Assistance proposal is to conduct the recommended archaeological survey to protect cultural resources and inform restoration designs, while continuing coordination with W2r to submit a Section 408 Alteration Determination Application to the USACE.

Review Team Evaluation

Strengths

- The application describes a clear need for completing archaeological surveys to protect cultural resources and inform restoration designs for the Elijah Bristow floodplain restoration project.
- The project builds on a phased planning approach that included modeling, alternative analysis, community engagement, and design phases broken into the upper and lower zones of the Elijah Bristow State Park.
- The resulting restoration project will address habitat limiting factors from the Upper Willamette River Conservation and Recovery Plan for Chinook Salmon and Steelhead by restoring river and floodplain processes that will create diverse habitats for all salmonid life stages, including instream pool and off-channel habitats.

- A professionally accepted approach will be used for a cultural resources survey to inform restoration designs. Initial surveys have already identified areas with a high probability for cultural resources and were used to inform the scope of the proposed technical assistance.
- Partner support is demonstrated by match.
- Project costs align with the proposed actions and were informed by an estimate provided by the contractor.
- The applicant has the capacity to accomplish the proposed technical assistance actions.

Concerns

- The applicant has two previously awarded technical assistance grants totaling \$150,000 and it is unclear what progress was made with these previous grant awards. Additional information describing what was achieved from those grants would provide helpful context to understand the status of this large-scale project and need for the current technical assistance.
- Implementing a Stage 0-informed restoration approach below a flood control dam may have uncertain results due to the influence of the dam on stream flows and the supply of large wood; however, there is still significant potential for restoring floodplain conditions.
- The feasibility of the future restoration project is dependent on the Army Corps of Engineer's Section 408 process. Including details in the application describing progress in this process would be helpful to determine timeliness of the proposed technical assistance in leading to future restoration.

Concluding Analysis

Utilizing a process-based restoration approach at Elijah Bristow State Park will restore a portion of the Middle Fork Willamette River back to a dynamic, braided multi-channel meandering river through a cottonwood gallery floodplain forest. This will provide habitat benefits for key indicator species such as Oregon chub, western pond turtle, spring Chinook salmon, and beaver. The site is publicly visible and provides opportunity to serve as an example of process-based floodplain restoration strategies for areas between headwaters and downstream zones. The applicant has taken a deliberate, intentional design approach because this large-scale project is complex with infrastructure constraints and a diversity of audiences engaged at Elijah Bristow State Park. The proposed project continues technical assistance to complete permitting and design processes necessary for future restoration implementation.

Review Team Recommendation to Staff

Fund

Review Team Priority

5 of 7

Review Team Recommended Amount

\$94,382

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

N/A

Open Solicitation Technical Assistance-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3044-23685

Project Type: Technical Assistance_v2

Project Name: Treating the Harmful Cyanobacterial Bloom at Ross Island Lagoon

Applicant: Human Access Project

Region: Willamette Basin

County: Multnomah

OWEB Request: \$133,445

Total Cost: \$618,155

Application Description A Harmful Cyanobacterial Bloom (HCB) in Ross Island Lagoon (RIL) on the Willamette River near Portland, OR threatens environmental and human health.

Manipulation of the lagoon over the last century has contributed to the HCB, which has been occurring with increasing frequency and intensity, and has led to the recent ODEQ listing of the lagoon as impaired for cyanobacteria.

Since 2017, Human Access Project has partnered with Oregon State University to 1) lead analysis and design, and 2) support a very diverse and engaged group of stakeholders, towards identifying a feasible and effective solution for suppressing the HCB.

Through this process, constructing a flushing channel has emerged as the most promising and most sustainable long-term solution, but also involves the most complex modeling and design. The channel would be located on the upstream end of the lagoon to reintroduce flow to the lagoon, suppressing cyanobacteria growth by introducing cooler, more turbulent water.

This technical assistance request would support developing the technical design and cost details for the flushing channel. Tasks to be funded under this technical assistance award involve:

- 1) experimenting with channel dimensions and locations within and existing hydrodynamic/water quality model,
- 2) estimating the effect of channel configurations on measures of algal activity,
- 3) engineer's cost estimate, and development of a monitoring and evaluation plan, and
- 4) support significant coordination with other scientists and management agencies and public outreach.

Key project partners include property owners Ross Island Sand and Gravel and Portland Parks and Recreation (property owners), and Department of State Lands , Portland Bureau of Environmental Services, Multnomah County, Confederated Tribes of Grand Ronde, Columbia River Inner Tribal Fish Commission, Department of Environmental Quality, PHCAG, USGS, ODFW, OSMB, USACE, OMSI, and Offices of US Senator Merkley & Wyden.

Review Team Evaluation

Strengths

- The application describes a clear water quality concern that needs to be addressed. Data was collected that demonstrates Harmful Cyanobacterial Blooms (HCB) are affecting water quality at Ross Island Lagoon, and a solution that reduces or prevents future HCBs will address a priority identified in the 303(d) list of water quality impaired waterbodies.
- Some of the previous application evaluation concerns are addressed by clarifying the budget line items and providing additional information describing why the flushing channel design is the preferred alternative.
- The proposed hydrodynamic-water quality modeling is a technically sound, professionally accepted approach.
- The project site is a highly visible location in a public area; any future project is likely to raise awareness about water quality.
- Potential alternatives were considered for addressing the HCBs.
- The applicant and technical partner are qualified to complete the proposed technical assistance. The partnership blends the appropriate technical expertise with community engagement experience that will result in the capacity necessary to implement the project.
- Partner support is demonstrated by letters included in the application.

Concerns

- While the application describes engineered design alternatives that were considered, it remains unclear why a stream process-based, flow-through channel that allows the river to run through the Ross Island lagoon year-round is not under consideration. The river channel at the project site is highly degraded and the preferred flushing channel design approach will lock the river in this limited state into the future. While the flushing channel will likely improve summer water quality in Ross Island Lagoon through an engineered solution, it will not address the limiting factors that are driving the watershed problem. Ross Island was once two separate islands and the Willamette River flowed freely in-between the islands. When the US Army Corps of Engineers constructed an embankment to connect the two islands to facilitate gravel extraction, the river function and flow was blocked and resulted in the lagoon that exists today. Maintaining the lagoon instead of restoring the river channel that once flowed between the two islands limits the potential ecological uplift of the future restoration project. It is unclear how the preferred flushing channel design solution will lead to a project that will protect or restore natural watershed functions to improve water quality or stream flows.

- It is unclear how the preferred flushing channel design approach will increase aquatic habitat for fish or other native species. Rearing and refuge habitat is a priority for migrating Endangered Species Act-listed fish in the lower Willamette River. Currently the availability of this habitat is highly limited and there may be opportunity to increase it through this project. While the flushing channel may provide fish habitat benefits during the spring and early summer, it will be limited because fish will avoid the lagoon once water temperatures are too warm. Expanding winter access to habitat allows for an outcome where fish can use the site for rearing during an appropriate season with safe water temperatures. This winter fish access will be limited if the gated flushing channel is only open in the summer to prevent algal blooms and closed in the winter to reduce erosion risk and prevent potential for the lagoon to capture the mainstem river.
- There are five Confined Aquatic Disposal (CAD) cells of contaminated and capped sediment at the project site. The flushing channel was selected as the preferred design alternative to avoid potential impacts to these cells that contain contaminants. It is unclear from the application whether it could be feasible to remove the cells so that a process-based flow through channel could be a workable design approach, which would restore natural watershed functions to improve water quality and provide fish habitat when it is most needed. The cost of any future restoration project will be high; it would be helpful to include a cost estimate for an alternative that includes consideration of removing the CAD cells and restoring the stream channel connection compared with the flushing channel option.
- It is uncertain whether the proposed technical assistance can lead to timely restoration due to regulatory actions by Department of State Lands and a lawsuit against Oregon Department of Environmental Quality related to a 401 certification associated with the Ross Island Lagoon. The application lacks information describing how these processes could impact project planning and implementation.

Concluding Analysis

HCBs in Ross Island Lagoon are impacting water quality and human health. The proposed project will integrate a high level of community engagement with a focus on collaboration to address an issue affecting watershed health and community access to the river. The design approach is likely to address the summer HCBs. The preferred flushing channel, however, misses an opportunity to consider alternatives that are more likely to lead to restoring natural watershed functions to improve water quality or stream flows as described in the statutory purpose for OWEB's Watershed Conservation Grant Fund.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3045-23699

Project Type: Technical Assistance_v2

Project Name: Chalamali Ecocultural Management Plan

Applicant: Long Tom WC

Region: Willamette Basin

County: Lane

OWEB Request: \$80,024

Total Cost: \$163,711

Application Description Chalamali is a 293-acre, privately owned property in Lane County, with a 151-acre conservation zone comprising mixed oak woodlands, oak savanna, prairie, and a 142-acre forestry management zone. Legacy trees, greater than 200 years old, dot the property including incense cedar, ponderosa pine, and white and black oaks. Prairie acres and meadow openings in woodlands support native herbaceous species.

Long Tom Watershed Council recently completed oak release activities across 78 acres; work that was outlined in a 2017 land management plan (LMP) which is now out of date. There are 73 additional acres of prairie and mixed oak woodland habitats that are in need of surveying and management planning. We need to bring together Chalamali stewardship partners to create a new LMP to outline the next phases of management, including both short & long term, sustainable strategies to enhance and maintain these fire-adapted, cultural prairie and oak ecosystems.

The new LMP will include plans to manage tree and shrub encroachment in oak woodlands and prairies, promote the establishment of native species, and manage introduced plant species. Unlike the recent LMP, it will include a comprehensive prescribed fire plan for the conservation zone, and climate change impacts and adaptation strategies. Subject experts from Indigenous and Western management backgrounds will inform the LMP, which will have Indigenous ecocultural restoration principles and goals integrated throughout. The landowners have expressed their commitment to Indigenous-led management at Chalamali, made possible through years of hosting the Traditional Ecological Inquiry Program (TEIP).

The updated LMP will include technical expertise of cultural and prescribed fire partners, Indigenous practitioners, and other local stewardship partners. We are requesting support for staff time for research, surveying, mapping, holding subject expert meetings on site, subject expert contributions, and plan writing.

Review Team Evaluation

Strengths

- Previous application evaluation concerns are addressed by describing a clear need for updating the management plan for the project site, clarifying roles of staff and partners involved in the project, and explaining the purpose of the honoraria cost and who will receive these funds.
- The application has clear goals and actions for weaving together western and Indigenous knowledge to update a land management plan for a 293-acre, privately owned property in Lane County.
- The project site is in an area that is a priority for oak habitat and the site is protected by a conservation easement.
- The project builds on previous habitat investments by OWEB and Bonneville Power Administration.
- The focus on returning fire to the landscape will significantly benefit oak and prairie habitats. Excluding herbicide use to protect areas for gathering plants for food or basketry will also benefit habitats by contributing to maintaining plant communities while also providing a safe source of plant materials.
- Appropriate partners are engaged in the project that will bring relevant expertise.
- Project costs align with the proposed actions and the budget line items include detailed descriptions.
- Project support, including the landowner's commitment to the project, is demonstrated by letters included in the application.

Concerns

- The application includes references to Confederated Tribes of Grand Ronde and Confederated Tribes of Siletz Indians; however, the extent to which the Tribes are involved and support the project is unclear.

Concluding Analysis

The thoughtful process described for the Chalamali Ecocultural Management Plan project has potential to become a model for collaboration. An Indigenous-led planning and stewardship approach to manage for gathering plant materials is culturally appropriate and can be beneficial for habitat. The concept of reciprocity with the landscape is an effective technique for maintaining oak and prairie habitat. There is a likelihood of success the technical assistance will develop a reasonable and useful management plan for the property that will result in restoration outcomes.

Review Team Recommendation to Staff

Fund

Review Team Priority

6 of 7

Review Team Recommended Amount

\$80,024

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

N/A

Open Solicitation Technical Assistance-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3046-23711

Project Type: Technical Assistance_v2

Project Name: Salem Fish Passage Prioritization Study:
Collaborate-Assess-Prioritize-Implement

Applicant: City of Salem Public Works

Region: Willamette Basin

County: Marion

OWEB Request: \$127,338

Total Cost: \$211,063

Application Description 1) The Project is located in the Willamette River basin at Salem, Oregon (see Figure 1) and includes studies in three sub basins: Glenn-Gibson, Mill Creek and Pringle Creek (see Figure 2).

2) The City of Salem needs a science-based study to prioritize opportunities for habitat restoration through removal of fish passage barriers. This project will result in future restoration and acquisition projects by providing input on priorities and leverage funds within the City's Capital Improvement Plan (CIP).

3) Through COLLABORATION with partners and stakeholders, this project will ASSESS and document the current status of fish passage in three focal watersheds (or basins), identifying barriers that prevent continual access to suitable habitat by native migratory fish, and result in a PRIORITIZATION plan that articulates a strategic approach for the repair/removal of fish passage barriers across these areas. This study will result in the IMPLEMENTATION of future capital improvements in Salem, such as culvert and bridge replacements, flood control mitigation, stream and riparian restoration, and utility crossings.

4) Partners include the North Santiam Watershed Council, Glenn-Gibson Watershed Council, the Confederated Tribes of the Grand Ronde, the Confederated Tribes of the Siletz Indians, Oregon Department of Fish and Wildlife and various Departments within the City of Salem including Natural Resources Planning, Engineering, GIS, and Stormwater Services Departments.

Review Team Evaluation

Strengths

- The application describes a clear need to assess migratory fish habitat conditions and barriers to develop a prioritized barrier removal plan for the City of Salem. The current plan is over 20 years old, and the new prioritized list of projects will be used to inform the City's Capital Improvement Plan (CIP) investments.
- The process by which data will be managed and shared across the project partner working group is technically sound.

- Professionally accepted methods and parameters will be utilized in the assessment, such as Oregon Department of Fish and Wildlife metrics.
- Partner support and commitment to the project are demonstrated with letters included in the application. The collection of partners that includes North Santiam Watershed Council, Glenn-Gibson Watershed Council, the Confederated Tribes of the Grand Ronde, the Confederated Tribes of the Siletz Indians, and Oregon Department of Fish and Wildlife will provide relevant expertise and increase the likelihood the project will lead to future restoration.
- The consultants and the City of Salem have the necessary capacity to accomplish the project actions.

Concerns

- Addressing fish passage may not be the highest priority limiting factor in the identified watersheds because many of the priority sites limiting fish access to the highest value habitat have already been addressed. The remaining barriers will result in limited ecological uplift for the investment in addressing fish passage. There is still habitat benefit to restoring watershed function that facilitates moving fluvial materials. Fluvial connectivity is important to watershed health and the degree to which addressing the remaining passage barriers restores this connectivity could increase ecological benefit of future restoration.
- It is unclear if additional assessment is needed to better understand locations that are blocking fish passage because this information may already exist from previous assessments. If the updated data along with the collaborative prioritization process leads to more strategic investment in the City's CIP, the technical assistance is still likely to succeed in leading to cost effective restoration.

Concluding Analysis

While future fish passage projects may have limited benefit to migratory fish, connecting aquatic habitats and restoring fluvial process in an urban area could result in ecological uplift. The technical assistance is likely to succeed in leading to future restoration by informing the City's implementation of the CIP for it to target watershed and habitat enhancement with a focus on climate adaptation and resilience.

Review Team Recommendation to Staff

Fund

Review Team Priority

7 of 7

Review Team Recommended Amount

\$127,338

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

N/A

Open Solicitation Technical Assistance-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3047-23736

Project Type: Technical Assistance_v2

Project Name: Rapid Bioassessment of Tryon Creek watershed

Applicant: Tryon Creek Watershed Council

Region: Willamette Basin

County: Multnomah

OWEB Request: \$102,749

Total Cost: \$110,834

Application Description Tryon Creek Watershed Council (TCWC) proposes to develop a Rapid Bioassessment (RBA) for the Tryon Creek watershed.

Tryon Creek flows through Southwest Portland and Lake Oswego before joining the Willamette River in Clackamas County, where it provides off-channel refuge and temporary rearing habitat for migrating salmon. A uniquely healthy urban stream that is 12 degrees colder than the Willamette River in the summertime, Tryon Creek supports a coastal cutthroat trout population as healthy as those in an undisturbed rural area, yet still is subject to various environmental stressors.

There is no planning document at the watershed scale. A science-based prioritization of restoration actions is needed as a multimillion dollar fish passage restoration project underway will allow salmon and other migratory species to access this habitat for the first time in nearly a century.

The watershed spans a variety of jurisdictions, property ownership, and land use types, and TCWC is able to work across these boundaries by focusing on the full watershed's health and in-stream habitat quality. This specific scale and perspective was identified by partners as a unique strength and positions TCWC as the most appropriate organization to pursue this project.

TCWC proposes to work with Watershed Action Committee input, to produce an RFP to hire and manage a consultant to produce the RBA.

It will provide comprehensive indications of cumulative impacts of multiple stressors and inform which issues and geographic areas, when addressed, will provide the most ecological uplift and promote long-term high quality native fish habitat. It will prioritize restoration actions to pursue, address data gaps and inform TCWC's first Watershed Action Plan.

Project partners include West Multnomah & Clackamas Soil & Water Conservation Districts, state & local agencies (Oregon Parks & Recreation Department, Cities of Lake Oswego & Portland), and nonprofits (Friends of Tryon Creek, others).

Review Team Evaluation

Strengths

- The application describes a clear need for the proposed Rapid Bioassessment in Tryon Creek watershed to develop prioritized specific restoration actions.
- Tryon Creek is designated as critical habitat for Endangered Species Act-listed coho, Chinook, and steelhead. The Highway 43 culvert located in the lower Tryon Creek inhibits access for coho and Chinook salmon and Pacific lamprey into the Tryon Creek watershed. The Highway 43 culvert is scheduled to be replaced through the Water Resources Development Act. The proposed assessment will be used to prioritize restoration strategies following the culvert replacement. Since there is no comprehensive assessment or planning document at the watershed scale, it is timely to develop restoration plans for after the fish passage is addressed.
- The project approach is technically sound for better understanding environmental stressors in Tryon Creek, including erosion risks, water temperature, and urban development, to prioritize restoration that leverages the investment in the Highway 43 culvert replacement.
- The application indicates the applicant has clear understanding of strategic planning and what is needed to achieve the proposed planning actions.
- Appropriate partners are engaged in the project, including Friends of Tryon Creek, West Multnomah and Clackamas Soil and Water Conservation Districts, Oregon Parks and Recreation Department, and Cities of Lake Oswego and Portland.
- Project costs are appropriate for the Rapid Bioassessment.

Concerns

- The planning process will have limited cost-benefit if the culvert at Highway 43 is not replaced as planned.

Concluding Analysis

The proposed technical assistance is timely to proactively establish a restoration strategy for Tryon Creek that can leverage momentum from replacing the Highway 43 culvert and build habitat connectivity across the watershed.

Review Team Recommendation to Staff

Fund

Review Team Priority

3 of 7

Review Team Recommended Amount

\$102,749

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$102,749

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3048-23740

Project Type: Technical Assistance_v2

Project Name: Banks Creek Culvert Replacement

Applicant: Banks School District #13

Region: Willamette Basin

County: Washington

OWEB Request: \$116,250

Total Cost: \$166,625

Application Description Banks Creek is a tributary of West Fork Dairy Creek, a tributary of the Tualatin River, located in rural Washington County, Oregon. Banks Creek currently crosses underneath the Banks Highschool Track and Field in a 400' long 48" Corrugated Metal Culvert. This culvert does not meet current fish passage requirements, and needs to be upsized and redesigned to allow for full passage of Native adult and juvenile Coastal Cutthroat Trout (resident and fluvial).

Project designs will be produced by a qualified contractor to maximize the habitat throughout this reach, while removing artificial obstructions to salmonid and other aquatic organism passage.

Project Partners include the Tualatin Soil and Water Conservation District and Oregon Department of Fish and Wildlife.

Review Team Evaluation

Strengths

- The project addresses a fish passage barrier on Banks Creek, located in the Tualatin River watershed.

Concerns

- The technical assistance need is unclear because the problem statement in the application does not describe the watershed concern that will be addressed specifically at the project site and why technical assistance is needed to move towards a specific restoration project. For example, watershed context information, such as stream habitat quality, fish population use in Banks Creek, and impacts of the current culvert on fish and stream conditions, is needed to understand how the project will address priority habitat limiting factors.
- The application lacks detailed actions and description of how they will be implemented to achieve the project goal, which may indicate the project is not ready to implement without a clear scope of work.
- The pathway for arriving at a design product is unclear because the application lacks information describing the design approach, data that will be collected, how community members will be engaged to provide feedback, and how alternatives will be considered.

- Improving fish passage at the project site will have limited ecological benefit because there are other significant barriers located upstream and downstream of the site.
- It is unclear whether the applicant has the capacity to implement the proposed project. The Tualatin Soil and Water Conservation District and Oregon Department of Fish and Wildlife are listed as partners; however, there are no letters in the application indicating support for the project. Commitment by partners with relevant watershed restoration expertise to provide capacity for the project will be critical to successful implementation.
- The application budget contains only one line item that lumps all the costs for the final engineering plans together, which lacks details needed to evaluate this cost. The budget narrative indicates costs were developed using the scope and fee estimates provided by an engineering consultant; including this information in the application could be helpful for understanding project costs.

Concluding Analysis

The application lacks details needed to review the project with the evaluation criteria and determine if the project is likely to succeed with a clear scope of work demonstrating the proposed technical assistance is technically sound and cost effective and the applicant has capacity needed to implement the project.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Monitoring-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3049-23631

Project Type: Monitoring_v2

Project Name: Effectiveness Monitoring of Prairie and Oak Woodland Restoration in the West Eugene Wetlands

Applicant: Institute for Applied Ecology

Region: Willamette Basin

County: Lane

OWEB Request: \$84,483

Total Cost: \$109,258

Application Description In 2023, the Oregon Department of Agriculture added 13 species to the state's list of threatened and endangered plants and are currently evaluating candidate species for listing in 2024. Of the species added in 2023, three are present on Bureau of Land Management (BLM)-administered lands in the West Eugene Wetlands (WEW) in Lane County, Oregon. Additionally, three more species that are candidates for future listing are also present in the WEW, as are four other species listed prior to 2023. Under a separate and complimentary OWEB proposal, the Institute for Applied Ecology proposes to work at five WEW sites across 124 acres to restore habitat and augment or introduce several of these state-listed and candidate species. The goal of this complimentary effectiveness monitoring proposal is to assess the efficacy of those restoration actions by comparing habitat conditions and the abundance of target species following restoration to baseline (pre-treatment) conditions. We will utilize standardized protocols for assessing habitat quality, rare plant populations, and spatial habitat mapping. We have successfully implemented these protocols on previous OWEB effectiveness monitoring projects as well as federally-funded projects to assess the recovery of threatened and endangered plants. Pre-treatment monitoring will be conducted in 2024 and 2025 and post-treatment monitoring in 2027 and 2028. A vast network of partners working in the WEW will contribute to and benefit from this project including the BLM, Army Corps of Engineers, U.S. Fish and Wildlife Service, City of Eugene, Long Tom Watershed Council, NRCS Plant Materials Center, and the Institute for Applied Ecology.

Review Team Evaluation

Strengths

- The applicant proposes to monitor for parameters in alignment with guidelines established in recovery plans for the threatened native plant species.
- This project complements and builds off existing data collected by the Bureau of Land Management (BLM).
- This project will follow professionally accepted monitoring protocols to collect the field data which includes several steps to control and assure the quality of the data from the field to the office so it can be analyzed.

- The applicant will store the resulting data in the threatened and endangered database that was developed in coordination with US Fish and Wildlife Service (USFWS).
- The applicant will produce a final report to share it with BLM and OWEB and make it available on their website, in the Cascadia Prairie-Oak Partnership technical library and ResearchGate.
- The applicant specializes in this type of monitoring and have a successful track record of completing similar monitoring projects in the Willamette Valley.

Concerns

- It is not clear how the different restoration actions (herbicide use, prescribed fire, manual removal, mowing, plug planting and seeding) will be incorporated into the analysis of the data to know what action is most effective at restoring the different plant species and habitat.
- The application doesn't adequately describe how the study design, monitoring methods and data analysis will assess the effectiveness of established vegetation from seed or plug.
- The timeline for the related restoration project is unclear. Additional information describing progress in the restoration design and implementation would be helpful to understand the timeliness and urgency for the proposed monitoring to align with that project.

Concluding Analysis

There is value in learning how effective different restoration actions are at restoring plant species and habitat in the Willamette Valley. The application didn't adequately describe how the applicant would be able to track the different restoration actions and incorporate them into the interpretation of the monitoring results. More information is needed to understand how the study design will incorporate the restoration actions to ensure each approach is monitored and there is a way to link the data analysis to describe the outcomes from each restoration action. Ensuring the restoration actions are fully developed and funded before pursuing funds for monitoring will increase this monitoring project's likelihood for success.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Monitoring-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3050-23664

Project Type: Monitoring_v2

Project Name: To a Decade and Beyond - Expanding Stream and Species Monitoring to Guide Luckiamute Restoration

Applicant: Luckiamute WC

Region: Willamette Basin

County: Polk

OWEB Request: \$125,737

Total Cost: \$165,159

Application Description The Luckiamute Watershed Council (LWC) proposes to build on our previous stream monitoring work to collect continuous temperature data and environmental DNA from surface waters in the Luckiamute watershed during the summer months of 2025 and 2026. This data collection will continue to inform restoration project development in the watershed. Monitoring in the summers of 2025 and 2026 will expand the dataset to 10 years of continuous monitoring in the longest running sites. Temperature monitoring sites were chosen because they are located within current restoration project areas, key tributaries in the watershed, or potential future restoration locations. eDNA sampling locations were chosen to explore the distribution of target species throughout the watershed. This project will install 24 temperature stations and collect approximately 30 eDNA samples for 2 summers in the Luckiamute watershed in Polk and Benton counties. Work will include field deployment, midseason checks, retrieval of loggers, pre- and post-sampling accuracy checks, as well as eDNA metabarcoding. The LWC will continue to implement quality assurance measures to ensure high-quality data that meets A-level standards. The LWC will continue to develop our partnerships with technical experts to conduct analysis of the full dataset to inform our restoration projects selection, locations, design, and development. The LWC makes the stream temperature data public through Oregon DEQ and our data visualization website created with earlier OWEB funding. We will make the eDNA results public through the US Forest Service eDNAtlas. Our project partners include a variety of stakeholders including local field and technical volunteers, private landowners, Bonneville Environmental Foundation, Oregon Department of Fish and Wildlife, and the Bureau of Land Management.

Review Team Evaluation

Strengths

- The applicant proposes to collect water temperature data that will contribute towards the Upper Willamette River Conservation and Recovery Plan for Chinook Salmon and Steelhead.
- The water temperature data can be used by Oregon Department of Environmental Quality (DEQ) to better understand the water quality conditions in the Luckiamute River watershed and in listing and delisting decisions.

- The applicant has designed this monitoring project to understand the presence and absence of aquatic species and water temperature conditions to inform and prioritize future restoration projects.
- Data collected will complement existing water temperature and eDNA data and support continued understanding of water temperature variability and species distribution in the Luckiamute River watershed.
- The applicant has a DEQ approved Sampling and Analysis Plan (SAP) and is following professionally accepted quality assurance and quality control measures.
- The applicant will make data available using an online data visualization tool and will submit water temperature data to DEQ, to make the data available to the public and natural resource professionals.
- The applicant will combine monitoring site visits to reduce emissions of greenhouse gases.
- The applicant is working with the appropriate technical experts including Mary's Peak BLM and Rocky Mountain Research Station's National Genomics Center for sample analysis.
- The applicant is engaging community members and partners through an established Monitoring Steering Committee and a Project Review Committee to review and discuss the results to receive additional insights on how best to use the data to inform future restoration actions.
- The budget has sufficient details to understand how the expenses are estimated and are appropriate for the work necessary to accomplish the actions proposed in the application.

Concerns

- The applicant lacks expertise to perform the trend analysis and assess the correlation of environmental factors with water temperature.
- The application does not describe the methods to collect canopy cover and riparian air temperature data. It is not clear what quality assurance and quality control measures will be employed to collect these datasets.
- The study design and didn't justify why all of the monitoring locations are needed to understand the status of water temperatures given that they have collected almost ten years of water temperature data at some sites.
- The eDNA lab analysis costs might be able to be covered under the BLM's existing interagency agreement with the laboratory since the BLM is helping the applicant collect the eDNA samples.

Concluding Analysis

This project is building on past monitoring efforts to move from baseline monitoring to trend monitoring

and add new parameters to target future restoration actions. The proposed temperature and eDNA monitoring efforts will identify where focus aquatic species are present during the summer months when water temperatures are an important limiting factor to consider.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 5

Review Team Recommended Amount

\$125,737

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$125,737

Staff Conditions

N/A

Open Solicitation Monitoring-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3051-23700

Project Type: Monitoring_v2

Project Name: Kellogg - Mt. Scott Creek Freshwater Mussel Monitoring to Support Salmonid Restoration

Applicant: North Clackamas Watershed Council

Region: Willamette Basin

County: Clackamas

OWEB Request: \$230,859

Total Cost: \$378,736

Application Description Freshwater mussels are a critical yet overlooked species group. NCWC has detected the presence of 2 species of mussels in the Kellogg-Mt. Scott Watershed (KMS), a tributary to the lower Willamette. KMS will be vastly improved with removal of Kellogg Dam & restoration of its impoundment in 2027 (see maps). This will restore volitional fish passage, with new mussel beds being established as anadromy is restored. The Kellogg Project is the #1-ranked fish passage project in OR owned by ODOT & received a \$15M IJA grant. Because mussels have been detected in the impoundment, restoration design must address mussel populations, including salvage and relocation.

The North Clackamas Watersheds Council (The Council) in partnership with Xerces Society for Invertebrate Conservation (Xerces) will:

1. Collect baseline data on mussel populations pre-dam removal. We will locate mussel beds throughout KMS to ensure they are included in future restoration efforts, both to improve their habitat & avoid impacts. We will conduct surveys using an in-prep protocol with guidelines for collecting occurrence, density, species composition, & size classes, plus relevant habitat characteristics, including water quality & metrics of human influence. We will identify precise locations of mussels so they can be prioritized for protection, using shell locations, eDNA, & visual surveys for live mussels. We will incorporate that information into restoration planning.
2. Determine precise locations of mussels in the impoundment to develop and implement a salvage and relocation plan. Partnerships with the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) & the City of Portland will allow salvaged mussels to be used by CTUIR to create a propagation population of Oregon floaters, for the only mussel propagation project in the West, & relocated to similar Willamette habitat at nearby Oaks Bottom Wildlife Refuge, where the City of Portland has an existing mussel monitoring program.

Review Team Evaluation

Strengths

- The proposed monitoring project will provide important baseline pre-dam removal conditions in the watershed and allow the applicant to track freshwater mussel distribution and abundance changes after Kellogg Dam is removed. The data will inform Kellogg Dam removal and future restoration projects.

- Kellogg Dam removal is scheduled for 2027, making this proposed monitoring project timely. The freshwater abundance and distribution data collected within the Kellogg dam impoundment is needed to limit impacts.
- This project will leverage several existing data sets especially the eDNA freshwater mussel survey data which is informing their monitoring locations in Kellogg Creek.
- The applicant proposes to use professionally accepted monitoring methods in a recently completed protocol that was developed by the Xerces Society in collaboration with the USFWS.
- The applicant is leveraging additional funds to engage the community, including targeted education of disadvantaged communities.
- The applicant has been building their capacity to perform monitoring and has completed an eDNA monitoring project that this effort builds upon.
- The staff and contractor are highly qualified to work on this project and have a good track record at implementing similar monitoring projects.
- The budget and narrative description includes details to understand how the expenses were estimated and those are appropriate for the work necessary to accomplish the actions proposed in the application.

Concerns

- It is unclear how feasible the survey methods are to fully capture the freshwater mussel presence and distribution in the Kellogg Dam impoundment due to the visibility. If visibility impacts the ability to properly locate the mussels there may be a need for SCUBA divers. If SCUBA divers are needed it could drastically increase the cost and capacity needed to successfully complete the monitoring as proposed in the application.
- The application lacked a sense of the context/size of the stream systems that will be monitored and whether the applicant will be able to complete the different tiers of surveys as described in the protocol.
- It is not clear how likely private landowners are willing to allow access to ensure the survey locations will be as comprehensive as proposed.
- The application did not describe how valuable this information is to other affected parties in the watershed.

Concluding Analysis

Information is needed to understand the abundance and distribution of freshwater mussels in Oregon. The proposed monitoring will provide site specific information to avoid impacts to freshwater mussels during the Kellogg Dam removal project and the implementation of future restoration projects farther

upstream. The proposed monitoring project provides an opportunity for a watershed council to engage with the Confederated Tribes of the Umatilla Indian Reservation to provide salvaged mussels to create a propagation population of Oregon floaters, which is the only mussel propagation project in the West.

Review Team Recommendation to Staff

Fund

Review Team Priority

3 of 5

Review Team Recommended Amount

\$230,859

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$230,859

Staff Conditions

N/A

Open Solicitation Monitoring-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3052-23701

Project Type: Monitoring_v2

Project Name: Fire Effects Monitoring: Developing a Framework for Evaluating Cultural and Ecological Health

Applicant: Ecostudies Institute

Region: Willamette Basin

County: Lane

OWEB Request: \$225,001

Total Cost: \$378,001

Application Description Intentional use of fire is an integral part of original Indigenous culture and subsistence practices in the Willamette Valley. The removal of the Kalapuya people and their fire practices has caused significant damage to both human and ecological communities. As a complement to the restoration of ecosystems and culture, this proposed project seeks to bring together western scientific and Indigenous knowledge systems to develop and trial a fire-effects monitoring framework that will help improve burning strategies in the WV with the goals of enhancing ecological diversity and supporting Tribal priorities associated with burning. Project partners include the Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz Indians, The Nature Conservancy, Traditional Ecological Inquiry Program, Upper Willamette Stewardship Network, City of Eugene, and Bonneville Environmental Foundation. Additional Technical Advisory Team members bring cultural practitioner perspectives and expertise in ecological sciences. Throughout the project, this team will be tasked with adapting and expanding upon existing monitoring protocols to develop a fire effects monitoring framework for WV ecological and cultural burns. Some examples of cultural values that could be reflected are abundance, harvestability, and quality of first foods and basketry materials, as well as ground visibility for historic artifact surveying. With guidance from advisors, project partners will carry out pre- and post-burn monitoring on 5-7 burn units. Monitoring will assess impacts of varying levels of fire severity on vegetation, soil, avian, and cultural parameters. This data will be interpreted to provide initial suggestions on future prescribed fire implementation timing based on fuel type (i.e. grassland or woodland) and objectives of burning. Data is expected to provide meaningful information for Indigenous people for cultural purposes and inform future coordinated monitoring approaches throughout the WV.

Review Team Evaluation

Strengths

- This project is building off existing efforts to help practitioners fill data gaps by collecting data on prescribed burns to better understand how to meet ecological and cultural values.
- Monitoring locations have already been identified by the applicant and include high priority restoration sites that have already been funded and identified as locations for reintroduction of fire.

- Lessons learned will be compiled into a best practices guidance document that will be shared with landowners, Technical Advisory Team (TAT) members and more broadly at a workshop to inform future restoration actions.
- The applicant proposes to work with indigenous communities to incorporate indigenous knowledge into the project to better understand how prescribed fires are affecting first foods and culturally significant plants.
- The monitoring methods and sampling design are adequate to determine the effects of prescribed and cultural fires varying severity on ecological and cultural values.
- Appropriate quality assurance and quality control measures are incorporated into all stages of data collection, management and storage.
- Letters of support demonstrate broad engagement across technical experts and community members by working with an established TAT and sharing information across the community.
- The applicant is including local communities impacted by climate change by participating in meetings and trainings with the indigenous centered Willamette Valley Fire Collaboration, Confederated Tribes of Siletz Indians, Confederated Tribes Grand Ronde Indians, The Nature Conservancy, the Traditional Ecological Inquiry program, Bonneville Environmental Foundation (BEF), the City of Eugene and others.
- The applicant has technical staff who have the necessary qualifications and abilities to successfully complete the monitoring activities.
- The budget provides a breakdown of tasks and duties each staff will perform over the three-year period and are appropriate to accomplish the actions proposed in this application.
- The budget includes funds for Native Americans to participate in the TAT meetings over the life of this monitoring project.

Concerns

- The application did not clearly describe how the soil organic matter data will be used to answer the monitoring questions and inform future restoration actions.
- It is unclear if the budget and project management timeline has incorporated an additional site visit immediately post-burn to determine fire severity.
- This application has several components that will be a significant amount of work and might be partially accomplished by incorporating existing information that their partners may already have.

Concluding Analysis

This proposed monitoring project will engage tribal partners to incorporate indigenous knowledge in the

development of a monitoring approach to effectively monitor prescribed burns. Understanding how different burning strategies meet ecological and cultural values in the Willamette Valley will support a broad diversity of partner's prescribed burning priorities and provide essential capacity for tribal partners to participate.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 5

Review Team Recommended Amount

\$225,001

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$225,001

Staff Conditions

N/A

Open Solicitation Monitoring-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3053-23713

Project Type: Monitoring_v2

Project Name: Monitoring Green Stormwater Infrastructure to Enhance Water Quality

Applicant: Long Tom WC

Region: Willamette Basin

OWEB Request: \$141,709

County: Lane

Total Cost: \$253,252

Application Description Urban pollutants carried by stormwater runoff pose a significant threat to native fish habitats in urban waterways. Streams in the urbanized areas of the Upper Willamette Subbasin, housing native River Chinook salmon, are designated as impaired by the Oregon Department of Environmental Quality due to regulated pollutants and water quality conditions. Additionally, emerging contaminants - including Per and Polyfluoroalkyl Substances (PFAS), and 6-PPD-quinone - known to significantly impact fish survival, have been detected at levels of concern for aquatic life in some streams. Urban stormwater runoff is a major contributor to these impairments. To mitigate these issues, the Long Tom Watershed Council (LTWC), with support of the Urban Waters & Wildlife Partnership (UWWP), has installed various types of green stormwater infrastructure (GSI) facilities at commercial and industrial sites to reduce pollutant loading and restore stream functions. However, the effectiveness of these voluntary facilities in removing the pollutants remains unknown. It is crucial to monitor the efficacy of existing GSI facilities to determine which types and features are optimal for pollutant removal. Failure to understand the efficacy of our stormwater design could lead to the installation of subpar infrastructure, resulting in prolonged detrimental effects on stream health. In the first year of this pilot project, the UWWP and LTWC will conduct observational monitoring of the effectiveness of 25 existing stormwater facilities in Eugene and Springfield. Based on these initial observations, 10 facilities will be selected for water quality sampling in the second year. The results of this monitoring pilot will inform the design and installation of urban restoration projects and GSI facilities that are most effective in removing pollutants impairing water quality and impacting endangered species, as well as inform future regional GSI monitoring efforts across the Upper Willamette Subbasin.

Review Team Evaluation

Strengths

- There is a clear need to collect data to inform approaches to monitoring to improve design and maintenance of existing and future public and local green stormwater infrastructure (GSI) facilities.
- The applicant is leveraging existing funding from the US Environmental Protection Agency (EPA), in part for the design and installation of new GSI and developing new Best Management Practices (BMPs).

- This project is incorporating changing climate conditions by focusing on monitoring storm events which have the potential to mobilize pollutants.
- The proposed monitoring will fill a data gap to understand how effective different GSI facilities are at capturing pollutants that are identified as a threat in a federal salmon conservation and recovery plan.
- The applicant has a draft monitoring plan that describes quality assurance and quality control measures and will work with DEQ to develop a quality assurance project plan.
- The data will be added to the International BMP Database to benefit the entire stormwater management community.
- The final report will be distributed to Urban Waters and Wildlife Partnership and posted online to share results with the public and interested partners.
- The applicant, contractors and partners have the necessary capacity, experience and qualifications to implement this monitoring project and analyze the data to meet the goal of the project.
- Letters of support demonstrate that the applicant is engaging with technical experts and community members on GSI projects for several years and are sharing their expertise within their local networks to improve stormwater quality in their watershed and neighboring areas.
- The budget table and narrative include a detailed breakdown of how expenses were estimated and are appropriate for the work to complete the actions proposed in the application.

Concerns

- The application does not describe how the data will be analyzed to determine if the current GSI designs are adequate to treat and retain an increase in the volume of stormwater that will be generated by increasingly intense storm events associated with climate change.
- The application included an attached draft monitoring plan that contained additional details on sampling methods and the facilities design elements that were not included in the narrative section of the application.
- The application proposes an ambitious timeline to monitor 10 GSI facilities during the relatively short window in which large storm events occur and it is not clear if the applicant has adequate capacity complete the monitoring as proposed across a 24-hour storm event.
- The proposed timeline is ambitious, and it is unclear how the applicant will handle delays, specifically if retrofitting of the GSI facilities is delayed between years 1 and 2 of monitoring.

Concluding Analysis

This monitoring project builds on an ongoing effort from local partners to implement green stormwater infrastructure that effectively removes pollutants and reduces impacts to local streams. Monitoring data is needed to understand if existing designs are working and to help inform the development of future green stormwater infrastructure to minimize impacts to water quality.

Review Team Recommendation to Staff

Fund

Review Team Priority

4 of 5

Review Team Recommended Amount

\$141,709

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

N/A

Open Solicitation Monitoring-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3054-23728

Project Type: Monitoring_v2

Project Name: Pre-Implementation Monitoring for Floodplain Restoration at Elijah Bristow State Park

Applicant: Middle Fork Willamette WC

Region: Willamette Basin

County: Lane

OWEB Request: \$349,405

Total Cost: \$508,514

Application Description The Middle Fork Willamette Watershed Council (MFWWC) seeks Monitoring funding to collect baseline conditions data in preparation for process-based floodplain restoration on the Middle Fork Willamette River and Lost Creek within Elijah Bristow State Park (Project). Located below Dexter Dam between the Lane County towns of Jasper and Lowell, the historically dynamic floodplain is in a stagnant and degraded condition due to anthropogenic impacts and lack of natural disturbance. With implementation of floodplain restoration anticipated to begin in 2027/2028, it is pertinent the Project Team to collect current pre-implementation data in order to evaluate the effectiveness of restoration actions at achieving desired ecological uplift outcomes.

Under the guidance of collaborating agencies and environmental non-profits (Oregon Parks and Recreation Department (OPRD), Oregon Department of Fish and Wildlife (ODFW), US Army corps of Engineers (USACE), Confederated Tribes of Grand Ronde (CTGR), and US Forest Service (USFS), and the Xerces Society), the MFWWC proposes to gather baseline conditions data to evaluate the effectiveness of process-based restoration in restoring floodplain function and improving habitat conditions for key species of concern, including spring Chinook, steelhead, Pacific lamprey, northwestern western pond turtle, and western pearlshell mussels at Elijah Bristow State Park.

Review Team Evaluation

Strengths

- The proposed monitoring will collect data on several sensitive aquatic species and their habitats including the western pond turtle, chinook salmon, steelhead, freshwater mussels, and pacific lamprey.
- This project is timely with restoration pending, baseline data is important to collect to understand the outcomes from a planned largescale floodplain restoration project.
- The application poses several monitoring questions and different data sets will be collected at transects across the largescale project area to understand habitat changes and effects to important biological species.

- The applicant proposes to use professionally accepted methods for most of the monitoring proposed in this application, including recent Stage 0 restoration effectiveness monitoring documents that are appropriate for the restoration planned in the area.
- Ground-based data will be collected to support the analysis of the remotely sensed data.
- The applicant has leveraged other funding to engage technical experts and community members which has created a strong base to continue working with them across this monitoring project.
- The contractor, Wolf Water Resources has a proven track record of work in the area and monitoring of largescale floodplain restoration projects.
- The expenses estimated in the budget reflects how much work is being proposed by the contractors, which is warranted and makes sense for the scope of work.

Concerns

- The applicant addressed many previous evaluation concerns, however the addition of new project components raised new concerns for the review team members.
- The application does not clearly describe how the project will consider different water releases at Dexter Dam when interpreting the pre-restoration conditions and how that will factor into assessing restoration effectiveness, particularly to water quality over time.
- The application does not clearly describe how the many different data sets will be managed, stored and reported to ensure analyses are completed accurately.
- The application does not provide a clear description on how the data will be analyzed to answer the proposed monitoring questions.
- It is not clear how the information will be made available to the public besides a final report being completed. There is no mention of sharing the water quality data with DEQ.
- The level of detail described in the application is inconsistent with the contractor's scope of work that was uploaded to the application.
- The application does not cite a professionally accepted method for the collection of dissolved oxygen (DO) data and is not clear if the QA/QC measures are adequate to collect high quality data.
- Tagging of freshwater mussels was added to the project from the previous version of the application and is not clear why this monitoring is proposed and if it can be successfully implemented.
- It is not clear if the budget is adequate to cover all aspects of the application, including obtaining the necessary permits and installing the shallow groundwater monitoring wells and writing of the Sampling and Analysis Plan.

Concluding Analysis

The scale of this complex monitoring project is necessary given the magnitude of restoration being planned. The number of species present and the partner's interest in a variety of data sets is driving the scale of this monitoring project that includes several different datasets. The information proposed in this application will establish an important baseline that, if repeated, has the potential to measure the impacts associated with a large floodplain restoration project.

Review Team Recommendation to Staff

Fund

Review Team Priority

5 of 5

Review Team Recommended Amount

\$349,405

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

N/A

Open Solicitation Engagement-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3055-23654

Project Type: Engagement_v2

Project Name: Engaging Gordon Creek Landowners and the Community

Applicant: Corbett Water District

Region: Willamette Basin

County: Multnomah

OWEB Request: \$56,782

Total Cost: \$68,327

Application Description Proposed Work

Landowners in the Gordon Creek watershed, land management agencies, tribes, the local community, partners, and the public will be engaged in a process to increase awareness of the benefits of watershed protection and to develop support for future restoration and protection actions.

The three-prong approach to engagement in the Gordon Creek watershed is to:

1. Raise awareness of risks to the water supply and fish and wildlife habitat and to build community investment in watershed protection.
2. Directly engage landowners and partners in the lower watershed to identify potential opportunities to participate in watershed stewardship in the entire watershed, including monitoring, land acquisition and restoration.
3. Convene landowners and resource agencies to forge agreements on the land management activities in the upper watershed that provide water source and fish and wildlife protection.

Engagement efforts in the sub-watersheds of the North and South Forks of Gordon Creek, the drinking water source for Corbett, will focus on collaborating with landowners and partners to seek support for the goals of water quality/quantity and fish and wildlife habitat protection and enhancement. Opportunities for habitat restoration, management agreements, conservation easements and land acquisition will be explored.

Project Partners:

East Multnomah Soil & Water Conservation District and Corbett School District are committed to the project. Additional participants expressing interests are landowners, BLM, and USFS. Likely participants include Sandy River Watershed Community Organization, Metro, Columbia Land Trust, and Confederated Tribes of Warm Springs.

Review Team Evaluation

Strengths

- A variety of communication methods will be used to engage landowners in the Gordan Creek Watershed, including mailings, public forums, and tours, to increase awareness about the benefits of protecting the watershed and develop support for restoration actions.
- The applicant recently completed a Risk Reduction Plan for Gordan Creek that is also a Drinking Water Protection Plan for the Corbett Water District. The proposed engagement project continues momentum built from the outreach completed to develop that plan.
- Gordan Creek is on the 303(d) list of water quality impaired waterbodies for exceeding water temperature, future restoration actions could contribute to implementation of the Total Maximum Daily Load (TMDL) plan for improving water quality.
- The project schedule is clear and reasonable for the proposed actions.
- Costs for the proposed actions are reasonable.

Concerns

- Additional detail describing the target audiences, why they were identified, and how each will be engaged is needed to understand how communication strategies will be used to effectively reach appropriate audiences for the project geography. For example, the Confederated Tribes of Warm Springs are identified as a target audience in the application. Details describing how identified audiences, such as the Tribes, will specifically be engaged to participate in conversations would be helpful for understanding the likelihood of success the proposed project can lead to future protection or restoration projects.
- It appears from the maps in the Risk Reduction Plan for Gordan Creek that most of the land upstream of the drinking water intake are public lands owned by US Forest Service or Bureau of Land Management. Most of the proposed actions target the general public or private landowners that are likely primarily located downstream of the water intake. It is unclear how engaging downstream landowners will lead to actions that address the watershed concerns described in the problem statement, which focus on impacts from forestry activities occurring above and adjacent to the drinking water intake. Information describing the amount of private forest lands located upstream of the water intake and strategies that will be used to engage the forest industry specifically would be helpful to understand how the proposed engagement will lead to restoration that addresses the target watershed concerns.
- The project focuses on impacts on water quality from clearcutting; however, research indicates that roads contribute more sediment inputs into streams compared to clearcutting. A focus on impacts from clearcuts could miss an opportunity to address a problem with greater impacts to the watershed.

- Recent revisions to Forest Practices Act rules substantially changed management practices associated with forestry activities, including increasing stream buffer size requirements and new procedures for helicopter pesticide application. These changes could reduce impacts of forestry activities in Gordon Creek Watershed. It is unclear whether this was considered when developing the project. The revised rules could alter the engagement strategy by narrowing the focus to priorities not addressed by the changes in Forest Practices Act requirements.
- The Risk Reduction Plan for Gordon Creek identifies infrastructure issues as a high priority risk along with impacts from clearcut harvesting; however, actions to address these concerns are not described in the application. It would be helpful to understand how the recommendations to improve intake infrastructure, address system leakage, and encourage water conservation among water users will be implemented to address water quantity concerns along with the targeted water quality concerns.
- Additional information describing the feedback loop partners will use to capture and utilize information from the meetings and tours to guide future watershed projects is needed to evaluate how the multi-directional communications will likely be effective.

Concluding Analysis

The Risk Reduction Plan for Gordon Creek demonstrates a need to communicate with landowners and community members about collaboratively determining solutions for watershed protection. More information is needed to understand the rationale for how engaging the identified audiences will lead to future restoration and protection actions that address the target watershed problem focused on impacts from forestry activities.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Engagement-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3056-23677

Project Type: Engagement_v2

Project Name: Landowner Engagement for Monroe Source Water Protection

Applicant: Coast Fork Willamette WC

Region: Willamette Basin

County: Yamhill

OWEB Request: \$47,927

Total Cost: \$85,527

Application Description This project will inform and engage private landowners about their role in protecting drinking water sources in the Monroe Source Water Protection area in Lane County and provide streamlined technical assistance for conservation strategies and restoration opportunities to support a new NRCS National Water Quality Initiative (NWQI.) The resulting engagement campaign will reach landowners through their existing communities of practice and connect them to technical assistance, conservation planning support, and key local partners. Farm tours will provide opportunities for peer-learning about source water protection strategies, helping landowners to see successful examples in-situ, and further building confidence & readiness to implement restoration & conservation actions/projects on their own properties.

The Coast Fork Willamette Watershed Council's Working Lands Program supports conservation on working farms and ranches throughout the Upper Willamette Basin. The Working Lands Program will lead the engagement campaign in partnership with the Long Tom Watershed Council to reach agricultural land managers in the target geography. With the support of the Upper Willamette SWCD, the Working Lands Program will provide initial site visits and initiate the conservation planning process for interested land managers. This initial engagement and planning will serve as a streamlined point of entry to leverage resources from the NRCS EQIP program, The Freshwater Trust's riparian shade program, as well as other conservation opportunities, including the Farm Service Agency's CRP and CREP programs, among others.

Review Team Evaluation

Strengths

- The application has clear goals and actions for engaging agricultural landowners in the Monroe Source Water Protection area in Lane County.
- Appropriate audiences will be engaged to address the identified watershed problems related to source water protection.
- The proposed engagement actions, including farm tours, can build community trust.

- Target audiences include a rural area designated as an environmental justice community historically underrepresented and adversely harmed by environmental and health hazards that impact farm management.
- The potential future restoration projects will leverage programs that are time limited, such as the Freshwater Trust's riparian shade program that has a five-year window.
- The collaborative partnership of organizations involved in the engagement project have relevant experience working together as a team.
- Costs are reasonable for the proposed actions.

Concerns

- Some of the proposed engagement actions may have limited success. The project area is a challenging region to engage agricultural landowners because they can be reluctant to attend meetings. Incorporating more targeted engagement actions by tax lot may be more effective compared to broad announcements at meetings. Details describing plans for following up with landowners would be helpful to understand how communication strategies are likely to be effective beyond the initial contact made through the proposed actions.
- The engagement project will provide information to landowners about potential conservation programs available for their properties. It is unclear how the applicant is engaging partners that will be important for implementing future restoration projects without letters of support from organizations such as Natural Resource Conservation Service (NRCS), The Freshwater Trust, Farm Service Agency (FSA), Oregon Department of Agriculture, and Oregon State University Extension. It is important to engage these partners early in the conversation with landowners to ensure information shared is accurate. For example, the application references CRP; however, this program is not offered in the project area.
- There may be a missed opportunity to leverage engagement occurring in the Oregon Department of Agriculture Strategic Implementation Area on Bear Creek, which is a targeted geography listed in the application.
- Additional information describing The Freshwater Trust's riparian shade program and the National Water Quality Initiative (NWQI) would provide helpful context for better understanding the potential for engagement actions to lead to future projects that will protect or restore natural watershed functions to improve water quality or stream flows.

Concluding Analysis

The rationale connecting the proposed engagement activities with timely development of eligible restoration or acquisition projects is unclear without inclusion of partners that will need to be involved in enrolling landowners in programs, such as NRCS and FSA. The application indicates the engagement project is intended to serve as a point of entry to leverage resources from these programs. The

likelihood of success of the proposed actions in achieving this expected outcome is uncertain without collaborating with these partners in the engagement project development and implementation.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Engagement-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3057-23702

Project Type: Engagement_v2

Project Name: Rallying the Fellowship: Plan for Your Land in the Middle Willamette

Applicant: North Santiam WC

Region: Willamette Basin

County: Marion

OWEB Request: \$246,416

Total Cost: \$260,266

Application Description The North Santiam (NSWC), Luckiamute (LWC), Marys River (MRWC), Calapooia (CWC), and South Santiam (SSWC) watershed councils, representing the Mid-Valley River Connections (MVRC) collaborative, seek Engagement Grant funding to advance project development to support restoration implementation across the five MVRC basins. Spanning parts of Benton, Lane, Lincoln, Linn, Marion, and Polk Counties, these councils' service areas cover over 30 percent of the Willamette basin. The MVRC councils have decades of conservation experience and have completed assessments, invasive weed surveys and action plans to guide strategic on-the ground activities such as weed control, riparian revegetation, livestock exclusion fencing and large wood placements.

Building off of the successful NSWC and SSWC Phase 1 Plan for Your Land Workshop series, MVRC proposes to expand this strategic outreach campaign with assistance from their regional partners by offering two five-part land conservation training workshops. MVRC will work with those who are already enrolled in restoration programs to reach out to neighbors in the community and invite them to participate in the workshops. Over the course of the trainings, participants will learn to inventory natural resources on their property, identify resource issues, learn about programs available to assist with those issues and with Council guidance take the next step of conservation implementation. The goal will be to assist in developing at least 4 conservation plans per basin for each session, a total of 40 plans. From these plans, we seek to develop and implement a minimum of 12 restoration projects over 6 years, totalling 10 miles of restored stream and 120 acres of restored riparian and wetland habitats. Project partners include staff from Marion & Linn SWCD, OSU Extension, Oregon Department of Agriculture and private land managers. Grant funds will be used for staff time, contracted services, mileage and training supplies and materials.

Review Team Evaluation

Strengths

- The application has a clearly defined goal for recruiting landowners to restore stream corridors and quantifiable actions to achieve that goal. Specific and measurable success indicators are identified based on previous experience implementing the Plan for Your Land workshops and are reasonable, achievable targets.

- The engagement project leverages results from previous implementation of the Plan for Your Land workshops that resulted in collaborative partnerships with landowners to set conservation goals and led to restoration projects. The applicant will focus engagement with landowners that are neighbors at these existing watershed projects. The proposed project is timely to capitalize on the momentum generated from the previous OWEB engagement grant.
- The proposed engagement actions includes common practices that are likely to be successful communications strategies with landowners, such as tours.
- The partnership across the mid-Willamette watershed councils creates an economy of scale that will leverage existing projects and programs in each watershed and build capacity across a large geography.
- The applicant and partners have capacity and relevant experience implementing similar engagement projects.
- The budget includes details needed to understand project costs. While the overall cost of the project appears high, it is reasonable for the proposed actions and expected outcomes. The price per landowner plan or restoration project is reasonable.

Concerns

- It is unclear how the applicant determined rural-living residents may be more impacted by climate change compared to urban residents. Including data or information about resources used to determine potential impacts to rural versus urban residence is needed to understand the extent to which local communities disproportionately impacted by climate change are engaged in the project.
- Additional information describing specific geographic focus for engaging landowners would provide helpful context for understanding the extent to which engagement could lead to the maximum ecological output by leading to highest priority restoration actions.
- The engagement approach works well with small acreage rural residential landowners and is not typically as effective with large commercial agricultural landowners. This could result in spending more money on a smaller amount of land or a broadcast, scatter approach to future restoration. Including information on how large agricultural landowners may be more specifically engaged through the project would strengthen the application.

Concluding Analysis

The proposed engagement project flips the script from traditional models of holding general events and hoping that landowners show interest in partnering on a project. Instead, conservation planning workshops will be used to provide information landowners are looking for that incorporate opportunities for them to gain awareness about the watershed and generate interest in restoration.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 2

Review Team Recommended Amount

\$246,416

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$246,416

Staff Conditions

N/A

Open Solicitation Engagement-Spring 2024

Willamette Basin (Region 3)

Application Name: 224-3058-23704

Project Type: Engagement_v2

Project Name: Beaver Lake Restoration Approaches - Phase 2

Applicant: Greater Oregon City WC

Region: Willamette Basin

County: Clackamas

OWEB Request: \$46,118

Total Cost: \$46,119

Application Description Beaver Lake and Mompano Dam are located within the 21,573-acre Abernethy Creek watershed. The creek is a tributary of the Willamette River entering near Oregon City, below Willamette Falls. The Greater Oregon City Watershed Council has been working with the Beaver Lake Homeowners Association and various community stakeholders since 2021 to advance understanding of the lake, dam, fish ladder and associated risks and challenges. Modification of the existing fish ladder is needed to ensure native migratory fish have access to over 8 miles of high-quality spawning and rearing habitat upstream of the dam. Water quality issues at the lake have been identified including shallowing due to sedimentation, seasonal temperature increases, harmful algal growth, and eutrophication. In the first phase of the project, a steering committee was formed made up of stakeholder representatives, watershed council members and staff, and technical expertise. The steering committee developed and presented background on the project for the HOA board which was well received. Subsequent to the presentation, additional work was identified to more effectively scope the challenges associated with the dam and develop a suite of proposed alternatives for consideration. Building relationships with the HOA board and lake committee has progressed more slowly than expected. However, recent meetings with the ODFW fish passage team and a US Fish & Wildlife Service lamprey passage expert have advanced the interest of the HOA in working collaboratively to fully understand and address the immediate needs for repair while also considering long-term solutions.

This Phase 2 proposal seeks additional funding and time to implement the recommended actions identified by the steering committee for planning assistance. Phase 2 will build on this framework to work with the community and interested parties to identify “desired conditions” for Beaver Lake and Abernethy Creek and provide ranked alternatives.

Review Team Evaluation

Strengths

- There is a clear need for engaging the community and homeowners association to communicate the benefit of proposed restoration actions developed by a steering committee to improve fish passage, water quality, and riparian and instream habitat at Beaver Lake and Mompano Dam.

- The application has a clearly defined goal to develop restoration concepts and build consensus to select a concept for project design. The proposed actions are specific and measurable. The desired outcomes for each step of the engagement process are clearly defined in the success indicators.
- The proposed communication strategy and methods are technically sound to effectively engage homeowners. Engagement with the homeowners association is important to generate support for restoration actions on Beaver Lake and Mompano Dam.
- The project builds on previous engagement that established a steering committee to guide conversations and includes homeowner association representatives.
- A successful engagement project is likely to succeed in leading to a restoration project that will result in ecological uplift by addressing fish habitat and water quality limiting factors and facilitating fish movement up Abernathy Creek to cooler water.
- The proposed second phase of engagement includes the addition of technical expertise that will increase capacity for implementing the proposed actions.
- Costs are reasonable for the proposed activities.

Concerns

- The proposed project is a continuation of engagement funded through a previous OWEB grant award and the actions in the current application mirror the previous application objectives. While the application provides some information describing progress made on the actions and why additional funding is needed, additional detail under each action describing progress made would be helpful for better understanding the status of these tasks.

Concluding Analysis

There is a clear need to engage the homeowner's association along with federal, state, local, and tribal representatives in identifying habitat and water quality restoration alternatives and developing consensus for a fish passage solution at the Beaver Lake Mompano Dam. Due to COVID significantly affecting the timeline of the original project and the applicant adaptively being responsive to needing a longer conversation with landowners about restoration opportunities, additional investment is needed to complete the engagement actions from the previous grant award.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 2

Review Team Recommended Amount

\$46,118

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$46,118

Staff Conditions

N/A

Central Oregon - Region 4 Spring 2024 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 - Spring 2023

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 Land Acquisition

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 Restoration

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 Region 4 Cities

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 Region 4 Streams

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 OWEB Region 4 Boundary

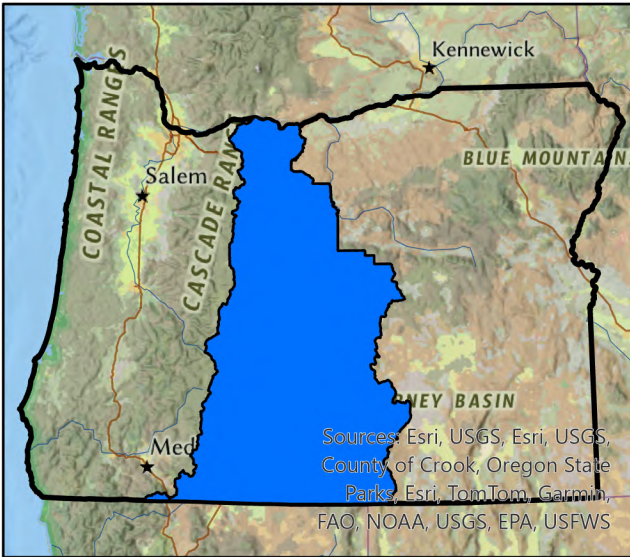


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Sources: Esri, USGS, Esri, USGS, County of Crook, Oregon State Parks, Esri, TomTom, Garmin, FAO, NOAA, USGS, Bureau of Land Management, EPA, NPS, USFWS

Region 4 - Central Oregon Restoration				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-4020	Hood River WS Group	Bear Creek Fish Passage Project	Create unimpeded fish passage to 2.7 miles of upstream habitat for ESA-listed winter steelhead, bull trout, and coho, as well as Spring Chinook salmon, native rainbow trout, and cutthroat trout, and improve hydrologic function by accommodating 100-year flood events and allowing normal transport of sediment and wood.	\$ 322,014
224-4019	North Unit Irrigation District	North Unit Irrigation District - Deschutes River Fish Screen Replacement Project	Replace outdated fish screen to meet state and federal fish screening criteria and provide safe passage of fish in the Deschutes River. This addresses USBR and ODFW findings and recommendations to update infrastructure and improve fish passage. These improvements ensure fish are safely passed around the dam and remain in the river with access to the fish ladder. With reduced maintenance issues resulting in adverse operations, NUID will also be able to efficiently maintain minimum instream flows.	\$ 999,999
224-4018	Lakeview SWCD	Upper Chewaucan SIA - South Creek Water Quality Improvement Phase 1	The restoration goal on South Creek - Murphy Ranch, is to improve water quality with better aquatic and riparian connectivity, resulting in habitat improvement for the Chewaucan redbad trout and associated aquatic species. More specifically, willow expansion from existing plants on site, meadow and channel re-connection, through strategically placed BDAs and increased natural beaver activity, and livestock exclusion with armored crossings and a spring development are project goals.	\$ 169,625
Total Restoration Projects Recommended for Funding by RRT and OWEB Staff				\$ 1,491,638

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
N/A				

Projects NOT RECOMMENDED for Funding by RRT			
Project #	Grantee	Project Title	Amount Requested
224-4017	Crooked River WC	Improving Wildlife Migration and Pastures on Foley Butte	\$ 214,643

Region 4 - Central Oregon Technical Assistance				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-4021	Upper Deschutes WC	Deschutes River Mirror Pond Dam Fish Passage Restoration Project	The goal for this project is to develop permit-ready engineering design plans for a nature-like fishway as part of the Deschutes River Mirror Pond Dam Fish Passage Restoration Project which will open up and provide access to over 60 miles of upstream habitat on the mainstem Deschutes River for native redband trout and other native migratory fish and aquatic species.	\$ 136,105
Total Technical Assistance Projects Recommended for Funding by RRT and OWEB Staff				\$ 136,105

Oregon Watershed Enhancement Board: Region 4 Restoration, Technical Assistance, Engagement and Monitoring

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
224-4023	Oregon Wildlife Heritage Foundation	Bend to Suttle Lake Highway 20 Wildlife Crossing Design Development	The goal of the B2S Wildlife Passage Initiative is to construct safe wildlife crossings on Highway 20 between Bend and Suttle Lake to benefit both wildlife and the motoring public. The B2S Coalition will use OWEB funds, in combination with other sources, to advance engineering and design by ODOT for three wildlife passage structures at the highest priority locations within the 35-mile Bend to Suttle Lake corridor.	\$ 376,750
224-4022	Wasco SWCD	Wasco County Watershed Councils Action Plan 2024	To update the Watershed Councils Action Plan using information learned from completing the updated watershed assessments within Wasco County to develop specific restoration actions, prioritize and identify restoration projects. The updated watershed action plan will identify restoration activities that will provide the greatest benefit to improving soil erosion, plant health and vigor, fish and wildlife habitat, riparian vegetation conditions, water quantity and quality, and upland habitats.	\$ 79,079

Projects NOT RECOMMENDED for Funding by RRT				
Project #	Grantee	Project Title		Amount Requested
224-4027	Bonneville Environmental Foundation (BEF)	Mainstreaming Beaver-based restoration as a Natural Climate Solution in Oregon Phase II		\$ 149,847

Region 4 - Central Oregon Engagement				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
		N/A		
Total Engagement Projects Recommended for Funding by RRT and OWEB Staff				\$ -

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
		N/A		

Projects NOT RECOMMENDED for Funding by RRT				
Project #	Grantee	Project Title		Amount Requested
224-4026	Oregon Agricultural Trust	Outreach & Collaboration to Promote Easements in Klamath County		\$ 115,689

Region 4 - Central Oregon Monitoring				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-4024	Upper Deschutes WC	Upper Deschutes River Phase II Monitoring Project	The goal of this project is to collect current data to determine the status of the aquatic community of the Upper Deschutes River by quantifying biotic and abiotic conditions in mainstem and off-channel habitats in response to streamflow restoration activities.	\$ 307,475

Oregon Watershed Enhancement Board: Region 4 Restoration, Technical Assistance, Engagement and Monitoring

224-4025	Klamath Watershed Partnership	Restoring high elevation wetlands in the Klamath Basin for threatened amphibian	The goal of our monitoring is to evaluate responses of Oregon spotted frog populations and their habitats to floodplain restoration at Jack Creek, Oregon.	\$	411,372
Total Monitoring Projects Recommended for Funding by RRT and OWEB Staff					\$ 718,847

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
N/A				

Projects NOT RECOMMENDED for Funding by RRT			
Project #	Grantee	Project Title	Amount Requested
N/A			

Region 4 Total OWEB Staff Recommended Board Award	\$2,346,590

Region 1 - 6 Grand Total OWEB Staff Recommended Board Award	\$13,925,206

Open Solicitation Restoration-Spring 2024

Central Oregon (Region 4)

Application Name: 224-4017-23656

Project Type: Restoration_v2

Project Name: Improving Wildlife Migration and Pastures on Foley Butte

Applicant: Crooked River WC

Region: Central Oregon

County: Crook

OWEB Request: \$214,643

Total Cost: \$268,327

Application Description 1. Foley Butte Ranch, located in the northwest corner of Crook County, Oregon, encompasses 30,000+ acres of timberland, creeks, meadows, and mountains. This property is known for its abundant wildlife species, including Mule deer, Rocky Mountain elk, Cougars, Black bears, Bobcats, coyotes, grouse, chukar, and native fish species in the abundant creeks. This property is located within ODFW's Rocky Mountain elk winter/summer range and Mule deer winter range, making habitat restoration a priority.

2. The project area has suffered from past grazing management regimes that have allowed cattle to overgraze the riparian corridors along streams and overgraze the timber meadows on the north end of the property causing native woody vegetation to be nearly void along streams. Native grass stands aren't able to respond with regrowth due to intense grazing. Prior grazing management has also led to the encroachment of western juniper, and the decline of forbs, shrubs, and quaking aspen.

3. This application will address wildlife habitat degradation from prior grazing management practices by improving grazing distribution that will help reduce fire fuels and prevent overgrazing, significantly decrease cattle numbers (800 pairs down to 250 pairs), eliminate 2.26 miles of non-pasture hazard fences within the elk and deer winter range, and install spring developments that will increase clean water sources year-around for wildlife.

4. Project Partners include, Oregon Watershed Enhancement Board (OWEB), The Crooked River Watershed Council (CRWC), and Foley Butte Ranch LLC.

Review Team Evaluation

Strengths

- The maps included provide watershed context for understanding where the different project components would be implemented (i.e. fence locations, spring developments) relative to regional wildlife ranges.
- The proposed project will remove old barbed wire, non-wildlife friendly fencing, which poses risks and barriers to wildlife movement, while installing new pasture fencing with wildlife friendly fencing following NRCS specifications.
- The project is strongly supported by a host of local, state, and federal entities as evidenced by their letters of support attached to the application.

- The applicant staff and landowner team have demonstrated experience in implementing this type of work with success.

Concerns

- The application provided a grazing management plan, although the detail provided was not enough to discern whether wildlife will benefit because of this project. For example, the different grazing zones do not have dates associated with use to understand when cattle will utilize each zone. It's unclear whether all three livestock grazing zones will be utilized every year or whether some zones or portions of zones will go into rest rotation (this practice is proven to maintain and/or increase vigor in understory plant communities). The salt lick distribution and spring developments will help with animal movement within each pasture, yet the pastures are large and it's unclear how and who will keep livestock from loafing around sensitive areas and riparian areas (some of which are fenced, some are not).
- It's unclear what thresholds will be used (i.e. stubble height) to inform managers when livestock have fully utilized a pasture or when a pasture is in good condition to allow livestock grazing. These thresholds are key to evaluate whether wildlife will benefit from increased forage which is an outcome of improved grazing management.
- It is unclear who will be responsible for the upkeep and maintenance of the fencing. Ecosystem benefits are contingent upon fencing being maintained.
- It's unclear what the landowner project management and oversight budget line item is paying for. OWEB cannot fund landowners for land management. More detail describing the landowner's task(s) for reimbursement would help provide proposal clarity.
- The project components are solely focused on improving livestock use and management. The watershed benefit to fish, wildlife, and water quality is difficult to quantify.
- The application states that the landowner has enrolled into the Grazewell program but did not provide any information as to what this program is or how the use of this program will improve conditions for livestock and wildlife. More information on this program and how it will be employed on the property would be helpful.

Concluding Analysis

This project will employ livestock grazing management tools as a surrogate to improve and enhance wildlife habitat. The methods proposed are known to potentially improve wildlife habitat conditions; however, successful restoration is completely contingent upon livestock use and management. There is not enough detail in the application regarding grazing management to discern whether wildlife would benefit because of this project. The applicant is encouraged to work with the landowner to develop a more detailed grazing management plan.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Central Oregon (Region 4)

Application Name: 224-4018-23662

Project Type: Restoration_v2

Project Name: Upper Chewaucan SIA - South Creek Water Quality Improvement Phase 1

Applicant: Lakeview SWCD

Region: Central Oregon

County: Lake

OWEB Request: \$169,625

Total Cost: \$213,645

Application Description 1) The Upper Chewaucan SIA - South Creek Water Quality Improvement - Phase 1 is focused on South Creek, a main tributary of the Upper Chewaucan watershed, west of Paisley, Oregon. Our project is on Murphy Ranch property, downstream of adjacent Forest Service managed land.

2) South Creek is in the upper Chewaucan Strategic Implementation Area (SIA) and was identified for restoration by the SIA Partnership. South Creek within our project area exhibits sediment loading, meadow disconnection, low water table, and stream corridor habitat impairment, all of which can negatively impact the endemic Chewaucan redband trout and associated aquatic species. A need for channel and meadow stabilization as well as willow recruitment is key to improving aquatic habitat.

3) We begin this project implementation in Phase 1 (current application) by fencing one mile of creek channel and 45 acres of riparian corridor with a permanent electric fence, a spring development for off channel water, a low-tech processed-based restoration (LTPBR) approach through postless beaver dam analogs (BDAs), and armored water gaps. On site monitoring through the life of the project will determine adaptive management for the next phases of restoration. Phases 2 and 3 for future applications will continue to focus on the same property with additional necessary riparian, meadow, and pasture treatments.

4) The Lakeview SWCD is leading the project and coordinating with the Murphy Ranch, Lake County Umbrella Watershed Council (LCUWC), Lake County Resources Initiative (LCRI), Natural Resources Conservations Service (NRCS), the United States Forest Service (USFS, Fremont Winema National Forest), River Design Group (RDG), Oregon Department of Agriculture (ODA), Oregon Department of Fish and Wildlife (ODFW), and Oregon Department of Environmental Quality (ODEQ).

Review Team Evaluation

Strengths

- The project need is documented by water quality data collected and analyzed as part of the South Creek Strategic Investment Area (SIA). The combination of project components will likely improve water quality conditions and improve habitat for fish and wildlife.
- The application includes letters of support from partners and the landowner demonstrating their commitment to implementing the project components.

- Nearby timber thinning in the area will provide material for building the beaver dam analogues (BDA's). This will provide cost savings and prevent increased greenhouse gas emissions by utilizing local material that would otherwise be piled and burned.
- The applicant's consultant has been designing, permitting, and implementing similar projects in Lake County with success providing direction to Lake County Resource Initiative (LCRI) field crews who will be building the BDA's.
- The electric fencing will protect the riparian area from unrestricted livestock access. Two water gaps will be installed to allow for controlled livestock access and watering.
- The applicant, consultant, and landowner are in the design phase of addressing a fish passage barrier directly upstream of the proposed project site. Correction of this fish barrier will allow for access upstream where spawning and rearing habitat and riparian condition is of high quality.

Concerns

- The project goal is to improve water quality supporting aquatic habitat, but it is unclear whether post-project water quality monitoring will occur. Since pre-project water quality data is available, the project is well positioned to articulate water quality benefits from BDA's and controlled livestock access.
- It is unclear whether the budget will support the two hardened crossings to support livestock access and watering; no line items listed in the budget seem to correlate with these features. The design drawing for this component is vague and does not provide much detail. Additionally, the map that identifies where these components will be installed is at a coarse scale. Given this, it's unclear whether these features will function correctly while protecting the streambank and streambed from livestock use.

Concluding Analysis

The watershed has been heavily impacted by recent wildfires which contributed fine sediment into South Creek. Utilization of BDA's in conjunction with controlled livestock access should improve water quality, riparian vegetation, and instream fish habitat.

Review Team Recommendation to Staff

Fund

Review Team Priority

3 of 3

Review Team Recommended Amount

\$169,625

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$169,625

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Central Oregon (Region 4)

Application Name: 224-4019-23676

Project Type: Restoration_v2

Project Name: North Unit Irrigation District - Deschutes River
Fish Screen Replacement Project

Applicant: North Unit Irrigation District

Region: Central Oregon

County: Deschutes

OWEB Request: \$999,999

Total Cost: \$9,179,684

Application Description 1) The North Unit Irrigation District Main Canal fish screens are located within the main stem of the Deschutes River, north of downtown Bend, Deschutes County, OR. The fish screens are within the City of Bend city limits and adjacent to NE Division Street. The site is located at latitude 44° 4'31.88" North and longitude -121° 18'21.67" West. 2) The existing fish screens at the Bend Headworks was installed in the 1940s and does not comply with state or federal screening criteria for fish protection including standards for approach velocity, screen mesh size, and lacks a fish bypass system. Given the age of the current screens, frequent repairs are needed during the irrigation season that typically require removal of the screens from the intake that allows fish to enter the NUID Main canal. As a result, NUID has performed annual fish rescue since 2017 to retrieve any fish that passed through the intake. During the 2020 post-irrigation season fish rescue effort, over 4,194 fish were rescued over a two-day period. 3) The North Canal Dam, adjacent to the NUID screens, provides head pressure for irrigation diversions. In 2017, a fish ladder was installed at the dam for fish to traverse upstream and downstream past the dam providing fish passage for the first time in over 100 years. The construction ready flat panel fish screen design mimics the design of the neighboring COID fish screen. The design includes a fish bypass system that releases fish near the base of the North Canal Dam and existing fish ladder to support the movement of fish above and below the dam. Through design features that will slow the approach velocity, shrink the mesh size for the screen, and provide a safe path to the fish ladder, the proposed fish screen will provide protection, survival, and restoration to native fish while allowing clean and efficient diversion of water for farmers. 4) Current fiscal partners include USBR and ODFW, with support from DRC, UDWC, CTWSR, JCSWCD, DBBC and TU.

Review Team Evaluation

Strengths

- The applicant considered multiple fish screen alternatives prior to deciding on a design that is currently in use on the adjacent irrigation canal operated by Central Oregon Irrigation District (COID). This screen is proven to be effective at keeping fish in the river while allowing diversion of water.

- The application articulated a clear need for this project. It is a high priority for the Oregon Department of Fish and Wildlife (ODFW) given the existing fish screen does not function and native fish get entrained in the irrigation canal. The applicant has been doing fish salvages that have saved hundreds of native fish while raising awareness of the dysfunctional screen and the urgency to replace.
- The applicant is highly motivated and committed to implementing the project. In addition to pledging over a million dollars in district funds, they have been successful at securing large scale match funding from Bureau of Reclamation and ODFW.
- The project builds on previous efforts in this section of river for the benefit of native fish. A fish ladder was constructed at the North Canal Dam in 2018. Additionally, significant streamflow restoration has occurred in this section of the river over the last 20 plus years.
- The applicant has the demonstrated experience and capacity to implement this large-scale project.

Concerns

- The application does not identify the need to secure an in-water work permit from Department of State Lands. Given the scope, scale, and location of this project in the river, the applicant is encouraged to investigate whether a permit is required to implement this project.

Concluding Analysis

This project will screen the North Unit Irrigation District (NUID) main canal located on the Deschutes River in the City of Bend that has the legal authority to divert over a thousand cfs of water for irrigation. The original fish screen built in the 1940's does not function and is a key limiting factor affecting native fish abundance and distribution in the Deschutes River.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 3

Review Team Recommended Amount

\$999,999

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$999,999

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Central Oregon (Region 4)

Application Name: 224-4020-23733

Project Type: Restoration_v2

Project Name: Bear Creek Fish Passage Project

Applicant: Hood River WS Group

Region: Central Oregon

County: Hood River

OWEB Request: \$322,014

Total Cost: \$814,881

Application Description This aquatic organism passage project is located on Bear Creek on the Mt. Hood National Forest (MHNH) within the Hood River Ranger District. Bear Creek is spring-fed, making it an important cold, clearwater tributary to the often glacial silt-laden Middle Fork Hood River. The existing road-stream crossing at the project site is a 52-foot long, 11-foot wide corrugated metal pipe arch culvert. The proposed project is needed to 1) create unimpeded fish passage to 2.7 miles of upstream habitat for ESA-listed winter steelhead, bull trout, and coho, as well as Spring Chinook salmon, Pacific lamprey, native rainbow trout, and cutthroat trout, and 2) improve hydrologic function by accommodating 100-year flood events and allowing normal transport of sediment and wood.

The Hood River Watershed Group (HRWG) has a final design for the project and approximately \$500,000 in matching funds from MHNH for construction. The project will replace the culvert with a precast concrete bridge and footings and restore the stream channel under the new bridge. Project partners are HRWG and the MHNH's Hood River Ranger District. HRWG will oversee all aspects of project construction and the Hood River Ranger District staff have secured all necessary permits.

Review Team Evaluation

Strengths

- The project will address limiting factors for ESA-listed salmonids, specifically bull trout, coho and steelhead. Bear Creek is a clear water tributary that is identified as a high priority for restoring passage for aquatic species to access high quality, clear water habitat.
- The applicant and partners have a long history of working together implementing similar instream habitat restoration projects.
- The applicant's design consultant has a proven track record of designing projects that successfully achieve ecosystem restoration.
- Landowner and project support is demonstrated by letters of support attached to the application.
- The project is ready to be implemented. Matching funds and permits are secured.
- Bear Creek is a cold-water refuge and has been identified by the USFS as a climate refuge for aquatic species dependent on clear, clean, cold water.

- The project design includes a bridge with a 1.5 bankfull width and stream simulated streambed. This approach is proven to be effective at allowing material to move through and offer the necessary instream habitat for volitional passage for aquatic species at life stages during all flows.

Concerns

- No concerns were raised.

Concluding Analysis

This project will allow access to 2.7 miles of high-quality habitat for a suite of anadromous and resident fish species. In a watershed with limited cold, clearwater habitat, opening passage at this site will provide critical year-round habitat, with particular importance during low summer flows and high velocity winter flows. This type of habitat will become increasingly important as climate change emphasizes these extremes.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 3

Review Team Recommended Amount

\$322,014

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$322,014

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Central Oregon (Region 4)

Application Name: 224-4021-23670

Project Type: Technical Assistance_v2

Project Name: Deschutes River Mirror Pond Dam Fish Passage Restoration Project

Applicant: Upper Deschutes WC

Region: Central Oregon

County: Deschutes

OWEB Request: \$136,105

Total Cost: \$387,080

Application Description The Deschutes River Mirror Pond Dam Fish Passage Restoration Project is located on the Deschutes River in Bend, Oregon. The Mirror Pond Fish Passage Advisory Committee worked between 2021 and 2023 on a feasibility study to develop a preferred alternative for fish passage at the Mirror Pond Dam. The advisory committee reached consensus in 2023 on a preferred alternative called a nature-like fishway and the next step is to develop permit-ready engineering designs which is proposed in this application. The proposed nature-like fishway would open up and provide access to over 60 miles of upstream habitat on the mainstem Deschutes River for native redband trout, bull trout (historically), and other native migratory fish and aquatic species. This is the last remaining full fish passage barrier on the Deschutes River within the city of Bend and ranks in the top category on Oregon Department of Fish and Wildlife's 2019 Statewide Fish Passage Barrier Priority List. Project partners include PacifiCorp, Oregon Department of Fish and Wildlife (ODFW), Upper Deschutes Watershed Council, and it is planned that River Design Group would complete the engineering design work given their work on the project to date to support the feasibility study and development of the preferred alternative concept. U.S. Fish and Wildlife Service (USFWS) provided funding through the National Fish Passage Program for the feasibility study (PacifiCorp and Bend Park and Recreation District also provided funding) and a small amount of that funding remains for engineering design work. It is anticipated that USFWS will provide additional funding for engineering design efforts in 2025. It is also expected that ODFW will provide funding for engineering design efforts later in 2024.

Review Team Evaluation

Strengths

- The proposed project builds on a comprehensive feasibility study that included a wide range of state and federal entities and local community members. This process identified a preferred design, which is the focus of this engineering technical assistance grant.
- The project site is a high priority for the Oregon Department of Fish and Wildlife (ODFW), number 25 on the statewide fish passage priority list, to provide volitional fish passage for all aquatic organisms at all life stages.

- The project is strongly supported by a host of local, state, and federal entities as identified by their letters of support attached to the application, including a letter of support from the dam owner and operator, PacifiCorp.
- The applicant staff, partners, and consultant team have demonstrated experience in implementing this type of work with success.
- The fish passage solution would open access to hundreds of stream miles upstream, providing access to quality habitat and much desired genetic mixing for native fish species.
- Should dam removal ever become a viable option (at time of application it is not), the preferred alternative of the nature-like fishway is the best option to facilitate any future removal. The fishway could act as a bypass channel during dam demolition.
- The timing of this project is ripe, given the dam owner/operator is willing and able to support the preferred alternative of a nature-like fishway to provide volitional fish passage.

Concerns

- The success of the fishway solution will be contingent on agreed upon flow agreements between PacifiCorp and ODFW that will determine the timing, duration, and amount of stream flow to be diverted into the fishway. These negotiations are ongoing.
- It is unclear whether the fishway will be implemented solely on lands owned by PacifiCorp, and whether adjacent property access and easements will need to be secured. Securing access on neighboring lands could halt, hinder, or slow down project progress.

Concluding Analysis

This project will develop a 100% fully designed nature-like fishway at Mirror Pond dam, owned and operated by PacifiCorp, on the Deschutes River in the City of Bend. Fish passage has been blocked at this site since 1910. This project builds on recent fish passage and streamflow restoration efforts on the Deschutes River in Bend.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 3

Review Team Recommended Amount

\$136,105

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$136,105

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Central Oregon (Region 4)

Application Name: 224-4022-23672

Project Type: Technical Assistance_v2

Project Name: Wasco County Watershed Councils Action Plan 2024

Applicant: Wasco SWCD

Region: Central Oregon

OWEB Request: \$79,079

County: Wasco

Total Cost: \$79,080

Application Description The proposed project location encompasses 5 watersheds in Wasco County: Mosier (49,659 acres), The Dalles (82,406 acres), Fifteenmile (236,689), White River (350,199 acres) and the combined Bakeoven/Buck Hollow Watershed (224,915 acres). Combined, this amounts to a total of 943,686 acres to be included in the proposal to update the watershed councils action plan. This project was part of a two-phase process. The first phase of this project was to update the Watershed Assessments, which was completed in the Spring of 2023, with funding from ODA. The new assessments incorporate the most up-to-date information regarding the current state of the watersheds which provides the foundation for developing restoration action plans for the five watersheds. This proposal will address the second phase that is to take that information from the assessments, and update the Action Plan which was originally completed in 2015. The Action Plan has been a critical tool in guiding restoration projects throughout Wasco County since it's completion. However, the previous Action Plan was based off of the old assessments, and is now over 9 years old. The Action Plan will identify specific restoration actions, prioritize the actions, and lay out a road map for restoration and outreach activities over a five-year period. Through the prioritization of specific restoration actions and conceptual project development, the five watershed councils with the assistance from a natural resource focused consultant, will develop restoration projects that address the root causes of the factors limiting watershed conditions.

Developing prioritized restoration actions requires extensive collaboration. In addition to watershed council involvement, the project partners include local County/City officials, DEQ, ODFW, OWRD, ODA, the Confederated Tribes of Warm Springs, USFS, ODF, and NRCS.

Review Team Evaluation

Strengths

- The proposed project builds on recently completed watershed assessments in 2023, which will utilize the information compiled to develop restoration priorities throughout Wasco County.
- The consultant engaged to develop the action plan is the same consultant who conducted the recently completed 2023 assessments and assessments/action plan completed in 2015. The advantage of utilizing the same consultant offers continuity, local resource knowledge and expertise, and potential cost savings.

- The outcome of this action plan will identify and prioritize conservation projects throughout the County that will provide the five watershed councils a roadmap to move forward with strategic implementation.
- The applicant has a strong track record of working collaboratively with all five watershed council boards, landowners, and agency partners. There is high likelihood this effort will develop a meaningful action plan that will be utilized across the County.
- The budget detail provided for the consultant's time to develop each task was helpful in discerning true costs in evaluating the project's cost effectiveness.
- The application highlights the need to update the current action plan, specifically in light of recent environmental stressors that are having an impact on natural resources in the County, such as severe drought and wildfires.

Concerns

- It is unclear what the recently completed 2023 assessments entailed. It would have been helpful to see the results of the assessment to understand what types of information will be utilized to develop the action plan. Without these specifics, it is challenging to determine how fish, wildlife, and water quality will benefit because of projects identified in the action plan.
- It is unclear whether the 2015 action plan needs updating. The application did not include a list of projects from the 2015 action plan that were completed vs. those remaining. Without this detail, it's hard to understand the need to update the 2015 action plan.
- It is unclear how each of the five watershed councils will prioritize restoration projects. It would have been helpful to understand this process and the different resource concerns and species each council will consider in their prioritization process.

Concluding Analysis

This project will develop an action plan across Wasco County that each of the five watershed councils will use to identify and prioritize a list of restoration projects. This action plan will be the road map that will drive the County's future conservation efforts for the foreseeable future.

Review Team Recommendation to Staff

Fund

Review Team Priority

3 of 3

Review Team Recommended Amount

\$79,079

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

N/A

Open Solicitation Technical Assistance-Spring 2024

Central Oregon (Region 4)

Application Name: 224-4023-23687

Project Type: Technical Assistance_v2

Project Name: Bend to Suttle Lake Highway 20 Wildlife Crossing Design Development

Applicant: Oregon Wildlife Heritage Foundation

Region: Central Oregon

County: Jefferson

OWEB Request: \$376,750

Total Cost: \$606,750

Application Description In Central Oregon, mule deer and elk must move to survive. Their annual migrations occur over a vast area from the arid shrub-steppe to the Cascade Mountains. Highway 20, between Bend and Suttle Lake, intersects several important wildlife movement corridors for deer, elk, and other wildlife.

Each year, the Oregon Department of Transportation documents between 350 and 600 mule deer and elk carcasses along this section of highway due to vehicle strikes and wildlife-vehicle collisions account for almost 30% of known mule deer deaths in Central Oregon (Schuyler et al. 2018).

The Bend to Suttle Lake Wildlife Passage Initiative's wildlife crossing design project is situated within the Deschutes National Forest. With five wilderness areas, six wild and scenic rivers, more than 350,000 acres of old-growth forests, and a national monument, this forest boasts an extraordinary diversity of wildlife species.

The project will provide construction cost estimates and design for three new underpass or overpass wildlife crossings across Highway 20 on USFS land, along with wildlife fencing and jump outs. These crossings will allow wildlife to cross this busy highway safely, improving their ability to forage for food, find mates, and adapt to the effects of climate change.

The Oregon Department of Transportation will be the project lead on engineering and design and is experienced in delivering multimillion-dollar projects to design completion. The total budgeted amount of \$2,250,000 million will be used, in partnership with other state and federal agencies, to complete geotechnical drilling, roadway design, environmental surveys, and project permitting.

In addition to state and federal agencies, this project is supported by a robust partnership of non-profits, landowners, tribal partners, and a university.

Review Team Evaluation

Strengths

- The proposed project builds on a nearly completed alternatives analysis that explored a variety of potential wildlife crossings based on wildlife-vehicle collision data, land ownership, and habitat data. The chosen wildlife passage alternatives, of which this project will fully design three, will maximize these criteria to provide the best possible alternatives to provide safe passage for wildlife crossing highway 20.
- The applicant staff, coalition partners, and consultant team have demonstrated experience in implementing this type of work with success.
- The application included a plethora of letters of support from partnering entities and state and federal agencies demonstrating their support and commitment to implementing the project.
- The application included a variety of maps, data, and graphs that document the severity of vehicle-wildlife conflicts.
- The applicant and partners that make up the coalition have the demonstrated experience and capacity to implement this large-scale project.
- The coalition utilized effectiveness monitoring data collected from wildlife crossings on highway 97 south of Bend that is aiding in the planning and design process when determining what the best structure type and associated features should be to maximize safe passage for wildlife.

Concerns

- The budget is one lump sum. This makes it difficult to discern true costs and cost effectiveness. The applicant is strongly encouraged to consider this feedback in future applications.
- The application lacked details regarding animal use and movement within the area. The heat maps were helpful in understanding elk and deer densities, as are the ODFW Priority Wildlife Connectivity Area overlay; however, collar data tracking movement and impacts to actual populations would be helpful to better understand broader animal behavior and movement in the area, and thus the relationship to habitat restoration.
- Since the application does not address highway safety measures, it is not clear whether there are more cost-effective approaches to address highway safety. Since the watershed benefit is unclear, the problem does not appear to be associated with watershed degradation but rather it appears to be transportation related.

Concluding Analysis

This project will develop fully engineered designs and secure permits to support wildlife crossings across highway 20 between the City of Bend and Suttle Lake. This corridor has the highest number of deer/elk-vehicle collisions in the State of Oregon, thus is a high priority for Oregon Department of Transportation (ODOT) and Oregon Department of Fish and Wildlife (ODFW).

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 3

Review Team Recommended Amount

\$376,750

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

N/A

Open Solicitation Monitoring-Spring 2024

Central Oregon (Region 4)

Application Name: 224-4024-23625

Project Type: Monitoring_v2

Project Name: Upper Deschutes River Phase II Monitoring Project

Applicant: Upper Deschutes WC

Region: Central Oregon

County: Deschutes

OWEB Request: \$307,475

Total Cost: \$388,715

Application Description The proposed project is located in the Upper Deschutes Basin from RM 227 at Wickiup reservoir downstream to RM 167 in Bend, including all major tributaries (Little Deschutes, Fall and Spring rivers). Since the early 20th century, the primary use of water has been to support agricultural uses including construction of three storage reservoirs. This strategy has altered natural flow regimes and impacted aquatic and terrestrial flora and fauna. The Deschutes River Habitat Conservation Plan (DBHCP) was finalized in 2020 following the 2014 listing of the Oregon spotted frog (OSF) as threatened under the Endangered Species Act. Flow changes outlined in the DBHCP to mimic a more natural flow regime are an integral part of OSF recovery and should benefit other aquatic species. Instream flow restoration began in 2017 which increased minimum winter flows from 20cfs to 100cfs downstream of Wickiup reservoir. Minimum winter flows are scheduled to increase to 300cfs in 2028 and 400-500 cfs in 2035. Studies exploring changes to fish population assemblages, macroinvertebrate communities and water quality have been limited since flow restoration activities began and are critical for understanding benefits and to inform habitat restoration design and implementation. This proposal will refine and expand upon Phase I monitoring completed by Oregon Department of Fish and Wildlife (ODFW) that was funded through the Deschutes River Mitigation and Enhancement Committee, which monitored conditions upstream and downstream of Bend. This proposal would fund Phase II work and expand on earlier fish monitoring efforts, macroinvertebrate sampling and water quality monitoring on main and off-channel habitats. Monitoring of OSF is already being conducted by the U.S. Fish and Wildlife Service (USFWS) and their partners under the DBHCP and is therefore not necessary as part of this monitoring effort. Project partners include ODFW and the Upper Deschutes Watershed Council.

Review Team Evaluation

Strengths

- This project will collect information to identify the abundance and distribution of native fish that can be used to target future restoration actions to improve habitat conditions and has been identified as a priority in state and federal recovery plans.
- This project will complement existing data by further exploring conditions farther upstream of Bend and reaches directly downstream of Wickiup Reservoir.

- The applicant has an existing DEQ approved Sampling and Analysis plan (SAP) to collect water temperature and macroinvertebrates that will be updated to include this project's details.
- This project will provide information to understand how increasing streamflow contributes to durable adaptation and resilience for ecosystems in an area that is predicted to experience shifts in hydrology associated with changing climate conditions.
- The contractor has the qualifications and ability to apply the proposed monitoring and analysis methods to successfully complete the monitoring activities.
- This project will engage technical experts as part of the existing advisory committee to provide input on the monitoring and share results from this project to help transfer information about conditions in the upper Deschutes with various agencies and organizations.
- The application includes several letters of support that demonstrate the applicant is engaging a diverse group of partners and they are interested in applying the information collected in this project.

Concerns

- The application does not provide a clear description of why monitoring is needed in the tributaries given that the streamflow restoration is occurring in the mainstem.
- The application is not clear how quality assurance and quality control measures will be incorporated into the fish monitoring actions to ensure high quality data is collected.
- It is not clear how the contractor will be providing the necessary information to allow the applicant to perform a quality control review of the water temperature data and write the technical report.
- The application did not describe how ODFW will work with the USFWS to incorporate the fish and frog data to collaborate on the development of restoration strategies that are beneficial to both species.
- The budget lacked detail for how the contractor expenses were estimated for ODFW to complete their monitoring tasks over 2.5 years.

Concluding Analysis

This second phase of native fish status and trend monitoring is a continuation of ODFW's efforts to understand how streamflow restoration is affecting native fish abundance and distribution directly downstream of Wickiup Reservoir. This proposed project is essential to monitor habitat conditions to identify future restoration actions and track changes as streamflow is incrementally increased in the future.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 2

Review Team Recommended Amount

\$307,475

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$307,475

Staff Conditions

N/A

Open Solicitation Monitoring-Spring 2024

Central Oregon (Region 4)

Application Name: 224-4025-23732

Project Type: Monitoring_v2

Project Name: Restoring high elevation wetlands in the Klamath Basin for threatened amphibian

Applicant: Klamath Watershed Partnership

Region: Central Oregon

County: Klamath

OWEB Request: \$411,372

Total Cost: \$525,367

Application Description Drought has greatly affected riparian habitats in the Western USA and can have pronounced effects on wetland dependent species like amphibians, the worlds most threatened vertebrate group. We propose an Effectiveness Monitoring study to measure the effects of habitat restoration on an at-risk population of Federally Threatened Oregon spotted frog (*Rana pretiosa*) in the Jack Creek watershed of the upper Klamath Basin. This project is a partnership including a key private landowner, Klamath Watershed Partnership (KWP), US Fish and Wildlife Service Partners Program, US Geological Survey, and USDA Forest Service (Fremont-Winema National Forest). The goal of this project is to quantify OSF population responses to riparian habitat restoration on key reaches of Jack Creek. Using a robust before-after control-impact (BACI) experimental design, we will compare water availability and OSF demography (e.g., survival and population size) pre- and post-restoration. This study capitalizes on a strong partner team, significant matching resources, and an exceptional data baseline on OSF in the Jack Creek drainage, and builds on previous work by expanding the study area and comparing past pond excavation with the current floodplain enhancement approaches to restoration. Findings from this study will aid in recovery of this listed species locally and around its range in the Northwest, as well as address a critical global need by advancing understanding of amphibian responses to multiple types of habitat restoration.

Review Team Evaluation

Strengths

- This monitoring project is timely, given that a new private landowner is interested in doing restoration work and will allow access to locations that are surrounded by past monitoring efforts.
- This monitoring project will collect data to understand the impacts of restoration that are addressing limiting factors identified in state and federal strategies aimed at recovering the threatened Oregon Spotted Frog (OSF).
- This project will complement existing data collected in this area and expands to an area that lacked monitoring over the last 5 years.
- This project will provide information to understand how floodplain restoration can increase OSF survival and population resilience in an area that has been impacted by drought conditions.

- The contractor will follow professionally accepted methods to collect the data and incorporate quality assurance and quality control steps into the process.
- The contractors working on this project are highly qualified and have a good track record of collecting and analyzing OSF data and are familiar with the geographic area.
- Final data included in analyses will undergo peer review by the US Geological Survey, will be delivered to partners and made publicly available on ScienceBase.

Concerns

- The project timeline is unclear, the application provided inconsistent information across several sections of the application.
- The application lacked details on the restoration actions to understand if the monitoring is adequate.
- Some of the monitoring methods are still in development with local partners, which made it hard to evaluate some aspects of the application.
- The application lacked detail on how the satellite data will be analyzed to consider temporal and spatial scales of different restoration actions.
- The application does not describe the plan to report these results and how the findings will be shared with the partners, private landowners and larger surrounding community.

Concluding Analysis

The Oregon Spotted Frog (OSF) is an ESA-listed Threatened species and the population in the Jack Creek watershed has unique genetic differences with the potential to exchange with populations from the Upper Deschutes basin immediately to the north. This proposed project will continue to collect data to provide information on the effectiveness of past and planned restoration projects on public land and extends it to include private land. Extending this monitoring can inform how and where to implement conservation measures to increase OSF resilience in an area that has experienced prolonged drought.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 2

Review Team Recommended Amount

\$411,372

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$411,372

Staff Conditions

N/A

Open Solicitation Engagement-Spring 2024

Central Oregon (Region 4)

Application Name: 224-4026-23731

Project Type: Engagement_v2

Project Name: Outreach & Collaboration to Promote Easements in Klamath County

Applicant: Oregon Agricultural Trust

Region: Central Oregon

County: Klamath

OWEB Request: \$115,689

Total Cost: \$120,689

Application Description Oregon Agricultural Trust (OAT) will partner with producers on their privately owned agricultural (ag) lands in Klamath County; including a large portion of the Klamath River & upper Klamath Lake basins and associated sub-watersheds as well as several rural communities

We will engage landowners on conservation strategies that compensate them for changes in land use, such as converting pasture to native floodplain or dry rangeland, for the betterment of the Upper Klamath River Watershed. This will benefit the recovery of native fish species including Lost River and shortnose suckers, bull trout, and coho salmon, all listed under the ESA, as well as the work of the Upper Klamath Basin Agricultural Collaborative (UKBAC).

Conservation efforts are most effective when land remains unfragmented and is managed by owner-operators who are familiar with and committed to their property. Conservation easements play a crucial role in helping landowners regain lost equity when converting productive ag land to less productive uses. By preventing fragmentation and increasing liquidity, easements also enable landowners to adapt their operations to evolving land use patterns.

We will undertake GIS research & analysis to strategically include Klamath County in our Farm & Ranch Protection Plan (FRPP).

OAT will conduct outreach in Klamath County to engage with landowners and promote easements for conservation and business planning, including:

- Participate in 4 outreach events across Klamath County to reach approx. 40 ag landowners on how they can use conservation tools to meet their business planning goals.
- Meet 1-on-1 with 15 existing and new landowner partners.
- Develop 1 professionally produced video profiling a producer in the area who has benefitted from an easement. We will include it in our resource library, use it in presentations and distribute to peers and partners.

Project partners include UKBAC, Sustainable NW, Klamath County Farm Bureau, and the Klamath Tribes.

Review Team Evaluation

Strengths

- The applicant is engaging appropriate partners to assist in landowner, partner, and agency engagement. Each partner works within a unique niche and collectively the partners represent a wide range of expertise to facilitate future conservation easements that are likely to benefit fish and wildlife in Klamath County.
- The proposed work is timely given the need to build interest and support in the community to take advantage of current programs offered through the Natural Resources Conservation Service (NRCS).
- The applicant and partners have successfully engaged rural private landowners for conservation easements in the past.
- The engagement approach of developing informative videos, conducting field tours and community driven workshops, and building trust to facilitate landowner engagement in conservation easement programs to restore fish and wildlife habitat is technically sound and likely to yield positive results.
- This project will likely benefit from past and current efforts underway in Klamath County to engage the agricultural community to support watershed restoration. The recent influx of federal funding to conservation partners in the Klamath Basin has opened opportunities for the applicant to be successful.

Concerns

- The approach and outcome of the GIS component lacks detail. For example, it is unclear what specific data layers will be used to develop the spatial analysis. Without this detail, it's hard to discern the value of the product and to determine the watershed benefit. Finally, the line item in the budget is lump sum which makes it challenging to discern true costs and cost effectiveness.
- There is no letter of support from the Klamath Tribes, NRCS, or Upper Klamath Basin Ag Collaborative. Without evidence of support, it's unclear how the applicant intends to engage, leverage and partner with these entities that are key partners in Klamath County conservation.
- The project identifies Coho salmon as benefiting from this project. This is unlikely given Coho salmon's upstream extent is Spencer Creek, a tributary to the Klamath River near the Oregon-California border, downstream of this project's footprint.
- The application does not explain why agricultural easements are needed to address water quality problems and watershed health.

Concluding Analysis

This project will engage the agricultural community in Klamath County to support the development of conservation easements to benefit fish and wildlife. The applicant is well positioned to serve in this role and the need for conservation easements is great; however, the project lacks detail and clarity around geographic prioritization for engagement as well as how this effort works in collaboration and/or conjunction with other conservation partners in the basin, especially the Wetlands Conservancy who is

working on a similar type project.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Central Oregon (Region 4)

Application Name: 224-4027-23709

Project Type: Technical Assistance_v2

Project Name: Mainstreaming Beaver-based restoration as a Natural Climate Solution in Oregon Phase II

Applicant: Bonneville Environmental Foundation (BEF)

Region: Central Oregon

County: Crook

OWEB Request: \$149,847

Total Cost: \$239,397

Application Description Supporting the recovery of beaver populations and their wetland habitats is an essential strategy for addressing the impacts of climate change and for recovering federally and state listed endangered, threatened, and sensitive species. While overwhelming support exists among practitioners, researchers and agencies to partner with beavers to address these issues, on-the-ground practitioners lack the tools and information necessary to plan for and prioritize efforts to implement projects. This proposal will build on previously and on-going successful efforts (Phase 1) to address major barriers to mainstreaming beaver-based restoration across the state while completing key actions in several state plans and supporting habitat recovery for several Oregon Conservation Strategy species (e.g. coho salmon, steelhead, and Pacific lamprey) and opportunity areas. The project draws on a strong and diverse coalition of local and regional non-profits, Tribes, and state and federal agencies to implement statewide beaver habitat planning tools that prioritize where beaver based restoration projects are most likely to succeed and where beaver may cause conflict with existing infrastructure and intense land uses. This proposal will support Phase 2 of this statewide project which includes data collection by at least six partners (Crooked River and Mid-Coast Watershed Council, Western Beavers, Grand Ronde Model Watershed, Wild Salmon Center, and Wetland Conservancy) in five basins, data processing and reporting for localized results by our technical lead, and collaborative project development leading to implementation. The project's community driven approach supports volunteer and youth education and career building opportunities in the process. With future funding, data will be shared widely with practitioners across the state along with other practical resources and guidance that support implementation projects through an interactive online resource hub (Phase 3).

Review Team Evaluation

Strengths

- The project focuses on improving tools and resources to restore and enhance beaver populations and their habitats, which are important features on the landscape, providing many ecological benefits to fish, wildlife, and water quality.
- The project will refine the Beaver Restoration Assessment Tool (BRAT), which is an effective tool used by practitioners to identify where this type of habitat restoration should occur.

- The proposal is strongly supported by watershed groups in the geographies this project will be implemented in, as evidenced by their letters of support attached to the application.
- The applicant is well positioned to lead this effort, given their experience, expertise, and knowledge of beaver and their habitats.
- Outcomes of projects utilizing these tools will help mitigate impacts of a warming climate, specifically by reconnecting floodplain, wetland, and meadow hydrology.

Concerns

- The need for refining and recalibrating the BRAT model was not justified. Beaver based restoration is occurring and increasing in pace and scale. It is unclear if the limiting factor affecting restoration practitioners is the need to modify the BRAT model. It is also unclear if this work is necessary to support successful beaver habitat restoration projects. The problem with the current BRAT model was not articulated.
- It is unclear why an additional phase (phase III) would be needed to deliver on objective #9 relating to publishing online resources for practitioners. These appear to be the desired outcome of interest and the conduit leading to future on-the-ground restoration projects.
- It is unclear what specific data sets will be collected, in addition to the methods of collection, analysis, and QA/QC of the data that will feed into the BRAT model recalibration. It is also unclear whether the watershed groups associated with this project have the technical expertise to collect field data. Without this information, it's challenging to discern the technical soundness of the application.
- The partner list attached to the application captures a lot of relevant geographical expertise; however, it lacks Trout Unlimited, who is a leader in this type of work across Central and Eastern Oregon and could likely offer sound advice regarding beaver habitat restoration.
- The project is titled phase II but the application did not describe phase I results and how the proposed phase II adds to and/or complements work completed in phase I.
- It is unclear whether the approach of capturing data at the ecoregion level would be specific enough to capture the unique attributes found across the Central and Eastern Oregon landscape. An example of a data dictionary and how it would be applied within a specific geography would help evaluate technical soundness.

Concluding Analysis

This project will refine and calibrate beaver restoration tools across a variety of landscapes in Oregon to better equip restoration practitioners with beaver restoration implementation. Restoring beaver and their habitats are a high priority across Oregon that support many species and climate adaptations; however, the application lacked specifics around the need, relevance, and technical soundness of the proposed approach.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

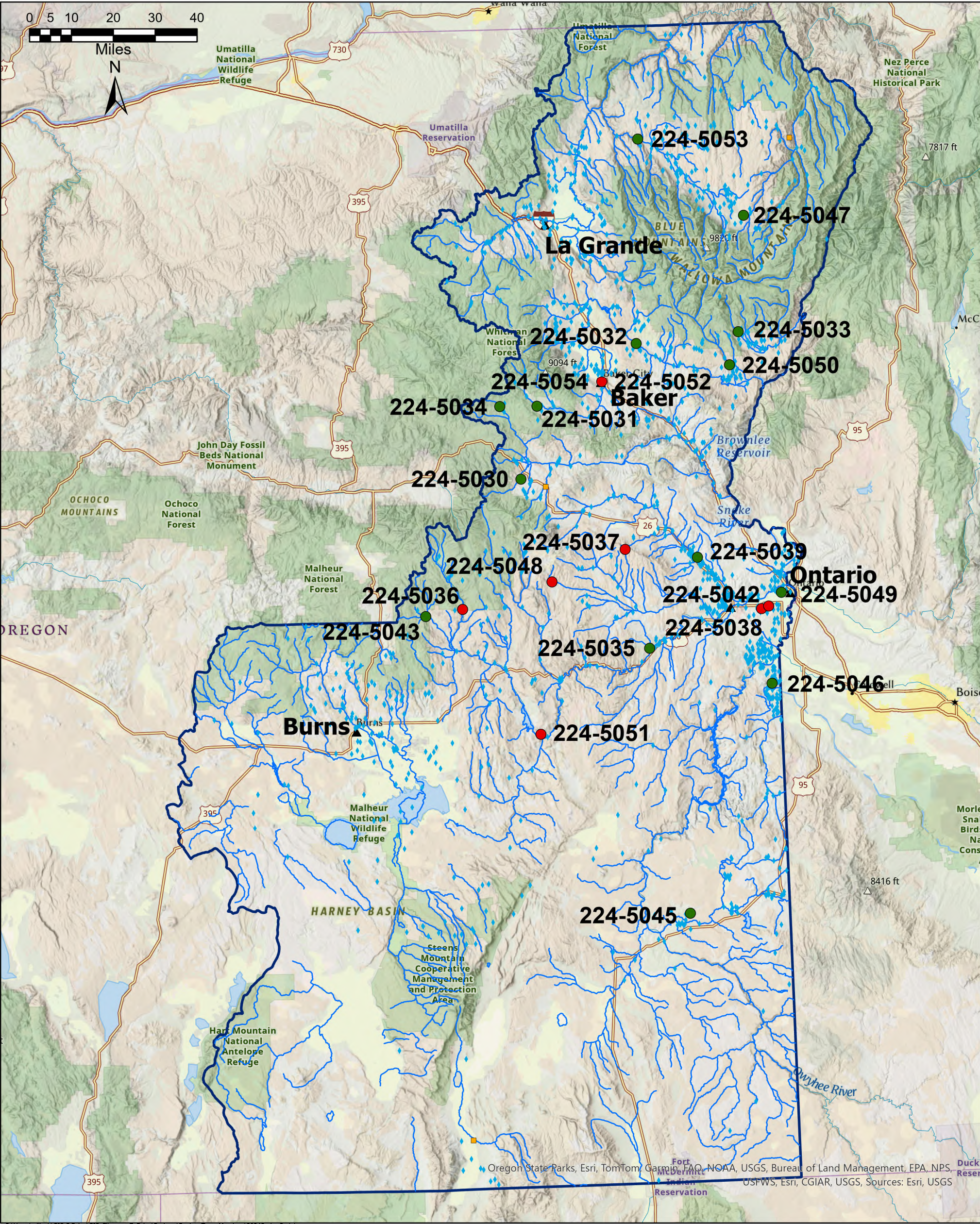
Staff Recommended Amount

\$0

Staff Conditions

N/A

Eastern Oregon - Region 5 Spring 2024 Funding Recommendations



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Funding Recommendation

● Staff Recommendation For Funding (SRF)

● Below Funding Line (BFL)

Previous Grants 1998 - Spring 2023

■ Land Acquisition

◆ Restoration

▲ Region 5 Cities

— Region 5 Streams

▭ OWEB Region 5 Boundary

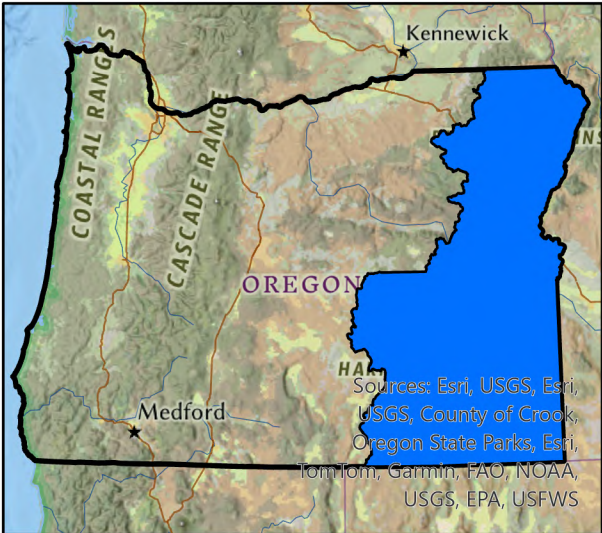


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Oregon Watershed Enhancement Board: Region 5 Restoration, Technical Assistance, Engagement and Monitoring

Region 5 - Eastern Oregon Restoration				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-5034	Powder Basin WC	Over the Log Weir and Through the Culvert: Camp Creek Aquatic Organism Passage Phase 1	Within the 1.5-mile Camp Creek project reach: Address 1 undersized culvert and a perched log weir to reestablish aquatic organism passage to 16.2-miles of cold-water habitat, improve watershed function by replacing existing undersized culvert infrastructure with structures designed for stream simulation, and improve watershed resiliency by remediating the perched log weir through channel fill and large woody debris placements to support floodplain reconnection and increased channel complexity.	\$ 226,213
224-5047	Wallowa Resources	Johnson Creek Culvert Replacement	The goal of the Johnson Creek Culvert Replacement Project is to restore all aquatic organism access to cold water refugia upstream in Johnson Creek, allow natural sediment and wood transport downstream to Big Sheep Creek, ensure the road remains open for public access to the Eagle Cap Wilderness, and eliminate the cost of road maintenance at this site.	\$ 193,703
224-5045	Owyhee WC	Power Pole Water Quality Improvement	The Power Pole Phase 1 water Quality Improvement Project goal is convert 58 acres of cropland/pasture from gated pipe to sprinkler irrigation. Conversion of 58 acres will eliminate tailwater containing sediment, nutrients and bacteria from flowing off of the project area through a small drainage and back into Jordan creek, The Owyhee River, and eventually into the Snake River. Addressing these water quality limiting factors will improve aquatic habitat in these streams and waterways.	\$ 107,647
224-5031	Baker Valley SWCD	Sumpter Water Improvement	The goal of the Sumpter Water Improvement Project is to eliminate flood irrigation runoff, erosion, sedimentation, bacteria and nutrient input concerns at the site entirely by converting 152 acres of seasonal pasture ground to sprinkler irrigation. Sprinklers will allow the oversaturated soil to properly drain between irrigation sets, improving pasture drought resiliency, carbon storage, root holding capacity, biodiversity and overall soil health at the site.	\$ 126,434
224-5046	Owyhee WC	Holly Water Quality Improvement	Convert 30 acres of flood/gated pipe irrigated farmland in the Big Bend area to sprinkler irrigation and eliminate irrigation tailwater runoff containing sediment, nutrients, and bacteria to address water quality limiting factors in the Snake River.	\$ 96,127
224-5030	Burnt River SWCD	Lancaster Irrigation and Riparian Improvement	To restore and protect riparian vegetation along the South Fork of the Burnt River, as well as improve water use and water quality conditions by eliminating flood irrigation runoff from entering the South Fork; and eliminate soil erosion, sedimentation and ditch loss by decommissioning a reach of the Lancaster Ditch.	\$ 234,879
224-5035	Malheur WC	Further on Down the Road Phase II Revisited	Improve water quality in the mainstem Malheur River by eliminating contaminated irrigation return flow. This project will help continue the statistically significant trend of improving water quality in this reach of the Malheur River. It will also help the irrigation district achieve its target of a minimum pool for winter habitat for bull trout in Beulah Reservoir.	\$ 158,089
224-5039	Malheur SWCD	Roping WQ in Willow Creek	The goal of this project is to eliminate runoff of 45 acres by conversion from flood to a pivot with zero runoff, and filter 11 acres of flood irrigation runoff on permanent pasture by using Best Management Practices. Thus reducing irrigation erosion , improve water quality, improve air quality and improve soil health. This will meet the water quality goals of NRCS, Watershed Council and the Malheur SWCD.	\$ 23,152
224-5032	Keating SWCD	Field 12 Irrigation Project	The goal of the Field 12 Irrigation Project is to eliminate flood irrigation runoff which directly impacts stream temperature, the transport of sediment and nutrients, and overall stream health in the Powder River. The project is designed to divert and use less water to irrigate 42 acres of pasture/hay ground, leaving more water in stream.	\$ 99,778

Oregon Watershed Enhancement Board: Region 5 Restoration, Technical Assistance, Engagement and Monitoring

224-5043	Malheur WC	Rip Van Winkle Revisited	Goals: 1) Enhance watershed resiliency to withstand wildfire threats and climate change. Treat 215 acres. 97 acres "medium density" 118 "light density." 2) Improve wildlife habitat by protecting and improving aspen stands. Protect a one-acre stand. 3) Control the invasion of juniper to benefit sage-grouse and other wildlife species. Cut juniper on 425 acres. Light density "Stage I"	\$ 172,108
224-5033	Eagle Valley SWCD	The Dooryard Project	The goal of this project is to improve the irrigation water efficiency, water quality, and fish habitat in Pine Creek by converting irrigation to sprinklers on 70 acres of hay/pasture land.	\$ 160,256
Total Restoration Projects Recommended for Funding by RRT and OWEB Staff				\$ 1,598,386

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
224-5036	Malheur WC	Hog Wild Thinning Phase II	Goals: Implementing Phase II will expand these goals to a wider area. 1) Enhance watershed resiliency to withstand wildfire and climate change. 2) Improve wildlife habitat by protecting and improving mahogany stands. 3) Control the invasion of juniper to benefit sage-grouse and other wildlife species. 4) Improve the riparian area function of a small ephemeral stream by removing invading juniper. a) Thin according to ODF riparian rules	\$ 194,459
224-5038	Malheur SWCD	Dr's Orders	The project goal for this project is to convert the 30 plus acres from furrow irrigation with the resulting polluted runoff flows to a zero runoff situation with no flows contributing to the degradation of the downstream water flows. With this conversion and those following, the watershed conditions will be greatly improved with the lack of sediments, nutrients and e coli contained within the water flows.	\$ 139,631
224-5037	Malheur WC	So Many Juniper, So Little Time Phase II	This project aims to remove juniper from 540 acres to enhance the site's suitability for providing a healthy and sustainable habitat for sage grouse. Implementing this project will increase the productivity of the riparian area, decrease predator habitat, and improve the success of other native sagebrush and vegetation. Additionally, this project seeks to remove the stressors limiting the growth of aspen stands located in some of the draws on site.	\$ 135,002
224-5042	Malheur SWCD	Lower Lincoln With Smoky	The goal of this project is to improve water quality by reducing the amount of irrigation runoff and erosion/sedimentation that leaves the project site on 16 acres, to increase on-farm irrigation efficiencies, and improve soil health. The second part is to bury 1364 ft of Lincoln Lateral for the wheel line to cross the existing lateral without irrigation water entering the open lateral.	\$ 68,760

Projects NOT RECOMMENDED for Funding by RRT			
Project #	Grantee	Project Title	Amount Requested
224-5040	Malheur SWCD	Blackbird Pie	\$ 45,848
224-5041	Malheur SWCD	HawkEye	\$ 88,837
224-5044	Malheur SWCD	Water Hack	\$ 19,173

Oregon Watershed Enhancement Board: Region 5 Restoration, Technical Assistance, Engagement and Monitoring

Region 5 - Eastern Oregon Technical Assistance				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-5049	Malheur SWCD	The Work Never Stops	Complete baseline inventory for each of the 5 properties. Complete Site Specific Plan for each property (Maps, Tables, Narrative). Submit each SSP to FWS for edits/collaboration. Finalize each property with FWS stamp of approval. Finalize each SSP as follows. 2 plans year 1 -2025 2 plans year 2 -2026 1 plan year 3 -2027 MC038-3,000 acres MC042-8,148 acres MC014-5,000 acres MC031-1,300 acres MC008- 7,200 acres	\$ 80,685
224-5050	Trout Unlimited Inc	Eagle Creek Floodplain Restoration Design Project	The project team will use technical assistance funding to produce and permit 100% implementation ready restoration design that will place this reach of Eagle Creek on a path towards proper geomorphic and ecological form and function, resembling the pre-settlement era riparian conditions as closely as possible within the project area.	\$ 177,722
Total Technical Assistance Projects Recommended for Funding by RRT and OWEB Staff				\$ 258,407

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
224-5048	Malheur SWCD	Bully No Moore	The goal is to design a restoration plan for the uppermost 5 miles of Bully Creek for the rehabilitation of the creek and the uplands associated with this water resource. The design will provide two (2) 90% designs to be included in a later restoration grant request. With 2 different designs, many options will be made available and the best will be chosen for following restoration grant application.	\$ 71,784

Projects <i>NOT RECOMMENDED</i> for Funding by RRT			
Project #	Grantee	Project Title	Amount Requested
N/A			

Region 5 - Eastern Oregon Monitoring				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-5053	Grande Ronde Model WS Foundation	Grande Ronde Basin Stream Flow Gauging Stations Operation- Water Years 2025 & 2026	We aim to support watershed conservation, restoration, research, and management in the Grande Ronde Basin by providing high quality stream flow data. This data enables: 1. Real-time management of surface flow for irrigation, ensuring efficient water use. 2. Fisheries professionals to make informed decisions based on stream flow data. 3. Restoration project teams to design actions using empirical stream flow records. 4. Vital supplementary data for fisheries and climate research programs.	\$ 101,002

Oregon Watershed Enhancement Board: Region 5 Restoration, Technical Assistance, Engagement and Monitoring

224-5052	Powder Basin WC	Powder Basin Long-term Water Quality Monitoring	The goal of this project will be to continue water quality monitoring efforts throughout the basin to determine long term trends and identify impairments in priority watersheds. The results of this monitoring will be used to establish baseline data, identifying factors limiting water quality, and direct future monitoring and restoration actions in the Powder Basin.	\$ 198,754
Total Monitoring Projects Recommended for Funding by RRT and OWEB Staff				\$ 299,756

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-5051	High Desert Partnership	Oregon Rangeland Monitoring Project	The goal of this project is to collect pre- and post-treatment metrics measuring ecological condition and vegetation composition on SOWR restoration efforts to provide pertinent information to SOWR project partners, other restoration practitioners, researchers, land managers, funders and policy-makers on the success of rangeland restoration projects in increasing the quantity and quality of sagebrush habitat in Oregon's rangelands.	\$ 332,195
224-5055	Malheur SWCD	Dewatering the Malheur	The goal of understanding why water quality in the Malheur River does not meet state standards and how discharges in targeted drains within the reach contribute to the water quality in the Malheur River and ultimately the Snake River. It is the intent of this project that the findings from the water quality monitoring would be used to better inform local landowners, operators, the irrigation districts, NRCS, SWCD and others to be used to identify trends in water quality.	\$ 58,049

Projects NOT RECOMMENDED for Funding by RRT			
Project #	Grantee	Project Title	Amount Requested
224-5054	Powder Basin WC	Powder Basin Project Effectiveness Monitoring	\$ 76,076

Region 5 Total OWEB Staff Recommended Board Award	\$2,156,549

Region 1 - 6 Grand Total OWEB Staff Recommended Board Award	\$13,925,206

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5030-23586

Project Type: Restoration_v2

Project Name: Lancaster Irrigation and Riparian Improvement

Applicant: Burnt River SWCD

Region: Eastern Oregon

County: Baker

OWEB Request: \$312,679

Total Cost: \$511,282

Application Description Located within the Burnt River Soil and Water Conservation District (SWCD), near Unity Oregon, and in the newly established Burnt River Strategic Implementation Area (SIA), the Lancaster Irrigation and Riparian Improvement Project will address riparian health as well as inefficient irrigation practices on 130 acres of flood and wheel line irrigated ground.

Two pivots will be installed, as well as 5,780 feet of mainline to eliminate the use of the highly erodible open earthen Lancaster Ditch that has been contributing to soil erosion, sedimentation and ditch loss concerns at the site. Current flood irrigation practices are impacting water quality in the Burnt River Watershed through increased runoff and sediment loads containing nutrients, debris and organic/inorganic matter. Flood runoff entering a fresh water system is linked to increased stream temperatures, pH, and dissolved oxygen, further impacting stream function and aquatic habitat.

In addition, livestock currently have unrestricted access to one mile of the South Fork of the Burnt River, located above Unity Reservoir, which has led to loss of vegetation in the riparian area. As a part of this irrigation efficiency project, the landowner will install 4,500 feet of wildlife-friendly fence and one off-stream watering trough and water gaps to protect the banks of the South Fork. Project partners include the private landowner, NRCS, and the Burnt River SWCD.

Review Team Evaluation

Strengths

- The restoration methods are clearly defined and appropriate to address degraded water quality in the Burnt River Basin. The new irrigation system will use 30% less water and the riparian fencing and off-site stock watering system will facilitate riparian vegetation and streambank recovery.
- The maps uploaded with the application show that the project is within an Oregon Department of Agriculture (ODA) Strategic Implementation Area (SIA) and Oregon Department of Environmental Quality (DEQ) conducts water quality monitoring in the area. This demonstrates the proposed water quality improvement actions are a priority for both agencies.
- Converting from flood to sprinkler irrigation will improve water quality and quantity in the Burnt River, a priority stream for conservation in the Burnt River Valley.

- The irrigation conversion may be a catalyst for other conservation projects in the Burnt River SIA, which is an area where landowners have not completed many conservation practices in the past.
- The landowner is actively improving stock watering systems, irrigation practices, and fencing on their property, indicating the irrigation system and riparian fencing is likely to be implemented and maintained as proposed.
- The Burnt River SWCD has a proven track record of managing and completing projects as proposed and according to the project schedule.
- The project is cost-effective by including irrigation water delivery pipelines that will facilitate future flood to sprinkler irrigation phases on the property.

Concerns

- Flash grazing will be implemented post project as a riparian area management tool. The grazing plan included in the application lacks detail describing the season of use, number of animals, and duration of grazing needed to understand how this management method will effectively lead to improving riparian conditions on the Burnt River.
- The application lacks details describing the water gaps that will be installed in the riparian fencing. Additional information explaining the number, dimensions, and design of the water gaps is needed to better understand the technical soundness of this restoration approach in reducing erosion, bank sloughing, vegetation degradation, and nutrient transport into Burnt River as described in the application.

Concluding Analysis

Converting 130 acres from flood to sprinkler irrigation in the Burnt River Valley will reduce water diverted for current crop production and improve water quality in the Burnt River. The proposed actions are likely to succeed in providing a watershed benefit because irrigation water management and riparian conservation are top priorities for the Burnt River Basin.

Review Team Recommendation to Staff

Fund

Review Team Priority

6 of 15

Review Team Recommended Amount

\$234,879

Review Team Conditions

Remove the duplicate \$70,000 budget line item for 12" mainline pipe. Removing this line item reduces contracted service to \$211,192 and indirect costs to \$21,353, which results in a reduced OWEB request of \$234,879.

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$234,879

Staff Conditions

Remove the duplicate \$70,000 budget line item for 12" mainline pipe. Removing this line item reduces contracted service to \$211,192 and indirect costs to \$21,353, which results in a reduced OWEB request of \$234,879.

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5031-23587

Project Type: Restoration_v2

Project Name: Sumpter Water Improvement

Applicant: Baker Valley SWCD

Region: Eastern Oregon

County: Baker

OWEB Request: \$126,434

Total Cost: \$265,389

Application Description The Sumpter Water Improvement project is located outside of Baker City, Oregon, above Phillips Lake Reservoir. The site currently utilizes flood irrigation on 152 acres of pasture ground conveyed through open earthen ditches and diverted out of the Powder River. All irrigation runoff from the site returns to Worley Creek and the Powder River and then flows directly into Phillips Lake Reservoir, located only one mile from the project site. Water is stored in the reservoir for angling, recreational use and downstream irrigation purposes.

The use of flood irrigation at this particular site is causing the ground to become oversaturated; increasing erosion, sedimentation, bacteria and nutrient input concerns in the Powder River, as well as in the reservoir, both of which are listed on Oregon Department of Environmental Quality's (DEQ) 303(d) list. Because oversaturated soil cannot properly absorb water, this issue is not only contributing to the ongoing runoff concerns, but impacting soil health and biodiversity at the site as well.

The landowner is partnering with the Baker Valley SWCD and Living Water Irrigation to improve irrigation efficiency on 152 acres and eliminate flood irrigation runoff at the site, along with the associated watershed concerns. One ten-tower pivot will be installed, along with flow meter, filtration system, pumping station, and associated pipe and conduit.

Review Team Evaluation

Strengths

- The irrigation conversion methods are clearly defined and appropriate to address degraded water quality in the Powder River Basin.
- The maps included in the application provide ample detail for understanding the project vicinity and proposed restoration components.
- Converting from flood to sprinkler irrigation will have water quality and quantity benefits to the Powder River, a priority stream for conservation in the Baker Valley.
- Three restoration alternatives are identified in the application, and the applicant will implement the appropriate alternative based on field shape, economic feasibility, and crop rotation.

- The irrigation conversion may be a catalyst for other irrigation water management projects in the Powder River Basin.
- The landowner is actively improving farming practices on their property, indicating the irrigation system is likely to be implemented and operated as proposed.
- The project team, including the landowner, have the capacity to implement and maintain the project as proposed.
- The Baker Valley SWCD has a proven track record of managing and completing projects as proposed and according to the project schedule.
- The budget reflects costs necessary to implement the irrigation conversion and is based on current market rates.

Concerns

- It is unclear how this project fits within the context of past and planned future restoration efforts in the watershed. A map showing past projects implemented in the Powder River Basin would clarify how the proposed actions are strategic.

Concluding Analysis

Converting 152 acres from flood to pivot irrigation will reduce irrigation wastewater in the project area and reduce sediment, nutrient, and bacteria runoff. The project is likely to succeed in continuing restoration actions in the Baker City area that implements ODA and the DEQ water quality improvement objectives for the Powder River.

Review Team Recommendation to Staff

Fund

Review Team Priority

4 of 15

Review Team Recommended Amount

\$126,434

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$126,434

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5032-23588

Project Type: Restoration_v2

Project Name: Field 12 Irrigation Project

Applicant: Keating SWCD

Region: Eastern Oregon

County: Baker

OWEB Request: \$99,778

Total Cost: \$158,763

Application Description Located within the Keating SWCD and in the Keating Valley just 24 miles east of Baker City, Oregon; this project site falls within the Lower Powder Strategic Implementation Area (SIA), a focus area that was established in association with the Oregon Department of Agriculture's Water Quality Program.

This property utilizes flood irrigation water, diverted from the Powder River via the Duncan Ditch to irrigate 42 acres of pasture/hay ground, all of which is surrounded by the Powder River; currently, all flood tailwater leaves the property and runs directly back into the Powder. Flood irrigation at this site is found to be the least efficient manner of irrigation, and tailwater is contributing to excess sedimentation and nutrient input concerns in this Oregon DEQ 303 d listed stream.

The Field 12 Irrigation Project proposes to convert from the use of flood irrigation to a center pivot with one pumping station on the Duncan Ditch to irrigate 42 acres of pasture/hay ground more efficiently, and to eliminate flood runoff into the Powder River. The landowner is partnering with Keating SWCD and a local Irrigation Company to design and install this project to improve water quality in the Powder River Watershed.

Review Team Evaluation

Strengths

- The restoration methods are clearly defined and appropriate to address degraded water quality in the Powder River Basin.
- The maps uploaded with the application show that the project is within an Oregon Department of Agriculture (ODA) Strategic Implementation Area (SIA) and Oregon Department of Environmental Quality (DEQ) conducts water quality monitoring in the area. This demonstrates the proposed water quality improvement actions are a priority for both agencies.
- Converting from flood to sprinkler irrigation will improve water quality and quantity in the Powder River, a priority stream for conservation in the Keating Valley.
- The irrigation conversion may be a catalyst for other conservation projects in the Lower Powder SIA, which is an area where landowners have not completed many conservation practices in the past.

- The landowner is actively improving farming practices on their property, indicating the irrigation system is likely to be implemented and operated as proposed.
- The project team, including the landowner, have the capacity to implement and maintain the project as proposed.
- The Keating SWCD has a proven track record of managing and completing projects as proposed and according to the project schedule.
- The budget reflects costs necessary to implement the irrigation conversion and is based on current market rates.

Concerns

- It is unclear whether the selected irrigation company has a proven track record of successfully installing pivot irrigation systems because they are not identified in the application as a project participant.
- The maps uploaded with the application do not clearly show how water from the Duncan ditch is delivered to the irrigation system pump station. This information is needed to determine technical soundness, water conveyance function, and likelihood of success.
- The project is in core sage grouse habitat. Pivot irrigation systems provide perches for predatory birds that are known to predate on sage grouse chicks and installing these systems can contribute to the decline of sage grouse in Baker County.

Concluding Analysis

Converting forty-two acres from flood to pivot irrigation will reduce irrigation wastewater in the project area and reduce sediment, nutrient, and bacteria runoff. The project is likely to succeed in continuing restoration actions in the Keating Valley that implements ODA and the DEQ water quality improvement objectives for the Powder River.

Review Team Recommendation to Staff

Fund

Review Team Priority

9 of 15

Review Team Recommended Amount

\$99,778

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$99,778

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5033-23599

Project Type: Restoration_v2

Project Name: The Dooryard Project

Applicant: Eagle Valley SWCD

Region: Eastern Oregon

County: Baker

OWEB Request: \$160,256

Total Cost: \$303,392

Application Description Located in Eastern Oregon, Pine Creek originates in the Eagle Cap Wilderness, and flows south to agricultural lands surrounding the City of Halfway before emptying into the Snake River. The Dooryard project, located five miles Northwest of Halfway, OR, currently, uses irrigation water diverted out of Pine Creek and into the Gaylord and Steele Ditches, located about 4,700 feet upstream of completed OWEB large grant #221-5015 Tarter Slough Fish Passage and Screening Project. Pine Creek is designated as Critical Habitat for Bull Trout and continues to be a focus for water quality, fish habitat and connectivity improvements among private, state and federal entities alike.

The property currently uses flood irrigation to cover 70-acres of uneven pasture/hay ground. The uneven ground results in an overuse of irrigation water and floods the landowner's dooryard and corrals each irrigation season. Flood runoff leaves the corrals and travels down the barrow ditch along Holbrook Creek Road before returning to Pine Creek, carrying excess sediment, debris, bacteria and nutrients that are impacting water quality and aquatic habitat in this Bull Trout Recovery Plan stream.

The landowner is partnering with Living Water Irrigation and the Eagle Valley Soil and Water Conservation District (SWCD) to mitigate the misuse and overuse of flood irrigation water and related watershed concerns.

Review Team Evaluation

Strengths

- The restoration goal is clearly defined and appropriate to address degraded water quality and improve bull trout habitat in the Pine Creek watershed.
- The Oregon Department of Environmental Quality (DEQ) conducts water quality monitoring in the area and the Oregon Department of Agriculture (ODA) is actively engaging landowners in the basin to address farm practices impacting water quality. This demonstrates the proposed water quality improvement actions are a priority for both agencies.
- Converting from flood to sprinkler irrigation will improve water quality and quantity in Pine Creek, a priority stream for bull trout restoration in the Pine Valley.

- The irrigation conversion may be a catalyst for additional conservation projects near Halfway.
- The project team, including the landowner, have the capacity to implement and maintain the project as proposed.
- The Eagle Valley SWCD has a proven track record of managing and completing projects as proposed and according to the project schedule.
- The budget reflects costs necessary to implement the irrigation conversion and is based on current market rates.

Concerns

- The application lacks detail describing how the proposed action will be implemented to achieve the project goal. For example, it is unclear how the pumping station will service the multiple irrigation methods or how water will be delivered to the center pivot system.
- Multiple sources of water will service this irrigation system that will require flow measurement devices; however, only one flow meter is listed in the budget.

Concluding Analysis

Converting seventy acres from flood to sprinkler irrigation will reduce irrigation wastewater in the project area and reduce sediment, nutrient, and bacteria runoff. The project is likely to succeed in implementing restoration in the Pine Valley that benefits bull trout and meets ODA and DEQ water quality improvement objectives for Pine Creek.

Review Team Recommendation to Staff

Fund

Review Team Priority

11 of 15

Review Team Recommended Amount

\$160,256

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$160,256

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5034-23626

Project Type: Restoration_v2

Project Name: Over the Log Weir and Through the Culvert:
Camp Creek Aquatic Organism Passage Phase 1

Applicant: Powder Basin WC

Region: Eastern Oregon

County: Baker

OWEB Request: \$226,213

Total Cost: \$282,767

Application Description Phase 1 of "Over the Log Weir and Through the Culvert" will address two structures impeding aquatic organism passage and limiting watershed function along Camp Creek in Baker County, Oregon, approximately 7.5-miles west of the city of Sumpter.

Camp Creek, a major tributary to the North Fork Burnt River (NFBR), is a perennial stream system which flows through the Wallowa-Whitman National Forest before entering private agricultural lands downstream. Both the NFBR and Camp Creek watersheds provide important habitat for several state and federal focus species including Columbia Basin redband trout, Columbia spotted frogs, and beavers. Throughout the Camp Creek watershed, current and historic land use practices limit watershed function and the availability of quality, connected, habitat to sustain resilient populations of focus species. This project will address a 1.5-mile stretch of Camp Creek within the National Forest where a steel pipe culvert and a log weir impede aquatic organism passage and disrupt natural stream function.

To improve watershed function, aquatic organism passage, and system resiliency we will replace the perched culvert pipe (2' step) with a semi-arch model designed with stream simulation throughout the structure. The 3.5' step created by the log weir will be remediated through channel aggradation and large woody material placement to decrease gradient, increase floodplain connection, and to restore a natural riffle in the meadow system. Addressing each passage concern will open approximately 16.2 miles of habitat to benefit various aquatic organisms at multiple life stages.

Project partnerships are imperative for accomplishing our objectives. Project partners include the Wallowa-Whitman National Forest (design, permitting, and implementation funding for the log weir restoration) and the potentially the Oregon Watershed Enhancement Board (implementation funding to replace existing culvert infrastructure).

Review Team Evaluation

Strengths

- The scope of work in the proposed solution section of the application has clear actions for completing design and permitting to address two structures impeding aquatic organism passage on Camp Creek by replacing one culvert and restoring a legacy log weir. Addressing each passage concern will open 16.2 miles of habitat to benefit redband trout, Columbia spotted frog, and beaver.
- The designs uploaded with the application are technically sound, demonstrate methods appropriate for the site, and will address limiting factors by treating the cause of degraded fish passage.
- Alternative design options were evaluated before selecting the proposed strategy.
- Reconnecting 16.2 miles of habitat for redband trout and Columbia spotted frog is a high priority project for the Camp Creek watershed and is a prioritized action in multiple watershed plans.
- The project is in the Oregon Department of Fish and Wildlife (ODFW) Burnt River beaver emphasis area.
- The project builds on previous OWEB, US Forest Service, and Powder Basin Watershed Council investments in floodplain restoration, valley bottom water storage, and riparian restoration.
- The project team has the capacity and relevant experience to implement the project.
- The applicant has a consistent track record for implementing similar high-quality projects in Baker County.
- The project cost to restore 16.2 miles of passage on Camp Creek reflects the quantified watershed health benefits expected from the investment.

Concerns

- No concerns were identified.

Concluding Analysis

The Powder Basin Watershed Council proposes to restore fish passage on Camp Creek west of Sumpter. The project will restore watershed function by extending available aquatic habitat for recognized species of concern in Oregon as well as contribute to durable ecosystem resiliency to climate change impacts.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 15

Review Team Recommended Amount

\$226,213

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$226,213

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5035-23633

Project Type: Restoration_v2

Project Name: Further on Down the Road Phase II Revisited

Applicant: Malheur WC

Region: Eastern Oregon

County: Malheur

OWEB Request: \$158,089

Total Cost: \$297,817

Application Description 1. This project is near Harper, Oregon adjacent to the Malheur River.

2. Water quality improvement in the Malheur Basin is one of the top restoration priorities for the Council. Water quality improvement is achieved through on-farm irrigation infrastructure improvements and management. The Malheur Watershed Council, in cooperation with irrigation districts and private landowners, has been systematically improving water quality through irrigation system conversions over the past 20 plus years across the Malheur Basin. This particular project will complement several recently completed and ongoing water quality improvement projects in the Harper Priority area. This is Phase II on this particular property. There has been statistically significant improvement in water quality along this stretch of the Malheur River. We think this is due to projects like this one.

3. The proposed project will convert 125 acres of flood-irrigated fields to sprinkler irrigation by installing:

1. a new pivot converting 125 acres from flood to sprinkler
2. 1,550 feet of 12-inch PIP 80# pipe for the mainline
3. 1 new bubbler
4. 1 30 hp pump
5. 1 electrical panel for the pivot
6. 3,000 feet of cable-con wire
7. Electrical allowance
8. 1 flow meter
9. Apply for a water-right transfer

4. Partners include the landowner, Vale Oregon Irrigation District, and the Malheur WSC.

Review Team Evaluation

Strengths

- Previous application evaluation concerns are addressed by identifying who is responsible for project design and implementation and clarifying estimated project costs.

- The application has clear objectives and activities for achieving the objectives. The restoration methods are clearly defined and appropriate to address degraded water quality in the Malheur River Basin.
- The photos, maps, and water quality data included in the application provide ample detail for understanding the project vicinity, proposed restoration components, and proximity of previously implemented restoration projects.
- Pivot irrigation is appropriate for the topography. The irrigation system will serve as a demonstration to other landowners and may encourage future water conservation projects.
- Three restoration alternatives are identified in the application, and the applicant will implement the appropriate alternative based on field shape and economic feasibility.
- The new irrigation system will improve water quality in the Malheur River by reducing sediment, nutrient, and bacteria runoff from the project site.
- Flood to sprinkler irrigation conversion is an Oregon Department of Environmental Quality (DEQ) Total Maximum Daily Load (TMDL) action plan priority.
- The Malheur Watershed Council has completed many irrigation water management projects and has the capacity to implement the project as proposed and according to schedule.
- The budget was developed using an irrigation company bid, reflects costs necessary to implement the irrigation conversion, and is based on current market rates.
- Three phase power from a previously installed flood to pivot project will supply needed power to this phase and will provide cost savings to the project.

Concerns

- No concerns were identified.

Concluding Analysis

Converting 125 irrigated acres from flood to sprinkler application will reduce irrigation wastewater. The proposed irrigation conversion near Harper will further efforts to implement Oregon Department of Agriculture and DEQ water quality improvement objectives by reducing sediment, nutrient, and bacteria delivery to the Malheur River.

Review Team Recommendation to Staff

Fund

Review Team Priority

7 of 15

Review Team Recommended Amount

\$158,089

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$158,089

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5036-23634

Project Type: Restoration_v2

Project Name: Hog Wild Thinning Phase II

Applicant: Malheur WC

Region: Eastern Oregon

County: Harney

OWEB Request: \$194,459

Total Cost: \$244,509

Application Description 1) The project is near Hog Flat and the Malheur River. It is about 25 air miles to Seneca.

2) This is Phase II of a thinning project. Juniper are invading pine and Douglas-fir stands. The invasion is degrading forest health, wildlife habitat, and could foster insect and disease, and disastrous wildfire. The western end of the property is within core sage grouse habitat. Juniper are beginning to invade these open areas. Federally listed bull trout inhabit the nearby Malheur River.

Phase II will finish the thinning on private land and will include a neighboring parcel of DSL owned and managed land.

Approximately 312 acres are in need of treatment.

3) Chainsaws will be used to cut 312 acres of juniper and pine. All juniper, except the trees that fit "old-growth" characteristics will be cut. In the Douglas-fir -Ponderosa Pine stands we will thin from below removing trees up to 10" DBH to create 16' X 16' spacing between trees below 10" DBH.

Slash will be hand-piled for later cool-season burning. Slash piles will be kept below 4-feet to prevent roost habitat for predators of sage grouse. On 44 acres of low density juniper control thinning slash will be lopped and scattered.

4) Partners are the landowner, Department of State Lands, and the Malheur WSC

Review Team Evaluation

Strengths

- Maps and photos included in the application provide ample detail for understanding the project vicinity, current forest conditions, and proximity of previous restoration completed nearby.

- The scope of work in the proposed solution section of the application has clear objectives and activities to enhance watershed resiliency to withstand wildfire and climate change, improve the mountain mahogany habitat type, improve sage grouse and wildlife habitat, and enhance riparian conditions on the property.
- The proposed forest thinning approach is technically sound. The approach was developed with advice from an experienced thinning contractor and will adhere to Oregon Department of Forestry (ODF) guidelines.
- The project demonstrates a strategic approach to forest management in the project area by building on a successful phase one thinning project on the property and thinning that occurred on adjacent properties.
- Prioritized actions in watershed plans, including the Natural Resources Conservation Service (NRCS) Sage Grouse Initiative and the Oregon Conservation Strategy, will be implemented.
- The applicant has capacity and relevant experience to implement the project.
- The project team has a consistent track record for implementing similar high-quality projects.
- The overall project cost is reasonable for the expected watershed health benefits.

Concerns

- No concerns were identified.

Concluding Analysis

The Malheur Watershed Council proposes to enhance watershed resiliency and improve a variety of wildlife habitats through conifer thinning. This will provide habitat benefit to native fish and wildlife, including sage grouse, and improve water quality in the upper Malheur watershed.

Review Team Recommendation to Staff

Fund

Review Team Priority

12 of 15

Review Team Recommended Amount

\$194,459

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

N/A

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5037-23641

Project Type: Restoration_v2

Project Name: So Many Juniper, So Little Time Phase II

Applicant: Malheur WC

Region: Eastern Oregon

County: Malheur

OWEB Request: \$135,002

Total Cost: \$188,914

Application Description 1) This project is located 11 air miles from Brogan, OR, and 12 air miles from Ironside, OR.

2) This continues the Malheur WC project So Many Juniper, So Little Time. The proposed project will further remove juniper over the sagebrush upland, ephemeral draw, and wet meadow habitats across the property. These areas are core sage grouse habitats (Cow Valley and Bully Creek Priority Areas for Conservation) and contain stands of aspen that are being crowded out by juniper. Currently, the juniper is outperforming species of bunchgrass, forbs, and shrubs that are vital to sage-grouse.

Additionally, the dense tree stands utilize extraordinary amounts of water, which have been observed in recent studies to impact water infiltration. This threatens the functioning of the wet meadows, which are vital to late-season sage-grouse brood-rearing. Without removing these trees, this population will continue to lose vital habitat.

3) We are proposing to:

Remove juniper from 540 acres of the site.

- 73 acres of high-density juniper

- 87 acres of medium-density juniper

- 380 acres of low-density juniper

This will be accomplished using chainsaws. In high- and medium-density areas, slash will be piled and burned at an appropriate time. In low-density areas, slash will be lopped and scattered.

Post-Project Maintenance:

Inspections will be conducted annually to determine if additional action is needed. Continued action will be contingent upon a per-acre count of juniper. Counts exceeding ten trees/acre will require further action. Subsequent action could include mechanical treatment of small or large areas using loppers and/or chainsaws. Monitoring will be conducted for a minimum of 10 years following project completion.

This project complements nearby juniper removal and riparian restoration, continuing to implement a CCAA site-specific plan.

4) Partners include Juniper Mountain Ranch, Pheasants Forever, and Malheur WSC.

Review Team Evaluation

Strengths

- Maps and photos included in the application provide ample detail for understanding the project vicinity, current forest conditions, and proximity of previous restoration completed on the project property.
- The scope of work in the proposed solution section of the application has clear objectives and activities to enhance watershed resiliency to withstand wildfire and climate change, improve sage grouse and wildlife habitat, and enhance riparian conditions on the property.
- The proposed juniper removal approach is technically sound. The approach was developed with advice from an experienced thinning contractor and will adhere to Oregon Department of Forestry (ODF) guidelines.
- The landowner is enrolled in the Candidate Conservation Agreements with Assurances (CCAA) program with the US Fish and Wildlife Service, which requires developing plans for maintaining sites post juniper treatment.
- The quantified habitat benefits expected from the project are reasonable because most of the juniper removal acres are in phase I juniper establishment with a healthy understory plant community.
- The project demonstrates a strategic approach to juniper management in the project area by building on a successful phase one thinning project on the property and thinning that occurred on adjacent properties.
- Prioritized actions in watershed plans, including the Natural Resources Conservation Service (NRCS) Sage Grouse Initiative and the Oregon Conservation Strategy, will be implemented.
- The applicant has capacity and relevant experience to implement the project.
- The project team has a consistent track record for implementing similar high-quality projects.
- The overall project cost is reasonable for the expected watershed health benefits.

Concerns

- The maintenance plan for long-term juniper control may not be sufficient. Conditions observed during the application review site visit demonstrates young juniper are reoccupying previously treated sites, which may indicate that maintenance of recent juniper removal on the property is not effective to maintain benefits to sage-steppe habitat.

Concluding Analysis

The Malheur Watershed Council proposes to treat 540 acres of encroaching juniper near Brogan in core sage grouse habitat. The majority of the acres to be treated are in stage I low density juniper

conditions that are most responsive to restoration actions. Effective maintenance after initial juniper treatment is important in restoring sustainable habitat for sage grouse. It is unclear how this investment will be maintained long-term without evidence indicating previously treated areas can be effectively maintained.

Review Team Recommendation to Staff

Fund

Review Team Priority

14 of 15

Review Team Recommended Amount

\$135,002

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

N/A

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5038-23644

Project Type: Restoration_v2

Project Name: Dr's Orders

Applicant: Malheur SWCD

Region: Eastern Oregon

County: Malheur

OWEB Request: \$139,631

Total Cost: \$357,875

Application Description 1. The Dr's Order project is located about 8 miles southwest of Ontario, Oregon and consists of 30 plus acres of irrigable cropland. It lies within the NRCS 'Valley View Priority Area'. The Dr's Order project drains into the Lee Rd Drain and eventually into the Nevada Ditch to be used by other farmers or spilled into the Blanton Drain and into the Malheur River and into the Snake River. Sediments and nutrients that wash off fields are passed onto the downstream users and contribute to overall water quality impairments.

The NRCS 'Valley View Priority Area' is located about 4 miles southwest of Ontario, Oregon, encompassing an area south of OR Highway 20-26 stretching from Cairo Junction 6.5 miles west and approximately 2 miles south. The NRCS 'Valley View Priority Area' consists of approximately 3275 acres with approximately 2000 acres of irrigable cropland. The entire area is in Malheur County.

2. Most of the sediment, nutrients, and bacteria in The Blanton 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. This farm is fairly typical and currently using 100% surface irrigation.

3. By installing partial swipe center pivots with the accompanying solid set sprinklers, pipeline, pump and flowmeter, the landowner will be able to achieve a zero water runoff practice that will enhance the downstream water quality.

4. The partners for this project are the landowner, Malheur County SWCD and Owyhee Irrigation District.

Review Team Evaluation

Strengths

- The project objectives are clearly stated, irrigation conversion methods are defined and appropriate for the location, and the project is ready to implement.

- The project is in the Valley View priority area, which is a focus area for Oregon Department of Agriculture (ODA), Department of Environmental Quality (DEQ), and Natural Resource Conservation Service (NRCS) to improve water quality in the Malheur River.
- Converting 30 flood irrigated acres to sprinkler application will address water conservation priorities in the Valley View priority area.
- Flood to sprinkler irrigation conversion addresses a DEQ Total Maximum Daily Load (TMDL) action plan priority by reducing sediment, nutrient, and bacteria laden runoff from the property, which will contribute to water quality benefits to the Malheur River.
- Ongoing water quality monitoring will document water quality trends in the watershed.
- The project is strategic because it is near previous and future on-farm irrigation improvements and will connect to the recently completed Arabian Pipeline Project, OWEB grant #222-5010.
- The project team has relevant experience and a proven track record for implementing irrigation water management projects.
- Landowner and tenant project support is demonstrated with letters of support included in the application.
- The application budget is informed by an irrigation company bid and reflects current costs and rates necessary to implement the project.

Concerns

- No concerns were identified.

Concluding Analysis

Converting 30 irrigated acres from flood to sprinkler application will reduce irrigation wastewater at the project site. The proposed irrigation conversion in the Valley View priority area will further efforts to implement ODA and DEQ water quality improvement objectives by reducing sediment, nutrient, and bacteria delivery to the Malheur River. The project is likely to succeed in achieving the proposed water quality improvements.

Review Team Recommendation to Staff

Fund

Review Team Priority

13 of 15

Review Team Recommended Amount

\$139,631

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

N/A

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5039-23650

Project Type: Restoration_v2

Project Name: Roping WQ in Willow Creek

Applicant: Malheur SWCD

Region: Eastern Oregon

County: Malheur

OWEB Request: \$23,152

Total Cost: \$161,520

Application Description 1. Roping Water Quality in Willow Creek is located 30 miles west of Ontario in NRCS the Willow Creek+ Water Quality Improvement Conservation Implementation Strategy Malheur County, OR.

2. Willow Creek runs along side of this proposed project. Excess runoff from the two flood-irrigated fields (56 acres) is adversely affecting water quality in Willow Creek. Nutrient and bacteria-laden tailwater from the irrigation enters directly into Willow Creek.

3. The proposed 45 acre conversion will connect to the existing pressurized mainline known as Lateral 349 that will provide pressurized system for the new pivot on the 45 acres. The remaining 11 acres will still be flood irrigation but planted into permanent pasture. NRCS has funded this grant and is working with the landowner on design, funding, nutrient management and cover crops on the total 56 acres and waiting on swcd portion. OWEB funds are requested for materials - filter, power, pasture seed, fertilizer, project management, travel and administration.

4. Partners include landowner, Vale Oregon Irrigation District, NRCS, and the Malheur SWCD.

Review Team Evaluation

Strengths

- The project objectives are clearly stated, irrigation conversion methods are defined and appropriate for the location, and the project is ready to implement.
- The project is in the Willow Creek priority area, which is a focus area for Oregon Department of Agriculture (ODA), Department of Environmental Quality (DEQ), and Natural Resource Conservation Service (NRCS) to improve water quality in the Malheur River basin.
- Converting 45 flood irrigated acres to sprinkler application will address water conservation priorities in the Willow Creek area.
- Flood to sprinkler irrigation conversion addresses a DEQ Total Maximum Daily Load (TMDL) action plan priority by reducing sediment, nutrient, and bacteria laden runoff from the property, which will contribute to water quality benefits to the Malheur River.

- The project is strategic because it is near completed on-farm irrigation improvements and will connect to a previously installed pipeline.
- The project team has relevant experience and a proven track record for implementing irrigation water management projects.
- The landowner, NRCS, and irrigation district project support is demonstrated with letters of support included in the application.
- The application budget is informed by an irrigation company bid and reflects current costs and rates necessary to implement the project.

Concerns

- Eleven acres will continue to be flood irrigated and it is unclear how irrigation wastewater from these acres will be treated prior to returning to Willow Creek.

Concluding Analysis

Converting 45 irrigated acres from flood to sprinkler application will reduce irrigation wastewater. The proposed irrigation conversion on Willow Creek will further efforts to implement Oregon Department of Agriculture and DEQ water quality improvement objectives by reducing sediment, nutrient, and bacteria delivery to surface waters in the Malheur Basin.

Review Team Recommendation to Staff

Fund

Review Team Priority

8 of 15

Review Team Recommended Amount

\$23,152

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$23,152

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5040-23651

Project Type: Restoration_v2

Project Name: Blackbird Pie

Applicant: Malheur SWCD

Region: Eastern Oregon

County: Malheur

OWEB Request: \$45,848

Total Cost: \$165,948

Application Description 1. The proposed project is located 1.6 miles west of Vale and less than 1.6 miles from the Malheur River and consists of 36 acre that receives water from Vale-Oregon Irrigation District's (VOID) Lateral 227 Pipeline that consist of approximately 1500 acres of irrigated cropland and is also located in The Willow Creek+ Water Quality Improvement Conservation Implementation Strategy Malheur County, OR

2. Field runoff flows into the Pump Ditch, which enters the Warm Springs Irrigation District and ends up in Willow Creek, then the Malheur River located at Vale. The primary resource concern addressed in the Lateral 227 area and Willow Creek+ Water Quality Improvement Conservation Implementation Strategy Malheur County, OR is water quality.

3. This landowner will hire a contractor to install the proposed sprinkler system that will bury the mainline from the take-out to the pivot pad for 1320 ft of 6" pipe for 26 acres, and install 52 solid sets to irrigate 10 acres with 3 sets of sprinklers in the corners, which will use 40% less water and reduce runoff from the field by 80%.

Working with NRCS, the landowner will plant pollinator plants in his wetland area on proximately 1 acre and plant the 26 acres to alfalfa for a cover crop.

Landowner will also be in charge of removing old farm equipment and vehicles to implement the project, plus filling in 2 upper field ditches, a drain ditch, a portion of the old lateral 227 that runs through the bottom east corner of the place, a man-made hole that was supposed to be a pump back pond and a silage pit using a D-3 caterpillar or comparable machine for approximately 50 hours.

4. Partners are VOID, landowner, NRCS and SWCD.

Review Team Evaluation

Strengths

- The project will address watershed limiting factors by restoring one acre of pollinator habitat under the guidance of the Natural Resources Conservation Service (NRCS).

- The project is in the Willow Creek priority area, which is a focus area for Oregon Department of Agriculture (ODA), Department of Environmental Quality (DEQ), and NRCS to improve water quality in the Malheur River basin.
- The project team has relevant experience and a proven track record for implementing irrigation water management projects.
- Landowner, NRCS, and irrigation district project support is demonstrated with letters of support included in the application.

Concerns

- The majority of the project area has not been irrigated for many years and it is unclear how water conservation and water quality improvement will result by adding more irrigated acres into crop production.
- Some of the treatments proposed may not be effective. For example, adding acres to crop production may increase water use and not result in additional water storage in the Beulah Reservoir or improved water quality in Willow Creek.
- The application lacks details describing the approach for pollinator habitat restoration. Additional information explaining the plant list, seed mix, restoration methods, and alternatives that were considered would be helpful to understand the methods that will be used to restore the pollinator habitat.

Concluding Analysis

The Malheur SWCD proposes to reinstate irrigation on 26 acres of a 36-acre property near Vale. It is unclear how increasing the number of irrigated acres in the Vale Oregon Irrigation District will lead to water conservation or water quality improvement in the Malheur Basin and directly links to improving fish and wildlife habitat.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5041-23660

Project Type: Restoration_v2

Project Name: HawkEye

Applicant: Malheur SWCD

Region: Eastern Oregon

County: Malheur

OWEB Request: \$88,837

Total Cost: \$318,542

Application Description 1. Located 8 miles west of Ontario in the Morgan Bench Priority Area with partners including NRCS, OID, and ODA. This farm consists of flood irrigation on 99 acres of irrigable cropland. It lies within the NRCS 'Valley View Priority Area' and the SWCD FAAP area. Runoff leaves the farm through the neighboring properties via buried drain lines that empties into a draw that eventually enters into the Soestring Canal. Sediments and nutrients that wash off fields are passed onto the downstream users and contribute to overall water quality impairments. This project sits directly underneath the North canal, next to Morgan Feedlot Pipeline but does not benefit from the pressurized line.

The NRCS 'Valley View Priority Area' is located about 4 miles southwest of Ontario, Oregon, encompassing an area south of OR Highway 20-26 stretching from Cairo Junction 6.5 miles west and approximately 2 miles south. The NRCS 'Valley View Priority Area' consists of approximately 3275 acres with approximately 2000 acres of irrigable cropland. The entire area is in Malheur County.

2. Currently runoff of the 99 acre pasture contributes directly to increased sediment loads in the Shoestring Canal that come from polluted irrigation return flows and livestock access to surface water. This farm is fairly typical in the area and currently using 100% surface irrigation with 75 pair of livestock annually.

3. By installing 1 swipe center pivot for 41 acres with two smaller full circle pivots combined for approximately 42 acres, conversion from flood to pivot will reduce e-coli nutrient rich runoff from this farm. 16 acres will remain in flood. Approximately 20 small volunteer elm trees will be removed for the swipe pivot. OID will replace takeout box #3 with a new box with a screen.

4. The partners for this project are the landowner, NRCS, SWCD and Owyhee Irrigation District.

Review Team Evaluation

Strengths

- The project is in the Morgan Bench Priority Area, which is a focus area for Oregon Department of Agriculture (ODA), Department of Environmental Quality (DEQ), and Natural Resource Conservation Service (NRCS) to improve water quality in the Malheur River.

- Converting 83 flood irrigated acres to sprinkler application will address water conservation priorities in the Morgan Bench priority area.
- Flood to sprinkler irrigation conversion addresses a DEQ Total Maximum Daily Load (TMDL) action plan priority by reducing sediment, nutrient, and bacteria laden runoff from the property, which will contribute to water quality benefits to the Malheur River.
- The project is strategic because it is near previously completed and planned future on-farm irrigation improvements.
- The project team has relevant experience and a proven track record for implementing irrigation water management projects.
- The application budget is informed by an irrigation company bid and reflects current costs and rates necessary to implement the project.

Concerns

- The application has a lot of project components, and it is difficult to understand how some of the objectives will be met. The uploaded maps are unclear in articulating the locations for the irrigation improvements, water sources, and how previous conservation efforts on the property interact with this project.
- The scope of work in the proposed solution section of the application does not have clear objectives and activities to understand why two pumps are needed, how continued flood irrigation on the property will impact sprinkler irrigated acres, or how flood irrigation wastewater will be managed prior to leaving the project area.

Concluding Analysis

Converting 83 irrigated acres from flood to sprinkler application may reduce irrigation wastewater in the Morgan Bench Priority Area. Additional information describing the design approach and how flood irrigation runoff at the project site will be addressed is needed to evaluate whether the project is likely to succeed in providing long-term watershed benefits.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5042-23661

Project Type: Restoration_v2

Project Name: Lower Lincoln With Smoky

Applicant: Malheur SWCD

Region: Eastern Oregon

County: Malheur

OWEB Request: \$68,760

Total Cost: \$140,437

Application Description 1. 6.5 miles west of Ontario, located in the Morgan Bench Priority Area.

2. Two parts to this application: 1st part, Runoff from this proposal spills into Shoestring Canal located 550 feet north. NRCS and the SWCD are working with the landowner for on-farm conversion from flood to sprinkler on 16 acres where Lincoln Lateral divides the two fields. Three acres will remain in flood. Two of the three acres have winter feeding with 3 pair of livestock and 2 yearlings. First irrigation, sediment and nutrients leave the field via the drain to Shoestring Canal.

2nd part, 1364 ft of open lateral is needed to be buried for conversion on 16 acres from food irrigation to 1 wheeline system. Working with Owyhee Irrigation District (OID) engineer, Mark Carpenter with required pipe sizes and installation of pipe cost.

3. 1st part - 16 acres on farm conversion

1280 ft wheel line.

6" Mainline

8 Risers

Cornell 2.5 WH-10 3 Phase Pump

6" Seametric Magmeter AG3000

1500" Electrical Wire 3 #2 with 1 #4 AK XLP Use

2nd part - Bury Open Lateral

18" 100# PIP Pipe

15" 100# Pip Pipe

12" Seametric Flow Meter

1 water right transfer for buried lateral

4. OID, SWCD, NRCS, and landowner

Review Team Evaluation

Strengths

- The project objectives are clearly stated, irrigation conversion methods are defined and appropriate for the location, and the project is ready to implement.
- The project is in the Morgan Bench Priority Area, which is a focus area for Oregon Department of Agriculture (ODA), Department of Environmental Quality (DEQ), and Natural Resource Conservation Service (NRCS) to improve water quality in the Malheur River.
- Converting 16 flood irrigated acres to sprinkler application will address water conservation priorities in the Morgan Bench priority area.
- Flood to sprinkler irrigation conversion addresses a DEQ Total Maximum Daily Load (TMDL) action plan priority by reducing sediment, nutrient, and bacteria laden runoff from the property, which will contribute to water quality benefits to the Malheur River.
- Ongoing water quality monitoring will document water quality trends in the watershed.
- The project is strategic because it is near previously completed and planned future on-farm irrigation improvements and will connect to an existing pipeline.
- The project team has relevant experience and a proven track record for implementing irrigation water management projects.
- The application budget is informed by an irrigation company bid and reflects current costs and rates necessary to implement the project.

Concerns

- No concerns were identified.

Concluding Analysis

Converting 16 flood irrigated acres to sprinkler irrigation will reduce irrigation wastewater in the project area and reduce sediment, nutrient, and bacteria runoff. The project is likely to succeed in continuing work in the Morgan Bench priority area that implements ODA and the DEQ water quality improvement objectives for the Malheur River.

Review Team Recommendation to Staff

Fund

Review Team Priority

15 of 15

Review Team Recommended Amount

\$68,760

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

N/A

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5043-23666

Project Type: Restoration_v2

Project Name: Rip Van Winkle Revisited

Applicant: Malheur WC

Region: Eastern Oregon

County: Harney

OWEB Request: \$172,108

Total Cost: \$215,683

Application Description

1) The project is near Calamity Creek, about a mile off the Van-Drewsey Road.

2) We are treating 640 acres. Juniper is invading 425 acres of sage-grouse core habitat. Juniper outcompete native bunchgrass, forbs and shrubs, which are necessary habitats for sage-grouse life cycle. Juniper provide perches for avian species that predate on young sage-grouse. Juniper and small pine are invading 215 acres of forest on steep slopes. The invasion is degrading forest health, wildlife habitat, and could foster insects, disease, and disastrous wildfire. A one-acre aspen stand is need of protection from grazing.

3) Chainsaws will be used to cut 425 acres of "low density" juniper. Slash will be lopped and scattered and kept below 4-feet to avoid creating perches.

Chainsaws will be used to thin 215 acres of overstocked pine and remove invading juniper. (97 acres Medium density 118 acres low density.)

Prescription :

-- Thin from below removing trees up to 10-inch DBH to create 16 ft X 16 ft spacing between trees below 10-inch DBH. Remove less vigorous trees up to 15-inch DBH if within 5 feet of a leave tree. Reduce to 180-200 trees per-acre .

-- Remove all juniper.

-- Prioritize retaining vigorous ponderosa pine over Douglas-fir.

-- Cut any trees that show advanced signs and symptoms of dwarf mistletoe, or if they are showing symptoms of bark beetle infestation.

-- Remove dead and dying trees; leave snags over 20-inch DBH.

--Low Density --remove juniper

Aspen Browsing

--Protect a 1-acre aspen stand from browsing with 900 feet of buck-and-pole fence.

Post-Project Maintenance

The treated area will be inspected annually to determine if actions should be taken. Criteria include counts of juniper trees per-acre. Action will be needed if there are 10 or more trees per-acre. These actions could include mechanical treatment of small or large areas with loppers and/or chainsaws.

Monitoring will occur for a minimum of 10 years.

4) Partners are the landowner and Malheur WSC.

Review Team Evaluation

Strengths

- Previous application evaluation concerns are addressed by explaining how invasive annual grasses and weeds will be treated post thinning and describing the mosaic pattern of open forest and patches of dense growth beneficial to wildlife that is expected to result from thinning conifers.
- The restoration methods are clearly defined and appropriate to address juniper and small pine encroachment in core sage-grouse habitat in northeast Harney County.
- The photos, maps, and designs included in the application provide ample detail for understanding the project vicinity and proposed restoration components.
- The project will address watershed limiting factors that impact forest health and wildlife habitat as well as increase the potential for large-scale wildfire. These limiting factors, including overstocked forest stands and juniper encroachment, are identified as concerns in local, state, and federal watershed restoration guidance documents.
- The project builds on previous Natural Resources Conservation Service (NRCS) and US Forest Service (USFS) forest management efforts in the area.
- The Malheur Watershed Council (MWC), contractor, and the landowner have the capacity to implement and maintain the project as proposed.
- The MWC has a proven track record of managing and completing projects as proposed and according to the project schedule.
- The project cost to remove encroaching conifers and protect aspen with buck-n-pole fencing reflects the quantified watershed health benefits expected from the investment.

Concerns

- No concerns were identified.

Concluding Analysis

The Malheur Watershed Council proposes to enhance watershed resiliency and improve wildlife habitat with a variety of treatment methods, including aspen protection and conifer thinning. Each of these treatments will provide habitat benefit to native wildlife, including sage-grouse.

Review Team Recommendation to Staff

Fund

Review Team Priority

10 of 15

Review Team Recommended Amount

\$172,108

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$172,108

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5044-23668

Project Type: Restoration_v2

Project Name: Water Hack

Applicant: Malheur SWCD

Region: Eastern Oregon

County: Malheur

OWEB Request: \$19,173

Total Cost: \$27,788

Application Description 1. Eight miles between Ontario and Nyssa, up on the upper bench ground, just below North Canal, this 20 acre farm is located.

Located two miles upstream from 206-162 Shoestring Sediment Ponds on the Shoestring Canal system. Two miles above Water Hack, 219-5011 In For The Haul where runoff used to enter the Shoestring Canal.

2. Current irrigation runoff enters the canal system from flood irrigation of 20 acres loaded with sediment and nutrients 5115 ft below. Project needs is to convert 20 acres of flood to sprinkler but can only afford 6.6 acres

3. Conversion of 6.6 acres with three sets of K-Lines with pump station risers, mainline and electrical.

4. Romans Irrigation, landowner and the SWCD

Review Team Evaluation

Strengths

- The proposed restoration approach using a K-line sprinkler system is appropriate given the steep slope and small project footprint.
- Converting 6.6 flood irrigated acres to sprinkler application may address water conservation priorities in the lower Malheur basin.
- Flood to sprinkler irrigation conversion addresses an Oregon Department of Environmental Quality (DEQ) Total Maximum Daily Load (TMDL) action plan priority by reducing sediment, nutrient, and bacteria laden runoff from the property, which will contribute to water quality benefits to the Malheur River.
- The proposed project is strategic by its location near previously completed irrigation improvements.
- The project team has relevant experience and a proven track record for implementing irrigation water management projects.

Concerns

- The 6.6-acre flood to sprinkler conversion project will have limited water quality benefits in the Malheur basin due to the 13.4 acres that will remain in flood irrigation on the property. An irrigation water management plan for the property is needed to understand how the proposed actions will compliment future habitat conservation.
- The project is not in a water quality improvement priority area defined by local partners, and it is unclear if DEQ, Oregon Department of Agriculture, or the Natural Resources Conservation Service have participated in the project development.
- No alternatives to the proposed approach were considered and it is unclear if the preferred alternative is the most cost-effective solution.

Concluding Analysis

The Malheur SWCD proposes to improve irrigation practices on 6.6 acres near Ontario. The project footprint is small, and it is unclear how this location is a strategic priority. The OWEB budget request is minimal, and the project scale could be more appropriate for the OWEB small grants offering. The applicant is encouraged to participate with the Malheur small grant team to implement this project.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5045-23679

Project Type: Restoration_v2

Project Name: Power Pole Water Quality Improvement

Applicant: Owyhee WC

Region: Eastern Oregon

County: Malheur

OWEB Request: \$107,647

Total Cost: \$195,433

Application Description 1. The Power Pole Phase 1 Water Quality Improvement Project is located is located 30 miles West of Jordan Valley near Arock.

2. The Power Pole Phase 1 Project consists of 58 acres of pasture/ cropland irrigated with gated pipe. Tail water from gated pipe methods contain sediment nutrients and bacteria that flow directly off the project site, into a small drainage and directly into Jordan Creek. These tailwater return flows contribute to water quality limiting factors in Jordan Creek and the Upper Owyhee River.

3. This project proposes to convert 58-acres from gated pipe to sprinkler irrigation through the installation of 3- ¼ mile wheel line systems and all required pipe conveyance infrastructure. Implementation of this project will eliminate tailwater return flows from 58 acres containing contaminants and improve water quality and aquatic habitat in Jordan Creek and Upper Owyhee River.

4. The project partners include Landowner, Owyhee Watershed Council and Agri-lines irrigation.

Review Team Evaluation

Strengths

- The restoration methods are clearly defined and appropriate to address water conservation, water quality, and soil conservation in the project area.
- Maps included in the application provide ample detail for understanding the project vicinity, the proposed restoration components, and the four-phased approach to irrigation water management on the project site, along with its proximity to prior implemented projects.
- Wheel line irrigation is appropriate for the topography in the project area. The irrigation system will serve as a demonstration to other landowners in the area and may encourage future water conservation projects.
- Four restoration alternatives are identified in the application, and the applicant will implement the appropriate alternative based on field shape and economic feasibility.

- Flood to sprinkler irrigation conversion addresses an Oregon Department of Environmental Quality (DEQ) Total Maximum Daily Load (TMDL) action plan priority by reducing sediment, nutrient, and bacteria laden runoff from the property, which will contribute to water quality benefits to the Owyhee Basin.
- The project team, including the landowner who has completed several conservation projects on the farm, have the capacity to implement and maintain the project as proposed.
- The Owyhee Watershed Council has a proven track record of managing and completing projects as proposed and according to the project schedule.
- The project is cost-effective by installing a pipeline that will facilitate future irrigation water management actions on the farm.

Concerns

- No concerns were identified.

Concluding Analysis

Converting 58 acres from flood to sprinkler irrigation will reduce irrigation wastewater in the project area and reduce sediment, nutrient, and bacteria runoff. The project is likely to succeed in continuing work in the Arock area that implements Oregon Department of Agriculture (ODA) and DEQ water quality improvement objectives for the Upper Owyhee River.

Review Team Recommendation to Staff

Fund

Review Team Priority

3 of 15

Review Team Recommended Amount

\$107,647

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$107,647

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5046-23683

Project Type: Restoration_v2

Project Name: Holly Water Quality Improvement

Applicant: Owyhee WC

Region: Eastern Oregon

County: Malheur

OWEB Request: \$96,127

Total Cost: \$229,060

Application Description The Holly Water Quality Improvement Project is located 2 miles SE of Adrian in the Big Bend Water Quality Improvement Area.

The project area consists of 30 acres of pasture/meadow hay crop land currently irrigated with flood/gated pipe irrigation. Tailwater containing sediment, nutrients and bacteria flow off the project area into the Holly Drain, Oakander Drain, Singer Drain then into the Snake River approximately ½ mile from the project site.

The proposed work includes converting 30 acres from flood to sprinkler irrigation through the installation of 1 pivot system/conveyance/electrical infrastructure, relocating 1 livestock feedlot area, and piping 1,300 feet of the Holly Drain.

Project partners include the landowner, Big Bend Irrigation District, Boise Irrigation District, Owyhee Watershed Council, Agrilines Irrigation and T&L Pivots Irrigation.

Review Team Evaluation

Strengths

- The application has clear objectives and activities for achieving the objectives. The restoration methods are clearly defined and appropriate to address degraded water quality in the Snake River Basin.
- The maps and handouts included in the application provide ample detail for understanding the project vicinity, the proposed restoration components, and proximity to prior implemented projects.
- Pivot irrigation is appropriate for the topography.
- The irrigation system will serve as a demonstration to other landowners and may encourage future water conservation projects.
- Three restoration alternatives are identified in the application, and the applicant will implement the appropriate alternative based on field shape, economic feasibility, and crop rotation.

- Flood to sprinkler irrigation conversion addresses a Oregon Department of Environmental Quality (DEQ) Total Maximum Daily Load (TMDL) action plan priority by reducing sediment, nutrient, and bacteria laden runoff from the property, which will contribute to water quality benefits to the Snake River.
- The proposed restoration will address actions identified in federal, state, and local water conservation plans by reducing irrigation wastewater delivery to nearby surface waters and the Natural Resources Conservation Service (NRCS) is working to make the Big Bend region a priority area for conservation.
- The Owyhee Watershed Council has completed many irrigation water management projects near Adrian and has the capacity to implement the project as proposed.
- The Owyhee Watershed Council has a proven track record of managing projects as proposed and according to the project schedule.
- The project cost to convert from flood to sprinkler irrigation, piping the Holly drain, and moving a livestock feeding area reflects the quantified watershed health benefits expected from the investment.

Concerns

- The application budget includes details clearly describing project costs, but it is unclear how the budget aligns with the notes on the bid sheets included in the application.

Concluding Analysis

Converting thirty flood irrigated acres to pivot irrigation, piping the Holly drain, and moving a feedlot to an unirrigated area will reduce irrigation wastewater in the project area and reduce sediment, nutrient, and bacteria runoff. The project is likely to succeed in continuing implementation of Oregon Department of Agriculture and the DEQ water quality improvement objectives for the Snake River.

Review Team Recommendation to Staff

Fund

Review Team Priority

5 of 15

Review Team Recommended Amount

\$96,127

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$96,127

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5047-23741

Project Type: Restoration_v2

Project Name: Johnson Creek Culvert Replacement

Applicant: Wallowa Resources

Region: Eastern Oregon

County: Wallowa

OWEB Request: \$193,703

Total Cost: \$399,158

Application Description The Johnson Creek culvert is located on National Forest System Road (NFSR) 3900-100 about 20 miles SE of Joseph, Oregon, off of the Hells Canyon Scenic Byway. NFSR 3900-100 terminates 1.8 miles beyond Johnson Creek at the Tenderfoot Trailhead, one of the eastern access points to the

Eagle Cap Wilderness. Johnson Creek is a tributary to Big Sheep Creek and is in the Salt Creek-Big Sheep Creek Subwatershed, a priority watershed for restoration on the Wallowa-Whitman National Forest.

The Johnson Creek culvert is a 4-ft corrugated metal pipe that has a 12" perch. It plugged in 2012 and was replaced with another undersized culvert. That culvert plugged in 2017 and water overtopped the road for a few days before it was cleaned out. This project proposes to replace that undersized culvert with a 37-ft clear-span modular bridge along with a simulated stream channel through the former culvert location which will allow threatened resident bull trout unfettered access to habitat up- and downstream for many years to come.

Johnson Creek is a steep, north-facing creek with very cold water. Electro-shocking revealed bull trout above the culvert in 2019, and in 2023 it was confirmed that bull trout were using just over 0.3 miles of habitat upstream. While that is not a long length of potential habitat, Johnson Creek is in a climate refugia area: a patch of cold headwater streams that have solid bull trout presence. Isaak et al. (2022) found that conservation investments to preserve bull trout should be made strategically and within proximity to climate refugia streams to maximize benefits. Protecting climate refugia populations could have significant conservation benefits for bull trout, thus replacing the Johnson Creek culvert would be a long-term investment in bull trout viability.

Replacing this culvert will complete one of the Essential Projects in the Salt Creek-Big Sheep Creek Watershed Restoration Action Plan.

Project partners include Wallowa Resources and the Nez Perce Trib

Review Team Evaluation

Strengths

- The restoration methods are clearly defined and appropriate to address aquatic organism passage, restore natural geomorphic processes, and reduce erosion and sedimentation that occurs at an undersized culvert on Johnson Creek.
- The project is ready for implementation with secured permits, stockpiled materials, and nearly completed designs.
- Three restoration alternatives are identified in the application, and the applicant will implement the appropriate alternative to achieve the restoration objectives.
- The proposed restoration is a high priority for the US Forest Service (USFS) and will address actions identified in local, state, and federal bull trout recovery plans by restoring passage to high-quality cold-water habitat.
- Providing access to habitat addresses changing climate conditions and contributes to durable adaptation and resilience for ecosystems in the Big Sheep Creek watershed.
- The applicant has capacity and relevant experience to implement the project as proposed, on time, and according to the budget.
- The applicant is engaging appropriate partners and partner support is documented in letters as well as secured match included in the application.
- The project team has a consistent track record for implementing similar high-quality projects.
- The overall project cost is reasonable for the expected watershed health benefits.

Concerns

- No concerns were identified.

Concluding Analysis

Wallowa Resources and the USFS propose to restore fish passage on Johnson Creek east of Joseph. The project will restore watershed function by extending available aquatic habitat for species of concern in Oregon as well as contribute to durable ecosystem resiliency to climate change impacts.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 15

Review Team Recommended Amount

\$193,703

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$193,703

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5048-23646

Project Type: Technical Assistance_v2

Project Name: Bully No Moore

Applicant: Malheur SWCD

Region: Eastern Oregon

County: Malheur

OWEB Request: \$71,784

Total Cost: \$77,034

Application Description (1) Located 20.5 miles northwest of Westfall, Oregon or 11.5 miles north and somewhat east of Beulah Reservoir. This project starts at the head waters of Bully Creek in Malheur County where the south arm and the north arm meet then proceeding downstream approximately 5 miles. Total length of the area of concern is over 16 miles. This part is the most needy with other portions to be addressed in later phases.

(2) Bully Creek has suffered some extreme downcutting as a result of some extreme weather events, the riparian area has been neglected and overgrazed by the previous landowner, invasive weeds have been allowed to flourish and juniper has been allowed to expand its territory. All of the previously mentioned conditions need to be addressed.

(3) The work will involve the removal of juniper and when possible, using the slash to mitigate erosion activity of the waters, along with other best management practices (BMP) to slow the flow and raise the water table. Exclusion fencing areas will be identified to protect the riparian and installed BMPs. Off stream watering of livestock will be one of the priorities of this project to pull the livestock away from the creek and riparian area. Invasive weeds will be controlled by chemical means or targeted grazing.

(4) Partners include the Malheur County Soil and Water Conservation District, ODFW, Malheur Vector Control and the landowner.

Review Team Evaluation

Strengths

- The proposed project builds on previous restoration implemented on an adjacent downstream property. This technical assistance may also lead to future design and restoration on a fifteen-mile reach of Bully Creek.
- Alternatives will be identified and analyzed as part of the technical assistance project.
- The restoration actions to be designed will address habitat limiting factors identified in a number of watershed plans by addressing instream habitat, stream channel down cutting, riparian vegetation, invasive upland plant species, domestic livestock management, and water quality.
- The applicant has capacity and relevant experience to implement the project.
- The applicant has a technical team of qualified experts to help guide the project.

Concerns

- Similar restoration completed on a downstream property is referenced in the application, but the outcomes of that work is not clearly described. Information explaining the results from this previous restoration would be helpful for determining the likelihood for the proposed project to succeed.
- Two 90% design alternatives will be produced. Typically, only one alternative is developed beyond the 30% design phase. The cost effectiveness of the project is unclear without information describing why two 90% design alternatives is necessary.
- It is not clear how the technical assistance and resulting restoration will lead to meaningful restoration without additional description in the application explaining the expected watershed benefits.
- If the design leads to restoration that diverts and stores water in the Bully Creek floodplain, a water right from the Oregon Water Resources Department (OWRD) may be required and OWRD is not identified as a partner engaged in the project.
- Western juniper boles and branches will be used in the design approach to mitigate erosion. It is unclear how the resulting design will effectively restore instream habitat conditions using this small diameter tree under the high flow events that occur in Bully Creek.
- It may not be cost effective for the engineering firm to complete tasks for project components better suited for partners with relevant experience to design, including fencing, weed control, and juniper removal.
- It is unclear if the estimated costs in the budget are sufficient to accomplish the proposed design actions for the five-mile project reach on Bully Creek.

Concluding Analysis

A stream, riparian, and upland restoration project will be designed on Bully Creek near Westfall. The resulting restoration will improve stream function, riparian vegetation, floodplain connectivity, and water quality, which will benefit sage steppe, riparian, and aquatic habitats.

Review Team Recommendation to Staff

Fund

Review Team Priority

3 of 3

Review Team Recommended Amount

\$71,784

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

N/A

Open Solicitation Technical Assistance-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5049-23688

Project Type: Technical Assistance_v2

Project Name: The Work Never Stops

Applicant: Malheur SWCD

Region: Eastern Oregon

County: Malheur

OWEB Request: \$80,685

Total Cost: \$125,793

Application Description In 2015, the Malheur Soil and Water Conservation District (SWCD) and U.S. Fish and Wildlife Service (FWS) initiated the 30-year Programmatic Candidate Conservation Agreement with Assurances (CCAA) for Greater Sage grouse in Malheur County to maintain/improve sage-grouse habitat while preserving the economic sustainability and ranching culture in Oregon. To date, the SWCD has solicited landowner interest (64 Letters of Intent, LOIs), prioritized enrollment as outlined in the CCAA, and enrolled 7 landowners (62,972 acres). Enrollment includes: 1) baseline inventory of ecological conditions; 2) identification of threats to sage-grouse and conservation measures (CMs); 3) synthesis of steps 1 and 2 in a Site Specific Plan (SSP); 4) landowner review; 5) FWS review and approval; and 6) issuance of a Certificate of Inclusion to the landowner. To adaptively manage, the SWCD meets annually with enrollees to discuss resource concerns, grazing, and CMs implemented in the prior year. Repeat monitoring of upland and riparian conditions occurs every 5-7 years to assess progress towards maintaining or improving sage-grouse habitat.

With 57 landowners awaiting enrollment (~487,915 acres), demand far exceeds SWCD staffing capacity. Requested funds will provide funding for 2 Rangeland specialists to 1: initiate baseline information for 5 properties. 2: complete 5 SSP plans and submit to FWS for approval. 3: Finalize 5 SSP's (33,648 acres) with final edits from FWS.

Properties are located on private rangelands that overlap with sage-grouse habitat in Malheur County. FWS and landowners are primary partners, and NRCS provides CM design expertise. This work is closely coordinated with the Oregon All Counties CCAA Steering Committee consisting of agencies implementing programmatic CCAAs in 7 additional counties.

Review Team Evaluation

Strengths

- The application provides a clear explanation describing the need to develop site specific plans (SSPs) for sage grouse conservation on private lands in Malheur County that are enrolled into the Candidate Conservation Agreement with Assurances (CCAA) program administered by the US Fish and Wildlife Service (USFWS).

- The project scope and scale are feasible and the partners necessary for collaborative work at the proposed scale are engaged in the project, including Malheur SWCD and USFWS.
- The data will be managed and stored in a regional database designed to report results annually at the sage brush reporting unit, which is the scale necessary to track conservation results.
- SSPs will be developed using professionally accepted methods and parameters.
- Qualified technical experts with relevant experience will implement the project.
- The applicant has a technical team of qualified experts to help guide the project.
- The proposed technical assistance is part of an ongoing effort to improve sage-grouse habitat, and the applicant has a list of landowners ready to enroll in the CCAA program.
- Costs in the budget align with the proposed technical assistance actions.

Concerns

- No concerns were identified.

Concluding Analysis

The Malheur SWCD will continue the CCAA and SSP development in Malheur County to improve sage-steppe habitat and benefit sage-grouse conservation. The technical assistance is clearly described in the application and includes coordination between the SWCD, UFWS, and the landowners. The project is likely to succeed in leading to sage-grouse habitat improvements.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 3

Review Team Recommended Amount

\$80,685

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$80,685

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5050-23737

Project Type: Technical Assistance_v2

Project Name: Eagle Creek Floodplain Restoration Design Project

Applicant: Trout Unlimited Inc

Region: Eastern Oregon

County: Baker

OWEB Request: \$177,722

Total Cost: \$192,722

Application Description The Eagle Creek Floodplain Restoration Design Project will design restoration for 0.8 river miles and 24 acres of floodplain on Eagle Creek (RM 5.52 - 6.32) within the Powder River Basin.

The river's floodplain habitats are not in functioning ecological condition (hydrologic, geomorphic, and vegetative composition), due to historic human disturbance including beaver trapping, tree removal, agriculture and grazing manipulation, ditch and berm construction, and an altered hydrologic regime. The project goal is to set the system on a trajectory towards proper ecological function, and thereby improve spawning and rearing habitat for native fish and aquatic life, and ecosystem function for other focal aquatic and terrestrial species.

This reach is critical spawning and rearing habitat for the Snake River Redband Trout and Mountain Whitefish and is designated Critical Habitat for Mid-Columbia ESA-Threatened Bull Trout. The project area is also critical habitat for the Columbia Spotted Frog, Greater Sage Grouse and numerous other avian species, Beaver, Mule Deer, and Elk. The Oregon Conservation Strategy prioritizes the area as a Tier #1 Highest Priority Aquatic Habitat area.

Our project team includes biologists, ecologists, geomorphologists, hydrologists, and engineers. The core partners include the private landowners, Trout Unlimited, the Powder Basin Watershed Council, Idaho Power, and the US Fish and Wildlife Service.

If funded, the project team will deliver a comprehensive 100% shovel-ready permitted restoration project design. The design will focus on floodplain reconnection, re-establishment of wetland habitats, and addressing numerous habitat limiting factors (e.g., habitat complexity, groundwater exchange, stream temperature, riparian plant communities, and zero-velocity rearing habitats).

The design will lead to a restoration project that will benefit all aquatic and terrestrial species using the valley bottom to complete their life cycle.

Review Team Evaluation

Strengths

- Restoration actions will be designed to address habitat limiting factors identified in a number of watershed plans, including cold water refugia important to native fish, instream habitat, and floodplain connectivity as well as wetland habitat types.
- Appropriate technical and engineering approaches, including topographic survey, hydraulic modeling, a sequential design iteration approach, and permitting, will be used to understand site conditions and determine restoration alternatives that will provide the greatest benefit to instream, riparian, and floodplain habitats.
- Sage grouse are present in the uplands adjacent to the project area. A restored floodplain and wetland complex will benefit this species that rely on mesic habitats during the brood rearing part of their life cycle for survival.
- The project team, including Trout Unlimited, Idaho Power, the Powder Basin Watershed Council, and the landowner, have the capacity, relevant experience, and technical expertise to implement the project.
- Stream restoration is not common on Eagle Creek. The applicant intends for this technical assistance and resulting restoration to serve as a catalyst for future projects in lower Eagle Creek.
- Costs aligns with the actions necessary to accomplish the project goal.

Concerns

- If the resulting design leads to restoration that diverts and stores water in the Eagle Creek floodplain, a water right from the Oregon Water Resources Department (OWRD) may be required and OWRD is not identified as a partner engaged in the project.
- Oregon Department of Fish and Wildlife (ODFW) fish passage approval will be required if the resulting design includes beaver dam analogs, and ODFW is not identified as a partner engaged in the project.
- An explanation describing how the cultural resources line-item cost was developed would be helpful for understanding this expense.

Concluding Analysis

A floodplain restoration project will be designed for a one-mile reach of Eagle Creek near Richland. The resulting restoration will improve stream function, riparian vegetation, and floodplain connectivity and benefit native fish and sage-grouse in the watershed.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 3

Review Team Recommended Amount

\$177,722

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$177,722

Staff Conditions

N/A

Open Solicitation Monitoring-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5051-23619

Project Type: Monitoring_v2

Project Name: Oregon Rangeland Monitoring Project

Applicant: High Desert Partnership

Region: Eastern Oregon

County: Malheur

OWEB Request: \$332,195

Total Cost: \$680,084

Application Description In 2022-2023, High Desert Partnership (HDP) received \$8.8M to increase wildfire resiliency (Senate Bill 762). With these funds, HDP and partners (BLM, DSL, Harney County CWMA, Harney SWCD, Malheur County Weed Department, and Malheur WC and private landowners) are addressing threats contributing to wildfire risk within the Stinkingwater Mountains in Harney and Malheur counties, which has been identified as a high priority by the Harney County Wildfire Collaborative (HCWC). HDP's Southeast Oregon Wildfire Resiliency (SOWR) project spans ~104,500 acres of private and public lands, with strategies to reduce fuel loads and improve rangeland health (e.g., herbicide and seeding treatments to combat invasive annual grasses, juniper removal). Understanding if these efforts are effective and what factors contribute to treatment success or failure is essential to guide and inform large-scale habitat restoration efforts through adaptive management. With in-kind funding, HDP partnered with USFWS, USGS, and INR to implement a robust, yet practical monitoring protocol using a before-after-control-impact (BACI) design. Pre-treatment and 1-year post treatment monitoring data estimating ecological conditions and vegetation metrics were collected on a subset of treatment areas. However, long-term monitoring is key to determine if treatment outcomes are durable and to compare different treatment methods. OWEB monitoring funds will support HDP and INR crews to collect monitoring data from 2025 through 2027 and development of a real-time web platform that provides data summaries. Our proposed monitoring budget is 4% of the implementation costs of the SOWR project. Not only will long-term monitoring guide the adaptive management of the SOWR project, this project responds to an identified need to harness practitioners' experience and outcomes of large-scale habitat restoration efforts to inform future restoration treatments across Oregon's rangelands.

Review Team Evaluation

Strengths

- The application clearly describes how the monitoring will address needs identified in several local, state and federal management and conservation plans such as the Oregon Conservation strategy and the Oregon Sage-Grouse Action Plan.
- This monitoring project complements tandem monitoring efforts happening in surrounding areas and existing data by collecting information in the same area in subsequent years (2025-2027) following the same monitoring protocol.

- This project will generate actionable data to inform how restoration actions are affecting sage brush habitat and vegetation responses.
- This application includes several letters of support that demonstrate engagement is occurring across state and federal agencies that express a commitment to collecting and applying data to improve future restoration efforts.
- The monitoring proposed is technically sound and will use professionally accepted data collection and analysis protocols that are well documented in the citations and the uploads section of the application.
- The applicant and contractors have the capacity and technical expertise to complete the project as proposed and are working with the US Geological Survey (USGS) on data management and online reporting tools to make information available to practitioners and to the public.
- This project is incorporating changing climate conditions by providing the monitoring data to the Land Treatment Digital Library and Land Treatment Exploration Tool that assists in planning future restoration projects in context of multiple variables including vegetation, climate and treatment characteristics.

Concerns

- Additional information, including a more detailed map, was needed to better understand how the project and proposed study area fit into the broader landscape scale work described in the application. It is not clear if there will be an adequate sample size to determine if the amount and quality of sagebrush habitat is improving at the landscape scale and to determine which restoration approaches were successful and why.
- The application does not describe how the proposed habitat and vegetation data will be incorporated into understanding how sage-grouse are responding to these restoration actions.
- Additional information was needed to understand how the project partners are engaging tribes as a technical expert or as a local community disproportionately impacted by climate change.
- The budget includes several lump sums, and the budget narrative does not address how all of the expenses were calculated to determine if they are appropriate for the work necessary to accomplish the actions proposed in the application.

Concluding Analysis

The High Desert Partnership proposes to leverage existing pre-restoration data by collecting three years of data to help implement the monitoring of sagebrush habitat restoration treatments in Malheur and Harney counties. Information is needed to understand if these actions are having the intended effects and learn how the related local conditions might influence the impacts of different restoration treatments over time and space.

Review Team Recommendation to Staff

Fund

Review Team Priority

3 of 4

Review Team Recommended Amount

\$332,195

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

N/A

Open Solicitation Monitoring-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5052-23630

Project Type: Monitoring_v2

Project Name: Powder Basin Long-term Water Quality Monitoring

Applicant: Powder Basin WC

Region: Eastern Oregon

County: Baker

OWEB Request: \$198,754

Total Cost: \$279,165

Application Description The Powder Basin Watershed Council's (PBWC) Long-Term Water Quality Monitoring Program (LTWQMP) has been a cornerstone of our efforts in the basin since 2013. Recent LTWQMP efforts from 2022 and 2024 have focused on water quality monitoring to track long term trends, collecting data at future restoration areas, and evaluating conditions at previously unmonitored locations. These efforts have been critical in conducting valuable pre-project water quality monitoring at currently active restoration efforts in the North Fork Burnt River, identifying locations and time periods where high concentrations of bacteria and nutrients create water quality issues, and identifying dissolved oxygen impairments at several important spawning streams for native trout. These monitoring activities receive significant support from our monitoring partners and volunteers, who have supported our monitoring efforts since 2013. We propose to continue these efforts at new and existing monitoring sites to identify long-term water quality trends, assess impacts of climate and land use on water quality, and monitor prospective restoration reaches. The PBWC is also looking to increase access to the large amount of collected water quality data by setting aside time to develop a database for continuous water temperature and dissolved oxygen monitoring and establishing a data landing page. Continuation of these monitoring efforts is a high priority for the PBWC given its importance in identifying impairments and potential restoration locations, as well as engagement with community members in watershed activities.

Review Team Evaluation

Strengths

- This proposed project will provide local data to inform the implementation of the recently approved Total Maximum Daily Load (TMDL).
- This application complements previously collected monitoring data, which the applicant demonstrates has been applied to inform restoration actions.
- The applicant has a Department of Environmental Quality (DEQ) approved Sampling and Analysis Plan (SAP) and will update it to incorporate flow and eDNA monitoring.
- Monitoring sites and sampling frequency have been developed by reviewing the previous data sets and receiving input from local, state and federal partners.

- Appropriate quality assurance and quality control measures are proposed and include training volunteers and a seasonal technician and field checks.
- The applicant has experience successfully collecting and analyzing the continuous water temperature, dissolved oxygen (DO) and grab sample data.
- The applicant is working with an established lab to process water samples for the bacteria source e-DNA analysis.
- The applicant is engaging local organizational partners, volunteers, students and community members in watershed activities and this monitoring project is a critical element of that effort.
- The budget is appropriate to meet the actions proposed in the application.

Concerns

- The application proposes to significantly expand the monitoring program and there is not always a clear connection to how the data will be analyzed to answer the different monitoring questions posed in the application.
- It is not clear how and when the applicant will engage with state and federal partners in data analysis and interpretation to understand the steps taken to inform future restoration actions across this broad area.
- The application wasn't clear if the eDNA analysis is able to identify to distinguish bacteria sources between livestock and elk or deer, which, in this watershed could be an issue.
- The Access database proposed to be developed to manage the continuous data is likely not adequate due to the large amount of data, a SQL database would provide increased data management capacity.
- The amount of water being provided for the bacteria source analyses seems small compared to other professionally accepted methods for collecting eDNA data from streams.

Concluding Analysis

The Powder Basin Watershed Council proposes to continue water quality monitoring to track long term trends, collect data at future restoration areas, and evaluate conditions at previously unmonitored locations. The applicant has a good track record at implementing this monitoring project since 2013, which contributes to the high likelihood of success. Results will be used to identify trends in water quality, identify factors limiting water quality and direct future restoration actions in the Powder Basin.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 4

Review Team Recommended Amount

\$198,754

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$198,754

Staff Conditions

N/A

Open Solicitation Monitoring-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5053-23652

Project Type: Monitoring_v2

Project Name: Grande Ronde Basin Stream Flow Gauging
Stations Operation- Water Years 2025 & 2026

Applicant: Grande Ronde Model WS Foundation

Region: Eastern Oregon

County: Wallowa

OWEB Request: \$101,002

Total Cost: \$313,982

Application Description The Grande Ronde Basin (GRB) in northeast Oregon encompasses over 5,000 square miles and is home to numerous perennial flowing streams and, crucial habitats for ESA-listed Snake River spring/summer Chinook salmon, Snake River summer steelhead, and bull trout. To effectively manage this vital ecosystem, a network of stream gauges has been established across the Grande Ronde and Imnaha River subbasins. These gauges serve multiple purposes, including irrigation water management, fisheries management, long-term flow and trend analysis, TMDL and SB1010 water quality management plan effectiveness, subbasin plan implementation, and restoration project development. The data gathered through these gauges play a critical role in providing essential data for understanding the cumulative effects response to conservation efforts in the basin. It is important to note that while these gauges offer valuable insights, their data should be utilized in conjunction with a larger assessment of cumulative effect.

This project focuses on the operation of 12 existing stream gauges, in collaboration with partners such as the US Geological Survey (USGS), Idaho Power, and the Oregon Water Resources Department (OWRD). Additionally, five gauges operated independently by OWRD are included in this network. These gauges, strategically located throughout the basin, enable the characterization of flow dynamics in both the Grande Ronde and Imnaha subbasins. They capture various stream flow characteristics, including headwater contribution, land management influence, and basin outlet data.

Production partners for this project include the Grande Ronde Model Watershed (GRMW) and Oregon Water Resource Department (OWRD), with funding provided by the Bonneville Power Administration (BPA), Oregon Watershed Enhancement Board (OWEB). This collaborative effort aims to enhance our understanding of the basin's hydrology and ecosystem, supporting informed decision-making for management and conservation efforts.

Review Team Evaluation

Strengths

- The data collected are critical to monitor protected instream flows and to inform water and fisheries management and future restoration actions.

- This project will complement the existing streamflow data and other current or planned fisheries monitoring projects in the basin.
- The contractor will follow professionally accepted monitoring and analysis standards and protocols and make the data available real-time and publish the final data online.
- The letters of support and match contributors demonstrate that a variety of partners are engaged in this project and will use the data.
- The applicant and contractor have the capacity, technical expertise, and performance history to complete the project as proposed.
- The budget was developed in close coordination with the contractor to ensure the expenses are appropriate for the work necessary to accomplish the actions proposed in the application.

Concerns

- Additional information on priority gauges and an updated map would have helped the reviewers understand the scope of the monitoring effort.
- This application does not seek funding nor provide a clear explanation to understand how the data will be analyzed to answer the monitoring question posed in the application.

Concluding Analysis

This proposed project will continue to collect streamflow data in the Grande Ronde Basin which has been in operation since the mid-1990s. This streamflow data is valued by several natural resource management organizations for many purposes including irrigation water management and designing future restoration projects to improve fish habitat and water quality. The Grande Ronde Model Watershed and the Oregon Water Resources Department is experienced and highly qualified to implement the project as proposed.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 4

Review Team Recommended Amount

\$101,002

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$101,002

Staff Conditions

N/A

Open Solicitation Monitoring-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5054-23715

Project Type: Monitoring_v2

Project Name: Powder Basin Project Effectiveness Monitoring

Applicant: Powder Basin WC

Region: Eastern Oregon

County: Baker

OWEB Request: \$76,076

Total Cost: \$102,584

Application Description The Powder Basin Watershed Council (PBWC) has a growing suite of restoration projects undertaken, planned, or proposed throughout the Power, Burnt, and Brownlee sub-basins. These projects include Low-Tech Process-Based Restoration (LTPBR) projects on Camp Creek and Trout Creek in the North Fork Burnt River (NFBR) and more intensive valley reset/stage-zero projects at Anthony Creek and Meadow Creek. While these projects are intended to help improve aquatic habitat, water quality impairments, stream and floodplain degradation, and loss of streamside vegetation, lack of information on both existing conditions and impacts from restoration limits our ability to improve planning and implementation of future restoration projects. Our current long-term water quality monitoring program has provided some useful information on stream conditions, but lacks the flexibility and scope needed to assess all facets of our restoration monitoring needs. To address these issues, the PBWC is looking to start a new effectiveness monitoring program by expanding from the collection of water quality data to include vegetation, stream morphology, and flow permanence monitoring, as well as assessments on restoration project impacts on bacteria and nutrients. We will also look at impacts of in-stream woody structures at LTPBR restoration reaches to assess how each structure meets restoration goals towards raising streambed and water surface elevations and increasing habitat diversity. The end result of this monitoring program will be used to advertise benefits to the community and address limitations at current projects. We will also integrate this information to an adaptive management framework to enhance project selection, planning, and implementation to further improve stream conditions in the Powder Basin.

Review Team Evaluation

Strengths

- The project will follow established quality assurance and control measures to collect the water quality data.
- The applicant is leveraging existing streamflow permanence monitoring methods and tools.
- This project will collect before and after restoration photos from drones that can be very powerful in engaging the community and recruit private landowners to participate in future restoration projects.

- The staff listed in the application have over a decade of experience collecting and analyzing water quality and habitat data.
- The applicant will engage the community by working with local youth organizations such as the Baker Resource Council, Northwest Youth Crew, and Baker Technical Institute as volunteers.

Concerns

- The application poses several monitoring questions, however there is not a clear description of how the data will be analyzed to adequately answer each question.
- Monitoring the streamflow permanence 10 meters above and below each restoration project may not be sufficient to understand how each project is affecting streamflow.
- The monthly water quality grab sample data will have limited value in evaluating the effects of the restoration actions.
- The USFS has a national database that can store a lot of the data proposed in this application and it is unclear if they are collaborating with the USFS to leverage this data management tool.
- The application does not describe who from the Wallowa Whitman National Forest (WWNF) is helping to collect geomorphology and vegetation data to know if they have the experience and qualifications to apply the proposed data collection and analysis methods in a successful manner.
- It is not clear if the organization has the capacity to implement this project as proposed given this is a huge expansion of their monitoring and begins to add several complex monitoring components (remote sensing, geomorphology and vegetation) that will require a significant effort to collect, manage and analyze.
- It is not clear if the volunteer will have adequate time to complete all the necessary drone monitoring tasks given the complexity of processing and analyzing the imagery over the life of the monitoring project to properly assess the effects of restoration projects.
- The application does not describe how the drone data will be analyzed to incorporate the ground based and existing LiDAR data.
- The budget is not adequate to collect and analyze all the data proposed in this application.

Concluding Analysis

The Powder Basin Watershed Council proposes to begin a new effort to monitor the effects of completed or planned floodplain restoration projects. This application proposes to collect a variety of water quality, physical habitat, vegetation, streamflow permanence and fish passage data to improve future project implementation and communicate outcomes with the local community. The application lacks sufficient information needed to determine the likelihood of success for evaluating the effects of floodplain restoration projects. A more focused monitoring application, with fewer monitoring elements

would more easily be implemented.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Monitoring-Spring 2024

Eastern Oregon (Region 5)

Application Name: 224-5055-23745

Project Type: Monitoring_v2

Project Name: Dewatering the Malheur

Applicant: Malheur SWCD

Region: Eastern Oregon

County: Malheur

OWEB Request: \$58,049

Total Cost: \$97,049

Application Description (1) The Malheur River from the point of diversion for the Nevada ditch at Vale, Oregon to the confluence with the Snake River at Ontario.

(2) The Malheur River is completely dewatered (no water passing downriver past the diversion) at Vale, Oregon. Little data exists as to the water quality in the river at that point. There is some data on the drains between the diversion and the confluence with the Snake River.

Continued monitoring is necessary to quantify water quality improvements and to characterize further changes in water quality related to changes in land and irrigation management over time. Sprinkler (pivot and lateral) and drip irrigation techniques are beginning to be implemented along this corridor. New and continued monitoring is critical to show agricultural producers that current agricultural practices are contributing to water quality impairment and to demonstrate that their efforts to improve land and irrigation management can be effective and worthwhile.

(3) . We propose to sample at 8 sites on the Malheur River drains that flow into this river. This is of particular interest to NRCS because it supports the NRCS Long Range Plan with current implementation strategies, and future conservation implementation in Northern Malheur County. We are applying for grant funds to implement on farm conversions to sprinkler irrigation and to pipe dirt ditch laterals for better water management. We need to assess if our efforts are successful in improving water quality in the Malheur River.

We are proposing to sample water from 8 locations twice a month from May to October. Sample parameters will be:

- Total and ortho Phosphorus
- E. coli
- Total Suspended Solids (TSS)

We propose to install flow gauges at 6 sites and use data from 2 permanent sites to calculate pollution loads before and after.

(4) Project partners are the NRCS, Warm Springs Irrigation District, Owyhee Irrigation District, BOR Lab in Boise, Idaho Power, and the Malheur Watershed Council.

Review Team Evaluation

Strengths

- The application proposes to collect water quality data for targeted outreach to agriculture producers to plan future restoration projects to improve water quality.
- This monitoring project will assist the Department of Environmental Quality (DEQ) and the Oregon Department of Agriculture (ODA) in understanding progress towards meeting the phosphorus TMDL target.
- The work proposed complements existing water quality data that has been collected in this area for several years.
- The applicant is following professionally established sampling methods to collect water samples and send them to an accredited water quality analysis lab.
- The applicant and contractor have the expertise to complete the monitoring, data analysis and reporting as proposed.
- A technical team, made up of state, federal and local organizations, will be convened to review results and plan subsequent monitoring seasons.

Concerns

- The application is not clear what standards or protocols are being followed for the streamflow gauges being run by Idaho Power or the Warm Springs Irrigation District.
- The project workplan does not include the streamflow monitoring element and the application lacked details on this component.
- The applicant proposes to store the water quality and streamflow data in spreadsheets which isn't as secure as a database.
- The application did not describe how the sampling sites were selected and if the study's scale is adequate to plan and evaluate the impacts of specific restoration projects.
- The application doesn't describe how the water quality and streamflow data will be analyzed to answer the monitoring question posed in the application.
- It was not clear if the technical team was convened to provide input on the proposed monitoring project's study design.
- It is unclear if the budget includes funding for the contractor to analyze the data and write the final technical report.

Concluding Analysis

The application proposes to monitor water quality in 8 agricultural drains before they reach the Malheur River. This information will be used to determine if improving trends in runoff from agricultural lands are

continuing and to focus future outreach efforts. This project leverages existing data by adding streamflow data to assess the phosphorus load each drain is contributing to the Malheur River rather than just concentrations.

Review Team Recommendation to Staff

Fund

Review Team Priority

4 of 4

Review Team Recommended Amount

\$58,049

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

N/A

Mid-Columbia - Region 6 Spring 2024 Funding Recommendations



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Funding Recommendation

●

 Staff Recommendation For Funding (SRF)

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 Below Funding Line (BFL)

Previous Grants 1998 - Spring 2023

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 Land Acquisition

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 Restoration

▲

 Region 6 Cities

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 Region 6 Streams

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 OWEB Region 6 Boundary



OREGON

WATERSHED

ENHANCEMENT BOARD

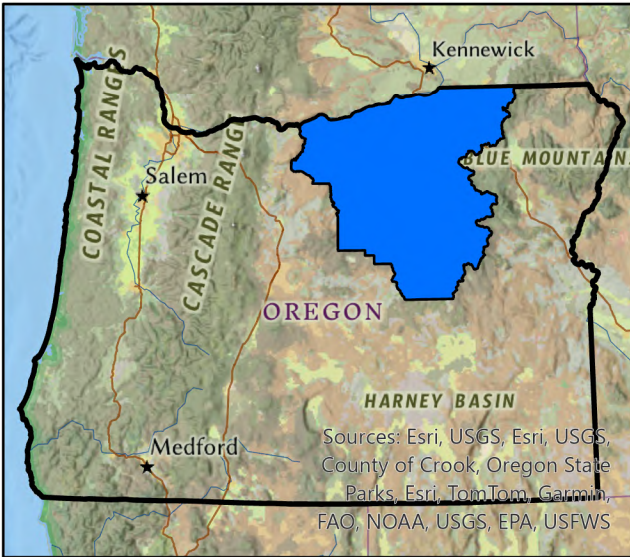
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Oregon Watershed Enhancement Board: Region 6 Restoration, Technical Assistance, Engagement and Monitoring

Region 6 - Mid-Columbia Basin Restoration				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-6024	Monument SWCD	Upper Cottonwood Creek Instream Restoration Phase 2	1) Install LTPBR structure on 2.6 miles of Cottonwood Creek to support the development of a healthy riverscape that leads to increased surface flow volume, duration, and extent and ultimately an increase in juvenile steelhead rearing and migration habitat. 2)Complete 60 acres of juniper removal and 70 acres of precommercial thinning to contribute to increased base flows, reduced wildfire risks, and improved wildlife habitat in the Cottonwood drainage.	\$ 117,670
224-6029	Gilliam SWCD	Comstock Basin Riparian Fencing, Planting, and Livestock Distribution	This project aims to improve riparian and upland habitat by utilizing the Conservation Reserve Enhancement Program, the Grassland Reserve Enhancement Program, and OWEB funding for upland management practices.	\$ 172,135
224-6027	North Fork John Day WC	Eightmile Creek Restoration	Increase quality juvenile salmonid habitat and water retention by increasing the number of pools, returning sinuosity and floodplain connection, increasing the amount of wood in the stream and encouraging beaver to take up residence in Eightmile Creek.	\$ 62,716
224-6026	Mid John Day WC	Yellow Jacket Creek Aspen Restoration and Forest Health	Address watershed health issues in the Yellow Jacket Creek watershed, including juniper encroachment, overstocked and unhealthy forest stands, and conifer encroachment in quaking aspen	\$ 387,797
224-6020	South Fork John Day WC	Antelope Watershed Restoration	Create resilient watershed conditions in the uplands and riparian area of the Antelope creek watershed.	\$ 125,644
224-6021	South Fork John Day WC	South Fork John Day Uplands	Create Resilient upland habitats in the South Fork John Day River Watershed.	\$ 330,276
224-6022	South Fork John Day WC	Martin Watershed Restoration	Create Resilient Forested Watershed through: 1. Reduce fuel loading to mitigate spread and reduce intensity of potential future fire. 2. Increase overall forest health and reduce likelihood of future infection by removing diseased trees and increasing spacing. 3. Foster growing conditions that promote high quality merchantable timber. 4. Increase available water and growing space for desirable species by removing encroaching juniper and developing upland water sources	\$ 94,691
Total Restoration Projects Recommended for Funding by RRT and OWEB Staff				\$ 1,290,929
Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
224-6025	Mid John Day WC	Pine Creek Forestry Improvement	Improve watershed conditions in Pine Creek	\$ 174,429
Projects NOT RECOMMENDED for Funding by RRT				
Project #	Grantee	Project Title		Amount Requested
224-6023	Wheeler SWCD	Henry's Deadhorse Restoration		\$ 156,218

Oregon Watershed Enhancement Board: Region 6 Restoration, Technical Assistance, Engagement and Monitoring

Region 6 - Mid-Columbia Basin Technical Assistance				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-6032	Monument SWCD	Cottonwood Creek Basin Instream Habitat Design	Develop LT-PBR designs to restore 8.2 miles of ESA-listed Mid-Columbia River Steelhead habitat in Cottonwood Creek and obtain permitting for the initial phase to ensure readiness for implementation.	\$ 190,252
224-6035	Wheeler SWCD	Keeton Creek Diversion Fish Passage , Culvert, and Aquatic Habitat Uplift	This project will develop two designs - one design to correct eight passage barriers and install seven screens that are needed to support fish passage during all flows, and one design will incorporate habitat components to increase and enhance riparian conditions and salmonid use. In addition, all required permit applications will be submitted and cultural resource surveys and reporting will be completed.	\$ 46,907
224-6033	Gilliam SWCD	Butte and Rock Creek LiDAR Based Restoration Prioritization Framework	This project aims to create a planning document and datasets that implementers can use for the next 5+ years to prioritize and implement successful process-based restoration in the Butte Creek and Rock Creek watersheds. The spatial data products developed from this project will support ongoing restoration planning, design, and monitoring.	\$ 41,424
224-6030	Mid John Day WC	West Branch Diversion and Pipeline Design	The goal of this Technical Assistance application is to develop a shovel ready project for the correction of a near-complete fish passage barrier and conversion of open ditch to pipeline which will result in significant water savings to be returned instream. The packet will be submitted to OWRD and OWEB for funding of the implementation. Other sources of funding will be sought as well.	\$ 68,009
224-6036	South Fork John Day WC	Murderers Creek Cultural Surveys	The goal is to secure funds for cultural surveys and Section 106 compliance on proposed restoration projects in the Murderers Creek watershed. These future restoration projects can improve ESA listed steelhead and juvenile Chinook habitat in one of the most important tributaries to the South Fork John Day River.	\$ 108,810
Total Technical Assistance Projects Recommended for Funding by RRT and OWEB Staff				\$ 455,402

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
224-6031	Wheeler SWCD	Left Hand Creek Floodplain Reconnection and Habitat Complexity Design	The goal of this technical assistance application is to develop a restoration design that ameliorates Left Hand Creek's the geomorphic and hydrologic functions to enhance habitat complexity for Mid-Columbia steelhead populations. Additionally, Wheeler SWCD will begin all required permit applications and completing cultural resource obligations.	\$ 66,231
224-6034	North Fork John Day WC	Tamarack Creek Culvert Design	The project aims to use technical assistance to obtain engineered design to remove and replace an undersized culvert with an appropriately sized culvert that will accommodate high flows on Tamarack Creek.	\$ 46,672

Projects <i>NOT RECOMMENDED</i> for Funding by RRT			
Project #	Grantee	Project Title	Amount Requested
N/A			

Region 6 - Mid-Columbia Basin Engagement				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
N/A				
Total Engagement Projects Recommended for Funding by RRT and OWEB Staff				\$0.00

Oregon Watershed Enhancement Board: Region 6 Restoration, Technical Assistance, Engagement and Monitoring

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Requested
224-6038	Umatilla SWCD	Lower Birch Creek Restoration Engagement	To identify, recruit, and work together with landowners and partners in the designated reaches to form a river restoration project(s).	\$ 58,850

Projects NOT RECOMMENDED for Funding by RRT				
Project #	Grantee	Project Title		Amount Requested
224-6039	Wheeler SWCD	Wheeler SWCD Strategic Direction Planning		\$ 33,319
224-6040	Walla Walla Basin Watershed Foundation	Walla Walla Basin Two-Year Engagement Project		\$ 76,802

Region 6 - Mid-Columbia Basin Monitoring				
Projects RECOMMENDED for Funding in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
224-6037	Walla Walla Basin Watershed Foundation	Monitoring Steelhead Use of Restoration Projects	The two project goals are to 1) Collect baseline steelhead spawning and juvenile salmonid rearing data in 5.6 miles of the North Fork and 4.2 miles of Couze Creek and 2) Monitor the effectiveness of restoration actions by documenting pre and post-treatment changes in physical habitat.	\$ 72,749
Total Monitoring Projects Recommended for Funding by RRT and OWEB Staff				\$ 72,749

Projects Recommended but NOT FUNDED in Priority Order				
Project #	Grantee	Project Title	Project Goal (From Application)	Amount Recommended
		N/A		

Projects NOT RECOMMENDED for Funding by RRT				
Project #	Grantee	Project Title		Amount Requested
		N/A		

Region 6 Total OWEB Staff Recommended Board Award	\$1,819,080

Region 1 - 6 Grand Total OWEB Staff Recommended Board	\$13,925,206

Open Solicitation Restoration-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6020-23610

Project Type: Restoration_v2

Project Name: Antelope Watershed Restoration

Applicant: South Fork John Day WC

Region: Mid Columbia

County: Grant

OWEB Request: \$125,644

Total Cost: \$323,799

Application Description The Antelope Watershed is located on the Double R Ranch in Izee, Oregon, toward the headwaters of the South Fork John Day River. The Double R has been working systematically to improve every watershed on their Ranch, with multiple partners.

The Ranch has a long and successful history of working with the South Fork John Day Watershed Council through Oregon Watershed Enhancement Board grants, and Oregon Wildlife Heritage Foundation grants. They have enrolled in NRCS programs, including the South Fork John Day Regional Conservation Partnership Program (RCPP), as well as performing many projects on their own.

The Antelope watershed is the next watershed of focus for the Ranch for whole watershed restoration efforts. We will partner with the Double R Ranch, and NRCS to match landowner efforts to remove 20 acres of Juniper, develop 4 upland water sources, buck and pole fence 250 feet for aspen protection, protect 10 acres of stream through installation of 1-mile of riparian protective fence, and install 16 Beaver Dam Analogues in Antelope creek.

Review Team Evaluation

Strengths

- Water quality and quantity is limited in this area and the proposed project will move towards improving these conditions.
- Proposed descriptions of spring developments and water troughs are clear and concise.
- The applicant, along with the landowner, has a proven track record implementing similar restoration projects funded by OWEB and the Natural Resource Conservation Service (NRCS).
- The proposed project site is visible to local traffic and would be available for tours and educational site visits, which may incentivize further restoration in the watershed.
- The appropriate partners are engaged in the project indicating a high likelihood of success in achieving desired conditions.

Concerns

- The channel of Antelope Creek is incised, and it is not clear if 16 Beaver Dam Analogs (BDAs) per mile will produce the expected outcomes.
- The proposed water developments may require permits and the applicant should consult with the watermaster for guidance.
- The proposed juniper removal should extend to the hill slopes to prevent reestablishment. Additional detail on post-juniper management is needed to ascertain the long-term sustainability of the investment.

Concluding Analysis

The South Fork John Day Watershed Council proposes to improve water quality, fish habitat, and rangeland health in the Antelope Creek watershed. The project will remove invasive juniper trees, develop upland water sources, installing fencing to protect aspen and riparian areas, and implement BDAs in Antelope Creek. The proposed restoration actions will complement a larger scale watershed restoration effort occurring through the South Fork John Day Resource Conservation Partnership Project (RCPP) effort.

Review Team Recommendation to Staff

Fund

Review Team Priority

5 of 8

Review Team Recommended Amount

\$125,644

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$125,644

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6021-23611

Project Type: Restoration_v2

Project Name: South Fork John Day Uplands

Applicant: South Fork John Day WC

Region: Mid Columbia

County: Grant

OWEB Request: \$330,276

Total Cost: \$521,909

Application Description This project is located in the Southwestern most portion of Grant County, in the headwaters of the South Fork John Day River, at the heads of Flat, and Brisbois creeks. This also incorporates the headwaters of the South Fork of Beaver Creek. The South Fork John Day River upland health restoration is important for improved water quantity/quality, and wildlife habitat. The area is listed as critical winter and summer range for Mule Deer and Elk. This area is also the priority area for the South Fork John Day Watershed Council's (SFJDWC) Regional Conservation Partnership Program (RCPP) through the NRCS.

We are partnering across 3 different landowners, IZ Ranch, Lewellyn's, and Gallaway's. This project in conjunction with the South Fork John Day Watershed Council's RCPP, and additional OWEB projects, will achieve a large-scale restoration effort at the headwaters of the South Fork John Day.

We are proposing to match RCPP, Environmental Quality Incentive Program (EQIP), and private landowner efforts which include 7 upland water developments, 318 acres of Juniper and Conifer removal, 1.5 acres aspen protective fence, and 6,000 feet of pasture fence. This will also compliment previously awarded and completed OWEB projects totaling 495 acres of aspen enhancement and conifer removal and 1 upland water development (Grant #'s: 218-6005, 219-6015, and 220-6014).

We are requesting OWEB funding for an additional 40 acres of Juniper removal, 250 acres of Juniper/Conifer removal, and protection of 6 acres of Aspen through Buck and Pole Fencing.

Review Team Evaluation

Strengths

- Previous application evaluation concerns are addressed by including detail on spring developments and land management goals, providing more detail on juniper prioritization, and a more detailed budget.
- The project is in a high-priority area for juniper removal as identified in the South Fork John Day Juniper Prioritization.

- The proposed restoration will address juniper encroachment, protect aspen, and install spring developments that will improve upland habitat conditions and minimize grazing impacts to sensitive aspen areas.
- The proposed actions will reduce wildfire risk through juniper removal.
- There is a high level of landowner interest in the project and the proposed actions build on previous landowner efforts and the South Fork John Day Watershed Council's Resource Conservation Partnership Project (RCPP).
- The South Fork John Day Watershed Council has a long history of working on similar landscape-scale efforts with multiple landowners.

Concerns

- No concerns were identified.

Concluding Analysis

The South Fork John Day Watershed Council proposes to restore the health of uplands in the South Fork John Day River by removing juniper and conifer trees, developing upland water sources, and protecting aspen trees from grazing impacts. The project is expected to improve water quality, benefit wildlife habitat including critical winter and summer range for mule deer and elk and improve overall watershed health.

Review Team Recommendation to Staff

Fund

Review Team Priority

6 of 8

Review Team Recommended Amount

\$330,276

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$330,276

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6022-23614

Project Type: Restoration_v2

Project Name: Martin Watershed Restoration

Applicant: South Fork John Day WC

Region: Mid Columbia

County: Grant

OWEB Request: \$94,691

Total Cost: \$185,193

Application Description Martin Creek is located on the Rockpile Ranch, and is a tributary to the South Fork John Day River, approximately halfway between the headwaters and mouth.

The Rockpile ranch has worked across the entire ranch to enhance fish and wildlife habitat, with multiple partners including the South Fork John Day Watershed Council, Grant SWCD, ODFW, and NRCS. This area is critical winter range for mule deer and elk, and Martin Creek is listed as a resident redband bearing stream.

The Ranch is currently enrolled in the South Fork John Day Regional Conservation Partnership Program (RCPP). They have focused forest health treatments in the Martin Creek watershed and have completed 107 acres under RCPP. The SFJDWC is also working with the Mule Deer Foundation for funding for 1 upland water development located on the BLM.

We are proposing 90 acres of pre-commercial thinning, and 1 upland watering source. Project partners include SFJDWC, Rockpile Ranch, NRCS, and Mule Deer Foundation.

Review Team Evaluation

Strengths

- The proposed project is located in critical winter range for mule deer and elk in the South Fork John Day watershed, addressing habitat improvement in the Oregon Department of Fish and Wildlife (ODFW) Mule Deer Management Plan.
- Fuels reduction will improve the long-term resilience of this watershed given the frequency of large fires in the area; proposed fuels treatments can help to reduce the size and intensity of fire especially during prolonged drought.
- The adjacent landowner, Bureau of Land Management (BLM), prioritized this area for fuels treatment.
- Removing overland flow on the roadbed by developing the spring source and piping the overflow back into the drainage will reduce sediment into Martin Creek.

- The applicant has capacity to accomplish the project goals and has successfully implemented similar projects.

Concerns

- The application lacks clarity on spring development designs, conflicting acreage numbers, and spring development details, including whether the overflow drainage will discharge directly downstream in the natural flow path.
- The placement of troughs near the stream may not effectively keep cattle away Martin Creek.
- The water developments may require permits and the applicant should consult with the watermaster for guidance.
- Letters of support from project partners would have benefited the application by demonstrating partner commitment.

Concluding Analysis

The proposed project aims to improve forest stand conditions, water quality, and overall watershed health in the Martin Creek watershed. The project is expected to increase overall forest health, reduce fuel loading, foster adequate growing conditions, and increase available water and crown space by forest thinning and removing encroaching juniper. The proposed restoration actions will benefit a larger scale watershed restoration effort occurring through the South Fork John Day Resource Conservation Partnership Project (RCPP) effort.

Review Team Recommendation to Staff

Fund

Review Team Priority

7 of 8

Review Team Recommended Amount

\$94,691

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$94,691

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6023-23639

Project Type: Restoration_v2

Project Name: Henry's Deadhorse Restoration

Applicant: Wheeler SWCD

Region: Mid Columbia

County: Wheeler

OWEB Request: \$156,218

Total Cost: \$261,283

Application Description This project is located in Northeast Wheeler County, 10 miles North of the town of Spray and borders the Umatilla National Forest. Henry's Creek and Deadhorse Creek flow through this property and are tributaries to Kahler Creek, that flows directly to the John Day River.

Phase I and II Western Juniper occupy this project area where continued fire suppression has allowed the juniper to encroach upon this landowner. The bunch grass communities below the encroaching juniper are at risk of being outcompeted for resources, increasing the likelihood of annual grasses invasion.

This project proposes to treat 195 acres of invasive Western Juniper in priority areas, develop 2 springs, and install 2 600-gallon troughs to improve water quality and quantity for livestock grazing distribution as well as a wildlife resource. After juniper removal, 195 acres of broadcast seeding will be distributed to encourage perennial grasses and discourage invasive annual grasses.

Project partners include OWEB, NRCS, Wheeler SWCD, and the landowner.

Review Team Evaluation

Strengths

- The proposed juniper removal complements efforts in Deadhorse Creek to protect riparian area through the Conservation Reserve Enhancement Program (CREP).
- The landowner utilizes fall and winter grazing rotations which benefits the bunchgrass communities and helps to reduce invasive annual grasses.
- The applicant has demonstrated capacity to accomplish the project goals and has successfully implemented similar projects.

Concerns

- The application lacks site characteristics and design details for the spring developments needed to evaluate whether the approach is technically sound and appropriate for the sites.
- The water developments may require permits and the applicant should consult with the watermaster for guidance.

- Additional information explaining the design, budget, and partner support for the water developments is needed to evaluate whether the methods are technically sound, and costs reflect the quantified watershed benefits. For example, the location of the water developments in the floodplain may not realize the expected watershed benefits since grazing could continue to cause riparian impacts.
- The unfenced reservoir on Deadhorse Creek could serve as a large water gap with heavy cattle use causing decreased water quality.
- The application lacks detail to understand the juniper prioritization and why the areas for removal were selected.

Concluding Analysis

Wheeler SWCD proposes to address forest health by removing juniper along Henry and Deadhorse Creeks and improve livestock distribution with two spring developments. Areas of disturbance will be seeded with native perennial grasses for both livestock and wildlife. The project aims to assist landowners in correcting past land management practices, focusing on removing juniper and restoring riparian areas along Deadhorse Creek. The application lacks details necessary to evaluate the technical soundness of proposed methods and the potential ecological benefits to fish and wildlife habitat. If resubmitted, the applicant is encouraged to address the concerns noted above.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6024-23648

Project Type: Restoration_v2

Project Name: Upper Cottonwood Creek Instream
Restoration Phase 2

Applicant: Monument SWCD

Region: Mid Columbia

County: Grant

OWEB Request: \$117,670

Total Cost: \$505,751

Application Description 1) The proposed project is located in northwest Grant County approximately 13 miles south of the town of Monument, Oregon in the Cottonwood Creek drainage (HUC 170702020905). 2) Cottonwood Creek is a 303(d) listed stream for temperature that provides critical spawning and rearing habitat to ESA-listed Mid-Columbia River summer steelhead. Elevated water temperatures and low flow significantly limit steelhead populations in Cottonwood Creek, a tributary to the North Fork John Day River (ODFW 2019). 3) Phase 2 of the Upper Cottonwood Creek Instream Restoration project includes installing low-tech process-based restoration (LTPBR) structures on two additional sections of Cottonwood Creek, covering 2.6 miles. The restoration efforts will focus on the installation of beaver dam analogs (BDA) and large woody debris (LWD) to improve LWD retention, attenuate flows, enhance floodplain connectivity, aggregate sediment, and increase riparian hardwood productivity. These measures will result in increased physical complexity within the channel, providing benefits to steelhead and their habitat. Phase 2 will also integrate upland restoration work, which includes a 70 acre precommercial thinning unit and a 60 acre juniper cut near the project area. Forestry work within the unit will provide wood for instream work and complement other forestry work with the Cottonwood Creek Drainage. The proposed unit is overstocked with a mixture of conifer species, which negatively affects forest health, reduces water availability, decreases available forage and habitat for wildlife, and increases the risk of catastrophic wildfire. 4) Partners for this project include Chad Engle (Landowner), Monument SWCD, The Warm Springs Tribe, USFWS, and ODFW.

Review Team Evaluation

Strengths

- The application includes clearly defined objectives to benefit ESA-listed Mid-Columbia steelhead habitat and technically sound methods for how those objectives will be achieved. There is no infrastructure downstream and project designs will be further reviewed by BPA and USFWS during permitting.
- The project aligns with previous and planned restoration efforts in the watershed.

- The applicant has capacity to accomplish the project goals and has successfully implemented similar projects.
- A low-tech process-based restoration (LTPBR) approach can accelerate the restoration process and is effective in systems like Cottonwood Creek with reliable flooding events, suitability for beaver habitat, and a high likelihood of riparian vegetation.

Concerns

- While LTPBR may be beneficial in the system, its effectiveness would be enhanced in areas with more extensive floodplain access and would lead to greater uplift.
- The risk assessment and hydrological analysis should be more detailed to show that the large woody debris (LWD) placement has been carefully considered.

Concluding Analysis

Monument SWCD proposes a second phase of restoration in upper Cottonwood Creek to restore instream habitat for ESA-listed Mid-Columbia steelhead. The proposed actions will address streamflow, channel complexity, and riparian habitat to benefit spawning and rearing habitat. The project will install LTPBR structures, such as beaver dam analogs (BDAs) and LWD in sections of Cottonwood Creek totaling 2.6 miles. The project will also restore uplands, include precommercial thinning of a 70-acre unit and juniper removal on a 60-acre unit. The proposed instream actions align with the ODFW Action Plan for Beaver Modified Landscapes to accelerate beaver habitat in the Cottonwood/Fox watershed, which is identified as a Beaver Emphasis Area.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 8

Review Team Recommended Amount

\$117,670

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$117,670

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6025-23663

Project Type: Restoration_v2

Project Name: Pine Creek Forestry Improvement

Applicant: Mid John Day WC

Region: Mid Columbia

County: Wheeler

OWEB Request: \$174,429

Total Cost: \$221,519

Application Description The project is located in the Pine Creek watershed in northwestern Wheeler County. The watershed drains to the John Day River near Clarno.

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. Overstocked forests present multiple watershed health issues. Using proper management practices such as pre-commercial thinning will result in a more resilient landscape, with healthier trees and understory species. Healthier forest stands are more resilient to impacts from climate change like drought, disease, and insects, and are less vulnerable to catastrophic wildfire. Limiting factors in this watershed include water quantity and quality. Conservation work has been completed on Pine Creek Properties over the last ten years through three previous OWEB restoration grants. Additional work on neighboring properties includes the Confederated Tribes of Warm Springs Reservation's Pine Creek Conservation Area and Bar U Ranch.

This project includes pre-commercially thin 135 acres of mixed conifer forest, remove 30 acres of western juniper, 10 acres of weed treatment, reseed 10 acres of disturbed ground.

Project partners include Pine Creek Properties, LLC, Oregon Department of Forestry, Mid John Day Watershed Council, and OWEB.

Review Team Evaluation

Strengths

- The project aligns with past and future restoration efforts in the watershed.
- The landowner was highly engaged during the site visit and expressed a clear understanding of how the project would benefit fire reduction, indicating a high likelihood of project success.
- The applicant acknowledges the potential for invasive weed growth post-project and has a proactive plan for treatment.
- The applicant has carefully considered alternative approaches to the project.
- The Watershed Council has the experience and capacity to implement the proposed restoration actions and plans to hire a contractor with ODF-specified qualifications.

Concerns

- The attached map lacks details that would be helpful context for understanding watershed benefits.
- The project lacks a comprehensive forest management plan which would be beneficial in guiding restoration efforts to improve forest health conditions.
- The Mid-Columbia Steelhead Recovery Plan is listed in the application as informing project selection; the linkage between the plan and proposed work is not clear.

Concluding Analysis

The Mid-John Day Watershed Council proposes to improve watershed conditions in Pine Creek by reducing the encroachment of western juniper and improving forest health. The project includes forest thinning, juniper removal, invasive weed control, and reseedling. The project demonstrates a commitment to watershed health and a well-thought-out approach to weed management; however, there are concerns regarding the lack of a forest management plan. Addressing these concerns would enhance understanding of the project's likely effectiveness and sustainability.

Review Team Recommendation to Staff

Fund

Review Team Priority

8 of 8

Review Team Recommended Amount

\$174,429

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

N/A

Open Solicitation Restoration-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6026-23665

Project Type: Restoration_v2

Project Name: Yellow Jacket Creek Aspen Restoration and Forest Health

Applicant: Mid John Day WC

Region: Mid Columbia

County: Wheeler

OWEB Request: \$387,797

Total Cost: \$584,657

Application Description Yellow Jacket Creek is a tributary to Parrish Creek in eastern Wheeler County. Yellow Jacket Creek and its tributaries have significant aspen stands that are suffering from conifer encroachment. In addition, surrounding forest stands are overstocked and are increasingly susceptible to insects and disease. Stands are showing detrimental effects from drought, beetles, and mistletoe infestation.

OWEB funds are requested to remove encroaching conifers including western juniper around the aspen stands, to install 6000' of brush fence and 1246' of buck and pole fencing around aspens for protection from large ungulate browsing, for 215 acres pre-commercial thinning of overstocked forest stands in Yellow Jacket Creek and one tributary, and to remove 175 acres of western juniper from the west slope of Yellow Jacket Creek. This project also proposes to reseed 50 acres of disturbed ground.

Partners include OWEB, the landowner, Mid John Day Watershed Council and Oregon Department of Forestry for technical advice.

Review Team Evaluation

Strengths

- Previous application evaluation concerns are addressed by including the Oregon Department of Forestry (ODF) Stewardship Forester in development of the proposed treatment plan and eliminating the spring developments from the project scope.
- The application has clear objectives and activities focused on watershed health.
- Livestock grazing has been eliminated from the property for the last five years and will be reintroduced in a careful, prescribed approach. This reduced grazing will sustain the effectiveness of the proposed restoration approach.
- New landowners at the project site have 10-year stewardship goals focused on forest health, juniper encroachment, and preventing loss of aspen stands. This strategic planning indicates a high likelihood for long-term sustainability of watershed health benefits. Landowner support is demonstrated by previously completed restoration projects and match commitment.
- Costs are appropriate for the proposed restoration actions and anticipated watershed benefits.

Concerns

- No concerns identified.

Concluding Analysis

The Mid-john Day Watershed Council is working with new landowners to improve upland health in the Parrish Creek watershed by protecting aspen stands, thinning forest stands, and removing juniper from the Yellow Jacket Creek watershed. The proposed project will improve overstocked forest stands and degraded native plant communities and increase species diversity and upland climate resilience. The applicant addressed previous application evaluation concerns and included ODF pre-commercial thinning recommendations and stocking rates in the forest treatment plan.

Review Team Recommendation to Staff

Fund

Review Team Priority

4 of 8

Review Team Recommended Amount

\$387,797

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$387,797

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6027-23669

Project Type: Restoration_v2

Project Name: Eightmile Creek Restoration

Applicant: North Fork John Day WC

Region: Mid Columbia

County: Grant

OWEB Request: \$62,716

Total Cost: \$94,916

Application Description Eightmile Creek is a tributary of the Middle Fork of the John Day River (MFJDR) at RM 11.8 downstream of Ritter, Oregon. The 0.7 mile project reach is located on private property just upstream from the mouth and above County Rd 15. Eightmile Creek provides important spawning and rearing habitat for ESA listed Mid-Columbia Summer steelhead, however, the degraded nature of the system decreases potential productivity. Regional plans and assessments have identified many habitat limiting factors in Eightmile including degraded riparian area, lack of habitat complexity, floodplain degradation, altered hydrology, and decreased water quality and quantity. This reach has the potential to store more water through floodplain reconnection and by increasing pool habitat. This project proposes using a low-tech process-based restoration approach, installing beaver dam analogs (BDAs), post-assisted log structures (PALS), and large wood structures to increase habitat complexity and water storage. Additionally, this project proposes removing patches of encroaching juniper from the riparian area and adjacent hillslopes in efforts to promote water availability and native plant production. This project also includes a planting effort to improve stream shading and riparian conditions. This is a cooperative effort between the North Fork John Day Watershed Council (NFJDWC), the Ritter Land Management Team (RLMT), the Oregon Department of Fish and Wildlife (ODFW), and the United States Fish and Wildlife Service (USFWS). NFJDWC will be the project lead, providing primary project oversight, contract oversight, planting, some materials, and project monitoring. RLMT will assist with project oversight, planting, and maintenance. ODFW will provide direct assistance with implementation as well as consultation to project design and oversight of instream work. USFWS will provide assistance with permitting.

Review Team Evaluation

Strengths

- The project is in a medium to high-priority stream reach for ESA-listed Mid-Columbia steelhead restoration and the proposed actions will address limiting factors identified in both the John Day Basin Partnership's ATLAS prioritization and the Mid-Columbia Steelhead Recovery Plan.
- The project team, including the landowner, Watershed Council, Oregon Department of Fish and Wildlife (ODFW), and Bonneville Power Administration (BPA), have the capacity to implement the proposed work. Partner roles are described in the application and in support letters.

- Stream habitat conditions in Eightmile were surveyed in 2019 identifying juvenile rearing habitat along with utilizing the Beaver Restoration Assessment Tool (BRAT) to inform project components.
- Additional restoration efforts in the watershed are being developed with adjacent landowners.
- The approach is cost-effective, and the budget reflects the expected watershed benefits.

Concerns

- The application lacks clarity regarding the low-tech process-based restoration and large wood structure design, location, and potential risks. While the project location seems appropriate for the proposed restoration actions, it would be helpful to include more information on stream hydrology and infrastructure to determine technical soundness.
- Watershed benefits are not clearly articulated in the application; it is unclear what the restoration actions will achieve including number of pools, amount of floodplain connected, and other aquatic habitat features.
- Specification on wood size and general hydrology of the watershed is not included with the application and would help in understanding the project scope and risk.
- Attached letters of support were for other projects in the Eightmile watershed and may not be relevant to the proposed project.

Concluding Analysis

The North Fork John Day Watershed Council proposes to implement low-tech process-based restoration (LTPBR) structures, such as beaver dam analogs (BDAs) and large woody debris (LWD) placements, in sections of Eightmile Creek totaling 0.7 miles. The project will also plant native vegetation in the riparian area to improve stream shading and water quality. Benefits are expected to improve spawning and rearing habitat in an ESA-listed Mid-Columbia steelhead stream that provides cold-water input to the Middle Fork John Day River.

Review Team Recommendation to Staff

Fund

Review Team Priority

3 of 8

Review Team Recommended Amount

\$62,716

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$62,716

Staff Conditions

N/A

Open Solicitation Restoration-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6029-23712

Project Type: Restoration_v2

Project Name: Comstock Basin Riparian Fencing, Planting, and Livestock Distribution

Applicant: Gilliam SWCD

Region: Mid Columbia

OWEB Request: \$172,135

County: Wheeler

Total Cost: \$276,760

Application Description This project is located in Gilliam County on 1.9 miles of Thirtymile Creek and 1,870 acres of pasture. The project begins on river mile 30 of Thirtymile Creek.

This reach of Thirtymile Creek remains one of few that have not been fenced, planted, and enrolled in the Conservation Reserve Enhancement Program (CREP). This section of Thirtymile lacks riparian vegetation, and the need for plantings and exclusion fencing is a priority. This will remove a primary water source for livestock, and off-site watering facilities and cross-fencing are needed for proper grazing management. The upland components of the project were initially planned to be funded by the Natural Resources Conservation Service (NRCS) through the Environmental Quality Incentive Program but were deemed ineligible (explanation in design alternatives).

This project would enroll over 95 acres into CREP, install 20,300 feet of riparian fence, plant 3,500 riparian plants, install 11,500 feet of cross fence, remove and replace 5,500 feet of woven-wire fence, and develop three off-site water sources for livestock and wildlife. The CREP contract has been executed, and riparian fencing will be completed in 2024, with the planting to be completed in 2025.

Project partners include OWEB, Farm Service Agency, Natural Resources Conservation Service, Gilliam-East John Day Watershed Council, Gilliam SWCD, and private landowners.

Review Team Evaluation

Strengths

- The proposed fencing and water developments align with the NRCS grassland management plan that was developed for the property, enhancing the overall restoration efforts.
- Rest and rotational grazing practices enabled by the fencing and water developments will improve rangeland health, and the project will also benefit ESA-listed Mid-Columbia steelhead by enhancing the riparian habitat and water quality.
- The project is located on a high-priority ESA-listed Mid-Columbia steelhead stream and will complete riparian fencing along the entire length of Thirtymile Creek.

- The applicant and its partners have the experience and capacity to successfully implement the project and have a proven track record of managing similar projects, completing projects as proposed, and timely reporting.

Concerns

- The application would benefit from additional information related to the design of the water developments, including whether overflow from troughs will be returned to the natural drainage, and if all appropriate permits will be secured.
- The project may be missing an opportunity to provide additional instream complexity by utilizing juniper instream to improve habitat conditions.

Concluding Analysis

The proposed project will restore riparian habitat on 1.9 miles of Thirtymile Creek and 1,870 acres of pasture in Comstock Basin. The project will install fencing to exclude livestock from the riparian area, plant native riparian vegetation, and develop off-site watering facilities for livestock. Expected benefits to ESA-listed Mid-Columbia steelhead include water quality improvements by, reducing bank erosion and increasing stream shade.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 8

Review Team Recommended Amount

\$172,135

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$172,135

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6030-23635

Project Type: Technical Assistance_v2

Project Name: West Branch Diversion and Pipeline Design

Applicant: Mid John Day WC

Region: Mid Columbia

County: Wheeler

OWEB Request: \$68,009

Total Cost: \$97,009

Application Description 1) The project is located near the headwater of West Branch Bridge Creek in the Bridge Creek Watershed southwest of Mitchell OR. 2) Currently water is conveyed from West Branch Bridge Creek through a 2.3 miles open hillside ditch to service approximately 250 acres of fields. The ditch experiences water loss and has a high rate of failure from breaching. The diversion which supplies the ditch dewateres a section of West Branch Bridge Creek and is a fish passage barrier. 3) This TA grant will analyze the ditch loss and irrigation layout to develop a conveyance pipe design and identify the amount of water that will be conserved through the piping process. A design will also be developed for the diversion and West Branch Creek which will provide fish passage and return the creek to its historic channel. 4) ODFW and USFWS will be consulted during the design process. The OWRD Grant and Loan program will also be consulted with since the objective of this TA project will be to identify conserved water which can be left instream. This would make the implementation project eligible for OWRD funding. The landowner is very involved in the project and is contributing significant funding.

Review Team Evaluation

Strengths

- The project addresses a clear need to improve fish passage and reduce water loss in the West Branch Bridge Creek watershed.
- The restoration resulting from the proposed design will leave water instream using the Oregon Water Resources Department (OWRD) allocation of conserved water program, benefiting ESA-listed Mid-Columbia steelhead populations in the watershed by permanently transferring the conserved water in-stream.
- The project is part of a larger OWRD water project grant, demonstrating a strategic approach to water conservation and restoration.
- The resulting restoration will improve passage for both juvenile and adult ESA-listed Mid-Columbia steelhead.

Concerns

- It is unclear whether the proposed design process will include on-farm infrastructure or ditch easement acquisition.

- It is unclear from the budget if the proposed cultural resource surveys will meet the project goals.
- It is unclear whether a range of alternatives will be considered during the design process.
- The project would benefit from looking at a range of irrigation methods to determine the best approach.

Concluding Analysis

The Mid John Day Watershed Council proposes to develop designs that will improve fish passage and irrigation efficiency in the West Branch Bridge Creek watershed. The application proposes replacing an open ditch with a pipeline to reduce water loss and restore streamflow along with improvements to the irrigation diversion structure to allow fish passage. The applicant is partnering with a qualified consultant to develop the design.

Review Team Recommendation to Staff

Fund

Review Team Priority

4 of 7

Review Team Recommended Amount

\$68,009

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$68,009

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6031-23640

Project Type: Technical Assistance_v2

Project Name: Left Hand Creek Floodplain Reconnection
and Habitat Complexity Design

Applicant: Wheeler SWCD

Region: Mid Columbia

County: Wheeler

OWEB Request: \$66,231

Total Cost: \$72,550

Application Description This project is located on Left Hand Creek, a tributary to Parrish Creek, which is a direct tributary to the John Day River 2.5 miles south of Spray, Oregon. The Parrish Creek Watershed limiting factors include water quality/quantity, riparian vegetation, floodplain connection, channel complexity, temperature, and altered sediment routing. The combination of past grazing management and encroachment of Western juniper has led to this stream's degradation; compromising cool and clean water inputs in ESH listed streams. This project will develop a multi phased restoration design using Low-Tech Process-Based Restoration (LTPBR) to create floodplain connections and extend perennial flow on approximately 6 miles of Left-Hand Creek with the lower approximate 3 miles being listed as ESH for summer steelhead. In addition, Wheeler SWCD will begin applying for all required permits and complete cultural resource obligations to obtain clearance for implementation. Project partners include OWEB, Anabranch Solutions, Wheeler SWCD, and the landowner.

Review Team Evaluation

Strengths

- Left Hand Creek is an ESA-listed Mid-Columbia steelhead stream within the Parrish Creek watershed, which is listed as a high priority for restoration in the Mid-Columbia Steelhead Recovery Plan.
- The resulting project has multiple restoration goals to address identified habitat limiting factors, including floodplain connection, habitat complexity, and overall stream conditions using low-tech process-based restoration (LTPBR).
- Portions of Left Hand Creek have subsurface flow, a condition that will be addressed through the proposed restoration approach.
- Landowners are planning to use virtual fence for grazing management and will enroll the riparian area in the Conservation Reserve Enhancement Program post-project, which will protect the restoration investment.

Concerns

- The application lacks clarity on how this project fits in the John Day Basin Partnership's ATLAS prioritization, as the project is in a Tier 3 (lowest priority) watershed.
- The application would benefit from additional detail on what will be achieved as part of the design process, including a basis of design report or other engineered products.
- It is unclear how the resulting restoration will impact downstream conditions or infrastructure.

Concluding Analysis

Wheeler SWCD proposes to develop a design for restoring floodplain connectivity and habitat complexity on Left Hand Creek, a tributary to the John Day River. The project aims to address degraded stream conditions caused by past grazing management and juniper encroachment. The proposed restoration design will incorporate low-tech process-based restoration (LTPBR) techniques to reconnect the floodplain and extend perennial flows on approximately six miles of Left Hand Creek. The project will also include securing necessary permits and completing cultural resource surveys.

Review Team Recommendation to Staff

Fund

Review Team Priority

6 of 7

Review Team Recommended Amount

\$66,231

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

N/A

Open Solicitation Technical Assistance-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6032-23647

Project Type: Technical Assistance_v2

Project Name: Cottonwood Creek Basin Instream Habitat Design

Applicant: Monument SWCD

Region: Mid Columbia

County: Grant

OWEB Request: \$190,252

Total Cost: \$194,116

Application Description 1) This project is located within the Cottonwood/ Fox Creek watershed in Grant County, OR.

2) Cottonwood Creek is a 303(d) listed stream for temperature that provides critical spawning and rearing habitat to ESA-listed Mid-Columbia River summer steelhead. Elevated water temperatures and low flow significantly limit steelhead populations in Cottonwood Creek, a tributary to the North Fork John Day River (ODFW 2019).

3) The project will develop designs for Low-Tech Process-Based Restoration (LT-PBR) along 8.2 miles of Cottonwood Creek. LT-PBR structures will enhance large woody debris retention, attenuate flows, improve floodplain connectivity, aggregate sediment, and boost riparian hardwood productivity. These improvements will increase physical complexity within the channel, providing favorable conditions for steelhead. LT-PBR structures, such as Beaver Dam Analogs (BDAs), may also serve as a mechanism to restrict the upstream movement of nonnative smallmouth bass. Designs will be developed in-house by MSWCD staff in collaboration with Anderson Perry. The 8.2 miles of designs will be implemented in two phases, with the first phase being permitted as part of this project. Anderson Perry will secure permitting for the first phase of this project.

4) Partners include Anderson Perry, Private Landowners, the Oregon Department of Fish and Wildlife, The Confederated Tribes of the Warm Springs Reservation of Oregon, and the Oregon Watershed Enhancement Board.

Review Team Evaluation

Strengths

- The proposed designs will complement other habitat improvement efforts in the watershed, and the cumulative efforts from the projects may have an impact on stream flow and temperature.
- The resulting restoration actions will be implemented in ESA-listed Mid-Columbia steelhead habitat and address limiting factors identified in recovery plans.
- The project site is in an Oregon Department of Fish and Wildlife, Beaver Emphasis Area and the resulting restoration will improve watershed resiliency and contribute to climate change adaptation.

- The Oregon Department of Fish and Wildlife (ODFW) research efforts related to smallmouth bass and beaver dam analog interactions connected to steelhead populations in the region provide an opportunity to measure the positive impacts of the restoration effort.
- The applicant has the capacity to develop the proposed design and has experience with similar types of projects; they are planning appropriately and utilizing an experienced contractor needed for the proposed design.

Concerns

- The application would benefit from additional detail on the division of tasks between the applicant and consultant.
- For the proposed low-tech process-based restoration (LTPBR) approach, the project would benefit from a downstream risk assessment and hydrologic analysis to understand how the designs will achieve restoration success.
- It is unclear whether the proposed cultural resource surveys are adequately scoped given the project's large footprint.

Concluding Analysis

Monument SWCD will develop designs for instream habitat restoration on 8.2 miles of Cottonwood Creek. The project aims to improve habitat for ESA-listed Mid-Columbia steelhead utilizing LTPBR structures, such as beaver dam analogs (BDAs). The applicant has engaged landowners in the area and built strong relationships contributing to the extent and success of projects in Cottonwood Creek. The actions also align with the ODFW Action Plan for Beaver Modified Landscapes to accelerate beaver habitat in the Cottonwood/Fox watershed, which is identified as a Beaver Emphasis Area.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 7

Review Team Recommended Amount

\$190,252

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$190,252

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6033-23682

Project Type: Technical Assistance_v2

Project Name: Butte and Rock Creek LiDAR Based
Restoration Prioritization Framework

Applicant: Gilliam SWCD

Region: Mid Columbia

OWEB Request: \$41,424

County: Gilliam

Total Cost: \$66,424

Application Description The project is located within the Butte Creek and Rock Creek watersheds in Gilliam, Morrow, and Wheeler Counties/, and are tributaries to the lower John Day River 2) The recovery planning process conducted by the John Day Partnership was used to identify restoration opportunities using the John Day Basin Partnership Atlas multi-criteria decision analysis tool. Within these watersheds, finer spatial scale (i.e., 500 m – 1 km) watershed condition assessments capable of prioritizing the distribution of limited restoration funding are currently lacking. Further, current restoration planning within the Lower John Day does not currently leverage contemporary spatial analysis tools and frameworks. This mismatch between recovery planning assessments and the scale at which riverscape restoration actions are implemented makes the allocation of restoration resources difficult and potentially inefficient. 3) Funding under this TA grant application would be used to prioritize the location of riverscape restoration actions within the Butte Creek and Rock Creek watersheds. The prioritization will be based on quantifying the current vs. potential floodplain (i.e., recovery potential) extent throughout 200 miles of the Butte Creek and Rock Creek watershed networks considered essential salmonid habitat. Specifically, the funding will be used to identify locations where channel and floodplain connectivity, the expansion of salmonid habitat, and riparian vegetation distributions can be maximized. Additionally, all floodplain prioritizations from this project and previous technical assistance grant applications (220-8208-19240 and 222-6036-19596) will be made available to funders and implementors via a web-based analytical tool. (4) Partners include Gilliam-East John Day Watershed Council, ODFW, NRCS, and OWEB.

Review Team Evaluation

Strengths

- The application describes a clear need for prioritizing restoration in Butte Creek and Rock Creek, important tributaries for ESA-listed Mid-Columbia steelhead.
- The project will help identify areas with the highest potential for restoration benefit, guiding a more strategic approach.
- The proposed prioritization framework will complement existing planning efforts in the region and provide a more detailed level of information supporting restoration project prioritization.

- Existing LiDAR data and analysis tools will be used, and data will be provided in a user-friendly format, including an interactive map and downloadable shapefiles.
- The applicant has the capacity and experience with similar work that has resulted in successful planning and restoration efforts in Thirtymile Creek.

Concerns

- No concerns were identified.

Concluding Analysis

N/A

Review Team Recommendation to Staff

Fund

Review Team Priority

3 of 7

Review Team Recommended Amount

\$41,424

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$41,424

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6034-23724

Project Type: Technical Assistance_v2

Project Name: Tamarack Creek Culvert Design

Applicant: North Fork John Day WC

Region: Mid Columbia

County: Grant

OWEB Request: \$46,672

Total Cost: \$59,672

Application Description The proposed project is on Tamarack Creek, a perennial cold-water tributary to Eightmile Creek. The project location is just 0.1 miles upstream of the confluence. Eightmile is a tributary of the Middle Fork of the John Day River (MFJDR) located in Grant County near the rural community of Ritter. Eightmile Creek provides important spawning and rearing habitat for ESA listed Mid-Columbia summer Steelhead and other native fish species, the degraded nature of the system decreases potential productivity. Regional plans & assessments have identified many habitat limiting factors in Eightmile including degraded riparian area, lack of habitat complexity, floodplain degradation, altered hydrology + sediment routing, and decreased water quality and quantity. This reach has the potential to store more water through floodplain reconnection and increase pool habitat. Our overall proposed restoration strategy in Eightmile uses a low-tech process-based restoration approach, installing beaver dam analogs (BDAs), post-assisted log structures (PALS), and large wood structures to increase habitat complexity and water storage. This technical assistance application is requesting funding to obtain engineered design for one undersized and under functioning culvert on Tamarack Creek as part of the larger restoration effort. This project is a cooperative effort between the North Fork John Day Watershed Council (NFJDWC), the Ritter Land Management Team (RLMT), and the United States Fish and Wildlife Service (USFWS).

Review Team Evaluation

Strengths

- The project aligns with other restoration initiatives in the watershed to improve in-stream habitat complexity using low-tech process-based restoration (LTPBR).
- The resulting restoration is proposed to reduce sediment into Eightmile Creek and improve water quality.
- The applicant has a successful track record of implementing similar types of projects in Eightmile Creek.
- The applicant has engaged appropriate partners including the Ritter Land Management Team (RLMT), and the US Fish and Wildlife Service (USFWS).

- The landowner is actively engaged in restoration with the Council and has the capacity to maintain the resulting restored conditions.

Concerns

- The proposed budget may not align with the complexity of the project, and simpler solutions could be considered.
- The application would benefit from additional detail on the alternatives analysis, including whether there are other options that could be considered.
- Attached letters of support were for other projects in the Eightmile watershed and may not be relevant to the proposed project.
- The project's justification for a fisheries benefit is not clearly described.

Concluding Analysis

The Tamarack Creek Culvert Design project is a cooperative effort between the North Fork John Day Watershed Council, RLMT, and the USFWS. The project proposes to design a replacement for an undersized culvert to improve water quality and fish passage in Tamarack Creek, a tributary to Eightmile Creek in the Middle Fork John Day River. Eightmile Creek is an ESA-listed Mid-Columbia steelhead stream; however, the fish use in Tamarack is not clearly described.

Review Team Recommendation to Staff

Fund

Review Team Priority

7 of 7

Review Team Recommended Amount

\$46,672

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

N/A

Open Solicitation Technical Assistance-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6035-23725

Project Type: Technical Assistance_v2

Project Name: Keeton Creek Diversion Fish Passage ,
Culvert, and Aquatic Habitat Uplift

Applicant: Wheeler SWCD

Region: Mid Columbia

County: Wheeler

OWEB Request: \$46,907

Total Cost: \$220,629

Application Description 1) This project is located in the Mountain Creek Watershed, along Keeton Creek approximately 10 miles east from the town of Mitchell, OR in Wheeler County. 2) Keeton Creek is categorized as essential habitat for ESA listed Mid-Columbia summer Steelhead. ODFW district staff conducted a rapid survey on random short sections of the creek using backpack electro-shockers, and at each site several O. mykiss were found, although overall abundance was low. Fish presence did increase significantly in the upper portions of the timber line which suggests habitat conditions in the lower reaches may be contributing to the lower number of fish presence. The property also has nine fish passage concerns, 7 Point of Diversion (POD) and 1 culvert, that are impeding fish passage in addition to needing fish screens. 3) This project will develop two designs - one design will correct eight passage barriers and install seven screens that are needed to support fish passage, and one design will incorporate habitat components to enhance riparian conditions and salmonid use. This project will also support Wheeler SWCD staff to begin applying for all required permits and complete cultural resource obligations to obtain clearance for implementation. POD designs will reduce landowner maintenance within the riparian zone. LTPBR structures will recruit LWD, attenuate flows, improve floodplain connectivity, aggregate sediment, and increase riparian woody productivity. This increased complexity within the channel will provide greater uplift for Steelhead utilization, protecting high quality habitat throughout the project site. 4) Project partners will include OWEB, ODFW, BPA, USFS, and Wheeler SWCD.

Review Team Evaluation

Strengths

- The restoration actions proposed for design will address multiple aspects of habitat improvement including passage barriers, fish screening, and instream habitat improvement.
- Appropriate partners are engaged in the project; Oregon Department of Fish and Wildlife (ODFW) support is demonstrated by funding and planned implementation of the designs for the diversion, fish screens, and aquatic habitat.
- A livestock management plan will be developed, and ODFW will support fence maintenance for 15 years, indicating likelihood of long-term sustainability of the investment.

- Project support is demonstrated by Bonneville Power Administration (BPA) participation in the design review and permitting process.
- The lower reaches of Keeton Creek lack suitable fish habitat and will benefit from the restoration resulting from the proposed design.
- The applicant has the capacity to implement the work as proposed, indicating a high likelihood of success.

Concerns

- For the proposed low-tech process-based restoration (LTPBR) approach, the project would benefit from a downstream risk assessment and hydrologic analysis to understand how the designs will achieve restoration success.
- With the proposed project scale, the applicant is encouraged to coordinate with permitting agencies, including the Oregon Water Resources Department, early in the design process.

Concluding Analysis

Wheeler SWCD proposes to partner with ODFW to design fish passage improvements and aquatic habitat restoration in Keeton Creek. The resulting restoration aims to address passage barriers for ESA-listed Mid-Columbia steelhead by replacing eight barriers and installing fish screens on irrigation points of diversion, with the district completing permitting and cultural resource surveys. The project will incorporate instream habitat features such as large woody debris placements and LTPBR structures to improve fish habitat on 3.8 miles of Keeton Creek. The proposed design will likely result in significant improvements to aquatic habitat over the next 3-4 years of restoration efforts.

Review Team Recommendation to Staff

Fund

Review Team Priority

2 of 7

Review Team Recommended Amount

\$46,907

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$46,907

Staff Conditions

N/A

Open Solicitation Technical Assistance-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6036-23726

Project Type: Technical Assistance_v2

Project Name: Murderers Creek Cultural Surveys

Applicant: South Fork John Day WC

Region: Mid Columbia

County: Grant

OWEB Request: \$108,810

Total Cost: \$109,035

Application Description The Murderers Creek Watershed covers approximately 84,962 acres and is a tributary to the South Fork John Day River in Grant County, Oregon. Murderers Creek is a part of the John Day River system, one of the last major free-flowing rivers in the Columbia River system and is one of the last to contain wild steelhead. Murderers Creek is the largest of the 5 tributaries used by steelhead and therefore is very valuable to sustaining or increasing steelhead production. It is also one of the most important tributaries for spawning and is used by about 59% of steelhead that enter the SF John Day River (MCWA, 1997).

We are proposing 471 acres of cultural surveys on planned restoration projects within the Murderers Creek watershed located on the Phillip W. Schneider Wildlife Area. With new regulation changes, the South Fork John Day Watershed Council is requesting funds to meet the necessary permitting for future planned restoration projects. The proposed projects for surveys include the already OWEB funded instream designs of Murderers Creek Phase 2 (Murderers Creek, Todd Creek, & Duncan Creek) and a new road access to this project. Also included in this proposal is Cabin Creek, a tributary to Murderers Creek. Proposed work in this area includes riparian fencing, juniper treatment, shrub planting, range drilling, and invasive weed treatment. Project partners include Oregon Department of Fish and Wildlife - Phillip W. Schneider Wildlife Area.

Review Team Evaluation

Strengths

- The application clearly describes a well thought out process for cultural resource surveys and compliance prior to planned restoration efforts.
- The applicant proposes a proactive approach applying lessons learned from previous efforts.
- Murderers Creek is a high priority tributary to the South Fork John Day River due to habitat for ESA-listed Mid-Columbia steelhead.
- The applicant has the capacity and experience to implement the work as proposed.
- The proposed approach will complement a previously funded OWEB technical assistance project to produce designs for Phase 2 habitat restoration in the Murderers Creek watershed.

Concerns

- No concerns were identified.

Concluding Analysis

The South Fork John Day WC proposes to conduct cultural surveys for planned restoration efforts within the Murderers Creek Watershed, a tributary to the South Fork John Day River. The project area is located on the Oregon Department of Fish and Wildlife (ODFW) Phillip W. Schneider Wildlife Area. The proposed survey area include 471 acres proposed for riparian and instream restoration and road access. Significant cultural resources were identified during implementation of Phase 1, and it is expected that Phase 2 will have similar findings.

Review Team Recommendation to Staff

Fund

Review Team Priority

5 of 7

Review Team Recommended Amount

\$108,810

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$108,810

Staff Conditions

N/A

Open Solicitation Monitoring-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6037-23690

Project Type: Monitoring_v2

Project Name: Monitoring Steelhead Use of Restoration Projects

Applicant: Walla Walla Basin Watershed Foundation

Region: Mid Columbia

County: Umatilla

OWEB Request: \$72,749

Total Cost: \$94,064

Application Description The project will document steelhead spawning and juvenile rearing activity in the North Fork Walla Walla River and Couse Creek, two tributaries identified as primary spawning areas for the Umatilla/Walla Walla population of mid-Columbia River steelhead. The project goal is twofold: 1) Document baseline steelhead redd counts and juvenile abundance and 2) Monitor the effectiveness of restoration actions with pre and post-implementation stream surveys.

Information describing steelhead utilization of the North Fork Walla Walla River and Couse Creek is currently lacking. With technical support from the Confederated Tribes of the Umatilla Indian Reservation, the Walla Walla Basin Watershed Council will conduct redd counts, habitat surveys, and juvenile snorkel surveys in 5.6 miles of the North Fork and 4.2 miles of Couse Creek in 2025 and 2026. The baseline spawning and rearing information is a first step toward filling a data gap about steelhead use of these tributaries. Effectiveness monitoring of restoration treatments will guide future project development and adaptive management actions.

Project partners include the property owners, Oregon Watershed Enhancement Board, and Bonneville Power Administration.

Review Team Evaluation

Strengths

- This project will fill existing data gaps identified in state and federal recovery plans, inform restoration projects and help evaluate future restoration projects.
- This project will follow professionally accepted monitoring methods to collect fish and habitat data and have technical assistance from the Oregon Department of Fish and Wildlife (ODFW) and the Confederated Tribes of Umatilla Indian Reservation (CTUIR).
- The letters of support demonstrate that the applicant has broad community support for this project and is engaging technical experts.
- The applicant has a good track record of successfully completing OWEB monitoring grants and the staff have the necessary qualifications to apply the proposed data collection and analysis methods in a successful manner.

- The budget table and narrative provide the necessary details to understand how the expenses were estimated and are appropriate to accomplish the actions proposed in the application.

Concerns

- The application proposes to back up the electronic data with two different drives on the same computer and there are more secure ways to do this to make sure the data is protected in case of emergency.

Concluding Analysis

This proposed project complements existing fish and habitat data by expanding monitoring farther upstream in the North Fork Walla Walla River and Couse Creek. The applicant has landowner agreements secured for ten years which demonstrates landowner commitment to this project and contributes towards a high likelihood of success.

Review Team Recommendation to Staff

Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$72,749

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$72,749

Staff Conditions

N/A

Open Solicitation Engagement-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6038-23645

Project Type: Engagement_v2

Project Name: Lower Birch Creek Restoration Engagement

Applicant: Umatilla SWCD

Region: Mid Columbia

County: Umatilla

OWEB Request: \$58,850

Total Cost: \$58,945

Application Description The Lower Birch Creek Restoration Stakeholder Engagement project is located just outside Pendleton, Oregon on the lower reaches of the mainstem of Birch Creek. The watershed within the project area is almost exclusively in agricultural use, with irrigated alfalfa and pasture within the floodplain and grazing range ground in the uplands. Irrigation delivery systems include handline, wheel-line, and pivots. Many of the landowners have water rights on Birch creek, utilizing push-up dams and some diversions. However, there is frequent groundwater supplemental use due to the lack of flow in the summer since much of Birch goes subsurface during the hottest and driest months.

Through multiple years of channelization, the channel is heavily incised and disconnected from the floodplain. A myriad of problems have sprung from the disconnection, including heavy erosion and channel migration that threaten structures, lowered water table, loss of habitat quantity and complexity for wildlife (specifically salmonids), and increased velocity.

The project seeks to gather together project partners and landowners in the reach to begin planning for a restoration project that seeks to address the disconnected floodplain. Landowners will be identified, contacted, site visits for voluntary project sites will be performed, and preliminary design discussion will begin utilizing the services of an engineer/consultant firm. Additionally, project partners will be recruited and incorporated into the overall project mission.

Current project partners include the Umatilla SWCD, Confederated Tribes of the Umatilla Indian Reservation, and initially identified landowners.

Review Team Evaluation

Strengths

- The proposed engagement is strategic and timely, building on efforts by Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and aligning with their Birch Creek Watershed Action Plan.
- The project directly responds to the needs of local landowners who have approached the SWCD for assistance.
- The project's focus on using conceptual designs for engagement with landowners can build trust and support, resulting in the timely development of eligible restoration.

- The applicant and CTUIR have experience and are the appropriate partners to engage in this work.

Concerns

- The engagement focus on lower Birch Creek may overlook opportunities for broader watershed restoration efforts in the upper watershed.
- The proposed budget allocates funds to project restoration concepts, potentially limiting engagement efforts.
- The application map lacks details to understand the planned approach.

Concluding Analysis

The Umatilla SWCD proposes to engage landowners in restoring the lower reaches of Birch Creek. The channelization of Birch Creek has caused incision and a disconnected floodplain, which has led to several issues, including a lowered water table and a loss of fish habitat. The SWCD will identify landowners and project partners, utilizing preliminary concept designs to discuss potential restoration projects. CTUIR is currently working on restoration in Birch Creek adjacent to the proposed project reach and this project will capitalize on the visibility of that effort.

Review Team Recommendation to Staff

Fund

Review Team Priority

1 of 1

Review Team Recommended Amount

\$58,850

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

N/A

Open Solicitation Engagement-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6039-23695

Project Type: Engagement_v2

Project Name: Wheeler SWCD Strategic Direction Planning

Applicant: Wheeler SWCD

Region: Mid Columbia

County: Wheeler

OWEB Request: \$33,319

Total Cost: \$41,983

Application Description 1) This project encompasses the Wheeler Soil and Water Conservation District, which aligns with the political boundaries of Wheeler County, Oregon. Nestled in the middle of the John Day Basin, it is the least populated county in Oregon with less than one person per square mile. 2) In the 60 years that Wheeler Soil and Water Conservation District (SWCD) has operated, the organization has effectively identified opportunities and engaged rural stakeholders in pursuit of projects to improve multiple aspects of watersheds within Wheeler County. Wheeler SWCD historically involved the public in many aspects of the watershed work it conducted; however, in recent years, the District has struggled with staffing turnover which resulted in a reactive approach of awaiting constituents to reach out for assistance, alluding to missed opportunities of a greater watershed-wide impact to protect and restore natural resources that could be achieved through outreach and stakeholder engagement. In April 2023, the Board of Directors reorganized the staffing model with assistance from Oregon Department of Agriculture and as of February 2024, Wheeler SWCD is fully staffed for the first time in over four years. 3) Community members need to become engaged and educated as current and future stewards of the John Day Basin. The District Management and Board of Directors aspire to engage landowners and community members in the process of renovating the Wheeler SWCD Strategic Direction for the first time over 25 years. This stakeholder engagement project provides a valuable tool at this critical time in the process of protecting and restoring natural resources in Wheeler County. 4) The partners include Wheeler SWCD, Wheeler County residents, and agencies which work closely with the District.

Review Team Evaluation

Strengths

- The proposed planning process includes engaging residents of Wheeler County, ensuring a wide range of perspectives are considered.
- Strategic planning aligns with the district's long-range action plan, providing a cohesive framework.
- Proposed surveys are understandable and clear; the applicant has experience with this type of engagement.

Concerns

- The application lacks clarity on how communication between the applicant and the community will be effective.
- It is unclear how the proposed engagement activities will directly lead to eligible restoration or acquisition projects.
- Additional detail outlining how the proposed work complements the district's long-range plan would benefit the application.

Concluding Analysis

This project will engage the community in Wheeler County in developing a strategic plan that reflects Wheeler SCWD's priorities. This planning process will include surveys, meetings, and public workshops, with a goal to create a more strategic and effective District that better serves the community. The updated plan will guide the district's future work and help to improve natural resource management in Wheeler County. The applicant has experience with similar survey efforts; however, the application lacks information on how the proposed engagement activities will lead to restoration efforts which is important for identifying and developing future projects.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A

Open Solicitation Engagement-Spring 2024

Mid Columbia (Region 6)

Application Name: 224-6040-23719

Project Type: Engagement_v2

Project Name: Walla Walla Basin Two-Year Engagement Project

Applicant: Walla Walla Basin Watershed Foundation

Region: Mid Columbia

County: Umatilla

OWEB Request: \$76,802

Total Cost: \$103,670

Application Description The Walla Walla Basin Watershed Council (WWBWC) seeks to engage the community in and around Milton-Freewater, Oregon in the Walla Walla River (WWR) Basin, with a focus on the upper WWR, Couse Creek, Little WWR system and connected alluvial aquifer. Engagement activities will support projects aimed at addressing some of the Basin's hydrological and ecological issues, including degraded stream flows, floodplain connection, surface-groundwater interaction, water quality, fish passage, riparian conditions, and aquatic habitat complexity. To address these issues, the WWBWC and partners such as Confederated Tribes of the Umatilla Indian Reservation (CTUIR), Umatilla County Soil and Water Conservation District (UCSWCD), and others will engage directly with landowners to identify potential project partners in target areas. Additionally, through more generalized public engagement WWBWC is very successful in showcasing the important restoration work that has been, and is being, done to build a better understanding for holistic resource and watershed protection and restoration. By familiarizing potential partners with the WWBWC's work and the Basin's hydrological and ecological issues, our audience better understands the potential and need for projects. Through these less targeted activities, such as volunteer restoration events, booths and presentations at community events, project tours, open house and other far reaching engagement techniques, WWBWC develops support, partners and projects necessary to address the Basin's degraded hydrological and ecological systems. In various capacities, the WWBWC engagement work has numerous partners including landowners, holders of water rights, CTUIR, Oregon Department of Fish and Wildlife (ODFW), Little WWR Working Group, local irrigation districts, Kooskooskie Commons, UCSWCD, Oregon Department of Agriculture (ODA), Washington Water Trust, Oregon Water Resources Department (OWRD) and other basin players.

Review Team Evaluation

Strengths

- The applicant has the capacity and relevant experience to implement a variety of engagement methods and communication strategies.
- Couse Creek is important ESA-listed Mid-Columbia steelhead and Chinook salmon habitat within the Walla Walla River watershed making this engagement potentially beneficial for these species.

- The applicant proposes a variety of methods to engage the community, including newsletters, meetings, tours, and Arc story maps.
- The applicant is knowledgeable about the basin and has developed numerous partnerships that could support the proposed engagement.

Concerns

- The application lacks information describing the methodology on how the engagement will be conducted.
- While letters of support were included from two partners, the application lacks information indicating support from additional partner agencies whose participation will be critical for identifying and developing future projects.
- The application lacks information describing activities completed with the previous OWEB funded engagement grant. Details explaining what was accomplished with that grant and why additional engagement is still needed would provide helpful context to evaluate whether the proposed actions can lead to timely development of eligible restoration or acquisition projects.
- The application lacks detail on how the proposed engagement will be implemented and would benefit from improving the clarity of the application.

Concluding Analysis

The Walla Walla Basin Watershed Council proposes to engage the community around Milton-Freewater, with a focus on the upper Walla Walla River, Couse Creek, and the Little Walla Walla River watersheds to develop future projects that address the basins altered hydrological and ecological needs. The Council will directly engage with landowners to provide information and generate voluntary actions that lead to projects like addressing fish passage, instream habitat complexity, irrigation efficiency, groundwater levels, and improving stream flow. Information describing the outcomes of work completed from the previous engagement grant is needed to understand why additional engagement is needed and is likely to succeed in leading to timely development of eligible restoration or acquisition projects.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

N/A

Review Team Recommended Amount

\$0

Review Team Conditions

N/A

Staff Recommendation

Staff Follow-Up to Review Team

N/A

Staff Recommendation

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions

N/A